UGANDA MANAGEMENT INSTITUTE

REGULATORY FRAMEWORK AND THE SUCCESS OF THE MOBILE MONEY INDUSTRY IN UGANDA: A CASE OF AIRTEL MONEY

By

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A DISSERTATION SUBMITTED TO THE SCHOOL OF MANAGEMENT SCIENCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER'S DEGREE IN BUSINESS ADMINISTRATION OF UGANDA MANAGEMENT INSTITUTE

JANUARY, 2018

DECLARATION

I, Jotham Tumuheirwe**,** declare that this thesis is my own original work and that it has not been presented and will not be presented to any other University for similar or any other degree award

Sign……………………………………….

Date……………………………………….

APPROVAL

We, the undersigned, certify that we have read and here by recommend for acceptance by Uganda Management Institute a dissertation titled *"the regulatory framework and the success of the mobile money industry in Uganda. A case of Airtel Money"* in partial fulfillment of the requirements for the award of the degree of a Master's Degree in Business Administration of Uganda Management Institute.

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Date………………………………………….

Stella Kyohairwe, PhD

Sign………………………………………….

Date………………………………………….

DEDICATION

This research work is dedicated to dear wife Providence Happy Tumuheirwe, children; Jasper Tumuhairwe, Juniper Tumuhairwe, my parents, Sadrack Rugira(RIP) and Euwulen Rugira(RIP), Brothers; William Byigyero, Emmanuel Ngeragyeze and Isaiah Begumisa, sisters Dorophine, Harriet, Alice (RIP) and Aidah. Friends in laws and relatives whose company I missed during the course of writing my family who company I missed during the course of writing this report.

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LIST OF ACRONYMS

AAA	Analytical and Advisory Assistance
BDS	Business Development Services
BOD	Board of Directors
BoU	Bank of Uganda
BPS	Budget Policy Statement
BTTB	Background to the Budget
CPIA	Country Policy and Institutional Assessment
CSMP	Civil Service Modernization Project
CSO	Civil Society Organization
CVI	Content Validity Index
EAC	East African Community
EU	European Union
FDI	Foreign Direct Investment
FY	Financial Year
GERD	Gross Domestic Expenditure on RandD
GDP	Gross Domestic Product
GoU	Government of Uganda
ICT	Information and Communication Technology
MDGs	Millennium Development Goals
MFPED	Ministry of Finance, Planning and Economic Development
MNO	Mobile Network Operators
NGOs	Non-Governmental Organizations
PSR	Public Sector Reform
SPSS	Statistical Package for Social Scientists

ABSTRACT

The study investigated the relationship between the regulatory framework and the success of the mobile money industry in Uganda with specific focus on Airtel Money. The study sought to achieve three objectives namely; to find out the relationship between institutional framework and the success of Airtel Money in Uganda, to assess the relationship between the law and the success of Airtel Money in Uganda and to examine the relationship between policies and the success of Airtel Money in Uganda. The study adopted a descriptive cross sectional survey design where both quantitative and qualitative approaches were used. The study population was 154 who were expected but 120 respondents returned the survey instruments representing a response rate of 77.9%. The data were collected using questionnaires and interviews and analysis was done using regression analysis, correlation coefficients, one way analysis of variance and independent sample tests for the quantitative findings. Qualitative analysis was done using content and thematic analysis. The findings revealed that there is a positive relationship between institutional framework, law and policies and the success of mobile money in Uganda.The results on institutional framework and the success of mobile money indicated that $r = 0.191$, Adjusted r square $= 0.401$, $p = 0.000 < 0.05$, the results for law and success of mobile money indicated that $r = 0.648$, Adjusted r square $=0.378$ $p = 0.011 > 0.05$ and the results for policies and success of mobile money revealed that $r = 0.512$, Adjusted r square$=0.214$, $p = 0.006 < 0.05$. Uganda has laws in place laws but not directly enacted and aimed at regulating mobile money. It was concluded: findings revealed that Uganda has policies in place for the regulation of the mobile money industry. It was observed that there are a number of policies that regulate mobile money. The public is aware of the existing policies on the mobile money industry and some policies in place have not been effectively utilized. There is need to enact laws that will directly regulate mobile money in Uganda. Regulation should be uniform across all providers to screen, qualify and monitor agents. Policies should be developed that would ensure that the existing rules for out of court redress and complaint channels apply to mobile payments or set specific standards tailored to new models as necessary. These mechanisms should be effective and should match existing transacting channels such as those for other payment systems such as the redress procedures and channels meeting minimum standards and the avenues are communicated clearly and consistently. There should be an effective monitoring of emerging consumer issues and a decision on when and what type of regulatory action is necessary and effective to avoid loss of confidence or curve abuse by Mobile Network Operators.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study examined the relationship between the regulatory framework and the success of the mobile money industry in Uganda: A case of Airtel Money Uganda. Regulatory framework is conceived as the independent variable while success of the Mobile Money Industry in Uganda is the dependent variable. Mobile money transfer is simply another way to send money. It is a transfer of money to a receiver in which the funds are deposited into a mobile or "virtual" wallet. Today, consumers have a variety of ways to send and receive funds or money transfers. Although using cash to send a money transfer is the most popular method for most people, more and more people want additional options: to send and/or receive funds on the internet, over the phone, and now, on their mobile phones(Brathe, 2010). Where mobile-to- mobile is available, a sender can initiate a mobile money transfer on his/her mobile phone, the key issue remains the regulatory framework which is not clearly streamlined hence making the success of the industry hang in balance. This chapter therefore presents the background to the study, the problem statement, the purpose of the study, objectives of the research, research questions, research hypotheses, conceptual framework significant of the study, justification to the study, scope of the study and definitions to key terms and concepts.

1.2. Background of the study

The study background is presented under four perspectives which are: historical, theoretical, conceptual and contextual background.

1.2.1. Historical background

The liberalization of the telecommunication sector in Uganda came via the Communications Act of 1997. The Act broadly aimed to improve the spread and affordability of modern telecommunications services. The Act saw the licensing of two national operators: MTN Uganda a subsidiary of MTN South Africa as the second national operator (SNO), and UTL, both of which were licensed to offer mobile and fixed services (Wakabi, 2009). Prior to liberalization, Uganda had licensed Celtel, which started offering mobile services in 1995, well ahead of the offer of mobile services by UTL (known as Uganda Post and Telecommunication), whose mobile service was launched in January 2001. MTN commenced its mobile service in October 1998 (Wakabi, 2009).

Under the old ICT regime, Uganda Posts and Telecommunication was the monopoly provider in the fixed-line segment. It was characterized by gross inefficiencies: it took several months for applicants to get connected and subscribers were often wrongly billed (Opendi, 2015). As a result, by the end of 1996, Uganda had 45,145 phone lines, which translated into a teledensity of 0.21 per 100 people. This consisted of 42,605 fixed lines, of which 36,472 were in the cosmopolitan area of the capital Kampala. By that time there were also 3,500 mobile lines owned by Celtel, whose reach was Kampala and a few nearby major towns such as Jinja and Entebbe. By July 2008, teledensity had risen to 22 % (Wakabi, 2009).

Besides, telecommunication is the mobile money services industry that is growing at a higher rate than the traditional banking industry. For the first time in Europe, E money directive was implemented in the UK in April 2002. It was implemented into UK law by means of secondary legislation in 2002, which amended the regulated activities order to make money issuance a regulated activity. Laws like the Financial Services and Market Act 2002 and the Electronic Money (UK Miscellenous Amendment Act, 2002) Regulation were enacted in 2002.This Act specified that electronic money is a specified kind of activity in the UK. In 2002, the UK government established money laundering regulations and a supervisory regime for the money service business to combat money laundering and terrorist finance (Lutherwoth, 2010). Currently, consumers in the U.S., the U.K. the UAE, Hong Kong, Singapore and Canada who want to send a mobile money transfer can visit participating mobile money agent locations and send cash to subscribers of both Globe Telecom / GCASH and Smart Communications/ SMART money all around the world(Dedan, 2015).

In Kenya, to deposit/withdrawal a customer needs to go to an M-PESA agent. The service is provided on a telecommunication platform and relies on the SMS services. It needs an active SIM card with the functionality of money transfer service as configured by the operators (Wabwire, 2014). In Uganda, MTN mobile money transfer service was first conceived by MTN in March 2005 and it was launched in 2007. MTN, Airtel, UTL and Africell customers use mobile money transfer service following the commercial launch of the product in 2007(Wabwire, 2014). Upon registration, users are able to send and receive cash using their mobile phones. Today MTN, Airtel, and UTL offer mobile money transfer services, by 2016, the four service provider had over 20 million registered customers (Wabwire, 2014). However financial regulations are yet to be developed through a consultative approach with the mobile industry to ensure it closely tracks market development without becoming a regulatory barrier. The implementation is supposedly suspected that it will allow for a mobile money transfer service for the consumer (Musoke, 2011). This study investigated a case for a regulatory framework for mobile service providers in Uganda and how it affects the success of the industry.

1.2.2 Theoretical Background

This study was underpinned by the Institutional theory by DiMaggio and Powell (1983). The Institutional theory adopts a sociological perspective to explain organizational structures and behavior (Dunn, 2010:4). The theory draws attention to how organizations' decision making is influenced by the institutional, social and cultural factors as identified by Scott, (2001:32), and in particular how rationalized activities are adopted by organizations. The theory emphasizes the use of rules, laws and sanctions as enforcement mechanisms, with expedience as basis for compliance (Scott 2004:23). Institutional theorists such as (DiMaggio and Powell, 1983:23; Meyer and Rowan, 1977:77), contend that the institutional theory can strongly influence the development of formal structures in an organization. This was augmented by (Killick, 2005:45) who postulated that institutional theory is the traditional approach that is used to examine elements of good institutional management such as the elements proposed in the conceptual framework. The institutional theory helps in showing the relevance of structures, processes and systems. It helped to establish whether the established frameworks have significant effect on good management.

1.2.3. Conceptual Back ground

This subsection presents the key concepts to the study and how they are operationalized in this study. The telecommunications industry is within the information and communication technology sector and is made up of all companies that make communication possible on a global scale whether through the phone or Internet. The largest companies in the sector are communication companies and internet service providers. These companies create the infrastructure that allows voice and data to be sent anywhere in the world (Zenithal and Bitner, 2000). Regulations on the use of agents determine if entities are allowed to do a particular activity or not (Baden, 2011). Rules about the payment system/s in a country govern who has access to the systems, whether they are required to interoperate as well as covering operational aspects like the basis of settlement and clearing. The laws covering the payment system affect whether and how a Mobile Network Operators (MNO) may access existing payment systems, or set up its own payment service (Redean, 2015).

Success is the accomplishment of a set task, in this study, success was looked at in terms of profits, return on assets, return on investment and return on capital employed.

1.2.4. Contextual Back ground

The mobile industry has a vested interest in ensuring that consumers like those who use mobile money services succeed. Any problems, where consumers experience the service negatively will have a negative impact on the success of these services. Electronic forms of payments require new regulatory frameworks such as e-commerce regulation. These regulatory frameworks such as enacted laws, rules, regulations and policies are often not yet developed in those countries which would benefit the most from receiving remittances. For Uganda’s case, the mobile money regulatory framework is not developed hence this has created performance gaps. This bears the danger of over- regulation and inappropriate/disproportionate rules in overlapping regulatory areas, for example customer identification, restrictions to offer non-telecommunications services, etc (Osike,2010)

The success of mobile telephone is based on two characteristics, which make the service attractive to customers: ease of use and mobility. In order to ensure customer adoption of a mobile money service, the service has to be easy to use for customers (ease of use) anywhere at any time (mobility). This is the ' mobile experience'. This is a challenge in that regulation created with traditional financial institutions in mind now should starts to apply to MNOs in Uganda. Compliance requirements with this regulation may sometimes make it impossible to design the mobile money service as a ' mobile experience', if they allow MNOs at all to undertake some of the activities of financial institutions. Although regulations are necessary to ensure stability of the overall financial systems and prudent behaviour of mobile money institutions to minimize risks for consumers and mobile money institutions themselves, the mobile money industry continues to suffer due to gaps in the regulatory framework (Obani, 2016).

1.3. Problem statement

The growth of mobile financial services has raised foundational policy questions for regulators of how to distinguish a ‘payment’ (mobile or not) from a ‘deposit, and what differentiates the business of providing payments from that of deposit taking. This boundary questions are not new, but the spread of the mobile phone is necessitating greater clarity because it has enabled the creation and distribution of electronic payment instruments on a widespread scale, which was neither easy nor even possible in many places until recently. There is no clear trend towards creating legal certainty through guidance or new legislation that regulates e-money issuance. The intensified competition has led to price wars with little or no regulation to the industry products like mobile money which has affected subscriber growth. However, the industry is optimistic of tapping into the growing demand for various mobile services if the regulatory framework is streamlined.

In the context, despite the rest of the world advancing rapidly in the telecommunications industry, the regulatory framework such as laws, rules, guidelines and policies for mobile money services have been questioned. Indeed non-banks such as mobile money operators issue electronic money without being subject to the full range of prudential regulations applied to banks. Obani (2016) noted that the existing laws like the Electronic Transaction Act, 2004 and the Financial Institutions Act No. 2004 etc have been deemed inadequate to regulate the mobile money industry in Uganda given that some provisions are silent on telecommunication and mobile money services hence requiring amendment. This is mainly due to the declining percentage of mobile money users in the mobile money sector. Therefore this study sought to investigate the relationship between the regulatory framework and the success of mobile money in Uganda.

1.4. Purpose of the study

The purpose of the study was to investigate the relationship between the regulatory framework and the success of the mobile money industry in Uganda. A case of Airtel Money

1.5 Objectives of the Study

The study was premised on the following research objectives;

1. To find out the relationship between institutional framework and the success of Airtel Money in Uganda
2. To assess the relationship between the law and the success of Airtel Money in Uganda
3. To examine the relationship between policies and the success of Airtel Money in Uganda

1.6 Research Questions

The study answered the following research questions

1. What is the relationship between the institutional framework and the success of mobile Money in Uganda
2. What is the relationship between the law and the success of mobile Money in Uganda
3. What is the relationship between policies and the success of mobile Money in Uganda

17. Hypotheses of the study

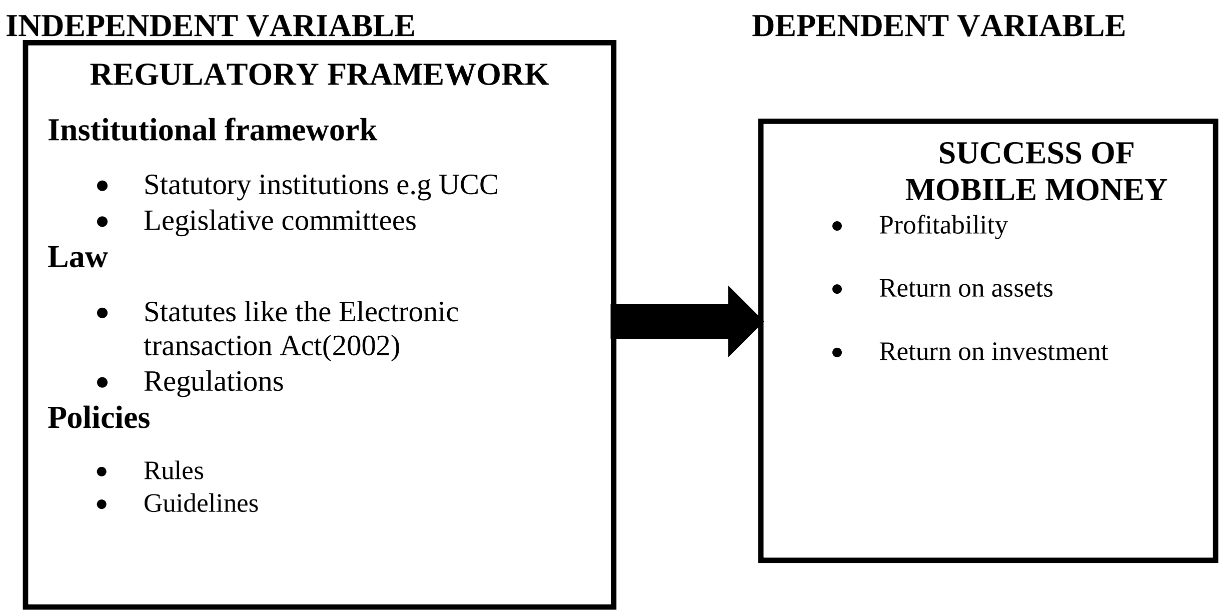
The study tested the following research hypotheses

1. There is a significant positive relationship between institutional framework and the success of mobile Money in Uganda
2. There is a significant positive relationship between law and the success of mobile Money in Uganda
3. There is a significant positive relationship between policies and the success of mobile Money in Uganda

1.8 Conceptual Framework

This sub section outlines the conceptual framework of the study and provides a discussion of the main areas of focus. It seeks to describe the substantial and crucial link between the issues and as a final point it seeks to summarize the variables for the study.

Figure 1. 1: A conceptual framework illustrating the relationship between regulatory framework and the success of mobile money



Source: adapted from: Allen, Schiavo-Campo, and Garrity (2014) (modified by the researcher)

The conceptual framework figure 1: shows the regulatory framework as the predicator/cause variable and success of mobile money as the predicted/effect variable. The conceptualization took the conceptual problems in measuring the study variables. The independent variable is regulatory framework which refers to statutory institutions like UCC and legislative committees. Laws refers to statutes and regulations like the Financial Institutions Act and Electronic transaction Act. Policies refers to rules and guidelines. Success of mobile money was measured in terms of profitability, return on assets, return on investment and return on capital employed. Porter's five forces analysis is a framework that attempts to analyze the level of competition within an industry and business strategy development. It draws upon industrial organization economics to derive five forces that determine the competitive intensity and therefore attractiveness of an Industry. Attractiveness in this context refers to the overall industry profitability (Porter, 2008). A change in any of the forces normally requires a business unit to re-assess the marketplace given the overall change in industry information. In relation to the study, the process of mobile money transfer may look very simple and intuitive but there are many factors that could derail the evolution of this exciting mobile money transfer mechanism. Depending on the regulatory regime in the given country and the amount of regulatory burden the mobile money industry is willing to take on. The business model where the service acts as a bearer is the group of business models with the lowest level of regulatory compliance for MNOs. There can be a lot of confusion about the ' mobile money industry' and its regulatory implications. To help clarify the regulatory implications of a mobile service, the analogy of effective institutions can be helpful.

1.9. Significance of the Study

It is hoped that the proposed study will be significant in the following ways. The government policy, decision makers and other stakeholders like UCC, the Central Bank and the Ministry of ICT hopefully will utilize the findings of the study to formulate and implement proper policies for regulating mobile network operators in Uganda. The study will further be a good guide for the drafting of the law on electronic money transactions in Uganda.

It is hoped that the study will highlight workable interventions on the telecommunication industry and the market performance of Mobile Network Operators in Uganda.

The study will act as a reference point for researchers who will pursue further research on factors affecting the growth of Mobile Network Operators in Uganda.

The study may add value to the body of regulatory frameworks for mobile money services contributing to the existing literature.

The study will lead to the award of a Master's in Business Administration of Uganda Management Institute

1.10. Justification of the Study

Despite the rest of the world advancing rapidly in the telecommunications industry, the regulatory framework for mobile money services has been questioned. This is mainly due to the declining percentage of mobile money users in the mobile money sector. Currently Uganda has less than 20 million subscribers to the Mobile Network operators of a population of 38 million people(UCC Report, 2015). This means less that 70% of the Ugandans are actively using telecommunication services. While markets like South Korea have reached 100% 4G population coverage (GSMA Intelligence, 2014), Ugandans are still trying to ensure the success of the mobile money industry. Therefore there is an urgent for this study that will investigate the effect of the regulatory framework on the success of mobile money in Uganda.

1.11. Scope of the study

1.11.1 Geographical Scope

This study was carried out in Kampala at various centers of Airtel money including the head offices. Kampala is the capital city of Uganda located in Central Uganda. Kampala is made up of five divisions that is Kawempe, Rubaga, Nakawa, Kampala Central Division and Makindye.

1.11.2 Content scope

The study examined the Regulatory Framework of Telecommunication Companies and Mobile Money Services in Uganda. Regulatory framework is conceived as the independent variable while success of the Mobile Money Industry in Uganda is the dependent variable. The independent variable is regulatory framework which refers to statutory institutions like UCC and legislative committees. Laws refers to statutes and regulations like the Financial Institutions Act and Electronic transaction Act. Policies refers to rules and guidelines. Success of mobile money was measured in terms of profitability, return on assets, return on investment and return on capital employed

1.11.3. Time scope

The study will focus on the period 2015 to 2017 because it is the period when the gaps have been in the regulatory framework (Uganda Police Report on Cyber Crimes, 2015). The intensified competition has led to price wars with little or no regulation to the industry products like mobile money which has affected subscriber growth.

1.12. Operational Definitions of Terms and Concepts

Money remittance in this study refers to simple payment service that is usually based on cash provided to a payment service provider which remits the corresponding amount for example via communication network, to a payee or to another payment service provider on behalf of the payee.

Mobile banking (m-banking) is the use of a mobile device primarily as a channel to conduct transactions from one or more bank accounts. These transactions may include payments from one bank account to other bank accounts. Mobile banking services typically offer a range of informational functions as well, such as balance enquiries, simplified statements, transaction notifications, or account alerts. Mobile banking is a subset of electronic banking (e-banking), which includes Internet banking and the use of non-mobile channels such as ATMs and Point of Sale devices.

Mobile payment (m-payment) is the use of a mobile device to make a payment. M-payment may involve creating a new instrument, such as e-money, to serve as the source from which and to which value is transferred. However, m-payment may be made using an existing instrument or store of value such as a bank account, although the term is sometimes used to describe only those payments that are not from a bank account According to Sharma (2009), institutional framework refers to the systems of formal laws, regulations, and procedures, and informal conventions, customs, norms, that shape socio-economic activity and behavior in the management of public finances in Uganda (Velasco, 2010).

The legal framework refers to laws and statutes in existence in Uganda that regulate the control of public finances

Regulatory framework: the regulatory framework addresses business rules governing the operation of mobile payment services, and specifies basic functionalities expected of any mobile payment service and solution in Uganda. It identifies the participants and defines their expected roles and responsibilities in providing mobile payment services in the system. In addition, it sets the basis for the regulation of services offered at different levels and by the participants. In this study regulatory framework will refers to the laws that regulate mobile money companies. The

Regulators for this purpose are the Bank of Uganda (BOU), Uganda Communications Commission (UCC).

Success is the accomplishment of a set task (Ruthrock, 2012), this study success was looked at in terms of profits, return on assets, return on investment and return on capital employed.

Mobile Operators in this study refers to Airtel as a company that provide mobile money services to the general public.

Financial Services in this study refers to services associated with the handling, dispensing and managing of money

Mobile money transfer: Converts cash into virtual money that can be sent through Airtel from one person to another using mobile phone. **Act**: is a law enacted by parliament

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter presents a review of related literature. In particular, the chapter presents the literature the regulatory framework for the success of the mobile money industry. This chapter reviews and provides a critique of the available literature on the study question. The literature has been reviewed on the basis of study objectives. This chapter further presents the identified research gap, which the study sought to address. The literature reviewed was from journals, textbooks, and working papers. The chapter handled and presented literature based on the objectives of the study, and other areas presented included the theoretical review and summary of the literature.

2.2 Theoretical review

This study was underpinned by the Institutional theory by DiMaggio and Powell (1983). The Institutional theory adopts a sociological perspective to explain organizational structures and behavior (Dunn, 2010:4). The theory draws attention to how organizations' decision making is influenced by the institutional, social and cultural factors as identified by Scott, (2001:32), and in particular how rationalized activities are adopted by organizations. The theory emphasizes the use of rules, laws and sanctions as enforcement mechanisms, with expedience as basis for compliance (Scott 2004:23). Institutional theorists such as (DiMaggio and Powell, 1983:23; Meyer and Rowan, 1977:77), contend that the institutional theory can strongly influence the development of formal structures in an organization. This was augmented by (Killick, 2005:45) who postulated that institutional theory is the traditional approach that is used to examine elements of good institutional management such as the elements proposed in the conceptual framework. The institutional theory helps in showing the relevance of structures, processes and systems. It helped to establish whether the established frameworks have significant effect on good management.

2.3 Review of Related Literature

The literature is reviewed on the basis of the study variables as laid down in the conceptual framework that is institutional framework, laws and policies.

2.3.1 Institutional Framework and Success of Mobile Money Industry

According to Wairagala and Wakabi (2009), in Uganda, the mobile network industry is made up of five major competitors which include MTN Uganda, Orange Uganda, Uganda Telecom (UTL), Warid Telecom and Airtel (former Zain Uganda). As of 2014, there were 12.1 million mobile phone subscribers across all five MNOs; and the subscriber base has been steadily increasing. The industry is regulated by Uganda Communications Commission hence without a proper law for its regulation. In the author's conclusion, they don't mention the kind of law that is in existence to regulate the industry an issue the researcher will discuss in detail.

Opendi (2016) noted that some industries may be on the verge of closure because the institutional framework has not helped out. Opendi cites the example of Uganda Telecom that was recently taken over by the government. Uganda Telecom was the third company in early 2000 to offer private mobile telecommunication services in Uganda to the general public after Celtel in 1996 and MTN in 1997. UTL has about 600,000 registered users for their mobile telecom services but the number of active users is less than 400,000 in the whole country. Uganda Communication Commission Report (2013) attributed the decline in the number of active registered users in the mobile telecommunication industry to poor marketing practices. However, the researcher critically assessed the institutional framework whether it is responsible for the poor performance of Uganda Telecom Limited.

Tusubira, Kaggwa, and Ongora (2015) noted that the challenge for many mobile telecommunication companies is the institutional framework. This could be affecting the enrolment of registered users hence the need to find ways and means of sustaining or increasing existing enrolment levels for customers and it is this matter that UTL is trying to solve year in year out. UTL has witnessed declining customer retention rates right from the stock shelves of their wholesalers and various outlets; and their stock replaced by competitors stock like MTN and Airtel (Olupot, 2013).Currently the mobile money market share of UTL is the lowest in the market with MTN having the largest share of 74%, followed by Airtel Money with 19% and lastly UTL with the lowest market share of 7%. By the end of 2013, the market share of UTL had lowered to 5.3% (Uganda Communication Commission Report, 2013). The issue is not increasing the enrolment levels but the nature of the institutional framework.

Olupot (2013) has attributed the decline in the performance of some companies like UTL to the institutional framework but however, limited or no other empirical studies have been undertaken to corroborate this assertion. It is against this background that the researcher seeks to examine the effect of the institutional framework on the success of mobile money services in Uganda.

According to Mutarubukwa (2010), since the introduction of the mobile banking services in 2007 in the country, the institutional framework is not firm on the regulation of this industry in Uganda. MTN, UTL and Airtel currently offer mobile payment services. Analysts say although the use of mobile banking to access financial services in developing countries is new but it is important in serving many rural poor people who have no traditional bank accounts. Uganda has more than twelve million m-payment subscribers, most of them subscribing to MTN Mobile money. The mobile payment services in the country are regulated by Bank of Uganda in aspects of observing financial transactions and in monitoring the mobile phone operations. As the government initiates the mobile banking law, Bank of Uganda has signed a memorandum of understanding to regulate mobile money transfer services (Musoke, 2011). However, the effectiveness of mobile money institutional framework has a gap that needs to be bridged which this research intends to be bridged. However, will the memorandum signed by bank of Uganda be sufficient to regulate m- banking services in the country?

2.4 Law and the Success of Mobile Money Industry

Galisonga (2014) in his thesis on the regulatory framework for mobile money services in Uganda submitted to ESAMI noted that there are various laws in place that govern other sectors but these tend to overlap Mobile Money Services. They include among others, the Bank of Uganda Act 2000 Cap 51 of the Laws of Uganda which mandates the Central Bank to supervise, regulate, control and discipline all entities that receive money from the public. The Act does not make any provision for combating money laundering nor does it make any provision for regulating mobile money services (Galisonga, 2014). The Financial Institutions Act 2004 that provides for the regulation, control, and discipline of financial institutions by the Central Bank; FIA does not mandate BOU to regulate non-financial institutions like telecommunication companies. The Micro-Finance Deposit-taking Institutions Act 2003 that provides for the licensing, regulation and supervision of microfinance business. Section 89 of the MDI Act 2003 mandates the Central Bank among other things to make regulations related to control of money-laundering in Uganda (Galisonga, 2014).

The Act does not make conclusive direction on how the regulations if made would properly regulate mobile money services. Mobile money services are entirely excluded. The Uganda Communications Act 1997 Cap 106 of the Laws of Uganda 2000 that created Uganda Communication Commission (UCC) and liberalized the telecommunications sector. The Act does not make any provision for combating money laundering nor does it make any provision for regulating mobile money services (Galisonga, 2014). The Electronic Transactions Act of 2004 that provides for the use, security, facilitation and regulation of electronic communications and transactions and the encouragement of the use of e-government services. The Electronic Signatures Act of 2004 that provides for and regulates the use of Electronic signatures.

Although the UCC Act 2013, provides for regulation of 'mobile value added services' these are not clearly defined in the act. The Act does not explicitly mention mobile money services nor does it mention combating money laundering. .To provides mobile money services, telecoms must partner with a bank that is prudentially regulated.

Shinyekwa (2012) noted that proper rules and regulations should be put in place to address the situation. Since the introduction of the mobile banking services in 2007 in Uganda, there was no proper law to guide and regulate them banking despite its tremendous growth and dynamism. It is on this basis that the researcher is investigated the case for a regulatory frame work for m-banking in the country.

A recent study by Okello (2011), which looked at eight branchless banking providers in Brazil, Cambodia, India, Kenya, the Philippines, South Africa and Uganda, found out that in more than half of the countries studied ‘branchless banking’ grew five times faster than the largest microcredit lenders. Regulators need to consider many issues while attempting to increase financial services outreach. Across the developing countries, millions of people rely on informal economic activity and local level networks to earn their living. Most of these populations are from bottom of pyramid and they don't have access to basic financial services/banks as access to them is costly and very limited. However, the outstanding growth of mobile sector worldwide has created a unique opportunity to provide social and financial services over the mobile network.

According to Blake (2014), in Europe the electronic money directive was adopted in May 200, in order to harmonize the supervisory and regulatory framework of electronic money in Europe and there by contribute to the creation of a single market. However, what is currently on ground essentially differs; the payment service providers are presently excluding e-money and e-money institutions when acting as money issuer from its regulatory scope. It is even important to note that in Uganda e money institutions are authorized to offer payment services as defined by the Payment Service Providers (PSPs) due to lack of a regulatory framework.

In Kenya, regulatory bodies (Central Bank of Kenya CBK and Communications Commission of Kenya CCK) promotes a stable & conducive environment for financial innovation to thrive and financial inclusiveness. The regulators work with Government agencies to promote a sound, safe, efficient, innovative and inclusive financial system with no room for regulatory arbitrage. CBK regulates financial services. CBK has developed regulations to facilitate and enhance electronic transactions and money transfer services. According to CBK report of 2010, their license condition requires all operators to set up customer care centers and file their complaint resolution procedures with CCK (CBK report, 2010). However, the regulators work with Government need to be regulated using the law in order to have a successful industry.

Although Uganda has gone a step forward by putting in place a regulatory framework through its central bank, the regulations are not very effective(Opendi, 2016). There is need for a proper law and policies on this; therefore a regulatory framework is important. The Regulations also lay provisions for the Bank to undertake corrective and remedial measures to protect against violation of the licensing terms and conditions including power to suspend or revoke the license, impose financial penalty and order compensation. The Regulations however leaves room open for the Bank to issue rules, procedures, guidelines and directives under the Regulations in order to govern paper-based payment items and other instruments that are eligible for transaction and electronic check image presentment. Besides the Regulations sets provisions for the Bank to recognize the new payment instrument as a designated payment instrument for protecting the interest of the public by ensuring integrity, security and reliability of the payment system.

Rashid and Elder (2015) noted that regulations on the use of agents determine if entities other than banks are allowed to handle cash at both ends of the remittance transaction, whether on behalf of banks or non-banks (i.e. remittance providers). In cases where regulation permits the outsourcing of the cash handling function, entities which already handle cash, such as retailers, may act as agents for financial institutions. Rules about the payment system/s in a country govern who has access to the systems, whether they are required to interoperate as well as covering operational aspects like the basis of settlement and clearing (Rashid and Elder, 2015). The laws covering the payment system affect whether and how a Mobile Network Operators (MNO) may access existing payment systems, or set up its own payment service. This has an effect on the business model (Rashid and Elder, 2015. If a Mobile Network Operator is deemed to conduct a payment business when offering MMT services, these laws will apply to them; in addition, they will affect the mode through whom the MNO may seek to access existing payment systems. As an example, MTN South Africa had to partner with a bank in order to get access to the South African payment systems (Wanjiru, 2011). The study by Rashid and Elder (2015) was a qualitative study compared to the current study that used mixed methodological approach.

2.5 Policies and Success of Mobile Money Industry

According to Obani (2016), the telecommunication companies are licensed and regulated by Uganda Communication Commission as mandated by the law to provide services of communication. Bank of Uganda is mandated by law to license, regulate, and supervise commercial banks and Micro- finance Deposit taking institutions (Bank of Uganda Act Cap 51; Financial Institutions Act No. 2004; Micro Finance Deposit Taking Institutions Act). However Telecommunication companies are offering mobile money services which included depositing, withdrawing, sending and receiving money from one person to another yet 'this is the reserve of the Financial Institutions(Obani, 2016). This act of offering mobile Money services is in contravention of the policies and law. The mobile experience poses the challenge that financial regulation created with traditional financial institutions does not adequately regulate it. Indeed non-banks such as mobile money operators issue electronic money without being subject to the full range of prudential regulations applied to banks. Compliance requirements with, this regulation may sometimes make it impossible to design the MMT service as a mobile experience. Financial regulation is necessary to ensure stability of the overall financial systems and prudent behavior of financial institutions to minimize risks for consumers and financial institutions themselves.

Opendi (2016) points out that policies are necessary for growth of both the telecommunication companies and financial institutions. They also minimize risks for the telecommunication companies, the agents and users. MTN is not a financial institution. It needs to obtain a license from either bank of Uganda or any other commercial bank to carry out financial businesses and operate mobile money. There is need to study the policy framework under which these services are offered and suggest appropriate recommendations. Other than this telecommunication companies will keep infringing on banking services which is the reserve of financial institutions and microfinance institutions that are mandated by law to offer banking services.

Osike (2015), the mobile industry has a vested interest in ensuring that consumers like using mobile money services, that they perceive these services as safe, reliable and easy to use. Any problems, where consumers experience the service negatively will have a negative impact on the success of these services. Electronic forms of payments require policy frameworks such as e-commerce regulation. The policy framework is often not yet developed in those countries which would benefit the most from receiving remittances. Any new payment policy applying to Mobile Network Operators when offering payment/remittance services is added to the already existing regulatory framework of telecommunications regulation. This bears the danger of over-regulation and inappropriate/disproportionate rules in overlapping regulatory areas, for example. customer identification, restrictions to offer non-telecommunications services, etc.

The researcher notes that a policy frameworks highlights success in m-banking or payment mostly in those regimes where non-bank based models have been introduced. That is why, most of the countries are adopting the liberal model i.e. non-bank based model, According to Musoke (2011), the success of mobile telephone is based on two characteristics, which make the service attractive to customers: ease of use and mobility. In order to ensure customer adoption of mobile money service, the service has to be easy to use for customers (ease of use) anywhere at any time (mobility). This is the ' mobile experience'. This poses the challenge that financial regulation created with traditional financial institutions in mind now should starts to apply to MNOs in Uganda. Compliance requirements with this regulation may sometimes make it impossible to design the mobile money service as a ' mobile experience', if they allow MNOs at all to undertake some of the activities of financial institutions (Musoke, 2011). Policies are necessary to ensure stability of the overall financial systems and prudent behaviour of financial institutions to minimize risks for consumers and financial institutions themselves. Financial regulation also aims at preventing money laundering and financing of terrorism. The result of effective policies is healthy competition amongst providers of financial services, efficiency, innovation and decreases in prices for consumers

The researcher doesn’t agree with the issue of the success of mobile money transfers basing on policies hence policies need to be well drafted for this purpose. The researcher noted that precautionary measures need to be put in place to ensure that the services don’t infringe upon the banking services regulatory framework as provided for under section 2(1) of the Bank of Uganda Act.

2.6. Summary of the literature review

The literature review above confirms that different scholars have conducted several studies to establish the effect of the regulatory framework on the success of mobile money. However, a number of gaps were identified as per the literature reviewed which this research bridged. For example (Osike, 2015, Opendi, 2016) noted that regulatory framework for mobile money need to be enacted but the question remains how effective will the enforcement of the law be. Most of the studies on the subject are based on developed countries with a well-developed private and public sector yet the current study focused on Uganda. The studies reviewed were mostly qualitative and do not guide us on the relationship between the study variables. The scholars did not specifically focus on the variables as laid down in this study. Considering the above, the current study focused on the effect of the regulatory framework on the success of mobile money in Uganda.

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CHAPTER THREE

METHODOLOGY

3.1. Introduction

This chapter presents and describes the approaches and techniques the researcher used to collect data and investigate the research problem. They include the research design, study population, sample size and selection, sampling techniques and procedure, data collection methods, data collection instruments, data quality control (validity and reliability), procedure of data collection, data analysis and measurement of variables.

3.2 Research Design

A descriptive cross sectional survey design was adopted for the proposed study. It entailed collecting data from a cross section of respondents at a single point in time. Kothari (2004) noted that a cross sectional survey is quick, easy to use, and least costly. The descriptive cross sectional survey designs validate emerging constructs and proposition in the data set; guiding the study of various units within the identified case by underlining the mechanism by which an incident is brought to being (Kothari, 2004).

A cross sectional survey contributes significantly to a researcher's own learning process by shaping the skills needed to do a good research. The above design is usually the simplest and least costly alternative. Though proof may be hard to come by owing to absence of hard theory, learning is certainly possible (Kothari, 2004). The study also applied both quantitative and qualitative approaches. Creswell (2009), noted that quantitative methods are more objective and help to investigate the relationships between the identified variables. This study applied qualitative approaches which involved in depth probe and application of subjectively interpreted data. As pointed out by Kothari (2004) qualitative researchers aim to gather an in-depth understanding of human behavior and the reasons that govern such behavior. The quantitative and qualitative approaches were adopted in sampling, collection of data, data quality control and in data analysis. Triangulation was adopted for purposes of getting quality data. Triangulation means using more than one method to collect data on the same topic (Somekh and Lewin, 2005). This is a way of assuring the validity of research through the use of a variety of methods to collect data on the same topic, which involves different types of samples as well as methods of data collection (Groves, Fowler, Couper, Lepkowski, Singer and Tourangeau, 2009). However, the purpose of triangulation is not necessarily to cross validate data but rather to capture different dimensions of the same phenomenon (Kothari, 2004).

3.3. Study Population

The study population was 190 that included 10 members of the Airtel marketing team (these contribute directly to the increment in market sales), 25 Airtel Sales team(these contribute directly to the increment in market sales), 10 Airtel dealers (Central Uganda), 35 Airtel sub dealers (Eastern Uganda) and 64 registered users (these are key stakeholders of the company), 20 UCC Employees(they participate in the day to day operations of the company) and 10 Members of Parliament(they are key in enacting the laws that regulate mobile money services). This population enabled the researcher to obtain the necessary data for his study that he required.

3.4. Sample Size and Selection

The study was based on a sample size of 154 that was drawn from a population of 190. The sample size of 154 was sufficient and this is recommended by Krejcie &Morgan (1970). Krejcie & Morgan (1970) assert that treat each sub-group as a population and then use the table to determine the recommended sample size.

Table 3.1: Population, Sample Size and Sampling Techniques

Category	Target population	Sample Size	Sampling Technique
Airtel Marketing Team	10	10	Purposive
Airtel Sales Team	25	19	Simple random
Airtel Dealers (Central)	05	05	Purposive
Airtel Sub Dealers (Eastern)	20	18	Simple random
Registered users	100	77	Convenient
UCC Officials	20	17	Purposive
Members of Parliament	10	08	Purposive
Total	**190**	**154**	

Source*: *Airtel HR Research Manual (2016)* & Modified by the Krejcie *& Morgan (1970) Tables

3.5. Sampling Techniques and Procedure

The study used simple random sampling techniques. Simple random sampling technique was used to sample Airtel sub dealers Eastern and Airtel Sales Team. According to Amin (2005), simple random sampling ensures that every member has an equal chance of being recruited into the sample. A sample frame was constructed and then the members were randomly sampled. Purposive sampling was used to sample Airtel Marketing Team, Airtel Sales Team, Airtel Dealers (Central), UCC officials and Members of Parliament. Mugenda and Mugenda (1999) notes that purposive sampling enables the researcher choose a sample based on his own interest. Convenient sampling was adopted when sampling Airtel registered users. Sekaran (2003) noted that convenient sampling enables the researcher recruit into the sample whoever is ready and willing to be made part of the sample

3.6. Data Collection Methods

Both primary and secondary data that is qualitative and quantitative was obtained. The researcher used the questionnaire survey because it is practical, large amounts of information can be collected from a large number of people in a short period of time and in a relatively cost effective way. The results of the questionnaires can usually be quickly and easily quantified by either a researcher or through the use of a software package and can be analyzed more 'scientifically' and objectively than other forms of research.

3.6.1. Questionnaire Survey

A questionnaire was used because it is cheap, a large group of respondents is covered within a short time, it also allows in-depth research, to gain firsthand information and more experience over a short period of time (Kothari, 2004). The questionnaire consisted of closed ended questions. The researcher used the questionnaire survey because it is practical, large amounts of information can be collected from a large number of people in a short period of time and in a relatively cost effective way. The results of the questionnaires can usually be quickly and easily quantified by either a researcher or through the use of a software package and can be analyzed more 'scientifically' and objectively than other forms of research. A questionnaire was used because it is cheap, a large group of respondents is covered with in a short time, it also allows in-depth research, to gain firsthand information and more experience over a short period of time (Earl-Babbie, 2013). The questionnaire was self-administered to members of the Airtel marketing team, Airtel Sales team, Airtel dealers (Central Uganda), Airtel sub dealers (Eastern Uganda) and registered users.

3.6.2. Interviews

Interviews were person to person verbal communication in which one person was interviewed at a time. Interviews were used because they have the advantage of getting in-depth information (Kothari, 2004). In addition they also gave an opportunity to the researcher to revisit some of the issues that have been an over-sight in other instruments and yet they are considered vital for the study. Interviews were personal interviews and were conducted with a selected few of the total number of respondents. In the secondary analysis of qualitative data, good documentation cannot be underestimated as it provides necessary background and much needed context both of which make re-use a more worthwhile and systematic endeavor. The interviews were conducted with members of the Airtel marketing team, Airtel Sales team, Airtel dealers (Central Uganda), Airtel sub dealers (Eastern Uganda) and registered users.

3.6.3 Document Review

In the secondary analysis of qualitative data, good documentation cannot be underestimated as it provides necessary background and much needed context both of which make re-use a more worthwhile and systematic endeavor (Kothari, 2004). Secondary data is obtained through the use of published and unpublished documents (Junker and Pennink, 2010).

3.7. Data Collection Instruments

The study used appropriate instruments for each method. Key informant interviews were conducted by the researcher using an interview guide. Questionnaires were used to collect quantitative data, a documentary review was done using the documentary review checklist.

3.7.1 Questionnaire

A questionnaire is a reformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives. The questionnaire was used on the basis that the variables under study cannot be observed, for instance, respondents' views, opinions, perceptions and feelings. The questionnaire was used because the information had to be collected from a large sample in a short period of time yet the respondents given the fact that the respondents can read and write (Bill, 2011). In this study, a self-administered questionnaire was used to draw information regarding the study. The researchers chose the questionnaire as an instrument because the study is virtually descriptive and the tool is an easy method of data collection. The questionnaire consisted of closed ended questions purely structured in nature whose variables were measured on a 5 point Likert scale (5 Strongly Agree, 4 Agree, 3 Not sure, 2 Disagree and 1 Strongly Disagree). The 5 point Likert scale is the most appropriate way to formulate the different questions for measuring different items from different variables. A copy of the questionnaire is attached marked appendix I

3.7.2 Interview Guide

The interview guide was used to collect the data. Interviews are person to person verbal communication in which one person or a group of people were interviewed at a time. Interviews were used because they have the advantage of ensuring probing for more information, clarification and capturing facial expression of the interviewees (Barifaijo, Basheka and Oonyu, 2010). In addition they also gave an opportunity to the researcher to revisit some of the issues that have been an over-sight in other instruments and yet they are considered vital for the study. The interview guide was unstructured containing questions on all variables of the study. The interview guide contains items on each variable. Interviews were used because they have the advantage of enabling the researcher get in-depth information for the study (Amin, 2005).

3.7.3 Document Review Check list

The documentary review check-list was used for purposes guiding the documentary reviewed data. Documentary data was obtained through the use of published and unpublished documents. According to Amin (2005), documents can be helpful in the research design of subsequent primary research and can provide a baseline with which the collected primary data results can be compared to other methods.

3.8 Validity and Reliability

Data quality control techniques ensured that data collected is valid and reliable; the instruments were first tested to ensure validity and reliability.

3.8.1 Validity

Validity refers to the truthfulness of findings or the extent to which the instrument is relevant in measuring what it is supposed to measure (Amin, 2005). The validity of the instrument quantitatively was established using the Content Validity Index (CVI). This involved the expert scoring of the relevance of the questions in the instrument in relation to the study variables. The instruments that yielded a CVI above 0.7 were within the accepted ranges. Amin (2005) noted that a CVI of more than 0.7 implies that the tool is valid. Index (CVI) was computed using the formula below:

$$C\,VI = \left[\frac{n}{N} \right] X100$$

Where; n = Number of items rated as relevant.

N = Total number of items in the instrument.

3.8.2 Reliability

Qualitatively, the reliability of the instruments was established through a pilot test of the questionnaire to ensure consistency and dependability and its ability to tap data that would answer the objectives of the study. The results of the findings were then subjected to a reliability analysis. Based on Cronbach's Alpha Coefficient, the scales for the variables were reliable. Quantitatively, reliability was established using the Cronbach's Alpha Reliability Coefficient test. Upon performing the test the values that were 0.7 and above were regarded reliable. In the case of psychometric tests, must fall within the range of 0.7 above for the test to be reliable (Creswell, 2003).

3.9. Procedure of data collection

The researcher through proper channels asked for an introductory letter from Uganda Management Institute which he used for purposes of introduction before the participants when collecting data from the field. Data was collected using questionnaires and interviews and later analyzed. A number of documents were reviewed basing on the documentary review checklist drafted. The researcher ensured confidentiality of the survey sheet since the identities were not important. Participants were given time to respond and after the researcher collected the surveys the next day. The researcher did not offer them any incentives for participating in the research.

3.10. Data Analysis

Amin (2005), states that statistical analyses were used to describe an account for the observed variability in the behavioral data. Data was collected, coded and edited during and after the study to ensure completeness, consistency, accuracy, and removal of errors and omissions. It also involved identifying patterns, consistencies and relationships in the questionnaire and interview guide (Qualitative data). Data analysis therefore involved qualitative and quantitative analysis.

3.10.1 Analysis of Quantitative Data

Quantitative data, data collected was expressed in numeric terms for analysis using the Statistical Package for Sciences (SPSS) Version (20) software. The researcher adopted bivariate analysis techniques in analyzing his data. Bivariate analysis is the simplest form of quantitative (statistical) analysis. In addition to frequency distribution, tables, mean, standard deviation and other measures of central tendency were used in data analysis. Regression analysis was run in order to test the magnitude of effect of the independent variable on the dependent variable and the correlation coefficient were used in order to test the relationship between the independent and dependent variables. The statistical programme was used in the calculation of descriptive statistics, frequency percentages, drawing of frequency tables and figures. This was well-suited for quantitative description. Analysis and explanations were made to give meaning to the collected data.

3.10.1 Analysis of Qualitative Data

Qualitative data collected from interviews and documentary review was sorted and grouped into themes. The researcher therefore evaluated and analyzed the adequacy of information in answering the research questions through coding of data, identifying categories and parameters that emerged in the responses (Glenn, 2013). While analyzing qualitative data, summaries were made on how different themes/variables are related. The content analysis technique was used during analysis of qualitative data in this study.

3.11 Measurement of variables

The variables of the study were measured using a five-Likert scale. Different variables were measured at different levels, that is, variables were measured using nominal, ordinal, interval and ratio scales. The five-point Likert scale ranged from 5 to 1, where 5 indicate 'strongly agree' 4 agree, 3 neutral, 2 disagree and, 1 strongly disagree. Different research instruments which are proved reliable and valid were used, where appropriate to formulate the different questions measuring different items.

3.12 Ethical Considerations

Honesty: There are several reasons why it is important to adhere to ethical norms in research. First, norms promote the aims of research, such as knowledge, truth, and avoidance of error. For example, prohibitions against fabricating, falsifying, or misrepresenting research data promote the truth and avoid error. Second, since research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, ethical standards promote the values that are essential to collaborative work, such as trust, accountability, mutual respect, and fairness (Amin, 2005). To avoid plagiarism, the work was subjected to the anti-plagiarism test using the anti-plagiarism software called turn it in of different authors were acknowledged whenever they are cited.

Informed Consent: The ethics framework is essential as it entails the voluntary informed consent of the participants. This required giving the participants adequate information about what the study involved and an assurance that their consent to participate would be free and voluntary rather than coerced. According to Sekaran (2003) participants informed consent may be obtained either through a letter or form that clearly specifies what the research involves, includes clearly laid down procedures the participants can expect to follow and explain the ways in which their confidentiality will be assured. In this case, a letter was obtained for this purpose. It may also be imperative to describe possible risks and benefits of the research (Sekaran, 2003). The signing of the voluntary informed consent by each individual participant was confirmation that the respondents are not coerced to participate in the study but are doing so willingly. The researcher explained to the participants that an audio tape were to used to record interviews. The researcher made the respondents aware of their right to opt out of the study if they so wish and that recording would only be done with their approval. In all the interviews, the participants consented to the use of audio tape. Some respondents required further verbal assurance that the tapes were under no circumstances to be handed over to their supervisors.

Anonymity: Respondent's names were withheld to ensure anonymity and confidentiality in terms of any future prospects. In order to avoid bias, the researcher interviewed the respondents one after the other and ensured that she informed them about the nature and extent of her study and on the other hand she gave them reasons as to why was interviewing them.

Confidentiality: The researcher protected confidential communications by informing respondents that participating in this study does not mean that they are giving up on any of their legal rights. The respondents were informed that recording both audio and video is an integral part of the study, the records of the interviews taken were kept confidential and any other data collected. The data was used for only academic purposes and not after be used against them or their offices. The records of this study were kept confidential. The records were destroyed after transcription and data kept on a personal computer.

Objectivity: The researcher avoided bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research where objectivity was expected or required. He avoided or minimized bias or self-deception.

CHAPTER FOUR

PRESENTATION, ANALYSIS ANDINTERPRETATION OF RESULTS

4.1 Introduction

This chapter presents the analysis and interpretation of the findings on the relationship between the regulatory framework and the success of the mobile money industry in Uganda with specific focus on Airtel Money. The findings logically follow the three specific objectives stated in Chapter one which are: to find out the relationship between institutional framework and the success of Airtel Money in Uganda, to assess the relationship between the law and the success of Airtel Money in Uganda and to examine the relationship between policies and the success of Airtel Money in Uganda. Findings from the surveys, interviews and from documentary sources were used to demonstrate the relationship between regulatory framework and the success of the mobile money industry in Uganda. The task was preceded by a discussion of the response rate and the background characteristics of the respondents. The information on the sample characteristics of the study respondents emerged from the background section of the survey questionnaires. The results are presented using descriptive statistics in form of percentages and frequencies. For each of the study objectives, before the bivariate results are presented, the descriptive results in terms of means, frequencies and percentages are first presented.

The presentation of quantitative results relies on regression analysis as imputed from determining the coefficient of determination for each of the independent variables against the dependent variable. For qualitative results and those from documentary sources, the results are presented under each of the respective study objectives. As much as possible, the chapter presents, analyses and interprets results from each of the data collection sources concurrently so as to provide a comparative perspective in demonstrating the relationship between the regulatory framework and the success of the mobile money industry in Uganda. The chapter finally summarizes the quantitative results using regression analysis to demonstrate the relationship between the regulatory framework and the success of the mobile money industry in Uganda.

4.2 Response Rate

In this study, the total number of expected respondents was 154 and a total of 120 respondents actually returned the survey instruments which were usuable. By computing the response rate based on the above formula, it gave a response rate of 77.9% which was higher than the recommended 50 percent at an international level.

4.3 Background Characteristics of the Respondents

This section presents facts about the respondents, namely; gender, age, education, marital status and working experience. This information was considered necessary because it helped in categorising the respondents and identifying their ideas on the success of mobile money.

4.4 Respondents by Gender

Table 4.1 below presents the summary statistics on the gender of the respondents

Table 4.1: The table below presents the summary statistics on the gender of the respondents

Gender	Frequency	Percentage
Female	59	49.2
Male	61	50.8
Total	**120**	**100**

Source: Primary Data (2017) **N=120**

Table 4.1 shows that the majority of the respondents were male (50.8%) and female were (49.2%). These results show that gender representation indicated a slight variation between the male and female with a difference of 0.2%. The responses on gender were representative of both groups.

4.5 Respondents by Age

The study looked at the age distribution of the respondents using a frequency distribution. The results obtained on the item are presented in table 4.2 below

Table 4.2: Presents the summary statistics on the Age of the respondents

Age in years	Frequency	Percentage
20-29	15	12.5
30-39	65	54.2
40-49	30	25
50 and above	10	8.3
Total	**120**	**100**

Source: Primary Data (2017) **N=120**

The age categories of the respondents were studied according to their age groups. This was important for the study because it was believed that differences in age indicated differences in opinions. Therefore, establishing different age groups of the people who were involved helped to provided varied opinions about the study problem. From the above table, the majority of respondents who took part in the study were between 30-39 years were 54.2% and those who were between the age of 20-29 were 12.5% and those that were between 40-49 years were 25% and lastly those that were above 50 years were 8.3%. This shows that the data collected was representative of all age groups.

Respondents by Level of Education

The table 4.3 presents the summary statistics on level of education of the respondents.

Highest Level of Education	**Frequency**	**Percentage**
Diploma	23	19.2
Bachelors	76	63.3
Post graduate	21	17.5
Others	00	00
Total	**120**	**100**

Source: Primary Data (2017) *N=120*

The majority of the respondents were first degree holders making a total percentage of 63.3%, the respondents with post graduate qualifications were 17.5%, and the diploma were 19.2%. These results indicate that the respondents had reasonably good education qualifications and the desired skills and knowledge to deliver. Besides, the respondents were able to read, understand the questionnaire and gave appropriate responses.

Respondents by Marital of the Respondents

The table 4.4 presents the summary statistics on level of marital status of the respondents.

Marital status	Frequency	Percentage
Single	72	60
Married	38	31.6
Separated	03	2.5
Divorced	04	3.4
Widowed	03	2.5
Total	**120**	**100**

Source: Primary Data (2017) *N=120*

The majority of the respondents were single (60%) and the married were 31.6%. This indicated that the data collected was representative to respondents of different marital status.

4.5 Empirical Results based on Study's Research Objectives

In this section, the empirical results for each of the specific research objectives is presented, analysed and interpreted with an overall goal of demonstrating the relationship between regulatory framework and the success of the mobile money industry in Uganda.

4.5.1 Objective One: the relationship between institutional framework and the success of Airtel Money in Uganda

This sub section is the centrepiece of this work. It presents findings, discusses and critique existing approaches to the institutional framework. The point of this examination and critique is to unearth the institutional framework and success of Airtel money in Uganda. The task of this section is further to dig more deeply into the implications of the difference between the pursuit of "good" management and the pursuit of effectiveness of institutional framework

Findings to address the institutional framework were obtained using a variety of methods including survey instrument, interviews and document analysis. The self-administered questionnaire measured institutional framework using six items on a Likert scale. The eight items measuring institutional framework are presented in Table 4.6. The items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. For each of the above items, descriptive statistics that include frequencies, percentages and means are presented in Table 4.6.

Table 4.6: Frequencies, Percentages and Means on the Institutional Framework

Items	SA	A	N	D	SD	Mean
The Mobile money sector has well developed institutional structures	23.3%	18.3 %	6.6%	35.8%	22.5%	2.34
There are loopholes within the structures for mobile money	29.1%	37.5 %	4.16%	12.5%	16.6%	3.96
The general public is aware of the existence, roles and functions of bank of Uganda	34.1%	30.8 %	-	17.5%	17.5%	3.70
The general audits standards being followed by Bank of Uganda are satisfactory	25%	21%	3.3%	32.5%	15.8%	2.30
The systems are well functioning in relation to mobile money services	16.6%	64.1 %	5.0%	5.0%	10%	3.88

Source: Primary data (2017) *N=120*

SD = Strongly Disagree, D = Disagree, N = Neutral, SA = Strongly Agree and A = Agree, F = Frequency, % = Percentage

Basing on survey findings, it was established from the respondents in relation to item one, the Mobile money sector has well developed institutional structures,cumulatively the majority percentage (58.3%) of the respondents disagreed with 41.6% agreed and 6.6% were undecided. The mean = 2.34 which on the five-point Likert scale (from a minimum of 1 for the worst case scenario strongly disagree to a maximum of 5, which is the best case scenario strongly agree) that was used to measure responses was close to 2 which corresponded to disagree. This suggested that the Mobile money sector does not have well-developed institutional structures.

Interview findings revealed that Mobile money transactions have presented regulatory challenges that could potentially hinder maximum development benefits. This is because firstly, mobile money blurs the traditionally distinct and independent sectors of regulation (most notably, the telecommunications and financial banking sectors). It often involves an overlap between multiple ministries and Government agencies, thus adding to the complexity of oversight needed.

As to whether there are loopholes within the structures for mobile money, cumulatively the majority percentage (66.6%) of the respondents agreed with 29.1% agreed and 4.16% were undecided. The mean = 3.96 was close to four meaning that the majority of the respondents disagreed with the item hence this suggested that there are loopholes within the structures for mobile money.

A respondent noted

> *The growth of mobile financial services has raised foundational policy questions for regulators of how to distinguish a 'payment' (mobile or not) from a 'deposit, and what differentiates the business of providing payments from that of deposit taking. This boundary questions are not new, but the spread of the mobile phone is necessitating greater clarity because it has enabled the creation and distribution of electronic payment instruments on a widespread scale, which was neither easy nor even possible in many places until recently. There is no clear trend towards creating legal certainty through guidance or new legislation that regulates e-money issuance.*

Three respondents supported the argument that there are loopholes within the structures for mobile money, they cited the case where companies have failed to crack on offenders that send money illegally to customers. Further the respondents revealed that the regulation of mobile money has a long way to go this represented 60% of the total interviewed. A member of PAC felt that the mobile money institutions have not been supported to the extent of handling all the cases referred to it by the general public.

In relation to item three, the respondents were required to state whether the general public is aware of the existence, roles and functions of bank of Uganda. The computed test figures reveal that the mean is 3.70 and the standard deviation is .1244 indicating agreement. A respondent felt that the regulation of the mobile money industry has a long way to go. However the opinion leaders (57%) had mixed responses about the mobile money industry.

4.12 Success of Mobile Money(Dependent Variable)

The items on this variable were derived from the dependent variable (success of mobile money). Question items measuring responsive services were put to the respondents. The items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. Descriptive data is as presented in Table 4.7.

Table 4.7: Frequencies, Percentages and Means on the Success of Mobile Money

Items	SD	D	N	A	SA	Mean
Airtel mobile money has yielded profitability between 2015 and 2017	25%	15%	--	23.3%	36.6%	3.64
Airtel money has yielded good return on investment between 2015 and 2017	13.3%	12.5 %	11.6%	28.3%	34.1%	3.52
Airtel money has yielded good return on capital employed between 2015 and 2017	10.2%	30.8 %	-	18.5%	31.5%	3.60
Airtel money has yielded good return on assets between 2015 and 2017	10%	12.5 %	2.5%	40%	37.5%	3.95

Source: Primary data (2017) *N=120*

SD = Strongly Disagree, D = Disagree, N = Neutral, SA = Strongly Agree and A = Agree, F = Frequency, % = Percentage

Table 4.7 presents empirical results through advanced statistical tests to demonstrate the views of the respondents on success of mobile money. The details are supported by interviews results and documentary evidence.

Whether Airtel mobile money has yielded profitability between 2015 and 2017, cumulatively the larger percentage (60%) of the respondents agreed with 40% agreeing. The mean = 3.64 this indicated that the majority of respondents agreed that Airtel mobile money has yielded profitability between 2015 and 2017. It was observed that although Airtel makes profits, there is need for a regulatory framework for the industry.

A respondent noted that the government tries as much as possible to have laws in place but this has not been possible given that no bill has ever been tabled in Parliament. Even institutions concerned have not gone an extra mile to have a regulatory framework in place. The respondents felt that there is need for institutions concerned to come up with a proper regulatory framework for mobile money. There were mixed responses about the usefulness of the regulatory framework, some respondents felt that since mobile money has been operating smoothly, the regulatory framework would not add anything.

Five dealers revealed that the institutions concerned with regulation of mobile money have been reluctant to have a bill tabled for that purpose, this represented 15% of the total interviewed. A sub dealer was reluctant to reveal the extent to which the bill will solve the current challenges of mobile money in Uganda.

The respondents were asked whether Airtel money has yielded good return on investment between 2015 and 2017, cumulatively the larger percentage (62.4%) of the respondents disagreed with 25.8% disagreeing and 11.6% were undecided. The mean = 3.52 indicated that the majority of respondents agreed that Airtel money has yielded good return on investment between 2015 and 2017.

The respondents were asked whether Airtel money has yielded good return on capital employed between 2015 and 2017, the mean of 3.600 indicated that the majority of respondents agreed that Airtel money has yielded good return on capital employed between 2015 and 2017.

Five sub dealers noted that Airtel money has yielded good return on capital employed between 2015 and 2017. One respondent noted that revealed that *having good return remains the trickiest process.*

The respondents were asked whether Airtel money has yielded good return on capital employed between 2015 and 2017, cumulatively the larger percentage (60%) of the respondents agreed with 41% disagreeing. The mean = 3.60 indicated that the majority of respondents agreed that Airtel money has yielded good return on capital employed between 2015 and 2017.

The respondents were asked whether Airtel money has yielded good return on assets between 2015 and 2017, cumulatively the larger percentage (77.5%) of the respondents agreed with 22.5% disagreeing. The mean = 3.95 indicated that the majority of respondents agreed that Airtel money has yielded good return on assets between 2015 and 2017.

4.7 Hypothesis Testing One:

Hypothesis Two Stated that there is a positive relationship between the institutional framework and the success of mobile Money in Uganda. The hypotheses was tested using Regression Analysis basing on the indicators of laws as indicated in the conceptual frameworks in chapter one.

Table 4.8: Regression Summary of the Institutional Framework and the Success of Mobile Money

	Un standardized Coefficients	Standardized Coefficients		T	Sig.	R Square	Adjusted R Square	F	Sig.
	B	Std. Error	B			0.195	0.191	6.65	0.000
(Constant)	1.34	0.48939		2.005	0.023				
SPS	0.145	0.147	0.421	0.432	0.305				
Dependent Variable : Success of the Mobile Money **Predictors : (Constant) Institutional Framework**									

Source: Primary Data (2017)

Table 4.8 results indicate that, success of mobile money linearly relates to policies (F = 7.45, Sig. = 0.000).

Table 4.9: Regression Analysis for policies and the success of mobile money

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.299[a]	.195	.191	.48939

a. Predictors: (Constant), institutional framework

Table 4.9 presents the R and R^2 value. The R value is 0.299, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable, success of mobile money can be explained by the independent variable institutional framework. The standard error of the estimate is .48939 and the adjusted R square value is 0.191. Therefore the adjusted square value of .191 implied that the institutional framework predicts the success of mobile money; in other words the success of mobile money is dependent on institutional framework by 19.1%

4.10 Objective Two: Law and the Success of Mobile Money

The items on the law were derived from the third of objective of the study. Question items measuring responsive the law were put to the respondents. The items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. Descriptive data is as presented in Table 4.10.

Table 4.3: Frequencies, Percentages and Means on the Law

Items	SA	A	N	D	SD	Mean
Uganda has laws in place to regulate mobile money	30.8%	51%	1.0%	8.3%	9.1%	3.999
The public is aware of the existing laws regulating the mobile money industry in Uganda	5%	11.6 %	-	41.6%	40%	1.968
The laws in place are effectively utilized	16.4%	64%	9.1%	1.6%	8.3%	4.04
Bank of Uganda are effectively implementing the laws in place	44.3%	45.3 %	00%	8.6%	%5.15	2.10
There is effective regulation of mobile money industry by the institutions concerned	17.5%	21.6 %	5.0%	27.5%	28.3%	2.21
The regulatory framework for the management of public finances has loopholes	14.1%	14.1 %	5.0%	38.3%	28.3%	2.01

Source: Primary data (2017) *N =120*

SD = Strongly Disagree, D = Disagree, N = Neutral, SA = Strongly Agree and A = Agree, F = Frequency, % = Percentage

Table 4.10 presents empirical results through advanced statistical tests to demonstrate the views of the respondents on the relationship between laws and the success of mobile money. The details are supported by interviews results and documentary evidence.

Therefore, mobile money services arguably do not constitute banking business as defined under Section 2 of the Banking Act. Therefore, they do not require the extent of regulatory oversight required for deposits that are used in banking. The depository bank has no involvement in or responsibility for payments through the MNO system. Mobile banking has relatively high costs of a bank account opening (minimum balance, service charges, full Know-Your-Customer (KYC) requirements, and travel time to a branch), compared to the easy, low cost and increasingly universal access to cell phone services (Okonji, 2013).

As to whether Uganda has laws in place to regulate mobile money, the tabulated responses indicated a mean of 3.999 above the median score of three. This implied that Uganda has laws in place to regulate mobile money. This is so because Parliament has on several occasion passed laws like the Financial Institutions Act that is serving the purpose.

A respondent noted that mobile banking is also susceptible to bank related risks such as credit risks, operational risks, systematic risks, fraud and identity risks. In Uganda several laws exist that seek to address some of these challenges but do so in a peripheral manner. The Banking Act, Anti-Money Laundering Act and the Communications Act are some of the laws that have useful provisions in regulating mobile banking. There are also a number of laws like Electronic Transactions Act.

The survey findings are supported by the reports by the BOU Reports. According to the BOU report (2012), many laws regulate banking unlike mobile money, however the enforcement is poor. To make sense of the differences between what at the time was simplistically described good enforcement, Kivumbi (2013) noted that laws are in place but the enforcement of the laws has been very poor".

Findings from interviews further revealed that most of the mobile money operators rarely follow the regulations that have been enacted by the state. The few laws that are followed are those that a well-known to the general public like the electronic transaction Act. On the other hand, most public agencies do not open up the space for people to get to learn about the laws. This limits the enforcement of the laws.

As to whether the public is aware of the existing laws regulating the mobile money industry in Uganda (81.6%) disagreed while 16.6% agreed with the item implying that the public is aware of the existing laws regulating the mobile money industry in Uganda.

A respondent who preferred anonymity noted that

> *The public is not aware of any laws that have been enacted to regulate mobile money, the industry still suffers given that the laws in place are not directly related to mobile money per see and even the general public is not aware of their existence.*

A closer analysis of Magezi's study seems to point out that laws in place are not ably regulating mobile money given that they were not enacted for this specific purpose.

The documentary evidence above seem not contradictory or not contentious to the earlier held view indicating that there has been laxity concerning the regulation of the mobile money industry.

Similarly, to summarizes the push and pull nature of Uganda's legal framework, Kivumbi (2013) wrote that the industry still has a long way to go given that Parliament has not enacted a law for that purpose.

As to whether the institutions have been reluctant to effectively enforce the laws and statutes in place, the majority of the respondents agreed with the statement. Relatedly a respondent noted

> *Uganda has no laws or regulations dealing directly with e-money. The adoption of e-payment regulations, which would govern e-money issuers, will serve the purpose. The precise nature of regulation would be linked to the scope of the bill if tabled before Parliament, but the expressed intent of BOU is to move to risk-appropriate regulation*

of the nonbank e-money issuers. (The primary regulator of e-money issuers and transferors is BOU)

Documentary evidence similarly revealed that there is ineffective enforcement of the laws. The views held by the majority of the respondents seem to be in consonant with other reports.

When asked whether the laws in place are effectively utilized. A respondent noted that the laws in place are effectively utilized indicating a mean of 4.04

A respondent noted that *"We understand that it is only a matter of time before Airtel is brought under the full regulatory umbrella of Uganda's laws, and it is likely to be regulated as an electronic money issuer. This is expected to be some way short of full regulation as a bank after all, Airtel doesn't offer credit, and it certainly doesn't lend out (multiples of) its customers' funds. Uganda's approach, in creating a separate regulatory category of Payment Institutions and separating the regulation of payment services from the regulation of credit institutions, might be a very useful model in this regard".*

However, due to the fragmentation of the current regulatory regime, these current laws like the financial institutions Act do not apply to all new types of payment systems including mobile payments. The convergence of telecommunications and finance has given rise to regulatory challenges for regulators. In marked contrast, both telecommunications and financial firms have been subjected to significant sector specific regulations. It is therefore imperative that regulators identify and address the gaps and potential overlaps between their existing legislative and regulatory frameworks.

4.7 Hypothesis Testing Two:

Hypothesis Two Stated that there is a positive relationship between the law and the success of mobile Money in Uganda. The hypotheses was tested using Regression Analysis basing on the indicators of laws as indicated in the conceptual frameworks in chapter one

Table 4.11: Regression Coefficients for Law and the success of mobile Money in Uganda

	Un standardized Coefficients	Standardized Coefficients		T	Sig.	R Square	Adjusted R Square	F	Sig.
	B	Std. Error	B			0.485	0.401	9.34	0.000
(Constant)	1.023	0.50252		2.524	0.016				
LPR	0.159	0.165	0.161	0.964	0.342				
Dependent Variable : Success of Mobile Money **Predictors : (Constant) Law**									

Source: Primary Data (2017)

Table 4.11 results indicate that the success of mobile Money in Uganda linearly relates to law (F = 9.34, Sig. = 0.000). As law excels, so does the success of mobile Money in Uganda.

Table 4.12: Regression Analysis for Law and success of mobile Money in Uganda

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.697 [a]	.485	.401	.50252

a. Predictors: (Constant), law

Table 4.12 presents the R and R^2 value. The R value is 0.697, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable the success of mobile Money in Uganda can be explained by the independent variable law. The standard error of the estimate is .50252 and the adjusted R square value is 0.485. Therefore the adjusted square value of .401 implied that the law predicts the success of mobile Money in Uganda; in other words the success of mobile Money in Uganda is dependent on the law by 40.1%

Table 4.13: Analysis of Variance Showing the Results on the Relationship between Law and the success of mobile Money in Uganda

ANOVA [b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.239	1	.239	.968	.327 [a]
	Residual	29.179	118	.247		
	Total	29.418	119			

a. Predictors: (Constant), law

b. Dependent Variable: success of mobile money

These are the degrees of freedom associated with the sources of variance. The total variance has N-1 degrees of freedom. The Regression degrees of freedom correspond to the number of coefficients estimated minus 1. Including the intercept, there are 5 coefficients, so the model has 5-1=4 degrees of freedom. The Error degree of freedom is the DF total minus the DF model, 119 - 1 =118. Mean Square are the Mean Squares, the Sum of Squares divided by their respective DF. The F-statistic is the Mean Square (Regression) divided by the Mean Square (Residual) .239/.247=2.593. The p-value is compared to some alpha level in testing the null hypothesis that all of the model coefficients are 0.The full model is statistically significant (F = .968, df = 119, 1, sig.= .327), even though the success of mobile Money in Uganda was statistically significant (p>.05) by itself. The value for this table had a total degrees of freedom of 119 because four observation had missing data and were not included in the analysis. The other degree of freedom corresponds to the intercept (constant) of the regression line. F-Statistics is .968, given the strength of the correlation, our model is statistically significant (p > .0005)

4.8 Objective two: Policies and the success of mobile Money in Uganda

The survey instruments used for the study had a list of 05 items measuring the influence of policies and the success of mobile Money in Uganda whose descriptive findings are presented. The researcher analyzed the questionnaires that were distributed to the respondents and responses were based on Likert scale ranging from one which represented strongly disagrees to five which reflected strongly agree. The resulting summary statistics are in Table 4.14 below.

Table 4.14: Frequencies, Percentages and Means on Policies and Success of Mobile Money

Items	SA	A	N	D	SD	Mean
Uganda has policies in place for the regulation of the mobile money industry	15%	14.1 %	13.3%	56.6%	11.6%	1.990
The public is aware of the existing policies on the mobile money industry	20.8%	20.8 %	6.6%	30%	21.6%	2.84
The policies in place are effectively utilized	16.6%	16.6 %	-	14.1%	52.5%	1.78
The institutions have tried to effectively implement the existing policies on mobile money industry	21.6%	20%	8.3%	21.6%	28.3%	2.80
There is good policy implementation in relation to mobile money industry	30.8%	37.5 %	4.1%	11.6%	20%	3.88

Source: Primary data (2017) *N=120*

SD = Strongly Disagree, D = Disagree, N = Neutral, SA = Strongly Agree and A = Agree, F = Frequency, % = Percentage

Table 4.14 presents empirical results through advanced statistical tests to demonstrate the views of the respondents on how a policy influences the success of mobile money. The details below are supported by interviews results and documentary evidence.

As to whether Uganda has policies in place for the regulation of the mobile money industry, responses showed that cumulatively the majority percentage (67.2%) of the respondents disagreed while 29.1% agreed and 2.5% were undecided. The mean = 1.990 suggested that most respondents were in disagreement with the item hence suggesting that Uganda does not have policies in place for the regulation of the mobile money industry.

A respondent noted that besides the laws there are a number of policies that regulate mobile money. The Bank of Uganda Act permitted banks to use third parties (Agent Banking) to provide certain banking services on their behalf. Subsequently, BOU issued guidelines on agent banking in May, 2012 (Bank of Uganda, 2012). The Guidelines require banks to seek BOU's approval for the agent network as well as approval for specific agents and clearly specify the services to be provided by the agents.

As to whether the public is aware of the existing policies on the mobile money industry, responses showed that cumulatively the majority percentage (61.6%) of the respondents disagreed while 20.8% agreed and 20.8% agreed. The mean = 2.84 suggested that most respondents were in disagreement with the item hence suggesting that the public is not aware of the existing policies on the mobile money industry.

As to whether the policies in place are effectively utilized, responses showed that cumulatively the majority percentage (33.2%) of the respondents agreed while 76.6% disagreed. The mean = 1.78 suggested that most respondents were in disagreement with the item hence suggesting that the policies in place are effectively utilized.

Survey findings revealed that the institutions have tried to effectively implement the existing policies on mobile money industry, the mean of 2.80 indicated that the majority of the respondents disagreed that institutions have tried to effectively implement the existing policies on mobile money industry.

It was observed that there is good policy implementation in relation to mobile money industry, the mean of 3.88 indicated that there is good policy implementation in relation to mobile money industry, A total of 68.3% agreed with the item.

4.9 Hypothesis Testing Two:

The Hypothesis two stated that there is a significant positive relationship between policies and the success of mobile Money in Uganda was tested using Regression Analysis basing on the indicators of policies as laid down in the conceptual framework.

Table 4. 4: Regression coefficients for policies and the success of mobile money

	Un standardized Coefficients	Standardized Coefficients		T	Sig.	R Square	Adjusted R Square	F	Sig.
	B	Std. Error	B			0.419	0.378	7.45	0.000
(Constant)	1.004	4.8939		2.774	0.007				
SPS	0.144	0.144	0.542	0.867	0.397				
Dependent Variable : Success of the Mobile Money Predictors : (Constant) Policies									

Source: Primary Data (2017)

Table 4.15 results indicate that, success of mobile money linearly relates to policies (F = 7.45, Sig. = 0.000).

Table 4. 5: Regression Analysis for policies and the success of mobile money

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.648 [a]	.419	.378	.48939

a. Predictors: (Constant), policies

Table 4.16 presents the R and R^2 value. The R value is 0.648, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable, success of mobile money can be explained by the independent variable policies. The standard error of the estimate is .48939 and the adjusted R square value is

0.378. Therefore the adjusted square value of .378 implied that the policies predicts the success of mobile money; in other words the success of mobile money is dependent on policies by 37.8%

Table 4. 6: Analysis of Variance Showing the Results on Policies and the Success of Mobile Money

ANOVA [b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.784	1	1.784	7.450	.007 [a]
	Residual	27.303	114	.240		
	Total	29.087	115			

a. Predictors: (Constant), policies

b. Dependent Variable: success of mobile money

These are the degrees of freedom associated with the sources of variance. The total variance has N-1 degrees of freedom. The Regression degrees of freedom correspond to the number of coefficients estimated minus 1. Including the intercept, there are 5 coefficients, so the model has 5-1=4 degrees of freedom. The Error degree of freedom is the DF total minus the DF model, 115 - 3 =114. Mean Square are the Mean Squares, the Sum of Squares divided by their respective DF. The F-statistic is the Mean Square (Regression) divided by the Mean Square (Residual) 1.784/.240= 7.450. The p-value is compared to some alpha level in testing the null hypothesis that all of the model coefficients are 0.The full model is not statistically significant (F = 7.450, df = 115, 1, sig.= .007), even though the success of mobile money was statistically significant (p>.05) by itself. The value for this table had a total degrees of freedom of 115 because four observation had missing data and were not included in the analysis. The other degree of freedom corresponds to the intercept (constant) of the regression line. F-Statistics is 7.450, given the strength of the correlation, our model is statistically significant (p > .0005)

In summary, the respondents were asked to give their summary opinions about policies. Several responses were given but generally their indicated that the responses on the policies were fair. In total 120 respondents provided responses indicating that policies drafted are good but the implementation of policies has faced challenges.

CHAPTER FIVE

SUMMARY, CONCLUSIONAND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, discussion of findings, conclusions obtained from the findings and the recommendations on analysis and interpretation of the findings on the relationship between the regulatory framework and the success of mobile money.

5.2 Summary of the findings

Interpretation and analysis of data collected provided the following findings that are summarised here under;

The results on laws and success of mobile money were $r = 0.401$, $p = 0.000 < 0.05$, the results on policies and success of mobile money were $r = 0.378$, $p = 0.011 > 0.05$. The results reveal that the institutional framework correlated with success of mobile money. The regression model was good/ significant ($F = 1.577$, $p = 0.000 < 0.05$). All the independent variables included ($\beta = .200$ and laws, $p = 0.001$), policies ($\beta = 0.053$, $p = 0.007$) and institutional framework ($\beta = 0.199$, $p = 0.006$) significantly positively influenced success of mobile money.

5.2.1 Institutional framework and the Success of Mobile Money

The results for institutional framework were $r = 0.214$, $p < 0.001$. The study findings indicated that institutional framework explained 0.214% of the variation in success of mobile money (adjusted $R2 = 0.214$). The R value was 0.012, which represents the simple correlation and, therefore, indicates a low degree of correlation. There is a positive relationship between institutional framework and the success of mobile money in Uganda. Therefore the adjusted square value was 0.214 ($F = 1.385$, $p = 0.001 < 0.05$), ($\beta = 0.199$, $p = 0.006$). The adjusted R-square and the magnitudes of the respective betas suggest that the institutional framework predicts the success of mobile money in Uganda.

5.2.2 Law and the Success of Mobile Money

The results on law and success of mobile money were $r = 0.401$, $p < 0.000$.The study findings indicated that law explained 40.1% of the variation in success of mobile money (adjusted $R2 = 0.401$). The R value was 0.401, which represents a moderate correlation and, therefore, indicates a moderate degree of correlation. Law ($\beta = .200$ and $p = 0.000 < 0.05$) significantly positively influenced the success of mobile money. There is a positive relationship between law and the success of mobile money in Uganda. The magnitudes of the respective betas suggest that the law significantly predicted success of mobile money followed by policies and institutional framework respectively.

5.2.3 Policies and the Success of Mobile Money

The results on policies and success of mobile money were $r = 0.378$, $p < 0.011$. The findings indicated that policies explained 37.8% of the variation in success of mobile money (adjusted $R2 = 0.378$). The regression model indicated ($F = 7.450$, $p = 0.007 < 0.05$). Policies ($\beta = 0.053$, $p =$

0.007) significantly positively influences success of mobile money. There is a positive relationship between policies and the success of mobile money in Uganda. The magnitudes of the respective betas suggest that the policies positively predicted the success of mobile money

5.3 Discussion

This subsection looks at the discussion of the findings research question by research question;

5.3.1 Institutional Framework and Success of Mobile Money

Study findings revealed that Mobile money sector has well developed institutional structures. The study findings are inconsistent with Wanjiru (2011) who noted that the mobile money sector has not got well-developed institutional structures.

Interview findings revealed that Mobile money transactions have presented regulatory challenges that could potentially hinder maximum development benefits. This is because firstly, mobile money blurs the traditionally distinct and independent sectors of regulation (most notably, the telecommunications and financial banking sectors). It often involves an overlap between multiple ministries and Government agencies, thus adding to the complexity of oversight needed. Sharma, (2009) noted that mobile money transactions have presented regulatory challenges that could potentially hinder maximum development benefits

It was observed that there are loopholes within the structures for mobile money. The growth of mobile financial services has raised foundational policy questions for regulators of how to distinguish a ‘payment’ (mobile or not) from a ‘deposit, and what differentiates the business of providing payments from that of deposit taking. This boundary questions are not new, but the spread of the mobile phone is necessitating greater clarity because it has enabled the creation and distribution of electronic payment instruments on a widespread scale, which was neither easy nor even possible in many places until recently. There is no clear trend towards creating legal certainty through guidance or new legislation that regulates e-money issuance. The findings are consistent with RuthRock (2012),who noted that the growth of mobile financial services has raised foundational policy questions for regulators of how to distinguish a 'payment' (mobile or not) from a 'deposit. In many countries there are loopholes within the structures for mobile money, they cited the case where companies have failed to crack on offenders that send money illegally to customers.

Study findings revealed that the general public is aware of the existence, roles and functions of bank of Uganda. However, due to the fragmentation of the current regulatory regime, these laws do not apply to all new types of payment systems including mobile payments. The convergence of telecommunications and finance has given rise to regulatory challenges for regulators. In marked contrast, both telecommunications and financial firms have been subjected to significant sector specific regulations. Rosenburg (2008) noted that it is imperative that regulators identify and address the gaps and potential overlaps between their existing legislative and regulatory frameworks.

5.3.2 Law and Success of Mobile Money

Study findings revealed that there is a positive significant relationship between laws and the success of mobile money. Therefore, mobile money services arguably do not constitute banking business as defined under Section 2 of the Banking Act. Therefore, they do not require the extent of regulatory oversight required for deposits that are used in banking. The depository bank has no involvement in or responsibility for payments through the MNO system. Mobile banking has relatively high costs of a bank account opening (minimum balance, service charges, full Know-

Your-Customer (KYC) requirements, and travel time to a branch), compared to the easy, low cost and increasingly universal access to cell phone services (Okonji, 2013).

Uganda has laws in place to regulate mobile money. This is so because Parliament has on several occasion passed laws like the Financial Institutions Act that is serving the purpose. This is in line with Wairagala and Wakabi (2009) who noted that despite the existence of laws, gaps exust in the mobile money industry. Findings revealed that mobile banking is also susceptible to bank related risks such as credit risks, operational risks, systematic risks, fraud and identity risks. Okonji(2013) noted that in Uganda several laws exist that seek to address some of these challenges but do so in a peripheral manner. The Banking Act, Anti-Money Laundering Act and the Communications Act are some of the laws that have useful provisions in regulating mobile banking. There are also a number of laws like Electronic Transactions Act.

The survey findings are supported by the reports by the Bank of Uganda Reports. According to the BOU report (2012), many laws regulate banking unlike mobile money, however the enforcement is poor. To make sense of the differences between what at the time was simplistically described good enforcement, Kivumbi (2013) noted that laws are in place but the enforcement of the laws has been very poor".

Study findings from interviews further revealed that most of the mobile money operators rarely follow the regulations that have been enacted by the state. The few laws that are followed are those that a well-known to the general public like the electronic transaction Act.

5.3.3 Policies and Success of Mobile Money

Study findings revealed that Uganda has policies in place for the regulation of the mobile money industry. The findings are inconsistent with Velasco (2010) who noted that most developing countries don't have policies in place for the regulation of the mobile money industry.

Findings revealed that besides the laws there are a number of policies that regulate mobile money. The Banking Act permitted banks to use third parties (Agent Banking) to provide certain banking services on their behalf. Subsequently, BOU issued guidelines on agent banking in May, 2012 (Bank of Uganda, 2012). The Guidelines require banks to seek BOU's approval for the agent network as well as approval for specific agents and clearly specify the services to be provided by the agents.

Study findings revealed that the public is not aware of any laws that have been enacted to regulate mobile money, the industry still suffers given that the laws in place are not directly related to mobile money per see and even the general public is not aware of their existence. A closer analysis of Magezi's study seems to point out that laws in place are not ably regulating mobile money given that they were not enacted for this specific purpose.

Okonji(2013) is contradictory or not contentious to the earlier held view indicating that there has been laxity concerning the regulation of the mobile money industry.

Similarly, to summarizes the push and pull nature of Uganda's legal framework, Kivumbi (2013) wrote that the industry still has a long way to go given that Parliament has not enacted a law for that purpose.

Study findings revealed that institutions have been reluctant to effectively enforce the policies and statutes in place. Magezi (2016) noted that Uganda has no laws or regulations dealing directly with e-money. The adoption of e-payment regulations, which would govern e-money issuers, will serve the purpose. The precise nature of regulation would be linked to the scope of the bill if tabled before Parliament, but the expressed intent of BoU is to move to risk-appropriate regulation of the nonbank e-money issuers. (The primary regulator of e-money issuers and transferors is BoU)

5.4 Conclusions

On the basis of the study findings, a number of conclusions were made in line with the objectives of the study.

5.4.1 Institutional Framework and the Success of Mobile Money

Study findings revealed that Mobile money sector has well developed institutional structures. Interview findings revealed that Mobile money transactions have presented regulatory challenges that could potentially hinder maximum development benefits. It was observed that there are loopholes within the structures for mobile money. Study findings revealed that the general public is aware of the existence, roles and functions of bank of Uganda. However, due to the fragmentation of the current regulatory regime, the laws do not apply to all new types of payment systems including mobile payments. Therefore it is recommended that an improvement on the institutional framework will enhance the success of mobile money in Uganda.

5.4.2 Law and the Success of Mobile Money

Study findings revealed that there is a positive significant relationship between laws and the success of mobile money. Uganda has laws in place laws but not directly enacted and aimed at regulating mobile money. Study findings from interviews further revealed that most of the mobile money operators rarely follow the regulations that have been enacted by the state. The few laws that are enforced are those that a well-known to the general public like the electronic transaction Act. Therefore it is recommended that an improvement on the law will enhance the success of mobile money in Uganda.

5.4.3 Policies and the Success of Mobile Money

Study findings revealed that Uganda has policies in place for the regulation of the mobile money industry. It was observed that there are a number of policies that regulate mobile money. The public is aware of the existing policies on the mobile money industry and some policies in place have not been effectively utilized. Survey findings revealed that the institutions have tried to effectively implement the existing policies on mobile money industry. Therefore it is recommended that an improvement on the policies will enhance the success of mobile money in Uganda.

5.5 Recommendations

In light of the study conclusions, the following recommendations were made in line with the objectives of this study.

5.5.1 Institutional Framework and the Success of Mobile Money

In light of the above, it is recommended that existing rules applied in other payment systems should be applied and emerging models and evaluation should be assessed through the increase of interagency coordination for designing and enforcing these rules. Institutions should be developed that would ensure that the existing rules for out of court redress and complaint channels apply to mobile payments or set specific standards tailored to new models as necessary.

Government should also be aware of threats that are outside the scope of financial authorities such as theft and laws on physical security requirements at agent's sites and the protection of mobile money against financial crimes such as money laundering and fraud.

5.5.2 Laws and the Success of Mobile Money

Accordingly, it is recommended that there is need to enact laws that will directly regulate mobile money in Uganda. Regulation should be uniform across all providers to screen, qualify and monitor agents. The regulation implemented should review the providers' internal controls and processes to identify, measure, and mitigate these risks and ensure systems are in place to handle consumer complaints related to agent acts and assess whether initiatives to increase consumer awareness may have greater impact than regulation in some situations.

5.5.3 Policies and the Success of Mobile Money

Policies should be developed that would ensure that the existing rules for out of court redress and complaint channels apply to mobile payments or set specific standards tailored to new models as necessary. These mechanisms should be effective and should match existing transacting channels such as those for other payment systems such as the redress procedures and channels meeting minimum standards and the avenues are communicated clearly and consistently. There should be an effective monitoring of emerging consumer issues and a decision on when and what type of regulatory action is necessary and effective to avoid loss of confidence or curve abuse by Mobile Network Operators.

5.6 Limitations and Assumptions of the Study

- There were a number of limitations associated with decisions made regarding the methodology. They relate to the choice of participants, the type of data collected and the analytic process.
- Another limitation was the time frame in which data was collected. The data constituted a snapshot of one point on the implementation continuum. Interviews date is limited in a number of ways including the limitations present in the questions themselves and also in the nature of the responses from participants. The participant's responses were based only on the questions that the researcher asked but there could have been more information through observation hence sometimes misleading information is given during interviews.
- Some respondents were not willing to give information unless paid and at some instances, the researcher had to wait till late in the evening when the respondents are through with their work so as to interview them.
- Adopting a mixed methodological approach required a lot of skills and reading about the two approaches which was not easy.
- For the key informants, given their busy schedules, some interviews were rescheduled to fit their timetables, but these also sometimes failed. The research took slightly long to conduct particular interviews which delayed the study. There was also a problem of absenteeism by some of the respondents at the designated place of carrying out the interviews. Therefore collecting data from them through the questionnaires proved to be a big challenge. In some instances, respondents wanted pay prior to providing information.
- The researcher managed these problems by making use of the supportive team leader who in one instance was willing to introduce the researcher in person to the respondents a

through sensitization of respondents on the importance and significance of the study. The Uganda Management Institute introductory letter helped to allay any fears and doubts among some respondents. Efforts were made to maintain confidentiality of the responses. The absenteeism of some officials was tackled by frequent to the banks, and above all establishing good rapport.

- The research took slightly long to conduct particular interviews which delayed the study. There was also a problem of absenteeism by some of the respondents at the designated place of carrying out the interviews. Therefore collecting data from them through the questionnaires proved to be a big challenge. In some instances, respondents wanted pay prior to providing information.

5.7 Areas for further Research

This study has examined “regulatory framework” and “success of mobile money” in Airtel. Future research should focus on the following.

1. The relationship between regulatory framework and mobile banking in commercial banks in Uganda
2. The relationship between regulatory framework and the success of mobile money in other companies like MTN, Airtel

REFERENCES

Amin, M.E. (2005). *Social Science Research: Conceptual Methodology and analysis*. Kampala: Makerere University Printery

Barifaijo, K.M, Basheka, B.C. and Oonyu, J. (2010). *How to write a Good Dissertation/Thesis: A Guide to Graduate Students.* Uganda Management Institute: Kampala

Bill, C.(2015) (eds) *Research Methods in the Social Sciences*: London, Sage Publications

Brathe, E. Gatte, K and Fored, L. (2010) *Modern m Banking in East Africa*

Comninos, A., Esselaar, S., Ndiwalana, A. & Stork, C. (2008).*Towards Evidence-Based ICT Policy and Regulation M-Banking the Unbanked*, (Policy Paper 4)

Creswell, J.W. (2003). *Research Design-Qualitative, Qualitative and Mixed Methods Approaches*. London: SAGE Publications

Creswell, L. (2009). Research methods, quantitative and qualitative approaches, Nairobi Kenya African Centre for Technology

Dedan, K. (2015). *"Tax Limitations and Government Growth: The Effect of State Tax and Expenditure Limits on State and Local Government."* Public Policy Institute of California, San Francisco.

DFID (2009), February 12). Douglas Alexander Sets Out How Branchless Banking Can Help The Poorest People. Retrieved September 26, 2009, from http://www.dfid.gov.uk/Media

Earl-Babbie, M. (2013).*The Practice of Social Research*, 10th edition, Wadsworth, Thomson Learning Inc., ISBN 0-534-62029

Ernest, N. (2003). *The Role of telecommunications in national development*"

Galisonga, J. (2014) *the regulatory framework for mobile money services in Uganda*: a Thesis submitted to ESAMI.

Glenn-Firebaugh, G. (2008). *Seven Rules for Social Research*, Princeton University Press, 2008, ISBN 978-0-691-13567-0

Gro''nroos, C.A. (1984) "Service model and its marketing implications", Euromeoan Journal of Marketing, 18(4), pp. 36-44.

GSM Intelligence. (2014). *"Amalgamating Central Bank and Fiscal Deficits"*, ed. Mario I. Blejer and Adrienne Cheasty, 236–58.

Johnad, B. (2008). *An evaluation of Mobile Money transfer services*. A research dissertation. University of Nairobi

Junker, K and Pennink, B. (2010). *The Essence of Research Methodology: A Concise Guide for PhD and Master Students in Management Science*, Springer

Khisa, I. (2016). *Uganda: Telecom Prospects in 2016*. Retrieved from http://allafrica.com/stories/201601131204.html

Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*, 2nd Edition New Delhi; India : New Age International Publishers

Kotler, P., & Rath, G. A. (2004). Marketing: A powerful but neglected strategic tool. *Journal of Business Str*ategy, 5(2), 16-21.

Krejcie, Robert V, Morgan, Darylew (1970) *"Determining Sample size for Research Activities" Educational and Psychological Measurement.*

Lutherworth, O. (2010) *Expanding bank outreach through retail partnerships*: correspondent banking in Uganda

Lyman,T., Ivatury, K & Staschen, H. (2006). *Use of Agents in Branchless Banking for the Poor: rewards, risks.*

McMillan, J. & Schumacher, S. (2006). *Research in education: Evidence based inquiry* (6th Ed.). Boston: Pearson Education.

Mutarubukwa, B.C. (2010). *The Development of Mobile Money Services in Developing Countries*

Musoke, P. (2011) *How do you price a mobile banking service*, A paper presented at Hotel Africana 12/04/2011

Muzoora, G. (2016). *Telephone users hit 21 million. Saturday Monitor*, page2, April 30.

Obani, D. (2016). *Managing Mobile Money*. Manila: ADB.

Opendi, J.W. (2016). *Branchless banking providers in Brazil, Cambodia, India, Kenya, the Philippines, South Africa and Uganda* (Policy Paper 4)

Osike, L. (2015) *Towards evidence-based ICT policy and regulation m-banking the unbanked in Uganda.* A research dissertation for MA MUK 2009

Oliver, R.L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*. McGraw-Hill, New York, NY.

Olugpot, I. (2012). *A Scoping Study of the Mobile Telecommunications Industry in Uganda*

Onen, R (2007). *Research methods for Social Scientists*

Porter, M. E. (1972). *How Competitive Forces Shape Strategy:* Harvard Business Review Boston.

Porter, M. (1979) *"The five Forces Competitive Model"* Library Review 54.3:180-191.

Porter, M. (2008). *Understanding the Generic Forces in Strategic Management*. Information Research 4.2

Ragin, C.C. (2011). *Constructing Social Research: The Unity and Diversity of Method,* Pine Forge Press, 1994, ISBN 0-8039-9021-9

Ragin, C. C. (2007). The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies. University of California Press 2007

Rajasekar, P. and Muerd (2015*). "Institutional Arrangements and Fiscal Performance: The Latin American Experience."* In Fiscal Institutions and Fiscal Performance , ed. James Poterba and Jürgen von Hagen, 103–34. Chicago: University of Chicago Press.

Rashid A. T and Elder, L. (2009). *Mobile Phones and Development: An Analysis of IDARCSupported Projects. The Electronic Journal on Information Systems in Developing Countries* (EJISDC) 36: 2, 1-16

Redaean, M. (2015). "The Politics of Blame Avoidance." *Journal of Public Policy* 6 (4):371–98

Rosch, E., Mervis, C. B., Gray, W. D., Johnson, D. M., and Boyesbraem, P. (2006). *Basic objects in natural categories.* Cognitive Psychology, 8(3), 382-439.

Rosenburg, J, (2008). *How do you price a mobile banking service.* Retrieved 5 December,2009 from http://technology.cgap.org/2008/08/25/how-do-you-price-a-mobile-banking-service/

RuthRock, J.W. (2012). *International Mobile Money Banking: A case History of Mobile Money*, November/ December 2007

Schiavo-Campo, S. and Garrity, T. (2014). *Assessing and Reforming Mobile Banking Management: A New Approach.* Washington

Sekaran, B. (2000). *Fundamental Research Statistics in Social Sciences.* 2nd Edition, Cambridge.

Sharma, S. (2009). *Relevance Lost: The Mismanagement of Mobile services.* London: DFID

Somekh, B and Lewin, C.(2005) (eds) *Research Methods in the Social Sciences*: London, Sage Publications

Tusubira, F., Kaggwa, I. and Ongora, J. (2005). "Uganda". In: Gilwald (ed.). Towards and African e-index household and individual ICT access and usage across 10 African countries The LINK Centre, Wits University School of Public and Development

[Kenneth F. G. Masuki: Mobile Phones for Information Delivery in Agriculture] 13 Management, South Africa.

Uganda Communication Commission Report (2014). Mobile network operator market share.

Uganda Government (2015) Mobile network operator partnering with banks

Uganda Government (2010)A report on the mobile network operators who have partnered with social networking sites to provide mobile internet access and the arrival of cheaper bandwidth via undersea cables

Uganda Telecom (2010). *A Report on the members of Mobile Network Operators in Uganda and Details when Uganda Telecom Launched its M-Sente Services in Uganda*

Velasco, K. (2010). *Ministry of finance audit findings on M-Pesa money transfer services.* Retrieved September 25, 2009

Wakabi, T. (2009). *Ministry of Finance Audit Findings on MTN Mobile Money Transfer Services*

Wairagala, G, and Wakabi, K. (2009). *Bringing Affordable Telecommunications Services to Uganda; A Policy Narrative and Analysis.Association for Progressive Communications* (APC) (2009).

Wanjiru, I. (eds). (2011). *Growth of Mobile Money Services in Kenya:* Nairobi: UNICA and AAPAM

Waverman, L., Meloria M. and Fuss, M. (2005). The Impact of Telecoms on Economic Growth in Developing Nations. In Africa: The Impact of Mobile Phones. *The Vodafone Policy Paper Series, 3:* 10-23

Wells, Louis T. (1966). *The Product Life C~cle and International Trade*. Cambridge

World Bank Report (2010) *Regulating m-banking in Africa*. Washington

Yin, R. K. (2003). “Case Study Research: Design and Methods”, (3rd ed.), Thousand Oaks, CA: Sage.

Zeithaml, V.A. & Bitner, M.J. (2000). *Services Marketing*. McGraw-Hill, New York, NY.

Zenithal, P. and Bithner, G. (2000). “Mobile Money Banking.” *European Economic Review* 40 (1): 61–89.

APPENDICES

APPENDIX (i)

QUESTIONNAIRE FOR AIRTEL MARKETING TEAM, SALES TEAM, DEALERS, SUDDEALERS, UCC OFFICIALS, BANK OF UGANDA OFFICIALS AND MEMBERS OF PARLIAMENT

Dear Respondent

Iam Jotham Tumuheirwe a Master's Degree in Business Administration student of Uganda Management Institute carrying out a study titled *regulatory framework and success of Mobile Money Industry in Uganda.* You have been sampled to participate in this study and the information you give will be used strictly for academic purposes and will never be used against you or your office. You are also requested not to write your name on this questionnaire. After filling out the questionnaire, put in the provided envelop and seal it and return to me. The information obtained from you will be kept highly confidential. Taking part in this study is completely voluntary. If you choose to be in the study you can withdraw at any time without consent of any kind. You can choose to skip any questions, participate in only some tasks as appropriate to the study. Participating in this study does not mean that you are giving up on any of your legal rights. The records of this study will be kept private and will never be used against you or your office. The records will be destroyed after transcription and data kept on a personal computer. If you have any questions about whether you have been treated in an illegal or unethical way contact the Research and Ethics Committee Uganda Management Institute.

I have read the above information and have received answers to any questions. Iam above the age of 18 and therefore consent to take part in the research study Participants Signature……………………….. Date………………………………………..

Thank you for your cooperation.

SECTION A: Background Information

(Tick the best option)

1. **Gender of Respondents**

Gender	Tick	
Male		1
Female		**2**

2. **Age Groups of Respondents**

Age group	***Tick***	
10 - 19 Years		1
20- 29Years		2
30- 39Years		3
40-49 Years		
Over 50 Years		4

3. **Highest Level of Education**

Education Level	**Tick**	
Certificate and Below		1
Diploma		2
Degree		3
Post Graduate Qualifications		4

5 **Respondents Marital Status**

Marital Status	Tick	Measure
Married		1
Single		2
Divorced		3
Separated		4
Widow		5
Others		6

SECTION B:

PART I- Please fill in appropriately, by ranking the questions provided under each section, according to the scores provided; ***(5, 4, 3, 2 and 1)***

		SCORES				
		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
		5	4	3	2	1
Section B						
	LAWS					
	Uganda has laws in place to regulate mobile money	5	4	3	2	1
	The public is aware of the existing laws regulating the mobile money industry in Uganda	5	4	3	2	1
	The laws in place are effectively utilized	5	4	3	2	1
	Bank of Uganda are effectively implementing the laws in place	5	4	3	2	1
	There is effective regulation of mobile money industry by the institutions concerned					
	The regulatory framework for the management of public finances has loopholes					
	POLICIES					
	Uganda has policies in place for the regulation of the mobile money industry	5	4	3	2	1
.	The public is aware of the existing policies on the mobile money industry	5	4	3	2	1
.	The policies in place are effectively utilized	5	4	3	2	1
.	The institutions have tried to effectively implement the existing policies on mobile money industry	5	4	3	2	1
.	There is good policy implementation in relation to mobile money industry	5	4	3	2	1

INSTITUTIONAL FRAMEWORK

.						
.	The Mobile money sector has well developed institutional structures	5	4	3	2	1
.	There are loopholes within the structures for mobile money	5	4	3	2	1
.	The general public is aware of the existence, roles and functions of bank of Uganda	5	4	3	2	1
.	The general audits standards being followed by Bank of Uganda are satisfactory	5	4	3	2	1
.	The systems are well functioning in relation to mobile money services	5	4	3	2	1
SECTION B: SUCCESS OF MOBILE MONEY						
.	Airtel mobile money has yielded profitability between 2015 and 2017	5	4	3	2	1

.	Airtel money has yielded good return on investment between 2015 and 2017	**5**	**4**	**3**	**2**	**1**
.	Airtel money has yielded good return on capital employed between 2015 and 2017	**5**	**4**	**3**	**2**	**1**
.	Airtel money has yielded good return on assets between 2015 and 2017	**5**	**4**	**3**	**2**	**1**

APPENDIX (ii)

INTERVIEW GUIDE FOR AIRTEL MARKETING TEAM, SALES TEAM, DEALERS, SUDDEALERS, UCC OFFICIALS, BANK OF UGANDA OFFICIALS AND MEMBERS OF PARLIAMENT

1) Comment on the existing regulatory framework of mobile money in Uganda?
2) How has the framework been effective in regulating mobile money in Uganda?
3) What loopholes exist in the current laws and policies regulating mobile money?
4) How best can these laws be improved to have a successful mobile money industry?

APPENDIX (iii)

INTERVIEW GUIDE FOR REGISTERED USERS

1. Do you know of any laws applying to mobile money?
2. If yes what is that law?
3. How effective has this law been used to regulate Airtel money?

APPENDIX (IV)

DOCUMENTARY REVIEW LIST

The following documents will be reviewed during the data collection exercise

1. Bank of Uganda Reports
2. Airtel money Reports
3. Minutes of Meeting
4. Acts

APPENDIX (iv):

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.