

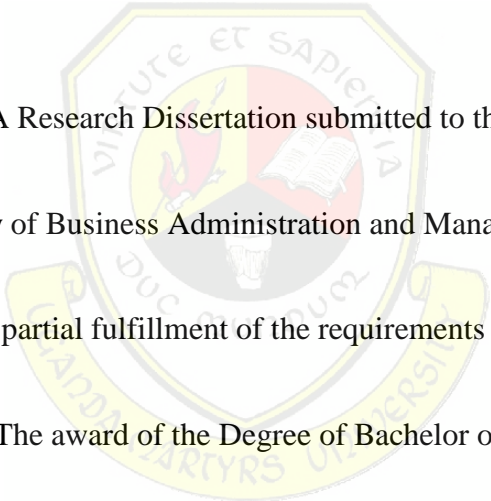
**THE EFFECT OF MOBILE MONEY SERVICES IN ENHANCEMENT OF FINANCIAL
INCLUSION OF RURAL AREAS**

A Case Study of Buwama

By

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Dedication

This dissertation is dedicated to my parents Mr. Okoke Senit Mark and Misses Okoke Diana Lamunu who helped throughout.

Acknowledgement

I wish to acknowledge my sincere thanks to all categories of people who assisted me in the course of doing this work without whom this study would not have been possible, I would also like to apologize for those I will not mention since they are many. In a special way I would like to thank the following:-

To God Almighty through whom all things are possible. I am grateful for his grace in all that I do, his mercy towards me and his manifested love throughout my whole academic life. He has been my rock in trying times

To my parents for nurturing, encouraging, supporting me financially and also materially ever since I began the academic life I will forever be grateful.

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Abstract

This study sought to examine the effects of mobile money services in the enhancement of financial inclusion in Buwama town as the case study. Rural areas like Buwama have been excluded from financial services especially the commercial banks and other financial institution. The study is expected to contribute to the body of knowledge and evidence necessary as regards to underlining the importance of mobile money as a core contribution factor towards enhancement of financial inclusion in rural areas. The objectives of this study were; to identify the role played by MM services in the enhancement of financial inclusion in the rural households.

The study employed quantitative and qualitative approaches of data collection and analysis. A sample of 50 respondents from around Buwama was studied. Qualitative and quantitative data was collected using semi-structured questionnaires, interview guides and use observation methods.

The researcher found out that MM services have greatly contributed to the people in the area in ways of providing the same financial services that the banks that excluded them provide. The researcher recommended that MNO should provide pay way machines in the area to enable the masses withdraw money even after the MM agents have closed up and gone home.

The researcher found out that there are a number of MM services that are provided for by these MNO which include; savings, transfers, transactions, withdraws, credit, insurance and among others. Sending and receiving of money can also be done across net works. The researcher recommended that the MNO should provide an option for speaker phone in a number of languages. This will help the illiterate in the area carry out transactions on their phones without having to ask assistance from neighbours or friends.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Introduction

This chapter presents the pattern shift in improved technology and innovation that has seen a rise in number of mobile telecommunication subscribers that have surpassed the number of banked population. With the need to take advantage of this advantage, Mobile money services which initially were intended as a purely transfer platforms being pivotal to ultimate financial inclusion of unbanked people mostly the poor people. This chapter presents the role that mobile money platforms can play in spread of financial inclusion across the unbanked people. This is presented through the background to the study, problem statement, and objectives of the study, research questions, research hypothesis, and scope of the study, justification of the study, significance of the study and definition of key terms.

1.2 Background of the Study

World Bank report (2009) estimated that 3,5 billion adults, just over half of world's adult population, do not use formal financial services to save or borrow; and in Sub-Saharan Africa, 325 million people (80% of the adult population) remain unbanked as compared to only 8% in high income OECD countries. Formal financial institutions are unable to help the unbanked manage money and risks due to excessive risks and costs", Financial inclusion is one of the objectives of several central banks, across Africa and mobile money is one of the revolutionary approached with which positive performance has been seen to address financial exclusion mainly for the poor communities which commercial banks find unprofitable (Hughes &Lonie, 2007).

With developments in information and computing technology (ICT), telecommunication devices such as telephones have emerged as the fastest growing used and affordable technological advancements globally. Evidence from an increase in channels of branches and ATMs, mobile phones are penetrating to the unserved, with more than 4 billion mobile subscriptions in the world today (CGAP, 2011). With this development, mobile phones are becoming most prominent in achievement of ICT spread and impact through delivery of mobile financial services due to ubiquity of cheap mobile devices. At the same time, banks have also resorted to utilization of these developments towards orienting financial services from counter banking to branchless banking through new channels such as Automatic teller machines, e-banking, e-

payment (Kulabako, 2010). These innovative approaches aimed at providing convenience and reliable banking services irrespective of the place and time. In this regard, banks are able to attract a larger market as well as attract “new” rural markets. In many developing markets partnerships between telecommunication companies and financial institutions have extended traditional banking services in rural areas where establishment of new branches was unprofitable or inaccessible such that Mobile Money services and Agent banking are brought to the proximity of the unbanked rural markets (Morawczynski and Pickens 2009).

The success of M-pesa in Kenya changed the financial market as telecommunication services together with ICT were able to integrate with financial services. In 2009, commencement of MTN Uganda saw tremendous performance as 2.5 million subscribers registered (MTN Report, 2010); over 3 billions of shillings were exchanged through remittances attracting other network operators to also adopt. Mobile money, therefore, became a cheap and reliable money transfer system between people that have access to a mobile phone. This was especially relevant for sending and receiving remittances, which would be much more expensive and sometimes risky through traditional formal and informal such as buses and taxis, couriers.

Mobile penetration in Uganda is estimated at 51.7% is determinant for mobile money penetration as well as subscriber growth across different network operators. Even with expectation of further growth of the mobile market, rapid growth in number of cheap telecommunication devices and handsets shows that 64% of Ugandans at least own a phone or have access to a mobile phone. Mobile money is currently becoming forefront to offering of new possibilities of financial services especially with telecommunications companies’ investment increment to tap into rural markets’ demand for communication especially when then their families and friends stay in urban areas as well as government upgrade of current ICT infrastructure and service. Adoption of mobile services by low income groups offers the opportunity of providing financial services through ICT as mobile users already exceed the number of banked people in many developing countries (Porteus, 2006; Morawczynski and Pickens, 2009). With the adoption of mobile money, rural households characterized by low income, socio-economic divide are not financially excluded. Furthermore, penetration of mobile money services was a threat to commercial banks as banks realized the shift from traditional banking, more banks have introduced several mobile banking platforms(such as Cente-Mobile by Centenary bank, M-cash by DFCU bank, Mobile

Wallet by Bank of Africa) so as to maintain competitiveness and avoid direct competition with telecom operators. Mobile money services have also been integrated into ATM services especially through Crane bank.

1.3 Problem Statement

Drawing from only 35% of Ugandans having a bank account and 65% of its population in rural areas, structural and economic weakness in rural areas has limited rural communities' access to financial services. I have also asked around for an agent of any bank in Buwama town and all the locals have referred to me Centenary bank in Kayabwe as the nearest bank to this town. However, there are more than twenty mobile money agents in this area and the villages deep and majority of the local have mobile phones. But when I asked them about having bank accounts, none of the locals that I confronted had bank accounts. Traditional banking also regards only banking high value and high frequency transaction and are also associated with high charges and transaction rates (AfDB, 2013). This therefore called for the study to understand the effects MM services on financial inclusion in rural areas since 65% of rural households have access to mobile phones as a means of addressing digital exclusion; rural households are still financially excluded from formal financial and banking services creating a social-economic divide and developmental problem. They continuously form the “unbanked population” that does not have access to credit, savings and cost-effective transfer/receipt of funds, payments and remittances.

1.4 Purpose of the Study

The researcher proposed to find out the effect of mobile money services in the enhancement of financial inclusion of rural household and businesses.

1.4.1 General Objective:

To identify the role played by Mobile money services in enhancement of financial inclusion of rural households

1.4.2 Specific objectives:

- i) To assess the role played by mobile banking in the extension of financial services in rural areas

- ii) To find out the effect of mobile payments and transfers on financial inclusion of rural household
- iii) To find out the extent to which mobile finance implementation can influence financial inclusion of rural household

1.5 Research questions

- i) In what ways can mobile banking improve the way of financial inclusion of rural households?
- ii) How is intensity of financial inclusion in rural areas increased by mobile transfers and payments?
- iii) To what extent can mobile financing improve financial inclusion of poor households?

1.6 Scope of the Study

1.6.1 Content scope

This study considered Gencer (2011) dimension of mobile money services including mobile payments, mobile finance and mobile banking. It is from these scopes of mobile money services that research objectives were formulated to influence financial inclusion. Financial inclusion will also cover savings, deposits, insurance and credit services that commercial banks have excluded rural areas from.

1.6.2 Geographical scope

The study is intended to be carried out in Buwana, Mpigi District located along Kampala-Masaka highway. Buwama is located in Mawokota.

1.6.3 Time scope

The study intends to cover mobile money services operations data over the past 6 months for the period from October 2014 to March 2015.

1.7 Significance of the Study

Mobile money services have been very successful in Kenya and their relationship with financial inclusion is immensely developmental to the Kenyan communities. More studies have focused on adoption rather than other the potential that mobile money has on transformation of lives of

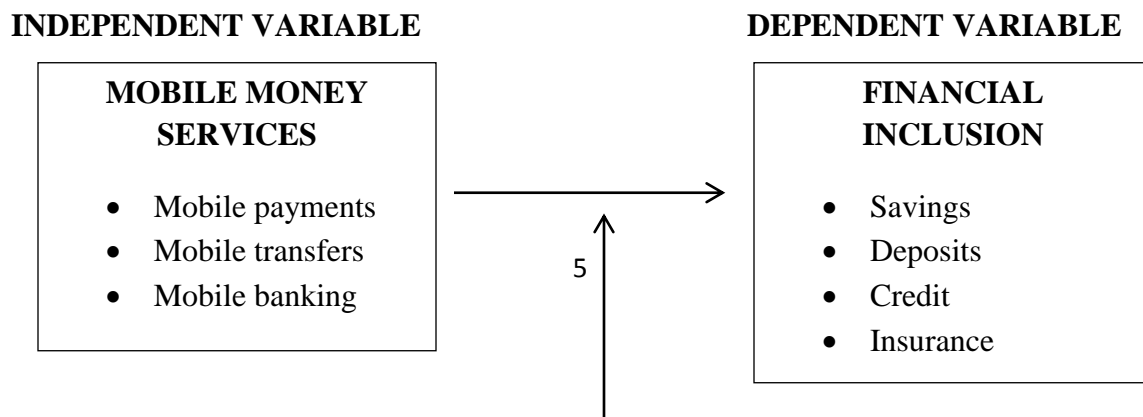
the poor. The study will, therefore, contribute to body of literature available on mobile money services in Uganda.

Financial inclusions of the rural households have a positive effect on improvement of their lives and transform them from poverty as well as receive remittances from their loved ones. Finally, the study is a requirement for award of a Bachelor Degree of Business administration and management of Uganda Martyrs' University.

1.8 Justification of the Study

This study obtained data and information on the effect of mobile money services in the enhancement of financial inclusion in rural areas. Uganda's Millennium Development Goals include the improvement in access and usage of ICT for welfare improvement. Mobile money is therefore an extension of auxiliary ICT services to the low-income and rural households; even those below the poverty lines since there a more chances of them owing at least a SIM card. In addition, Reduction of business costs thorough mobile services incurred in transactional operations would open rural areas to more business opportunities as well as receipt of remittance from urban relations. I therefore choose to carry out this study and not any other to see how this new innovation of MM helps the people in rural areas with no banking facilities since they have been excluded from such financial services.

1.9 Conceptual Framework



Source: Gencer (2011)

Following MNO-led models of mobile finance service and its role on financial inclusion that involves branchless banking, especially of the poor and rural comes the advent of Mobile money through which banking services are extended in areas where the reach of banking infrastructure is not present (Hughes & Lonie, 2007). Financial inclusion is with its definition limited or no access to a range of financial services. Mobile money services have proved to be both adaptive and transformational towards financial services (Herzberg, 2003). From a transformative approach, mobile money services reach out to unbanked poor individuals with no access to bank accounts offers them opportunity to be included into the financial process (Kulabako, 2010). At the same time, innovations in mobile money services adaptively complement financial services from basic financial services such as deposit and withdraw to mobile wallets and mobile transfers, check deposit

According to Gencer (2011), mobile money services can be varied into mobile banking (such as transactions and information), mobile payments (such as peer-to-peer transfers, business-to-business), and mobile finance (such as insurance, credit and savings). Increased innovations in finance and telecommunication have transformed the formal system through which banking services are accessed especially by the poor population at cheaper costs. With this argument,

financial services are accessible to the *unbanked* using mobile phone SIM (Subscriber Identification Module) numbers rather than account number as unique identifiers on the network. In the mobile banking model, however, mobile money is an additive service in which bank account owners use their mobile phones to access their existing bank accounts and associated services such as checking account balances, transfer funds between accounts or view check images.

With changes in technological and economic environment, mobile money is becoming a transformational service that could be adopted across different sections of the economy such as healthcare, agriculture, commerce and so on such that more people are not financially excluded. Therefore mobile money improves access to credit, deposits in form of savings, credit and insurance so that financial inclusion is boosted (Levine & Sweet, 2000).

1.10 Operational definitions

a) Mobile money services

Mobile money services refer to the use of mobile phones to access financial services (Gencer, 2011) and other complementary services that accompany financial services such as payments, accounts, transfers from both formal and informal financial providers.

b) Financial inclusion

This is the extension of financial services to poor and rural people who have no or limited access to formal and informal financial services (Mbiti and Weili, 2011).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

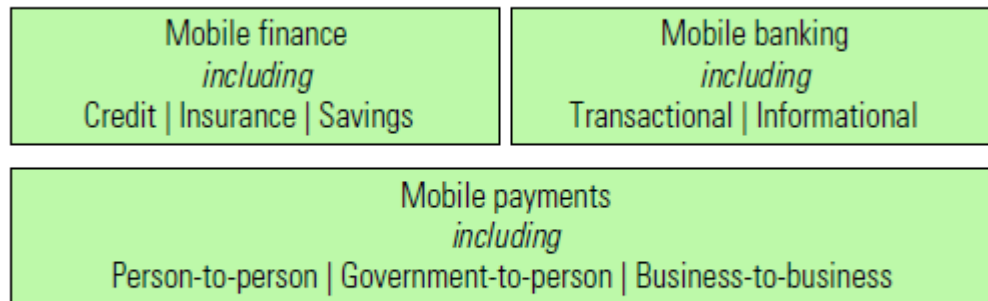
Financial inclusion has been defined as the delivery of financial services at affordable cost to vast sections of disadvantaged and low income groups (Bihari, 2011) whereas Mobile money refers to the convergence of mobile telephony and financial services. Claire and Eisenhart (2013) describe mobile money as the crossroad between telecommunication and financial services whose potential can enforce financial integrity, inclusion and reducing dependency on cash. In this respect, financial inclusion will also be as a result of more account opening especially when mobile money services introduce local communities to services offered by financial institutions. One of the reasons mobile money has attracted considerable attention is the expectation that it can provide affordable financial services to previously excluded populations. A considerable amount of literature on financial inclusion emphasizes that “banking the unbanked” can lead to better decision making, more efficient markets and various other development goals

2.1 Mobile Money

Mobile money has no precise definition however; various authors attach it with different terms depending on its usage, purpose and implementation. Lawack (2013) related mobile money to mobile banking in which financial services are delivered via mobile networks as performed on a mobile phone.

According to Dahlberg (2008), mobile money services are comprised of storage of currency in accessible subscriber identity module (SIM) as opposed to account numbers in traditional banking. The stored currency value can be converted into cash or transferred between accounts. This is in form of Peer to Peer mobile transfers, person-to-business payments for goods and services. Coherent to this, Gencer (2011) notes that mobile money services include mobile banking services, mobile payments and mobile financing. Implementation of these services on a mobile handset opens users’ opportunities to financial inclusion owing to advantages in terms of accessibility, convenience, speed, privacy, cost-effectiveness and control for conducting financial transactions over other money transfers (Birch and Young, 2007).

Figure 2.0 showing different mobile money services



Source: Adapted from Gencer 2011.

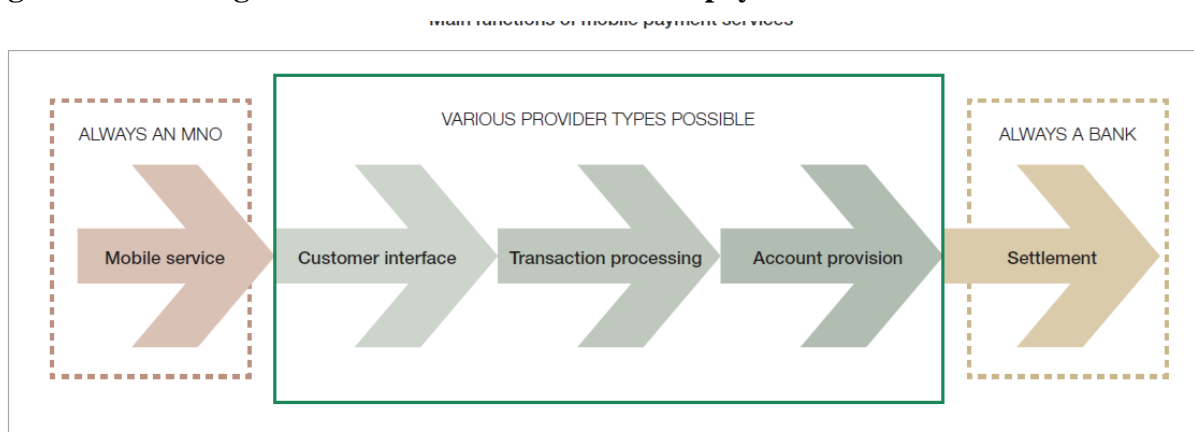
2.1.1 Mobile transfers and payments

Mobile transfers are services entailing the transfer of mobile money from one user to another. Unlike mobile transfers, Mobile payments are services in which money is exchanged between two users with an accompanying exchange of goods or services. From mobile transfers, MNOs have broadened mobile money services to include a range of mobile payments. According to Kulabako (2010), MNOs in Uganda started out by targeting entities that receive recurrent payments from diverse customers like utility companies (e.g. power, water, sewage, pay TV, etc.) and those that make bulk payments (e.g. for salaries and school fees). However, with an increase in popularity of mobile money services traditional money transfers initially offered through banks (such as Western Union and Money Gram) were incorporated into the mobile money platform

Furthermore, World Bank (2009) recognizes mobile payment services as comprising of five basic functions: mobile services, customer interface, transaction processing, account provision, and settlement (as in Figure 2.1). According to Mendes & Alampay (2007) Mobile payments and transfers make use of two models that the bank-led model and the non-bank-led model. Under a bank-led model for mobile payment service, customers have a direct contractual relationship with a licensed financial institution. In contrast, under a nonbank-led model they exchange cash for electronic value recorded in a virtual account on the server of a non-bank organization, such

as a MNO or an issuer of stored-value cards. Nonbank led models can be used to facilitate mobile payments and transfers but not more sophisticated banking services, such as savings and credits, unless associated with bank-led models (World Bank). Non-bank led models include the MNO-led model which is most used in developing countries. The MNO-led model makes use of agents to scale up financial inclusion mostly in areas without reach of banks but have greater mobile diffusion.

Figure 2.1: showing function of mobile transfers and payments



Source: World Bank, (2009)

2.1.2 Mobile financial services

These are services in which mobile money may be linked to a bank account to provide the user with a whole range of transactions (savings, credits) that they would ordinarily access at a bank branch (Maurer, 2008; Gencer, 2011). Mobile finance services are used by insurance institutions to leverage mobile money as a vehicle for cost reduction and improved efficiency in providing their conventional services (Morawczynski and Pickens, 2009). Also, some micro-finance institutions (MFIs) are using mobile money a safer and cheaper way to disburse loans and collect payments. Micro-insurance institutions are similarly beginning to use mobile money to collect premiums and pay reimbursements to their customers. In the end, microfinance institutions (MFIs) that receive mobile money deposits could potentially generate more revenue through retention of such deposits. As a result, Mobile money services offer an unprecedented opportunity to significantly increase access to financial services and ease the flow of financial transactions within business environment. Mobile money, therefore, could transform financial

inclusion where most financial inclusion models have employed either ‘credit-led’ or ‘savings-led’ approaches but not achieved sufficient adoption or scale-up. Radcliffe (2010) states that mobile money has redefined the financial inclusion landscape by promoting risk reduction attached with handling cash during transactions that involve long distances or association with couriers and bus services.

2.2 Financial inclusion

Financial inclusion has commonly been defined as the provision of financial services to previously “unbanked” sections of the people. However, consensus on the scope of financial inclusion may extend to the provision of other financial services to individual to have access to only the basic financial services at an affordable and fair price. To another extent, consensus on financial inclusion is not merely focused on the “unbanked” individuals but on disadvantaged and other vulnerable groups, including low income, rural and undocumented persons previously deemed unworthy of financial services despite their dependence on basic transactions and remittances from family, current economic conditions dictate their absorption into mainstream financial services (such as insurance, microloans) especially when involved in business transactions with urban-based businesses.

In developing countries, financial inclusion is defined to include both semi-formal and informal financial services such as Savings and Credit cooperative societies, Self Help groups that are common for low-income earners and micro-entrepreneurs who micro-access loans and saving for business and consumer smoothing. Commonly such services are referred to as Microfinance services and range from savings, loans, insurance, financial advisory and are aimed at serving poor communities in rural areas (Susan and Zarazua, 2011); despite limited access to technology. However, Mbiti and Weili, (2011) remarks on reduced preference for mobile money services in preference for formal and informal financial services, provide a limitation to financial inclusion since mobile money alone is not sufficient to absorb all people into the financial system. They advise against replacement of banking services for Mobile money services since they offer limitations to financial discipline and could create a negative effect on economic times since electronic money is vulnerable to financial damage when there is total dependence on use of electronic money. According to Gross et al (2012), evolution of technology fosters filling of the void created by traditional, conservative “branch banking” such as high transaction costs,

timely long queues to “convenience banking” involving electronic conversion and storage of cash, transfer of stored value between accounts.

According to Claire and Eisenhart (2013), financial inclusion traverses beyond ordinary receipt and sending of remittances to total transformation from dependence on cash and promoting the use of electronic means of transfer and storage. They highlight that mobile money provides the means for conversion of electronic funds to physical cash as well as making of payments. Furthermore, financial inclusion involves access other financial services such as insurance, credit, and different types of saving options are also important (Claire and Eisenhart, 2013; Hannig and Jansen, 2010) in a convenient environment. For all these services, the convenience to make payments for loans and to individual, and save is easier with electronic means since the need to move to a financial institution is eliminated. Alexandre (2011) asserts that mobile money in consequence provides a gateway to an account and later on a variety of financial services; and therefore financial inclusion will be best measurable depending on the frequency of usage of financial service, mode of access and purpose of access (Demirguc-Kunt and Klapper 2012).

2.3 Mobile banking and financial inclusion

According to Gencer (2011), mobile banking is a vehicle to financial inclusion through transactional and information means. From this view, mobile banking is supported through means such as WAP and Mobile wallets so that secure flow of information and transaction is possible between the bank and account holder regardless of the place and time. Herzberg (2003) presents mobile banking as a transformative tool for both permanent and non-permanent residents of rural areas to be included in the financial world as they can keep abreast of their bank accounts even in places where banks are non-existent. Here forth, Mobile-banking offers the opportunity to diminish financial exclusion by offering financial services to low income groups that have access to mobile telephones but not to financial services. These are key services capable of transforming the livelihoods of the poor. Ivatury and Mas (2008) present mobile banking as a substitute and complement to financial strategic alliances such as retail banking where direct and instant banking is done between customers and bank offering services such as statements, balances, cheque deposits, money transfers, bill payments over the their mobile networks.

Mobile banking provides the possibility of addressing two key barriers to financial inclusion for the poor: affordability and physical availability. Compared to branch-based banking, mobile banking does not incur in the cost of roll-out and faces lower cost of handling low-value transactions. This makes cost burden transfer to the customers minimal unless by regulatory measures. However, Gencer (2011) reacts by stating that despite cost reduction, charges in terms of tariff plan in the end become a burden to customer with regulations. More to this, mobile banking of both low value and high value clients is charged the same fee as adopted from traditional banking methods. Therefore, cost reduction of mobile banking is an advantageous point to note only when external influences are not affecting the MNO's profitability. More to this, Radcliffe (2010) remarks that Mobile banking delivery is commonly set up with existing networks that already reaches poor un-banked people; adding a bank account to the mobile phone can channel the power of new distribution networks for cash transactions such as airtime merchants (Gamos LTD, 2006). The created networks reduce dependence on expensive and cost-inefficient means of transactions in rural areas. For example, mobile banking will not require a new handset to make transactions due to various channels such as USSD, Message and Wap through which mobile banking is offered. Depending on the available channel, it is possible to make transactions

Mobile banking changes the financial and social connectedness of individuals mainly in business as well as the efficiency of the market. Indeed, inequality and social exclusion diminish economic growth and create inefficiencies in the function of the financial market (Aghion, Howitt, & Mayer-Foulkes, 2005; Bordeau de Fontenay & Beltran, 2008). Inefficient financial markets characterized with poor information flow make the possibility of absorption of low volume-characterized unbearable. In a bid to reduce this, mobile banking provides a convenient and trustable information flow relevant to efficiency of financial markets to cater for rural and poor communities.

Mobile money has the possibility to facilitate agent banking. Agent banking is a model for delivery of financial services whereby a bank partners with a retail agent in order to extend financial services in location for which bank branches would be uneconomical. Agent banking is the backbone is mobile banking because they are in many cases equipped with the right equipment and location that could transform the crowding of banking branches and extension of

banking services to rural areas where it is extremely expensive to set up a branch yet they are not “worthy” investment due to low bank transactions. Location of banking agents in rural areas provides rural persons mostly the illiterate who feel intimidated by the environment in banks with access to longer hours of service, convenience in banking owing to the close proximity of the agent. Despite a wide range of products available to customers, agent banking is most limited to Person to Person (P2P) payments and does not have very good reception to savings, deposits, and insurance or credit facilities (CGAP, 2014 article by Eduardo Diniz). In Kenya, agent banking has been suggested as an innovative model through which the rural clichés will be financial included. Empirical studies in Brazil have proven agent banking as a transformative and adaptive financial inclusion method that had financially includes over 75% of initially excluded poor communities. In Mexico, Agent banking is a strategy through which the poor communities have been able to use financial services especially the local farmers (World Bank, 2009). Regulations on banking, however, pose a big hindrance to promotion of mobile banking due to set standards that have to be fulfilled by bank agents. In the same way, the existence of numerous banks poses a risk of uncontrolled agent banking and security threats attached with robbery since agents are located in convenient places such as pharmacies, shops that don’t need a lot of security.

Mobile banking allows users to make money transfers that are Peer to Peer transfers, across different accounts. Since SIM cards can are Point of Sale (POS), a mobile phone acts as a virtual bank through which information and transactions can be executed. Money transfers were initially restricted to some complicated set of clientele who used platforms such as Money Gram and Western Union. Mobile banking introduction of mobile wallets provides a safer and easier mode across the banking section for transfer of funds between accounts

2.4 Mobile transfers, payments and financial inclusion

Mobile payments refer to the provision of payment services through the use of mobile phones, mostly electronic funds transfer between a customer’s own accounts, transfers to a third party (beneficiary), or would be mobile money. A mobile payment may also refer to the process of two parties exchanging financial value using a mobile device in return for goods and services. During mobile payments, a mobile phone acts as a point of sale between the buyer and seller of a good or service. Following the success of M-Pesa in Kenya, various business models were

developed to cater for diverse business transactions so as to provide basic services to the poor. Transitions from traditional payment procedures especially through cash have been adopted by Government, Non-Government organization and business for payment of salaries and other benefits to their staff and other business persons especially suppliers as a convenient and affordable methods. In addition, Mobile money service innovation evolutionalized the payment process of many payments in Uganda such as taxes, utility bills that were initially done through cash offices and banks. These mobile payments include payments to NWSC e-payments, URA taxes, Digital TV subscriptions and bulk payments such as school fees and salaries (Kulabako, 2010).

The prospects of mobile transfers and payments pose an increasing chance for international or cross-border transfers of money cheaply and conveniently (AfDB, 2013). This is mainly inform of remittances from family and friends.

Competition created by mobile transfer in sharing of liquidity and deposits between banks and MNO creates a competitive environment that focuses not only on existent developed markets but also exploring into new markets that have not been utilized (Nuwagaba, 2012; Stirmus, 2012).. This change in market orientation forces the banks to move into rural areas such that they can tap into the rural markets. This will be in form of branches set-up and mobile branches (Kamukama & Tumwine, 2012). In their research on mobile money and how it affects commercial banks liquidity, they highlight that commercial banks competition with mobile money operator was driving more commercial banks to rural areas and also making use of mobile money services to also increase their clientele base. Their recommendation on partnerships between MNO and other commercial banks will force banks into effective models to expand their physical reach into poor and rural areas

Although traditional banking regards only banking high value and high frequency transaction based businesses as cost effective, mobile money offers a transaction based service that can tap into small volume payments and transfers for their customers with only transfer limits as the only limitation to transfers (AfDB, 2013)

Mobile money offers the chance for interoperability between mobile networks and bank accounts. Mobile money accounts in the Bank-led model allow customer to send and receive transfers between accounts linked to different mobile networks and other bank accounts regardless of the bank or mobile operator.

The ability to make mobile payments is not enough from a financial inclusion perspective. People need more than payment or storage functionalities to manage their financial lives—insurance, credit, and different types of saving options are also important, if not essential. However, CGAP (2012) states that mobile payments are an optimal gateway for financially underserved and the poor whose exclusion was due to being considered worthy, unprofitable and not rust could be put in them as bankable. On the other hand, mobile payments only require registration and not screening of customers unlike other financial services such as credit, saving and insurance; making such “*untrustworthy*” customer to be also included on the basis of their registration.

2.5 Mobile finance and financial inclusion

Mobile finance is a frontier for which virtual banks on phones boost saving both domestic and foreign (CGAP, 2011). The savings generated here forth become a means through which shock absorption in bad times is done, entrepreneurship is fostered and a means to secure money safely. According to Kendall et al (2011), Mobile money created a platform for start-ups to build upon (Kendall et al. 2011) so that income can be generated from transaction costs during transactions. More prominent was the involvement as business such as MM agents. Excess income of start-ups, as a result, became saving from business transactions.

Mobile commerce is influential in mandating people to have bank accounts especially when they need to make transactions with business in rural areas. Mbiti and Weili (2011), highlight that the rural person are able to increase their financial reach when their mobile phones transaction and statements are used to back their business transaction. As technology in Mobile money platform increases, mobile money services are becoming a possible means through which rural communities are perform most of their commercial activities. It also facilities other commercial platforms are effectively used by rural persons mainly when one agent is chosen as a correspondent to both Mobile Money Services and other complementary platforms. In addition

to this, Mbiti and Weili (2011), regulations that seek to reduce risk and ensure liquidity between banks and mobile money networks requires that deposits are made with commercial banks. These deposits induce such agents to have bank accounts; which bank accounts can be used to access other financial services. Furthermore, the success of innovation of mobile money has the ability to enable and catalyze the development of mobile commerce (Herzberg, 2003) particularly in the developing world.

Williams and Torma (2007) applaud the capacity mobile money services in advocating for self-driven long term saving in terms of pensions. They highlight that the information asymmetry in current pension plans by Government statutory bodies limit savers zeal to save more than the required since they have not proper record of their saving with the pension funds. Furthermore, they highlight that mobile money services could be transformational into access to more sophisticate financial saving solutions to the unbanked and vulnerable groups without any limitation for working class.

In addition to extending financial services to the poor, mobile money is expected to improve productivity by increasing the efficiency and lowering the cost of transactions, improving security, generating new employment opportunities, and creating a platform on which other businesses can grow. Generally, mobile money ability to reduce costs is indisputable (Ivatury and Mas, 2008) especially with operational cost to business. The reduction in cost is later converted into saving by individuals especially from transport costs, account opening, document processing. Gencer (2011) posits that mobile money platform could be a conduit for cost-effective and easier access to other financial services such as micro-finance and micro-insurance. With microfinance having a more prominent success, its reach and infrastructure has been adopted in rural areas since remittances from urban relations act as deposits and the same institution offer the same service. As a result, acquaintance with microfinance institutions by those who were excluded is a probable reason to be engaged with microfinance services and hence financial inclusion. To supplement this, the WEF (2011) assessment on models of financial inclusion shows that synergy between mobile money services and microfinance could help leverage MFIs' progress in provision of micro-credit and micro-savings mobilization out of

voluntary rather than pressure from group members. Levine & Sweet (2000) highlight the impact of partnerships between mobile network operators and other financial institutions in extension of such services. For example, a partnership between Equity bank and Safaricom in Kenya gave birth to M-Kesho that offers micro-savings accounts, credit and insurance to subscribers; Kilimo Salama which is a micro-insurance product that used M-Pesa to provide micro-insurance policies to small holder farmers. Finally, innovation of mobile money services atop current platforms offers users more sophisticated financial services that could be very beneficial to the unbanked population. However, Maurer (2008) notes that mobile money networks in developing countries, Uganda in particular, are not equipped to offer the broad range of financial services people want and need. Among other things not offered by MNO are creditor loan facilities, insurance covers and drawing larger amounts above

2.6 Conclusion

Mobile money and financial inclusion are two concepts that are inter-dependent but comparative advantage of every service cannot be completely successful unless it is within enabling environments that allow for local customization of innovative forms of mobile money (Pickens, 2009). Therefore, innovation and dynamism remains a standing point for which mobile money services must be tailored to traditional methods of banking. In addition, the role played by mobile money in financial inclusion is undisputable but it possesses a big threat to sustainability of liquidity in commercial banks. Mobile money regulation, therefore, must require that a competitive landscape is maintained so ensure survival of other commercial banks (Sturmius, 2012).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter defines the type of research design to be used in the study, presents a study population and area from which the sample size will be obtained. It further illustrates the various methods in which data will be collected and made available for management and analysis. The results obtained justify whether the data was reliable and valid. The chapter takes into consideration the ethical codes to be observed by the researcher during the study and portrays the limitations the researcher is likely to face during the research and how the researcher will manage to overcome them.

3.2 Research design

Orodhon (2003) defines research design as the scheme, outline or plan that is used to generate answers to the research problem. The study will use a case study design of Buwama, Mpigi district. According to Bluman (2012), case studies are research design in which a study is done on a smaller population as representative of a bigger population. Case study designs entail the use of both qualitative and quantitative approaches.

3.3 Study Population

A study population refers to a totality of the number of units that have the possibility of being included in the sample (Bryman, 2003). The study population will include residents of Buwama who don't have access to financial services. These will cover households, businesses, persons.

3.4 Area of study

The research will be carried out in Buwama, Mpigi district. The study will concentrate in rural parishes of Buwama including Mbizzinya, Bunjako and Bongole. Since this areas are not near the highway, they are less attractive to financial services. Buwama trading center also lacks an agent of any bank.

3.5 Sample size

Due to the research design, the study will intend to cover a sample size of 50 respondents. The sample will consist of 10 mobile money agents, 15 men, 4 farmers, 6 students, 10 youths and 5 women.

Table 3.1 showing number of sample elements

No	Category	Number of sampled units
1	Mobile money agents	10
2	Men	15
3	Women	5
4	Youths	10
5	Students	6
6	Farmers	4
	Total	50

3.6 Sampling techniques

A sample refers to a group of elements selected from a larger group in the hope that studying this smaller group will reveal important information about the larger populations (Gideon, 2012). The study will use both probability and non-probability sampling techniques in selection of samples. Probability sampling will involve the use of simple random sampling of the population.

However, non-probability sampling will be done involving purposive sampling technique. Purposive sampling involves a biased selection of sample elements because of the information possessed by the element that could be relevant of the objectives of the study. Since a sampling frame in terms of a population register is readily unavailable to the researcher, the study will then also use convenience sampling in which sample units will be selected along depending on their

willingness to participate in the study. This is because some of the units may be more knowledgeable than others about mobile money services and are literate.

3.7 Data collection methods

The researcher will use both primary and secondary data during the study. Primary data will be collected through structured questionnaires. Owing to the limitation of time, the researcher chose to use only questionnaires in the data collection process to obtain first-hand information. The questions in the questionnaires were in line with the objectives of the study. Secondary data will be obtained from internet, journals of previous research findings and existing literature on each study variable.

3.7.1 Questionnaires

The researcher will use self-administered questionnaires having both open-ended and closed-ended questions. During questionnaire administering, the researcher will allow the literate respondents to fill in the questionnaires, however, he will read the questions and wait for a response from the illiterate respondents. This will be done to avoid any form of language barriers and errors from non-response of the respondents.

3.8 Data management and analysis

According to Sekaran (2003), data analysis mainly tests the goodness of data; the hypothesis developed for the research and gets to feel the data. It was concerned with creating order and putting things in a way someone can understand. It was made after careful consideration of the objectives of the study as well as of tools developed to meet the objectives.

Data collected was coded categorically and each response given a numerical equivalent. This coded data was then stored and computed using SPSS. SPSS (Statistical Package for the Social Sciences) is a programming device for conducting statistical analysis and providing functions for managing, analyzing and presenting data.

Analysis on the data was done through descriptive statistics such as percentages, means and standard deviations. The study also used correlation and regression analyses to find out if there is existence of relationship among the study variables. Data presentation was done through pie charts and bar graphs

3.9 Quality control

According to Kothari (2004), “Validity refers to the extent to which a test measures what we actually wish to measure, while reliability has to do with the accuracy and precision of a measurement and procedure.” The significance of ensuring control over the research processes and collection of data was vital for the credibility of research findings. The set procedures in this study ensured that control over the data obtained from the field was seriously taken into consideration as that provided its measure for reliability and validity. Validity was used as a quality control method in which a pilot administering of the questionnaire was initially done before effective data collection. This reduced any chances of questionnaires that were repeated or misunderstood by the respondents. The researchers measured content validity and construct validity so as to ensure that the data collected using the instrument is accurately and honestly represent theoretical constructs studied. Research instruments are said to be valid if it actually measures what it is supposed to measure (Saunders et al., 2007). The content validity index (CVI) was established by relating the declared valid items to total number of items.

$$CVI = \frac{\textit{Items rated relevant}}{\textit{Total number of items}} \times 100$$

The researcher also maintained that sources of bias such as from the research instrument and from the researcher were minimized. The questionnaires contained questions that were not influencing the respondents’ response.

3.10 Ethical issues in the research process

The researcher requested for permission from respondents before carrying out the research. In this way, some information that the respondents gave out was not to be revealed out for other reason other than academic purposes. The researcher also has to keep confidentiality and identity of the respondents.

The researcher also received permission from the university detailing the nature of research that will be carried out. This letter of approval was presented to the LC 1 chairman since the researcher is not a permanent resident of that area. This provided assurance over the intention of the researcher. In addition, no one was forced to give out information that that felt they were not to give out.

3.11 Limitations of the study

Financial constraints: Finance was most of the serious hurdles since it was needed for having the work surfed, typed, photocopied, printed and money for making phone calls during inquiry of the work.

Information gathering constraints: Some of the needed information to have this work accomplished was personal and some respondents did not feel like revealing such information to a stranger. However, assurance of the confidentiality of their information was made to them

Time constraint: The duration for which the research was permitted to be done corresponds with other academic obligations such as test, course work and lecture that the researcher also has to fulfill. This problem made the data collection constrained since the case study is located in a distant location from the university.

3.12 Conclusion

In conclusion, the researcher has shown how the population sample was obtained from which data was collected and analyzed. He has further presented ethical considerations that were observed during the research and solutions to limitations to her research; with this, he believes he will be content with the outcomes.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter presents the findings of the study that were generated from data collection, analysis and interpretation. It includes descriptive statistics, correlation analyses. The results are presented using the research objectives which are:

- i) To assess the role played by mobile banking in utilization and access to financial services in rural areas
- ii) To find out the effect of mobile payments and transfers on financial inclusion of rural household
- iii) To find out the extent to which mobile finance implementation can influence financial inclusion of rural household

4.1 Background information

4.1.1 Gender of the respondents

The research collected data on the gender of the respondents to find out which sex uses MM services more often and are conversant with financial inclusion in the area and the details are presented in the Table 4.1 below.

Table 4.2 showing gender of the respondents

Sex	number	Percentage
Male	20	58.8
Female	14	41.2

Total **34** **100**

Source: Primary Data, 2015

The results in Table 4.2 above indicate that 58.8% of the respondents were male whereas 41.2% were female. This showed that more male prefer to use the services of mobile money than the female. This was because more men were engaged in a number of businesses than the women and had responsibilities like paying a number of bills for example school fees, television bills, electricity bills both for their homes and businesses and among other bills. The females mostly used MM for savings alongside other ways to keep their money which included SACCOS and this contributed to the gender in balance in the study.

4.1.2 Marital status of the respondents

Data collection also included information regarding the marital status of the respondents which helped to find out which of the status used the MM services more. This data was preemptive enough to understand some aspects on the background of the respondents.

Table 4.3 showing marital status of the respondents

Age group	Frequency	Percentage
Single	25	73.5
Married	9	26.4
Total	34	100.0

Source: Primary Data, 2015

From the results in the Table 4.3 above, 73.5% of the respondents were married where as 26.4% of the respondents were single. However, majority of the married respondents had occupations as compared to the single respondents. This showed that the married respondents had a number of responsibilities to take care of than the single respondents thus using the MM services from time to time. Some them had their families staying in their home towns and hard to provide for them

from time to time by sending money to support them, had to pay school fees and a number of bills like electricity both for their businesses and families at home.

4.1.3 Age of the respondents

Data collection involved data on the age groups in which the respondent belonged. This was in consideration of the age groups that were both eligible for bank accounts as well as in possession of mobile money access. This helped to show which age group actively participated in MM services and the reasons that inspired them to do so. According to the results as shown in Table 4.4 below, it is clear that the respondents were all eligible for bank accounts with a majority of 55.9% of the respondents between 21-30 years followed by 23.5% of the respondents between 15-20 years and 20.6% of the respondents.

Table 4.4 showing age bracket of the respondents

Age group	Frequency	Percentage
15-20 years	8	23.5
21-30 years	19	55.9
31-40 years	7	20.6
Total	34	100.0

Source: Primary Data, 2015

It can be deduced from the above results that financial inclusion was more common in youths between 21-30 years who probably are literate about financial system and are within heading or within the working class. It also showed that they were not afraid of technology change and were excited about the services. This proved that within the rural areas most people who are older than 30years of age prefer to use the ways that have worked for them in the past other than changing to mobile money because they are not ready to learn anything new plus they are contented with what they are using at the moment.

4.1.4 Level of education

Data collection also sought to have access to the highest level of education attained by the respondents. These results would provide the background on whether the respondents were able to understand, read and write instruction as required when using Mobile Money Services as well as for banking purposes. Most of the illiterate were scared of using these services because of fear of making financial errors that would result into losses on their side. However, most of the literate admitted to finding MM services simpler, easier, less costly and more convenient to use than even banking services. From Table 4.5 below, 64.7% of the respondents had acquired a maximum of secondary education, 32.4% with a maximum of Primary education and 2.9% of the respondents had not acquired any form of formal education. The study therefore was conducted on persons who had acquired some form of formal education and this supports their having come across some information concerning financial inclusion either from school or other forms of information dissemination such as radio and televisions. Unlike those who have not gone to school who may not have found a way to come across this information.

Table 4.5 showing respondents' level of education

Level of education	Frequency	Percentage
Primary	11	32.4
Secondary	22	64.7
Uneducated	1	2.9
Total	34	100.0

Source: Primary Data, 2015

The above results confirm CGAP (2014) recommendation that financial inclusion must be emphasized for the rural illiterate population in developing countries which characterize the majority of the financially excluded population.

4.1.5 Occupation

Data collection also sought to find out the nature of economic activity that the respondents were engaged in and in connection with MM services. This was attributed to the need to have the access to finance that can be kept or utilized with financial institutions. It therefore showed that majority of the respondents were employed which gave them a reason to use the services to benefit them in a number of ways for example savings, transactions like payment of distant suppliers and customers demand on payments through mobile money and among others. They then admitted on this simplifying their lives and reducing costs like transport costs to go pay distant suppliers. It was found that those whose occupations necessitated them to have a lot of cash or bulk cash on them were more likely to know about mobile money and its role in financial inclusion because they found it hard to keep a lot of cash on themselves as they were scared of thieves or losing the money so they needed a place where they could keep the money safely until when they need to use it unlike those who have a low cash flow in their businesses and can easily keep the money themselves because they do not see the need for mobile money banking or even regular banking.

Table 4.6 showing respondents' occupation

Occupation	number	Percentage
Unemployed	3	8.8
Agent	7	20.6
Bodaboda	3	8.8
Business man	2	5.9
Farmer	3	8.8
Salon	1	2.9
Shop keeper	3	8.8
Student	6	17.6
Vendor	3	8.8
Youth	2	5.9
Total	34	100.0

Source: Primary Data, 2015

4.1.6 Monthly income

Data collection also sought to find out the monthly income of the respondents in relation to their saving and spending habits in connection to the theory of marginal propensity to save and consume. Their income levels would also determine their expenditure level thus the means they use for example sending money, paying bills and a number of transactions through MM services as well as how it has helped them. However, almost all of the respondents were not very responsive to their monthly income. This would have been attributed to the need for confidentiality or lack of accountability or steadiness in their monthly income. Though according to the little data found, it was seen that the little who gave information on their income showed that they did use mobile money banking once in a while and they actually found that it helped them keep their money safe and also allowing them to access their bank accounts.

Those that did not give information about their income though also divulged that though they use mobile money services it's not as often. Plus they do not trust it since they have heard about people's money getting lost on their phones and this makes them cautious about the service of mobile money.

Table 4.7 showing respondents' monthly income

Monthly income	Frequency	Percentage
Less than Shs 100,000/=	3	8.8
Shs 100,0001 and 200,001/=	1	2.9
Unknown	30	88.2
Total	34	100

Source: Primary Data, 2015

4.1.7 Bank account ownership

The study also wanted to get preliminary background on the respondents' ability to having priory had a bank account as well as their perception on banking services. This will therefore give us a connection between the banks and the MM services as well as the most preferred by the people in the community. The study also wanted to find out whether if there was a bank agent in this area it will benefit them. The results in Table 4.8 below show that 78.8% of the respondents did not have bank accounts and 21.2% of the respondents had bank accounts. This showed that majority of the people prefer to use MM services than the bank services in this region and are comfortable even with the inexistence of banks in this region.

Table 4.8 showing respondents' bank account ownership

Response	Frequency	Percentage
Yes	7	21.2
No	26	78.8
Total	34	100

Source: Primary Data, 2015

The results above are satisfactory enough to show that majority of the respondents were financially excluded from formal financial services. It is therefore within the scope of the study that the respondents were entirely crucial to the study. This was due to the fact that most of these people did not really have the necessity for having a bank account because they had other ways of keeping their money either on themselves or with relatives or SACCOs, phones and do not need banks

4.1.8 Mobile phone ownership

The study also collected data regarding ownership of mobile phone devices by the respondents. This is because the MM service is performed across mobile phones. The study needed to find out how many had mobile phones and whether or not they use them to access these MM services. Ownership of a mobile device is influential to having a SIM card as well as private access to the MM service. From Table 4.9 below, the results show that all the respondents owned a mobile phone. This though did not inform us as to whether they were registered users of mobile money services because having a mobile phone does not mean anything. But however, even those that are not registered users of the mobile money services can still access these services but at a higher cost rate and are limited to only a few of the services as compared to those who are registered users.

Table 4.9 showing respondents' mobile phone ownership

Response	Frequency	Percent
Yes	34	100.0
No	0	0
Total	34	100

Source: Primary Data, 2015

The above results provide a useful background that financial inclusion is possible through mobile money because of the proliferation of mobile phones due to ICT development as proposed by Kulabako (2010) thus making this research in agreement with other studies.

4.1.9 Mobile network subscription

The study also collected data on the mobile networks that the respondents were subscribed to. However, one owning a SIM card does not necessarily mean they are registered to access the MM services. This would help find out the relationship between those that own SIM cards and those that have registered their SIM cards to access the MM services. It would also further show the most preferred network or networks among the people in this region. Therefore, the results of Table 4.10 below show that 45.5% of the respondents were subscribed to both MTN Uganda and Warid/Airtel Uganda, 33.3% of the respondents were subscribed to either Warid/Airtel, 15.2% to MTN Uganda only and 6.1% were subscribed to Orange. None of the respondents were subscribed to UTL.

Table 4.10 showing respondents' mobile network subscription

Network	Frequency	Percentage
MTN only	5	15.2
Warid/Airtel only	11	33.3
Both Warid and MTN	15	45.5
ORANGE	2	6.1
Total	33	100.0

Source: Primary Data, 2015

With the major MM carriers being MTN and Warid/Airtel Uganda, the study revealed that many of the respondents were subscribed to mainly MTN and warid/airtel and used mostly other networks as auxiliary networks due to mobile network connectivity.

4.1.10 Mobile Money service registration

The study collected data on the mobile money service that the respondents were registered owing to having a mobile phone. This would therefore help to find out the transaction carried out by these respondents and if these MM services have provided for them the financial services they need in the area. The results in Table 4.11 show that 97.1% of the respondents were registered to the Mobile money service while 2.9% had not been registered to any mobile money service despite having or not having mobile phones. This showed that the majority of the respondents could access these MM financial services.

Table 4.11 showing respondents' MM service registration

Response	Frequency	Percentage
Yes	33	97.1
No	1	2.9
Total	34	100

Source: Primary Data, 2015

Though they were registered, some of them did not really use the service that much because they were either illiterate or did not have that much capital or did not see a purpose for it.

4.1.11 Access medium for MM services

Respondent were also required to state whether they were using Mobile Money services irrespective of their having a phone or not. The results in Table 4.12 indicate that 85.2% were accessing MM services via their own phones, 11.7% through a Mobile money agent and 3.1% through a friends or family members' phone.

Table 4.12 showing respondents' MM service accessibility

Accessibility	Frequency	Percentage
On my phone	29	85.2
Through an agent only	4	11.7
On a friend or family member's phone	1	3.1

Total	34	100.0
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Source: Primary Data, 2015

The above results indicate that majority of the respondents were accessing MM services through their own phones. A cross examination of MMS access point and phone ownership shows that majority of the phone owners opted to use their phones than agents. This was because they did not really trust the agents and since it's a factor to deal with money people are not that trustworthy since they fear the money may be stolen so they prefer to use their own phones. However, a few of the respondents used agents and friends mobile phones because they were either not registered on a certain network and did not want to face the charges and high rates concerned with cross network transactions or they were illiterate on how to use the MM services through their own phones.

4.2 Mobile transfers and financial inclusion.

4.2.3 Nature of Mobile transfers

Respondent were also required to identify the forms of mobile transfers that they were making using the MM platform. This would help determine the most transfer payments commonly made by the respondents using their phones. The results in the 4.13 below indicate that 50% of the respondents were making mobile transfers for business needs, 35.3% for personal needs while 14.7% were making transfers for utilities and bills payments such as electricity. This indicated that most of the respondents did actually use mobile money services to carry out or help them in their businesses and thus allows them to facilitate their business needs. Most of them relieved the ease and cheap costs involved with using MM services for example to mostly pay distant suppliers and carryout inter region businesses.

Table 4.13 showing nature of mobile transfers

Payments	Frequency	Percentage
Utilities and bills	12	35.3
Personal needs	5	14.7
Business needs	17	50
Total	34	100.0

Source: Primary Data, 2015

Mobile money service innovation evolutionalized the payment process of many payments in Uganda such as taxes, utility bills that were initially done through cash offices and banks. These mobile payments include payments to NWSC e-payments, URA taxes, Digital TV subscriptions and bulk payments such as school fees and salaries (Kulabako, 2010).

4.2.4 Frequency of MM Service transfers

Respondents were also required to state the frequency with which they were accessing mobile money services through whatever means that they were using. This would help us find out how frequent they make these transfers either on a daily, weekly or monthly basis. The results in Table 4.14 below revealed that 75.8% of the respondents were accessing MM services at least monthly, 18.2% accessed MM services daily while 6.1% accessed the services weekly. It is conclusive that the respondents were not very much transacting MM service transfers on a weekly and daily basis. This therefore showed that many respondents could have been making transfers on a monthly basis which could be as a result of monthly expenditures.

Table 4.14 showing respondents' frequency of MM transfers

Frequency of Access	Frequency	Percentage
Every day	7	18.2
Every week	2	6.1
Every month	25	75.8
Total	34	100.0

Source: Primary Data, 2015

As stipulated by AfDB (2013) about the need to tap into small volumes of payments and transfers, MM is therefore a service that can serve the underserved rural people who are considered unprofitable to the commercial banks and their activities. This therefore makes the results of these findings in agreement with their studies.

4.2.5 MMS senders and recipients

The study also collected data on the senders and recipients to the respondents. These were people with whom the service was involved with and included family and friends, business and customers or even both. The results (as shown in Table 4.15 below) show that 44.1% of the respondents used the Mobile money transfers with family and friends and 17.7% used MM transfers for business purposes. This was reflective of the agents and the other respondents who used the service to access their accounts to deposit on the account of their creditors; While 38.2% used MM transfers for both family and friendly needs and for business needs. MM transfers being mostly among family and friends showed that the services helped these people to send and receive money to and fro with their love which as away also strengthened their relationship. This also helped them do business in these far areas and provide for their loved ones as well at relatively cheaper costs.

Table 4.15 showing respondents' senders and recipients on MMS

Response	Frequency	Percent
Family and friends	17	44.1
Customers and business	4	17.7
All of them	13	38.2
Total	34	100.0

Source: Primary Data, 2015

Therefore, mobile transfers and payments pose an increasing chance for international or cross-border transfers of money cheaply and conveniently (AfDB, 2013). This is mainly in form of remittances from family and friends. This therefore makes the results of these findings in agreement with their studies.

4.3 Mobile banking and financial inclusion

4.3.3 Skill possessed by respondents for phone banking

In assessing whether the respondents were making mobile banking transaction, it was also important to know whether they had acquired the knowledge to execute it. It was discovered, in accordance to table 4.16 below, that 91.2% of the respondents did not have the skills and only 8.8% had the skill for mobile banking. This therefore showed that inspite the fact that majority of the respondents had attained a certain level of education and were not illiterate as so, they lacked the skills of carrying out mobile banking transactions. However, it showed on the faces of the respondents that most of them were not interested in learning these skills as they were comfortable with all the benefits and ease that MM services was providing to them and so no use of linking to banking services.

Table 4.16 showing whether respondents had the skill for mobile banking

Response	Frequency	Percent
No	31	91.2
Yes	3	8.8
Total	34	100.0

Source: Primary Data, 2015

However, many rural households cannot read and write as this was also a problem faced during data collection.

4.3.4 Knowledge and use of Mobile banking

The study also required to investigate whether the respondents had relevant knowledge and the technical know-how of the use of mobile banking platforms that were available to them via their phones. It was observed (as seen in Table 4.17) that the 82.4% of the respondents had knowledge about mobile banking but had never had the initiative to use the services. This showed that majority of the respondents knew about these services though had never used them. When asked why, most of them said they so no use in using these banking services since they would acquire relatively the same services from MM as the banks. They further added that they were no bank agents in the area so why the use of their services that may lead to increased costs for example transport costs to travel to other towns like Kayabwe and Masaka.

Table 4.17 showing respondents' knowledge and use of mobile banking

Response	Frequency	Percent
Yes and i have used them	1	2.9
Yes and i have never used them	28	82.4
No and No	5	14.7
Total	34	100.0

Source: Primary Data, 2015

Therefore, despite the power of MMS to include rural environments especially through information dissemination, the success of the dissemination would not be achieved and the respondents were stuck to the normal MM Services without ever having the need to access their bank accounts via their phones. This was because the users did not have a need to accesses their bank accounts because they would just go to the bank if they needed to know about their accounts.

4.3.5 Using phones to make bank transactions

The respondents were also asked whether they were using MM Services for making transactions such as balance checking, statement requests, money transfers. According to the table 4.18 below, it was conclusive that majority (97%) of the respondents had not used at least one bank transaction on their phone against the 3% who had. They were also not able to use the mobile access by the bank in which some had bank accounts. A few also confenced to switching from their bank accounts to the use of MMS claiming its more convenient with more agents, associated with cheap costs than banks and a number of other reasons.

Table 4.18 showing respondents' response to the use of banking transactions

Response	Frequency	Percent
No	33	97
Yes	1	3
Total	34	100.0

Source: Primary Data, 2015

However, mobile money being a transformational tool (Herzberg, 2003), the transformation was not evident in inclusion via mobile transactions. The services via the phone could not replace traditional mentality on banking transactions. This therefore makes the study in disagreement with other studies.

4.3.6 Influence of agent banking on access of bank services

Agent banking has been advocated in its success and outreach for financial services to even the rural households. This therefore was to find out from the people in this region whether the introduction of a banking agent would encourage them to access these banking services and other services through their phones. The results in Table 4.19 below, 81.3% of the respondents are in support that introduction of agent banking on MM platforms would ease their access to banking services, 15.6% were not in agreement while 3.1% were not sure or were ignorant about agent

banking. This would be an added bonus because people find it easier to deal with agents as the other mobile money services like depositing of money or withdrawing of money from ones phone would prove.

Table 4.19 showing whether agent banking would simplify access of bank services

Response	Frequency	Percent
Yes, it would	26	81.3
No, it would not	5	15.6
I am not sure	1	3.1
Total	32	100.0

Source: Primary Data, 2015

Agent banking in a number of countries has been suggested as an innovative model through which the rural population will be financial included. Other empirical studies in Brazil have proven agent banking as a transformative and adaptive financial inclusion method that had financially includes over 75% of initially excluded poor communities (World Bank, 2009). This therefore makes the study in agreement with other studies.

4.4 Mobile finance and financial inclusion

4.4.3 Maximum time savings kept on a phone

Respondents were also asked to state the maximum amount of time that they kept deposits on their phones as a form of savings. This would have helped us find out whether the MM saving service on the phone is helpful to them in providing for them that specific financial service.

Majority of the respondent could not provide the precise duration money was kept on their mobile accounts. As seen from the results in Table 4.20 below, 87.9% of the respondents could not ascertain the saving durations, 9.1% had a maximum response of a month and 3.0% had a maximum duration of a day.

Table 4.20 showing respondents' maximum time saving kept on the phone

Response	Frequency	Percent
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1 day	1	3.0
1 month	3	9.1
I am not sure	29	87.9
Total	33	100.0

Source: Primary Data, 2015

The above results depict lack of a good saving culture that comes with Mobile money services. This could be blamed on the fact that money is always available and at the disposal of the youth entrepreneurs. There are also a number of agents around the area and some work till late in the night. In addition, this could be attributed to the emergency reasons with which funds are sent and have to be withdrawn as soon as possible.

4.4.4 Preference of MMS for saving over banks and SACCOs

There was also need to ascertain the choice for which the respondents thought would be very convenient for them. In this way, I would be able to see if the satisfaction of Mobile money financial service of saving would subside with those from banks and SACCOs. As shown in the results of Table 4.21 below, the majority of the respondent felt that they preferred Mobile Money services against Banks and SACCOs owing to ease and convenience in using them. This is based on a 54.8% response in preference and a 45.2% response preferring the use of both SACCOs alongside MMs. the explained this in a number of ways for example, they would prefer the SACCOs weekly contribution in small amounts to be cheaper but at the end of it all, when they get their money they put it on their MM account for safe keeping. This therefore brings us to more than 95% of the respondents preferring to use MM for saving than banks and SACCOs since they do not also leave their money in the SACCOs account.

Table 4.21 showing respondents' MM preference over SACCOs and Banks

Response	Frequency	Percent
Yes	17	54.8
No	0	0%

I am not sure	14	45.2
Total	31	100.0

Source: Primary Data, 2015

The results in Table 4.15 above are in line with Ivatury and Mas (2008) who presents mobile banking as a substitute and complement to casual banking function such as retail banking. This then shows that the results of the findings as well as the study are in agreement with other studies.

4.4.5 Mobile financial services used

The study also sought to know the type of financial services that the respondents were accessing through their mobile handsets. This would also help us find out the commonly used MM financial service among the people in rural areas. The results, as showed in Table 4.22 below, indicate that money transfers and payments were the dominant financial transaction that the respondents were carrying out with a percentage agreement of 56.2%. This was followed by deposits and withdraws with a percentage response of 43.8% for deposits and withdraws. However, deposits and withdraws are connected to money transfers and payments.

Table 4.22 showing mobile financial transactions

Response	Frequency	Percent
Deposits and withdraws	14	43.8
Money transfers and payments	18	56.2
Insurance	0	0
Total	32	100.0

Source: Primary Data, 2015

The above results show agreements by CGAP (2014) about the limitation that legal and statutory organs make to influence the range of services that MM carriers are able to extend and offer to their clients with in the country.

4.4.6 Preferred method of getting financial assistance

Since majority of people use banks for saving and other transactions so that in the end they can acquire financial assistance from the bank, we also had to ask our respondents who greatly use MM as a substitute for banks how they acquire their financial assistance. The results in Table 4.23 below show the responses of the respondents preferred methods and majority of them prefer accessing loan facilities from friends and family as evidenced by an average response of 75%. Other respondents preferred to access the loans physically from the bank (average of 15.6%) while 9.4% of the respondents preferred having to obtain loan facilities through a MM agent. This implies that most of them preferred borrowing from friends and family due to a number of reasons which may include lack of stress, one may not need security, no fixed repayment time, no harsh conditions and a number of any reasons.

Table 4.23 showing respondents' preferred method of loan transaction with banks

Response	Frequency	Percent
Physically at the bank	5	15.6
From agent	3	9.4
I get from a friend	24	75
Total	29	100.0

Source: Primary Data, 2015

According to the CGAP (2014) on the how intimidated the rural households and residents are of commercial banks, they would rather opt for financial relief from friends and family with whom they have close relationships with. It also confirms World Bank (2009) report in which the farmer groups were more approachable for financial services in Mexico than the financial institutions. This revelation is also true to rural areas of Buwama. This therefore puts the results of the findings in agreement with other studies.

4.5 Financial inclusion

4.5.3 Are banks making effort to reach out

Bank's financial inclusion strategies must involve all concerned stakeholders. Therefore, it was relevant to understand whether the respondents were positive to efforts for their inclusion. The study results, as in Table 4.24 indicate that the respondents were not knowledgeable whether banks were making an effort to reach out and about the type of services that financial institutions and MMO were using to financially include them (as seen with an average of 50%) and other respondents did not agree that the financial institutions were maximally contributing to their financial inclusion as seen with average 34.4% in disagreement and an average of 15.6% in agreement of the bank's efforts.

Table 4.24 showing responses on banks' reach out effort

Response	Frequency	Percent
Yes, it has	5	15.6
No, I has not	11	34.4
Not sure	16	50
Total	32	100.0

Source: Primary Data, 2015

However, banks have been known as profit making organizations and have always been afraid of setting up agents in rural areas due to believed high cost incurred as well as local's unwillingness to save and lack of money to save.

4.5.4 Preferential Financial service provider

With various options that could be adopted for financial inclusion, the respondents had to respond on their preferential inclusion platform. This therefore would help us find out the preferred option by the respondents. The results show that 66.7% of the respondents preferred to be included via Mobile Money Services, 30.3% through SACCOs while 3.0% through

commercial banks. This then showed that majority of the people preferred the use of MM services than any other financial services due to a number of reasons.

Table 4.25 showing respondents’ financial service preference

Response	Frequency	Percent
Commercial banks	10	3.0
SACCOs	1	30.3
Mobile money service	22	66.7
Total	32	100.0

Source: Primary Data, 2015

The results in Table 4.25 above are also in line with Ivatury and Mas (2008) who presents MM services as a substitute and complement to casual banking function such as retail banking. This then shows that the results of the findings as well as the study are in agreement with other studies.

4.5.5 Why people do not access financial services

The study also inquired about the reasons that were impeding the respondents from accessing financial services using the assumption below;

- (i) The services are for only the rich
- (ii) We have no bank in this areas
- (iii) The services are expensive
- (iv) We don’t have money to keep there

Table 4.26 showing reasons for limited access to financial services

Response	Frequency	Percent
(i) and (ii)	4	12.9
(ii) and (iii)	11	35.5
(ii) and (iv)	7	22.6
All the above	9	29.0
Total	32	100.0

Source: Primary Data, 2015

The results in Table 4.26 above indicate that the respondents were limited to access financial inclusion with 35.5% attributing it to both absence of banks and the related costs; 22.6% of the respondents attributed it to not having both banks and the money to keep in the banks; 12.9% attributed it to both having no banks and the perception that the services are meant for the rich. In addition, 29.0% of the respondents felt that their exclusion was due to all the assumed reason above. It is therefore conclusive that the financial inclusion of the people in Buwama was due to having no formal banking services and could only see mobile money as the only way through which they could access some services they are excluded from.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter brings out the summary, conclusion and recommendation basing on the topic “the effects of mobile money services in the enhancement of financial inclusion of rural areas.” To achieve this, both primary and secondary data was used and the summary of the findings and conclusions were drawn based on the data analysis and study objectives. The chapter also further gives recommendations and areas for further studies in connection with this study.

5.2 Summary of the findings

5.2.1 To assess the role played by mobile banking in the extension of financial services in rural.

Mobile banking refers to the use of a mobile phone to access one bank account information as well as carrying out a number of bank transaction through the phone for example deposits, withdraws, transfers, payments, statement inquires and among others. This service helps people to acquire the banking services even in areas that have no banking agents thus bringing financial inclusion in all areas especially in rural areas. This is a key service capable of transforming the livelihood of the poor.

Many of the of rural people in this area also agreed to the fact that mobile banking is related with cheap cost and explained that before MM and mobile banking, they hard to use accounts of

friends and relatives in case they were to receive money from their distant family members. They further said that it also increased and strengthened their relationship with their family members.

However, according to the findings in chapter four, a small portion of only 21.1% of the population having bank accounts and a smaller population of 8.8% not having the skills and knowledge of using mobile banking. Many of the people in the region blamed this on the fact that there are no banks agents in their areas which gives them no reason to learn how to acquire these services. Majority of the people also had a perception that the banking services were mainly for the rich and believe that they are involved with high costs and for this reason they called them thieves.

To a smaller extent, the locals in the area who use this service have been so grateful to the new innovation and this included a number of business people some of which accessed the service on their phones and the other who did not know how used the mobile agent. Majority used them to pay suppliers straight to their bank accounts for the services received. They implied that this was cheaper than travelling to the nearest town with a bank agent to make these payments as well as risk reduction of travelling with large sums of money.

5.2.2 To find out the effects of mobile payments and transfers on financial inclusion of rural household

Mobile payments refer to the provision of payment services through the use of mobile phones from one person to another for example a customer and a sale personnel, transfers to third party and among others. During mobile payments, a mobile phone acts as appoint of sale between the buyer and the seller. Today, many businesses and service providers including government and non government organization have the provision of mobile payment for example payment of

bills like electricity, water, URA, television, school fees as well as paying for goods at stores, supermarkets, departments and among others.

The prospect of mobile transfers and payments pose an increasing chance for international or cross-border transfers of money cheaply and conveniently (AfDB, 2013) which has helped distant workers provide for their families even in times of emergencies. This is mainly remittance from family and friends. These transfer payments have also helped improve and strengthen the relationship between family members and friends especially those in villages and distant cities.

Unlike the traditional banks that only allow transactions of high and big amounts and are also associated with high charges on transactions thus excluding the poor, mobile money services especially payments and transactions are associated with low charge. These charges fluctuate depending on the transaction amount and they also offer a transaction based service that can tap into small volume payments and transfers thus including the poor and allowing them also acquire financial services.

However, CGAP (2012) states that mobile payments are an optimal way for the poor who were excluded from financial services from banks due to being considered worthy, unprofitable and no trust could be put in them as bankable. On the other hand, mobile payments only require registration and not screening of customers unlike other financial services such as credit, saving and insurance.

5.2.3 To find out the extent to which mobile finance implementation can influence financial inclusion of rural household

Mobile finance is a frontier for which virtual banks on phones boost saving both domestic and foreign (CGAP, 2011). The savings generated here forth become a means through which shock absorption in bad times is done, entrepreneurship is fostered and a means to secure money safely.

In addition to extending financial services to the poor, mobile money has also improved productivity by increasing the efficiency and lowering the cost of transactions, improving security, generating new employment opportunities, and creating a platform on which other businesses can grow. The job opportunities for example to MM agents have also helped improve the standards of living in rural areas. According to the findings in chapter four, the majority of the respondents questioned where MM agents. However, majority of the respondents also accepted to not acquiring funds from banks but friends and family as well as MM credits especially the agents.

Finally, innovation of mobile money services offers users more financial services that could be very beneficial to the unbanked population. However, Maurer (2008) notes that mobile money networks in developing countries, Uganda in particular, are not equipped to offer the broad range of financial services people want and need. Among other things not offered by MNO are creditor loan facilities, insurance covers and drawing larger amounts above what they have.

5.3 Conclusion

In conclusion, mobile money services have helped in the extension of financial services to the people in rural areas and it has also made it easy for them to benefit from financial services like mobile finance (credit, insurance, saving), mobile banking (transactions, statement inquiries), mobile payments (person to person, government to person, business to person). Implementation of these services on a mobile handset opens users' opportunities to financial inclusion owing to advantages in terms of accessibility, convenience, speed, privacy, cost-effectiveness and control for conducting financial transactions over other money transfers (Birch and Young, 2007).

In addition, the role played by mobile money in financial inclusion is undisputable but it possesses a big threat to sustainability of liquidity in commercial banks. Mobile money regulation, therefore, must require that a competitive landscape is maintained so as to ensure survival of other commercial banks (Sturmius, 2012).

5.4 Recommendations

Basing on this study, the following are some of the recommendations that were derived from the findings.

I would recommend banks to put up ATM machines in the area and also teach the people in the area on how to use these machines when initiating cash withdraws from their mobile phones.

This would help increase the liquidity of the banking sector as it seems to be dieing out with this innovation of mobile money. This would also help people to easily access their money in this region at all times around the clock.

I would also recommend that the MM service providers provide pay way machines that will help people deposit and also with draw cash alongside the agents who may not be reliable as humans unlike machines always tend to get problems here and there which mean no working thus bringing the whole MMs to a standstill in the area.

I would also recommend the MM service providers to provide a special package for those who want to register their MM for business transactions only so as to give out credits and loans depending on their weekly or monthly transaction amounts. This service should operate like the air time services for example, “beerako by Warid,” “Malako” by Orange and among others.

I would also recommend the MM services operators to come up with options where one can withdraw the money on his line but through another person’s line. This would help in situations in villages where they face load shading and among others. This option should work just the option of one buying for another air time using his mobile money account.

Lastly, I would recommend that the MM service providers provide an option of speaker phone for example where one chooses the language and speaks with the computerized woman on the other side as they are given short instructions to follow from like, “press 5 for withdrawing, putting in the amount you which to withdraw, press 6 to confirm...” and among others. This would help solve the illiteracy problem which was a major issue even during data collection. Due to this, some of the locals would use friends, family and neighbours to help them carry out transactions.

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8) Do you have a mobile phone? Yes No

9) Which mobile network do you have as your SIM card? (*Choose one or more options*)

MTN Warid/Airtel Orange Others.....

10) Do you use mobile money services? Yes No

If yes, what do you use to access the service? (*You can choose more than one option*)

On my phone On a friend's or family member's phone
 Through an agent Other: *specify*

Section B

This section of the questionnaire seeks to find out the role played by mobile finance to influence people's access to financial services.

11) To what extent do you agree with the following statements with regards to the role mobile finance plays to influence people's access to financial services?

	Mobile finance influence people's access to financial services.	YES	NO	NOT SURE
a	Mobile money has made it easier for you to acquire financial services such as savings, deposits, transfers and payments.			
b	It is easier to apply for a bank loan using your mobile banking account.			
c	Mobile money influences people to open up bank accounts.			
d	Banks are making effort to reach out to the rural people in your areas.			

Section C

This section of the questionnaire seeks to find out the role mobile transfers influence people's access to financial services

12) To what extent do you agree with the following statements with regards to the role mobile transfers play to influence people's access to financial services?

	Mobile transfers influence people's access to financial services	YES	NO	NOT SURE
a	Mobile money has helped us in the making of a number of payments for example National water, UMEME, school fess, debtors and among others.			
b	Mobile money services have made it easy to transfer of make payments among friends, relatives, family and customers.			
c	Mobile money has also helped us keep excess transferred money on our phones for days, weeks even months.			
d	Mobile money has also helped us make transfers into our bank accounts as well as checking our account balances.			
e	Mobile money services have also reduced our costs of doing business in terms of eliminating transport cost, time spent travelling to the suppliers and among other costs.			

Section D

This section of the questionnaire seeks to find out the role mobile banking influence people’s access to financial services

13) To what extent do you agree with the following statements with regards to the role mobile banking plays to influence people’s access to financial services?

	mobile banking influence people’s access to financial services	YES	NO	NOT SURE
a	It is easier to use mobile money account than a bank or SACCO for saving.			
b	Using of mobile banking services such as mobile wallet by Housing Finance is easier and efficient than going straight into the bank to access them.			
c	Mobile banking has made it easier for me to access my bank account and other banking services such as balance inquiry, statement requests, and money transfers.			
d	It is easy and faster for one to acquire the knowledge and the skills of how to use mobile banking through their there phone			
e	If a bank had an agent in our area it would be very easier for you to access bank services.			

9. Any other comments you would like to add regarding this research?

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THANK YOU