E-BANKING AND PERFORMANCE OF FINANCIAL INSTITUTIONS IN UGANDA: A CASE OF KABALE DISTRICT

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17/A/MBA/052/W

A DISSERTATION SUBMITTED TO THE DIRECTORATE OF POSTGRADUATE TRAINING IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF BUSINESS ADMINISTRATION DEGREE OF KABALE UNIVERSITY

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DECLARATION

I, **Bashaija Ismail Bosco,** hereby declare that this dissertation titled *–E-Banking and Performance of financial institutions in Uganda: A Case of Kabale District* is my own work and has never been presented for any academic award to any institution of higher learning.

……. ……

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APPROVAL

This is to certify that this dissertation titled *E-Banking and performance of financial institutions in Uganda: A case of Kabale District* has been written under our supervision and is now ready for presentation with our approval.

…… ……..

DR ETON Marus (PhD) **DATE**

SUPERVISOR

……. ……..

DR. ARTHUR SUNDAY **DATE**

SUPERVISOR

DEDICATION

I dedicate this research to my mum, Mrs Theodolla Bashaija, and my children Andinda Dalton and Ahabwe Darwin.

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I am very grateful to God for giving me the wisdom, good health and courage to continue with my studies and throughout the period of doing research.

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ABBREVIATIONS

ATM	Automated Teller Machine
BCBS	Basel Committee of Banking Supervision
BOU	Bank of Uganda
ECS	Electronic Clearing System
EFT	Electronic Funds Transfer
EPOS	Electronic Point of Sale
FinTech	Financial Technology
ICT	Information Communication Technology
IT	Information Technology
Mbanking	Mobile Banking
MDI	Microfinance Deposit-taking Institutions
MNO	Mobile Network Operators
PC	Personal Computer
PIN	Personal Identification Number
POS	Point of Sale
SACCO	Savings and Credit Cooperative Organisation

ABSTRACT

The study set out to find out the impact of e-banking on performance of financial institutions in Uganda, with Kabale District as the case study. The study was guided by the following objectives: to find out the forms of e-banking used in financial institutions in Kabale District; to find out the relationship between e-banking and performance of financial institutions in Kabale District; and, to find out the effect of e-banking on performance of financial institutions in Kabale District. In their efforts to provide cheap, reliable, flexible, fast and convenient financial services, financial institutions resorted to e-banking which relies on FinTech tools, However, the provision of e-banking products in financial institutions may heighten operational vulnerability due to network failure, initial high investment technological infrastructure, cyber-attacks, risking customer data confidentiality all of which may affect performance of financial institutions. The study adopted a descriptive research design and survey designs, which helped in collecting and analysing qualitative and quantitative data. A sample of 138 participants was selected from a target population of 210 subjects who were purposively and randomly selected. The study used both structured and unstructured questionnaires, and an open-ended interview guide to collect data. Descriptive statistics (percentages) were used to examine the forms of e-banking, while inferential statistics were used to assess the relationship and the impact of e-banking on performance of financial institutions. The results showed internet banking as the most used form of electronic banking. The study found a significant moderate relationship ($r = .761$; sig. $<.05$) between electronic banking and performance of financial institutions. Electronic banking was found to account for 74.5% of the performance of financial institutions, with electronic cards alone predicting about 61.6% for any unit-change in the use of electronic cards. The study concluded that electronic banking has a significant impact on performance of financial institutions. As a recommendation, financial institutions should promote e-banking workshops and training to their customers to make them user-friendly.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the background of the study, problem statement, general objective and specific objectives of study, research questions, significance of the study and the conceptual framework. Electronic Banking in this study was treated an independent variable and was conceptualized in terms of Mobile Banking, Internet Banking, electronic Card, electronic funds transfer and e-payments. Performance of financial institutions was treated as a dependent variable and was conceptualized in terms of transaction costs, customer satisfaction and access to financial services, customer deposits, profitability and quality of management.

Electronic banking is a process by which a customer carries out banking transactions electronically without having to physically enter a bank or financial institution (Simpson, 2002). E-banking creates unprecedented opportunities for banks in the ways they organize financial product development, delivery, and marketing via the internet and thus enhance bank performance. In addition, BCBS (2001), Electronic banking, or e-banking, includes the provision of retail and small value banking products and services through electronic banking channels as well as large value electronic payments and other wholesale banking services delivered electronically. Electronic banking involves using electronic and telecommunication networks in delivering the various processes, products and services to the clients (Stephen, 2002).

According to Kamrul (2009) Electronic banking is the use of innovative methods for delivering bank products and services using electronic communication channels rather than exchanging actual cash, cheques, or other negotiable instruments. This means that banks can deliver their products and services to clients from anywhere and at any time through diverse communication media such as the internet, mobile networks, Automated Teller Machine (ATM) networks, etc. (Kamrul, 2009).

1.2 Background of the study

1.2.1 Historical Perspective

Before the introduction of Electronic Banking, banking transactions were done manually which slowed down the settlement of transactions (Kahinga, 2014). This involved posting of one transaction from one ledger to another by human beings. The evolution of technology has enabled financial institutions offer Electronic Banking (Kakuru, 2013). This is done by new technologies such as Personal computer banking (PC-Banking), Automated Teller Machines (ATM), Electronic funds transfer, internet banking, Mobile banking, account to account transfer, paying bills online, getting online statements, credit cards, among others, are now replacing the traditional service delivery methods (Mwaura, 2013).

While the first Automated Teller Machine (ATM) in the world was introduced by Barclays Bank (UK) in 1967, IBM also introduced the magnetic stripe plastic cards in 1969. These innovations together marked the birth of electronic banking. These systems were initially aimed to use the computational power of transaction-processing capabilities to provide regular reports and analyses of business activity. In this way, Management Information Systems (MIS)

offered managers of banks the possibility to increase the scope for monitoring, controlling and planning of operational procedures (Batiz-Lazo & Wood, 2001).

According to Franklin, James & Philip (2008), E-banking has great potential to improve the quality and scope of financial services and expand opportunities for covering trading risks and can widen access to financial services for a much greater set of retail and commercial clients by offering more cost-effective services.

Globally, the financial industry is experiencing remarkable evolution in the delivery of services as a result of increasing digitization. Digitization is the capacity to convert, store, transfer and process information in computer readable formats. Digitization has played a fundamental role in the financial industry, enhancing information processing capacity, speed and connectivity, consequently improving efficiency both for the customer and the back-office processing in the delivery of financial services (Bank of Uganda, 2019). The way and manner in which financial services are delivered to customers has changed over the years. There has been significant change and improvement in the structure of the banking industry even though the financial institutions' traditional functions have remained the same. Adewali and Afolabi (2013) asserted that there has been an increased access through which people can access financial services through the various channels.

It has been argued by Ovia (2001) that electronic banking emerged from e-commerce in the field of banking and financial services. It can be said that the driving force of electronic banking in every country is the use of Information and Communication Technologies (ICT). There has been an improvement in the way financial institutions render services of money transfers, depositing, withdrawing, checking account balances and checking on loan balance by the

customers since the introduction of electronic banking (Stephen, 2002). The financial industry in any country, including Uganda, cannot do without information systems because these play an important role in the financial industry. All the cash flows of almost any financial institution are linked to information systems within that particular institution. This is the issue which has become very important and of great concern in the financial industry as well as the necessity for both the local and international competitive financial services.

Indeed, the use of the internet as a new alternative channel for the distribution of financial services has become a competitive necessity instead of just a way to achieve competitive advantage with the advent of globalization and fiercer competition (Flavián, Torres, &Guinalíu, 2004). Banks use online banking as it is one of the cheapest delivery channels for banking products (Pikkarainen et al., 2004).

In July 1999, the Bank of Uganda issued a policy statement which classified financial institutions into four tiers. Tier IV: financial institutions which are not regulated by Bank of Uganda and are not authorized to take in deposits from the public but may offer collateral or non-collateral loans. Tier III: Microfinance and Deposit taking Institutions (MDIs). Tier II: Credit institutions; Tier I: Commercial banks. Commercial banks are authorized to hold current, savings and fixed deposit accounts for both retail and corporate business in local and international currency. In addition, Commercial banks are authorized to transact the business of foreign exchange in all currencies (Fredrick, 2014).

1.2.2 Theoretical perspective

This study was guided by the innovation diffusion theory and the transactions cost innovative theory.

1.2.2.1 The innovation diffusion theory

The innovation diffusion theory explains an individual's intentions to adopt a technology as a modality to perform a traditional activity (Okiro and Ndungu, 2013). This theory was applied by Mattila (2002) when she studied the factors affecting the adoption of mobile banking services. As regards the innovation diffusion theory, Clarke (1995) postulated that diffusion of innovation attempts to explain and describe the mechanisms of how new interventions, in this case Electronic Banking, are adopted and become successful. Not all innovations are adapted, and even if they are good, it may take a long time for an innovation to be adopted. He further states that resistance to change may be a hindrance to diffusion of innovation; and although it might not stop the innovation, it will slow it down. Commercial banks in Uganda have acknowledged the benefits of electronic banking; they have adopted these innovations, due to factors such as the availability of required tools and connectivity by the telecom service providers and software. Adoption of such innovations is faster in financial institutions that have Internet access and information technology departments than in financial institutions without such technologies.

1.2.2.2 The Transactions cost innovative theory

The transactions cost innovative theory was introduced by Hicks and Niehans (1983) who championed and stated that the foremost aspect of financial innovation is to be able to reduce cost of transaction in response to the advancement in technology and which resulted in the reduction of transaction cost. The ability to lower the cost of transaction brings about innovation in financial and upgrading of financial service and the same holds that money-related innovations decrease the costs involved in making transactions (Kurgat and Charles (2018). Transactions Cost Innovative Theory is relevant as regards the impact of e-banking on the performance of financial institutions in Kabale District since the use of internet, electronic cards

and mobile phones to carry out financial transactions has facilitated improvement in quality and cost of financial transactions for financial institutions in Uganda and Kabale District in particular, especially on the part of financial institutions due to downsizing staff. Customers of the financial institutions in Kabale District, however, still incur high costs of transaction especially when depositing, withdrawing and sending Cash.

1.2.3 Conceptual perspective

E-banking is a form of banking where funds are transferred through the exchange of electronic signals between financial institutions, rather than the exchange of cash, cheques, or other negotiable instruments (Saidul, Azizul, Kamil & Parveen, 2010). Performance measurement is the process of regular and systematic data collection, analysis and reporting to be used by a firm to follow up the resources it uses, the results it obtained with the produced goods and services (Bamberger, 2010). In this study, electronic banking was considered as the independent variable. E-banking was studied basing on the specific services under e-banking such as: Mobile Banking, Internet banking, electronic card, Electronic funds transfer and e-payments. Performance of financial institutions was considered as a dependent variable and was evaluated on the basis of transaction costs, customer satisfaction and access to financial services, Customer deposits, return on investment (Profitability) and quality of Bank management.

There are various measures of organizational performance. However, the most used is profitability. Profitability is the degree to which a business creates profit from the factors of production: labour, management and capital. A deeper focus of profitability reveals the relationship between profits and expenditure comparative to the magnitude of capital outlay (Gilbert and Wheelock, 2007). There are many different ways to measure financial institution's performance. This may be reflected in the financial institution return on investment, return on

assets, value added, among others, and is a subjective measure of how a financial institution can use assets from its primary mode of business and generate revenues (Schon, 2008). According to Kaplan and Norton (2004), performance can be assessed by the use of the balanced score card (BSC). It addresses other aspects that do not incorporate financial measurements but rather intangible and intellectual assets such as high quality services or royal customers which are more critical to the success of the business.

1.2.4 Contextual perspective

The banking sector in Uganda registered increased growth in the year to June 2017. Total assets of commercial banks grew by 9.0 per cent between June 2016 and June 2017, up from 5.5 per cent in the previous year. The increase in assets was mainly driven by banks' increased holdings of securities, amidst a shift away from loans, which recorded sluggish growth (Bank of Uganda, 2017). In the year 2019, the banking industry aggregate assets increased by 10.5 per cent, from USh.27.4 trillion in June 2018 to USh.30.3 trillion as at end June 2019. Loans and advances, investment in government securities, balances with Bank of Uganda (BOU), and placements with non-resident banks respectively accounted for the largest proportions of the industry total assets (Bank of Uganda, 2019). It is not known whether the implementation of electronic Banking has contributed to this performance.

A continuing trend of the rising role of technology-enabled innovations in the provision of financial services was observed during the year to June 2019. Overall, there are foreseen potential benefits for the financial sector from technological innovations in the financial space

including improved efficiency and financial inclusion (Bank of Uganda, 2019). Evidently, the technological innovations are being driven by mobile money payments technology enabling greater financial access and use, facilitation of remittances, and trade. Financial technology (FinTech) promises solutions for improvements in financial system supervision towards improved retrieval of real-time granular data and speedy reporting.

It is, however, noted that financial institutions face technology-associated risks such as electronic fraud. For example, according to Centenary Bank Report (2015), in 2012 a group of Bulgarians was convicted of defrauding many ATM users. Centenary Bank was one of the most affected banks and this led to the cancellation of ATM card PINs aimed at calming down the general public. With even this and other measures, consumers continue to report complaints of electronic fraud at Centenary Bank (Summit Business Review, 2015). According to the Financial Crimes Report (2014), the fact that most of the time, these cases go unnoticed or remain unreported implies that the extent and effect of such crimes on retail bank performance remains unquantified.

The financial sector in Uganda is quickly evolving from the past to an era where clients are accorded efficient, fast and convenient banking services. Whereas investment in electronic banking is paramount, it should also be noted that it requires a lot with regard to budget allocation for the bank. As it is, aside from employee expenditures, technology is commonly second in the list of the entry in the firms' budget. Further to this, there is the challenge of card fraud, usually on lost, stolen cards and counterfeit card fraud. Thus financial institutions have had and are required to manage these technology-associated risks. Accordingly, it is imperative that e-banking innovations are crafted after thorough research on the risks associated and costs to

be incurred so as to ensure that optimal profitability is maintained. This can be achieved if overall associated risks are understood by the bank and its clients.

The Governor Bank of Uganda at the launch of Standard Chartered Bank (U) Limited's Client Digital initiative (2019) underlined this issue as follows: "I wish to reiterate that while innovations such as the one being launched today accrue benefits to the financial institutions and customers, they also present associated risks, which if not well managed have the potential to outweigh the benefits". This is because in the online environment, criminal acts can be performed with extremely high speed, and without any physical contact (Cheung and Lee, 2006). If an unauthorized individual is able to get access to the online banking portfolio of a user, a considerable amount of financial information may be jeopardized and there might be considerable financial losses.

The use of digital payments significantly increased in the year to June 2019 following efforts from the government, commercial banks and Bank of Uganda to promote digital payments as an alternative to cash; and customers' demand for fast, convenient and efficient payments (Bank of Uganda, 2017).

There is a relative increase in electronic Banking transactions according to the Bank of Uganda financial stability reports 2019, 2018, 2017 and 2016**.** For instance according to Bank of Uganda 2019 Report, Electronic Card transactions and volumes increased between June 2018 and June 2019 (see Table1).

Table 1: Electronic card transactions and volumes June 2018 – June 2019

		June 2018	June 2019	Percentage Change
Debit Cards	Active number of cards (Millions)	2.0	2.4	19.3
	Volume of Payments (Millions)	2.2	2.8	27.3
	Value of Payment (UgShs, Billions)	455.9	650.4	42.6
Credit Cards	Active number of cards	7,104	9,247	30.1
	Volume of Payments (Million‘)	123.0	144.3	17.3
	Value of Payment (UgShs, Billions)	39.8	49.3	23.7
POS	Volume (Millions)	1.4	1.9	35.2
	Value (UgShs. Billions)	418.6	469.8	12.2

Source: *Bank of Uganda 2019*

The total number of active debit cards issued by banks as at June 2019 grew by 19.3 per cent to 2.4 million from 2.0 million as at June 2018. The volume of payments made by debit cards stood at 2.8 million an equivalent in value of USh.650.4 billion. The number of credit cards continued to increase but their use remains relatively low in comparison to debit cards partly attributed to the limited number of merchants and outlets that accept credit cards (Bank of Uganda, 2019).

Credit cards increased in number by 30.1% from 7,104 by June 2018 to 9,247 by June 2019. The volume of payments using the credit cards increased by 17.3% from 123.0 million by June 2018 to 144.3million by June 2019. The average Value of payments using credit cards increased by 23.7% from Shs. 39.8 billion by June 2018 to Shs. 49.3 billion by June 2019.

The electronic Point of Sale POS terminal Volume of transactions increased from 1.4 million by June 2018 to 1.9 million by June 2019 transacting up to UShs. 418.6 billion by June 2018 and 469.8 billion by June 2019. This is an indicator that people are using the service of electronic card.

The above indicates how financial institutions and customers have adopted electronic banking tools. However, the cost to customers is still high especially transaction costs as banks rely on the service providers such as telecommunications companies which also charge a fee. It is therefore important to establish the effect of e-banking on performance of financial institutions in Uganda, using a variety of financial and non-financial measures such as loyal customers, return on investment, customer deposits, quality of bank management and customer satisfaction and access to financial institutions.

1.3 Statement of the Problem

Uganda‘s financial industry has witnessed many changes since the introduction of E-banking. Curreently, customers of Commercial Banks, SACCOs, and MDIs have efficient, fast and convenient banking services. In the effort of providing quality and acceptable services, most financial institutions in Uganda have resorted to investing huge funds in electronic banking which uses the financial technology (FinTech) tools. Whereas the rapid growth of FinTech has made banking services more efficient and cost effective, investments in various technological infrastructure are taking a larger share of the financial institutions income (Abor, 2004). Apart from staff costs and other operational costs, technology is usually the item in the budget with the highest cost in rural financial institutions, especially in Kabale District, and the fastest growing item; yet we do not know about its impact on banks’ performance.

Electronic Banking can potentially heighten operational vulnerabilities, arising from failure of systems, internal controls and human error, threatening the provision of financial services and/or stability of the providers. Also, the increased use and integration of information systems and digital access may worsen vulnerability to cyber-attacks, risking customer data confidentiality

(Bank of Uganda, 2019). Furthermore, as the provision of electronic banking is increasingly dependent on third-parties, such as telecommunication companies, cloud-computing entities, and data providers. A disruption of key third-parties' systems could pose far-reaching systemic disruption to the financial system and further increase the cost of transactions. According to police crimes report (2014), between the months of August and November 2014 only, mobile money frauds caused a loss of over 207 million UGX (80,000 USD) to the users. In Kabale District, customers have reported such cases as well, though most of the cases are undocumented. Some financial institutions in Kabale District have suffered ATM fraud and system network interruptions which may have had a negative impact on their operations. If these benefits and risks are not clearly established, the continuing use of e-banking may negatively affect the performance of financial institutions but no researched literature is available about e-banking in financial institutions in general and the performance of these financial institutions which this research seeks to discover.

1.4 Objectives of the study

1.4.1 General Objective

The purpose of the study was to find out the impact of e-banking on performance of financial Institutions in Uganda: A case of Kabale District.

1.4.2 Specific Objectives

i. To find out the forms of E-banking used in financial institutions in Kabale District;
ii. To determine the relationship between E-banking and the performance of financial institutions in Kabale District;
iii. To examine impact of E-banking on performance of financial institutions in Kabale District.

1.5 Research Questions

i. What are the forms of e-banking used in Financial Institutions in Kabale District?
ii. What is the relationship between e-banking and performance among financial institutions in Kabale District?
iii. What is the impact of E-banking on performance of financial Institutions in Kabale District?

1.6 Scope of the study

1.6.1 Geographical scope

The study was confined in Kabale District of South Western Uganda. Kabale District has many financial institutions including commercial banks, Microfinance Deposit taking Institutions and Savings and Credit Cooperative Societies (SACCOs).

1.6.2 Content Scope

The study focused on Electronic Banking (forms and nature) and its impact on performance of financial institutions in Kabale District.

1.6.3 Time scope

The study focused on a period of five years from 2015 to 2019. This is the period when most banks adopted the usage of e-banking. This period was selected to enable the researcher come up with coherent information from the respondents of different financial institutions to enable him get balanced opinion. It was carried out from January 2019 to December 2020.

1.7. Significance of the study

The study is of great importance to the following categories of people and institutions:

Researcher: The study is of importance to the researcher as it equips him with the knowledge of e-banking and performance of financial institutions. It will also enable the researcher to obtain a Master of Business Administration degree.

Financial institutions: The research findings will help financial institutions to improve on their e-banking if performance is to be improved especially after adopting recommendations that will be highlighted.

Telecommunication companies: These companies are the third parties in e-banking providing interconnectivity. The report will help them understand the contribution of online banking and be able to plan for other financial institutions and extend their services where they do not exist to reap from the benefits of connectivity.

Other Researchers: The report will help students and researchers as it will be used by students who are investigating further about internet and ICT technologies and performance of financial institutions.

Policy makers: The report will help the government of the Republic of Uganda through the Central Bank and the Uganda Communications Commission to draw favourable conditions that will help all banks adopt electronic banking in their operations.

1.8. Conceptual framework

According to Smyth (2004), a conceptual context is a research tool aimed at helping the researcher in creating awareness and understanding of the topic of study as well as articulating it. The conceptual framework assesses the relationship between the Independent and the Dependent research variables.

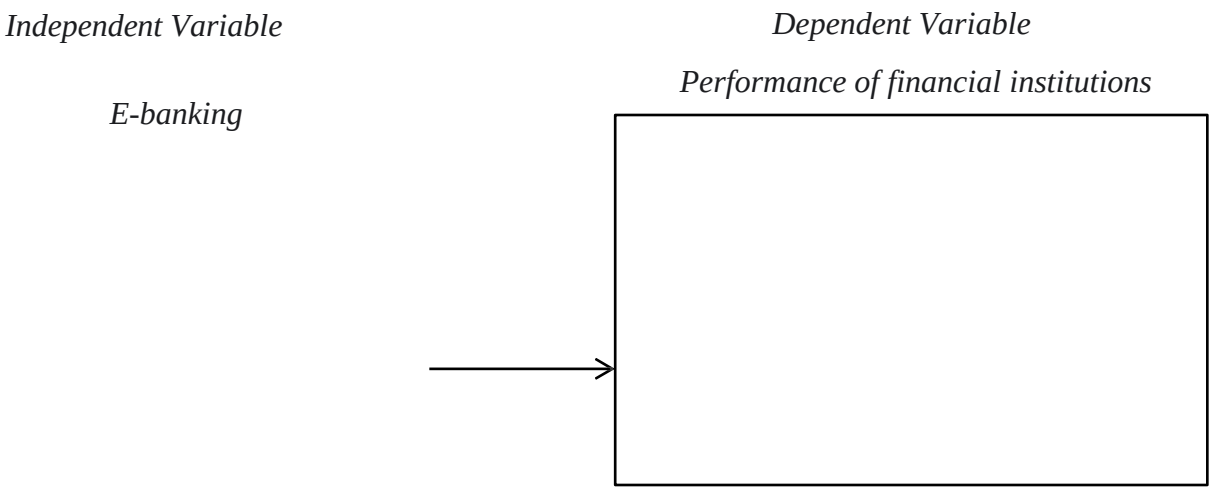


Figure 1: Conceptual framework

Source: *Adopted from Dona M. A. Obongo (2016) and Modified by the researcher*

In this study, electronic banking was considered as the independent variable. E-banking was studied basing on the specific services under e-banking such as: Mobile Banking, Internet banking, electronic card, Electronic funds transfer and e-payments. Performance of financial institutions was considered as a dependent variable and was evaluated on the basis of transaction costs, customer satisfaction and access to financial services, Customer deposits, return on investment (Profitability) and quality of Bank management.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter presents the theoretical and conceptual review of related literature on e-banking and performance of financial institutions. Theoretically, the study reviews the innovation diffusion theory and the transactions cost innovative theory. Conceptual literature was reviewed based on the variables of the study. The independent variable is Electronic banking and the dependent variable is Performance of financial institutions.

2.1. Theoretical review

This section reviews the innovation diffusion theory and the transactions cost innovative theory which guided the study.

2.1.1 The innovation diffusion theory

The innovations diffusion theory explains an individual's intentions to adopt a technology as a modality to perform a traditional activity (Okiro and Ndungu, 2013). This theory was applied by Mattila (2002) when she studied the factors affecting the adoption of mobile banking services. As regards the innovation diffusion theory, Clarke (1995) postulated that diffusion of innovation attempts to explain and describe the mechanisms of how new interventions, in this case electronic Banking, are adopted and become successful. Not all innovations are adopted and even if they are good, it may take a long time for an innovation to be adopted. He further states that resistance to change may be a hindrance to diffusion of innovation and although it may not stop the innovation, it will slow it down. Moreover Rogers (1995) identified five critical attributes

that greatly influence the rate of adoption. According to Rogers (1995), the rate of adoption of new innovations will depend on how an organization perceives its *relative advantage, compatibility, trialability, observability and complexity*.

Diffusion is defined in the Rogers‘ Model as a process by which an innovation is communicated through certain channels over time among the members of a social system. The definition indicates that innovation is a target, the means is communication channels and communication is the process. The adopters can be an individual, groups or organizations at different levels of the social system, the context of innovation is a social system and it is a change over time (Rogers, 2003).

In summary, Rogers (2003) argued that innovations offering more relative advantage, compatibility, simplicity, trialability and observability will be adopted faster than other innovations. Rogers cautions that getting a new idea adopted, even when it has obvious advantages is difficult, so the availability of all these variables of innovations speed up the diffusion process.

Hoffman and Birnbirch (2012) hypothesize that the rate of adoption of a new innovation is related to (perceived) relative advantage. The greater the perceived related advantage, the faster the adoption. Secondly, the desire to improve organizational performance is seen to be an enabler for technological change. Therefore financial institutions that have gained from the e-banking innovation have quickly adopted it and other electronic products to improve on their performance.

If organizations in Uganda acknowledge the benefits of electronic Banking, they will adopt these innovations, given other factors such as the availability of the required tools. Adoption of such innovations will be faster in organizations that have Internet access and information technology departments than in organizations without.

2.1.2 Transactions Cost Innovative Theory

The transactions cost innovative theory was introduced by Hicks and Niehans 1983 who championed and stated that the foremost aspect of financial innovation is to be able to reduce cost of transaction in response to the advancement in technology and which resulted in the reduction of transaction cost. The ability to lower the cost of transaction brings about innovation in financial and upgrading of financial service. The theory further holds that money-related innovations decrease the costs involved in making transactions (Kurgat & Charles, 2018). The importance of Transaction costs Innovation theory in the set-up of Internet-related Information Technology (IT) considerably lessens a company‘s exchange costs since it delivers effective coordination, administration and utilization of data. Cell phones use Internet-associated IT which brings down exchange costs as it gives both off-site access to the company‘s internal database and other significant sources of information. Consequently, reduction of operation costs through agency banking, internet banking and mobile banking may influence growth in profitability for the financial institution which is one of the measures of performance.

In the context of this research, Transactions Cost Innovative Theory is relevant as regards the impact of e-banking on the performance of financial institutions in Kabale District since the use of internet, electronic cards and mobile phones to carry out financial transactions has facilitated improvement in quality and cost of financial transactions for financial institutions in Uganda and Kabale District in particular.

2.2 The concept of E-Banking

According to BCBS (2003), e-banking is to include the provision of retail and small value banking services through electronic channels as well as large value electronic payment and other wholesale banking services delivered electronically. Existing forms of e-banking in Bangladesh, for example, take mainly Internet banking, online banking, Automated Teller Machines and mobile banking. Among these forms of e-banking, Automated Teller machines and mobile banking are the most popular (Siddik, 2015).

E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic and interactive communication channels (Federal Financial Institutions Examination Council, 2003). It is the systems which enable individuals or businesses, financial institutions or customers to access accounts, business transactions through a public or private network, including the internet (FFIEC, 2003).

Electronic banking is the automated delivery of new and traditional banking products and services directly to the customer through the electronic communications like computers, ATMs and internet websites. In relation to this, the term electronic banking (e-banking) is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive Communication channels (Buchanan, 2010).

2.3 Forms of electronic banking

Electronic banking consists of the following: Mobile Banking/Telephone Banking, Internet Banking, Electronic Card (uses ATM, Debit and Credit Cards and PoS), Electronic funds transfer and e-payments.

According to Centenary Bank Annual Report and Financial Statements (2017), pages 44 - 45, there are a number of Electronic Banking products offered: *ATM Service (CentePoint)*, a 24-Hour cashier for Centenary bank customers which gives them complete access to their accounts by use of CenteCards. This offers answer to the question of access of financial services; *CenteMobile* Service where customers have been able to directly access money on their accounts from the comfort of their homes on their Mobile phones and this has made transactions easier and more convenient. *Internet Banking Service*, a service that enables a Bank‘s customers to access their account information through the internet from the convenience of their offices and homes. *Merchant POS service*, a service that enables customers to use their CenteCards at Point of Sale (POS) Terminals to pay for goods and services. *Visa Debit Card*, a more secure card migrating from Magnetic stripe to Chip and PIN technology, less susceptible to card fraud like skimming and cloning.

2.3.1 Mobile Banking

Mobile banking is a term used for performing banking transactions or acquiring bank account information via mobile devices (McGregor, 2013). Mobile banking is a system that allows customers of a financial institution to conduct a number of financial transactions through a mobile device such as mobile phone or personal digital assistant. According to Guitterez and Singh (2013) mobile banking is the use of mobile phones to conduct financial and banking transactions. According to Klein and Mayer (2011) mobile banking is the use of mobile phones to make financial transactions. Mobile banking can also be defined as the use of a mobile phone to carry out transactions on one’s bank account. The bank account must be linked to the phone number of the customer.

Donner and Tellez (2008) conducted a study on mobile banking and economic development where they sought to link adoption, impact, and use. The study established that through offering a way to lower the costs of moving money from place to place and offering a way to bring more users into contact with formal financial systems, Mobile banking could prove to be an important innovation for the developing world. However, the true measure of that importance required multiple studies using multiple methodologies and multiple theoretical perspectives before answering the questions about adoption and impact.

According to Asia, Mbabazize and Shukla (2015), mobile banking involves the use of mobile phone for settlement of financial transactions. It supports person-to-person transfers with immediate availability of funds for the client.

Mobile Banking uses the Mobile Money technology to effect transactions. Currently, there are four mobile network operators (MNOs) providing mobile money services: MTN Uganda through MTN Mobile Money, Airtel Uganda through Airtel Money, Africell Uganda through Africell Money Uganda, and Uganda Telecom through MSente. However, there are also non-MNO mobile payments providers, such as M-Cash, Ezee Money, and Micro-pay. However, the number of customers declined by 0.7 per cent in the year to June 2018 from a growth rate of 16.6 per cent in the year to June 2017. This was largely attributed to the de-registration of mobile money accounts whose users had not submitted the requisite know-your-customer (KYC) credentials to maintain their registration status (Bank of Uganda, 2017).

2.3.2 Internet Banking

According to Thulani et al (2009), Internet banking refers to systems that enable bank customers to get access to their accounts and general information on bank products and services

through the use of bank‘s website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations. Sometimes Internet banking is defined as a subset of PC banking, which also includes online banking.

Internet Banking uses electronic card infrastructure for executing payment instructions and for final settlement of goods and services over the internet between the merchant and the customer. Currently, the most common internet payments are for consumer bills and purchase of air tickets through the websites for the merchants (Littler, 2006). Internet banking is a subset of e-banking that is primarily carried out by means of the Internet. The term transactional e-banking is also used to distinguish the use of banking services from the mere provision of information (Deutsche Bundesbank, 2000).

Internet banking platform enables customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments and stop-payment requests. Account information can be accessed any time, day or night, and can be done from anywhere (Post Bank, 2018). The benefits of Internet banking, according to Post Bank (2018), include: Customers can receive and send money without hassle; Customer does not need to have cash; Customers can access their money anytime anywhere; Customers can send money to any destination directly from their account without Agents; Customers can meet their loan obligations even when the bank is closed to avoid penalties; Customer is saved from the bank queues for withdrawals or deposits; Customer saves on the transport and time costs involved with accessing the banking hall; and, Customer does not need to have a branch or ATM near him to get bank service.

2.3.3 Electronic Card

An electronic card is a physical plastic card with a machine readable chip that uniquely identifies the holder and can be used for financial transactions on the internet. For Instance, Automated

Teller Machine (ATM) Card and Electronic Point of Sale Terminal (EPoS) Cards used to authorize payment to the merchant or seller (James, 2009). The various types of electronic cards include debit card and credit card. Debit cards are linked to the local bank accounts and offer immediate confirmation of payment. Credit cards can be used to link a customer to a credit line and can be used for accessing local and international networks and are widely accepted in most countries. The underlying infrastructure and operational rules are often provided by global trusted schemes (Such as Visa and Master Cards) in addition to local Lines (James, 2009).

Shittu (2010) noted that Electronic Banking brought convenience to bank customers. As Debit card replaced cash, people would carry less cash on them. Shittu (2010) further noted that bank customers who have Debit cards can purchase or make payments from their accounts in person, online, or by phone at stores that display the Visa logo. With a Debit card, fund transfer from customers‘ account is fast; however, a customer must ensure that he or she has sufficient fund in his/her accounts to cover the purchase or payment. Electronic Banking enables direct deposit or withdrawals to and from customers‘ accounts. Shittu also stated that Electronic Banking enabled electronic cheque processing, which reduced the number of clearing days and improved security. Wise and Ali (2009) argued that many banks in Tanzania want to invest in ATMs to reduce branch cost since customers prefer to use them instead of a branch to transact business. The financial impact of ATMs is a marginal increase in fee income substantially offset by the cost of significant increases in the number of customer transactions.

As at end of June 2017, the banking sector registered a decline in branch network and number of ATMs, mainly on account of the transfer of the assets and liabilities of Crane Bank Limited (now defunct) to DFCU Bank Limited. In addition, other banks are rationalizing their branch and ATM operations, shifting to the more efficient alternative channels such as mobile banking, in

order minimize operational costs. As at end-June 2017, the total number of bank branches stood at 546 compared to 566 branches at the end of June 2016. Similarly, the number of ATMs decreased from 862 to 818 in the same period (Bank of Uganda, 2017).

2.3.4 Electronic funds transfer

According to Bank of Uganda (2019), in August 2003 there was implementation of Electronic Funds Transfer (EFT) for both credit transfers and direct debits. The EFT system provides fast, convenient, reliable and secure domestic payment and collection of funds. Credit Transfers are predominantly being used by government and corporate customers to transfer salary payments to the employees'/beneficiaries' accounts. Payment instructions using this channel have picked up both in volumes and values especially after capping cheques to UGX 20 million in July 2007, and a decision by government to stop issuing cheques to its suppliers and employees in favour of EFTs.

EFT is a computerized system for carrying out and processing transactions between financial institutions routed through the Clearing House at Bank of Uganda (Centenary Bank, 2019). It is an online system that allows customers to transfer funds instantaneously from their bank accounts to merchant accounts. A point of sale uses a debit card to activate Electronic Funds Transfer process. Increased banking productivity results from the use of EFT to service customers shopping payment requirements instead of clerical duties in handling cheques and cash withdraws for shopping. Furthermore, the system continues after banking hours, hence continual productivity for the bank even after banking hours, it also saves customers energy in getting bank branches or ATMs for cash withdraws which can be harnessed into other productive activities.

On 20 April 2018, BOU commenced the operation of an upgraded Electronic Clearing System (ECS). The ECS automates the process of clearing cheques and electronic funds transfer (EFT) transactions, both in Ugandan shillings and the widely used foreign currencies, namely USD, EUR, GBP and KES. The new system provides a cheque truncation capability. Cheque truncation involves exchanging electronic cheque images in the clearing process instead of exchanging actual physical cheques. This eliminates the physical movement of cheques between banks and across bank branches, and thus speeds up the Cheque clearing process. In the year to June 2018, 1.1 million cheque transactions valued at USh.5.8 trillion were cleared in the ECS. This was a slight decline from 1.2 million cheque transactions equivalent to a value of USh.6.1trillion that were cleared through the ECS in the previous year. However, the total volume of EFT transactions increased from 8.6 million recorded in the previous year to 9.4 million in the year ending June 2018. On the same note, the value of the EFT transactions rose by 21.7 per cent from USh.19.1trillion to USh.23.3 trillion Over the same period (Bank of Uganda, 2018).

2.3.5 E-payments

The definitions of e-payments are viewed from different perspectives ranging from scholars in the field of accounting and finance, business technology to those in information systems. For instance, Dennis (2004) defines e-payment system as a form of financial commitment that involves the buyer and the seller facilitated via the use of electronic communications. Also, Briggs and Brooks (2011) see e-payment as a form of inter-connection between organizations and individuals aided by banks and inter-switch houses that enables monetary exchange electronically. In another perspective, Peter and Babatunde (2012) viewed e-payment system as any form of fund transfer via the internet. Similarly, according to Adeoti and Osotimehin (2012), electronic payment system refers to an electronic means of making payments for goods and

services procured online or in supermarkets and shopping malls. Another definition suggests that e-payment systems are payments made in electronic commerce environment in the form of money exchange through electronic means (Kaur & Pathak, 2015). Antwi, Hamza, and Bavoh (2015) defined e-payment as a payer‘s electronic transfer of a monetary claim on a party acceptable to the beneficially. Lin and Nguyen (2001) define e-payment as payments made via the automated clearing house, commercial card systems and electronic transfers.

Generally, there are quite a number of e-payment services that have been developed within the payment system around the globe. These include electronic cheques, e-cash, credit cards and electronic fund transfers (Ken & Will, 2002). According to Hsiao-Cheng, Kuo-Hua and Pei-Jen (2002), there are four major categories of electronic payment systems: online credit card payment, electronic cash, electronic cheques and small payments. They further stressed that each of these systems has its own advantages and disadvantages.

Generally, electronic payment can be defined as a platform used in making payments for goods/services purchased online through the use of internet (Roy & Sinha, 2014). Subsequently, with the introduction of e-payment system, the world payment system turned out to align with the current trend of cashless transactions among individuals, businesses and governments (Odi & Richard, 2013). As a result of this, the world payments system is gradually changing from coins and paper-based money to electronic forms that provide more convenient, fast and secured process of making payments among individuals and organizations (Premchand & Choudhry, 2015).

E-payment technologies that take the form of electronic methods have not only reduced the settlement time but also the financial costs of processing client payments (Humphrey et al.,

2006). The shift from the traditional paper-based payment systems to electronic methods has substantially reduced the cost of operations for banks. The combination of the sophisticated payment methods and the reduced cost of operations attributed to the shift focus from the traditional payment methods to electronic payments techniques will positively impact the financial performance in the banking system (CEC Bank, 2008).

2.4 Importance of electronic Banking to financial institutions

E-banking appeal as well its product development is rapidly growing, and the global acceptance has strongly encouraged its penetration. The success of e-banking is contingent upon reliable and adequate data communication infrastructure. Similarly, Hoffman and Birnbirch (2012) suggest that it is efficient for banks to invest in online transactions through the creation of networks. Most banks today have electronic systems to handle their daily voluminous tasks of information retrieval, storage and processing (Gruber, 2011). Irrespective of whether they are automated or not, banks by their nature are continually involved in all forms of information management on a continuous basis.

There are five basic services associated with e-banking: view account balances and transaction histories; paying bills; transferring funds between accounts; requesting credit card advances; and ordering cheques for faster services that can be provided by domestic and foreign banking reaps benefits for both banks and its customers.

Windrum and De-Berranger (2003) suggest that the commercial benefits of e-banking lie in five areas. Firstly, firms are able to expand their geographical reach. Secondly, important cost benefits lie in improved efficiency in procurement, production and logistics processes. Thirdly, there is enormous scope for gaining through improved customer communications and

management. Fourthly, the Internet reduces barriers to entry for new market entrants and provides an opportunity for small firms to reorient their supply chain relationships to forge new strategic partnerships. And finally, e-banking technology facilitates the development of new types of products and new business models for generating revenues in different ways.

From the banks' perspective, e-banking has enabled banks to lower operational costs through the reduction of physical facilities and staffing resources required, reduced waiting times in branches resulting in potential increase in sales performance and a larger global reach (Ihejiahi, 2009).

From the customers' perspective, e-banking allows customers to perform a wide range of banking transactions electronically via the bank's website anytime and anywhere. In addition, customers are no longer confined to the opening hours of banks; travel and waiting times are no longer necessary, and access of information regarding banking services is now easily available (Mudiri, 2014). In addition, E-banking has provided bank customers with the ability to pay bills, manage accounts, and shop all from the convenience of their homes. This alternative has also reduced cost for the banking institutions that offer the service, an online transaction costs the bank much less than a face-to-face interaction with a bank's teller (Akindele, 2010).

According to Ongkasuwan and Tantichattanon (2002), internet banking allows customers to access and perform financial transactions on their bank accounts from web-enabled computers that have internet connections to the bank.

A study was conducted by Hernando and Nieto (2007) on the effect of mobile banking and financial performance of Spanish commercial banks. It was concluded that banks that implemented mobile banking were able to attract more customers and this led to increased access to customer deposits leading to financial performance. In the same line, Kizito and Mugole

(2015) sought to establish the effectiveness of mobile banking services in selected commercial banks in Uganda. Research findings revealed that mobile banking services in the selected commercial banks were generally effective. The least effective item under mobile banking services was noted in security measures and privacy, followed by time management, convenience and financial risk measures respectively.

Mudiri (2014) maintains that the introduction of mobile money services has greatly changed the dynamics of the industry, bringing financial services closer to the public. Financial institutions such as commercial banks and microfinance institutions are also investing in the provision of mobile financial services to reap from these benefits. Mobile banking has the advantage of making basic financial services more accessible by minimizing time and distance to the nearest retail bank branches as well as reducing the banks' own transaction costs (Lee and Kim, 2007). With e-banking, requests from customers for statement of accounts, Balance and account activity enquiries are immediately responded to. With PIN and other verification systems, the time taken to offer typical cashier services like receiving and paying out of cash is minimized (Sullivan, 2010). Also with the advent of Automated Teller Machines (ATMs), banks are able to serve customers outside the banking hall all round the clock (Mudiri, 2014).

2.5 Impact of E-banking on Performance of financial Institutions

Abaenewe et al. (2013) related bank performance generally to how it has fared within a trading period in relation to the realization of its objectives. Indeed, there are many parameters a company can select to measure its growth but the most meaningful yardstick is the one that shows progress with respect to the ultimate goal of making profit. Hence for the size of the financial institution, the volume of deposit and its profitability were seen to be more reliable in measuring banks' performance (Abaenewe et al., 2013). However, according to Ekwueme et al.

(2012), operational efficiency of e-banking can be assessed by critically evaluating the banking operations between the pre and post e-banking period.

2.5.1 Transaction Costs

E-banking is a lower-cost delivery channel and a way to increase sales. Internet banking services lies in the increased retention of highly valued customer segments. E-banking reaps benefits for both financial institutions and customers. On side of the financial institutions, e-banking has enabled them to lower operational costs through the reduction of physical facilities and staffing resources required, reduced waiting times in branches resulting in potential increase in sales performance and a larger global reach (Geetha & Malarvizhi, 2011). In their study conducted to examine technological progress and its effects in the banking industry using relevant data, Berger et al. (2003) found that ICT investment leads to improvements in costs. The improvement has led to productivity increase in form of improved back-office technologies which is in form of organization- related benefits such as reduced costs of operation as well as improved front-office technologies which is in form of benefits to customers such as improved quality and variety of banking services. Indeed, the use of the internet as a new alternative channel for the distribution of financial services has become a competitive necessity instead of just a way to achieve competitive advantage with the advent of globalization and fiercer competition (Flavián, Torres, & Guinalíu, 2004; Gan, Clemes, Limsombunchai, & Weng, 2006). Banks use online banking as it is one of the cheapest delivery channels for banking products (Pikkarainen et al., 2004). Such service also saves the time and money of the bank with an added benefit of minimizing the likelihood of committing errors by bank tellers (Jayawardhena & Foley, 2000).

Offering high quality services to satisfy consumers' needs at lower costs, are potential competitive advantages of e-banking. Some studies show that e-banking has successfully reduced operating and administrative costs (Siriluck and Speece, 2003). Cost savings have helped e-based banks to offer lower or no service fees, and higher interest rates on interest-bearing accounts than traditional banks (Gerlach, 2000; Jun and Cai, 2001).

Internet Banking provides convenience in terms of the capital, labour, time and all the resources needed to make a transaction. According to Akuffo-Twum (2011), access to banking services via internet is fast, convenient and available at any given time. Internet Banking costs are less than traditional banking because there is less variable cost in terms of maintenance costs, salaries and other administration overheads.

Banks can become more efficient in cost than they already are by providing services which can easily be accessed via the internet for their customers. The Internet Banking provides the bank with an almost paperless system because via internet, customers serve themselves, negating the need for frontline staff and savings are gained from reductions in staff, reduction in branch sizes, and reduction in consumable costs: such as paper, ink cartridges, and other stationery (Hosein, 2010). Mobile banking presents an opportunity to reduce transaction costs by replacing costly labour with less expensive, automated technology and decreasing transportation costs associated with disbursing loans and collecting payments (Consultative Group to Assist the Poor, 2009).

Mobile banking services have enabled facilitation and movement of money from the banking institutions to the poor members of the society in the rural and urban centres at transactions costs that are much cheaper than those offered by commercial banks, which in the process has enabled

the banks to reach the unbanked resulting in tremendous growth in the banking industry (Jenkins, 2008).

2.5.2 Customer satisfaction and access to financial services

According to Saha and Zhao (2005), customer satisfaction is defined as a collection of outcome of perception, evaluation and psychological reactions to the consumption experience with a product/service. In other words, Saha and Zhao further defined customer satisfaction as a result of a cognitive and affective evaluation where some comparison standard is compared to the actually perceived performance. Raman et al. (2008) said that service as an intangible good appeal differently to each customer and certain extent of service should be achieved in order to satisfy the customer and that the resulting commitment, loyalty and retention are critical indicators of customer satisfaction.

Ogbuji et al. (2012) observed that the Automated Teller Machine (ATM) is one of existing replacements of the cascading labour intensive transaction system effected through what is popularly referred to as paper-based payment instruments. An automatic teller machine allows a bank customer to conduct his/her banking transactions from almost every other ATM machine in the world. The ATM, therefore, performs the traditional functions of bank cashiers and other counter staff. It is electronically operated and as such response to a request by a customer is done instantly. Furthermore, as the ATMs continue when human tellers stop, there is continual productivity for the banks even after banking hours.

Amado (2005) and Yuns and Akingbadei (2011) noted in their findings that the introduction of Electronic Banking has improved banks' efficiency in services to customers while Fredrick (2012) and Ojokuku and Sajuyigbe (2012) stated that Electronic Banking improved the growth

of the banking industry, enhanced bank-customer relations, improved customer satisfaction, facilitated banking transactions, and brought banking services closer to customers. Guru et al. (2001) supported the finding and noted that Electronic Banking brought banking services to the customers' doorsteps.

From the customers' point of view, electronic banking allows customers easier access to financial services and time saving in managing their finance (Almazari and Siam, 2008; Ayrga, 2011; Tan and Teo, 2000). Indeed, the emergence of electronic banking has prompted many banks to develop marketing and information technology strategies in order to stay competitive. Venkatesh, Morris, and Davis (2003) noted that the successful implementation of information systems is dependent on the extent to which such a system is used and eventually adopted by the potential users.

Homburg et al. (2006) have recognized that the effect experienced during the acquisition and consumption of the product or service can also have a significant influence on satisfaction judgements. Internet Banking creates convenience for the customers, hence they do not have to go to a branch to receive the service. A person can print information, forms, and applications via the Internet and be able to search for information efficiently instead of waiting in line and asking a teller (Cleopatra, 2019). With better and faster options, a bank will surely be able to create better customer relations and satisfaction.

According to Hosein (2010) Internet Banking improved banks' ability to retain customers as customer relationship management (CRM) can be facilitated by the data acquired and captured on the corporate database as products and services can be customized to suit the needs of the customer or groups of customers, thus facilitating customer loyalty. In particular, customer

loyalty is built, which may be defined as a customer‘s intention or predisposition to purchase from the same organization again (Edvardsson et al. 2000), that result from the conviction that the value received from one seller is greater than the value available from other alternatives. Researchers have empirically found positive relationship between bank website design and customer satisfaction as critical factors on the use of e-banking (Fang and Salvendy, 2003; Lazar and Sears, 2006; Vu and Proctor, 2006).

E-banking is a borderless entity permitting anytime, anywhere and anyhow banking. The mobile phone banking is taking services to remote areas where conventional banks have been physically absent. Subscribers can now open accounts, check their balances, pay their bills, transfer money, and cater for their daily basic needs (Ondiege, 2010). All the banking transactions can be performed from the comfort of the home or office or from the place a customer wants to. According to Kwashie, 2012) convenience of conducting banking outside the branch official opening hours has been found significant in cases of adoption of e banking and financial institutions provide customers convenient, inexpensive access to the bank 24 hours a day and seven days a week.

Financial institutions are now able to reach many more new customers than before while at the same time providing them with banking services at their convenience anywhere in the country, while existing and new customers are enjoying the increased security and affordability of the services and devices (Jenkins, 2008). According to Njenga’s (2009) study on Mobile phone banking usage experiences in Kenya, availability of multiple outlets across the country implies more points of contact with customers as opposed to the traditional banking hall setup. He also found that the flexible operating hours of the M-Banking agents leave them with greater opportunities to satisfy banking requirements that may arise at any time.

Grabner-Kraeuter and Faullant (2008) have stated that e-banking allows customers to perform a wide range of banking transactions electronically via the bank‘s website anytime and anywhere. In addition, customers are no longer confined to the opening hours of banks, travel and waiting times are no longer necessary, and access of information regarding banking services are now easily available (Hamlet, 2000).

Consistent with the above, Munyoki (2015) states that mobile banking offers millions of people a potential solution in emerging markets that have access to a cell phone yet remain excluded from the financial mainstream.

2.5.3 Customer deposits

The adoption of electronic banking such as Internet banking, mobile banking and the use of ATM has a direct impact on the performance of the financial institutions (Gitau, 2011). The low costs of these platforms have the effect of increasing the number of customers who have subscribed to the channels and who have subscribed to the banks as customers (Mwangi, 2014). This has an effect on the financial institutions having a huge customer base hence driving their income through the monthly account maintenance fees and an increase in customer deposits hence lower costs in attraction of capital for lending purposes (Ngugi, 2012).

Some studies show that deposits constitute a cheap and stable financial source of funding compared to other alternatives such as equity capital and borrowed capital (Bank of Uganda, 2010). The implication is that higher funding costs have a negative impact on bank profitability. Consequently, capital structure is among the main determinants of bank performance (Goddard et al., 2004).

Golara (2016), in his study on e-Banking and customer deposits concluded that Electronic banking is one of the reliable methods and approaches to create a dynamic platform for customer deposits and banking requirements of customers are fulfilled through a variety of methods. Several studies have shown that the amount of bank deposits mainly depend on factors such as system security, updating bank interactions, using hardware and software facilities in interactions, breadth of the market, the effect of the e-banking system on reducing time, increasing the services and facilities of the banking system and between individuals and legal persons.

2.5.4 Profitability

Various studies were conducted in the areas of electronic banking (EB) and its impacts on the banking industry. A few contradictory results were reported. Josefowicz and Novarica (2011) indicated low economic growth, excess branch capacity, and pressure from the regulatory authorities exerted pressure on bank profitability and increased competition for quality. To enhance profitability and competitiveness, banks focused on redesigning their products and costs utilizing IT to facilitate the use of internal and external data. Creating more options for online and mobile bill pay, banks were able to restructure cost, and enhance their distribution systems. Idowu et al. (2002) supported Josefowicz and Novarica as they indicated bank productivity and profitability were enhanced due to IT which enabled Electronic Banking.

Most recent operations-related researches have this basic assumption that technological innovation has a direct bearing on performance improvement (Chemtai, 2016). Abubakar (2014) explained that e-banking has the potential to improve productivity, growth and profitability performance of banks due to low cost advantages associated with the delivery of its services. The concept of organizational performance is connected to the ideas of growth and sustainability and

businesses typically try to perform well in a number of areas. First, they try to perform well financially, that is, realize a good return on their investment. Secondly, they try to gain much of the market share; and thirdly, they try to create more value for their stakeholders. Creation of sustainable growth is a prime concern of businesses; however, achieving this goal is no easy task, given the rapidly changing political, economic, competitive, and consumer trends. Abaenewe et al. (2013) related bank performance generally to how it has fared within a trading period in relation to the realization of its objectives. Indeed, there are many parameters a company can select to measure its growth but the most meaningful yardstick is the one that shows progress with respect to the ultimate goal of making profit, such that the size of the bank, the volume of deposit and its profitability were seen to be more reliable in measuring banks' performance (Abaenewe et al., 2013).

Existing empirical literature reports varying findings on the impact of e-banking on bank performance in the short term and long term. Kariuki (2005) and Kamau (2010) presented the constructive effects of e-banking on banking performance looking at bank profits and incomes as degree of performance. These studies concluded that e-banking leads to higher profits in the long term but not in the short term because of high ICT investment costs. Kamau (2010) saw that banks that are having high income progress were more likely to use different kinds of advanced ICTs.

De Young et al. (2007) analysed the effect of e-banking on the performance of banks in US markets. The findings concluded that e-banking improved the profitability of banks hence increasing their revenues.

However, Siam (2006) studied banks of Sudan and realized that e-banking services in the short term have a negative effect on the profitability of banks and this negative effect is due to banks' investment in the field of infrastructure and staff training, but in the long run, these services will have a positive effect on the profitability of banks.

2.5.5 Improvement in Management

Quality of Bank Management: includes loan administration, lending policies, risk reduction, ownership structure, governance and audit functions. Management quality according to Datta (2012) explores the capability of the management of the banking institutions to identify, evaluate and regulate the risks in their undertakings to ensure a safe, rigorous, and efficient system.

According to Laura Acevedo and John, M. (2007), E-banking leads to productivity gains. Automating routine bill payments, minimizing the need to physically visit the bank and the ability to work as needed rather than on banking hours may decrease the time involved in performing routine banking activities. In some cases, month-end reconciliations for credit card transactions and bank accounts can be automated by using e-banking files. To assess a bank's management quality, it requires professional judgements of banks' compliance to policies and procedures, aptitude for risk-taking, development of strategic plans. The performance of the other five CAMELS (Capital adequacy, Asset quality, Management, Earning, Liquidity and Sensitivity analysis) components will depend on the management quality. The ratio of non-interest expenditures to total assets can be one of the measures to assess the working of the management. This variable, which includes a variety of expenses, such as payroll, workers compensation and training investment, reflects the management policy stance. Another ratio

helpful to judge management quality is Cost per unit of money lent which is operating cost upon total money disbursed (Maheshwari, 2009).

With FinTech tools such as electronic Banking advancing the financial system, traditional entity-based regulation and supervision which relies on past and periodic data reporting, with delayed supervisory action in some instances, will no longer be sufficient. Conveniently though, FinTech promises solutions to revamp financial system supervision, towards more forward-looking approaches and activity-based regulation. FinTech can facilitate real-time and granular data collection and reporting; more refined analysis, including intelligence from unstructured data; greater computing and storage capacity; dynamic and predictive supervision; and automated and more prompt implementation of supervisory action (Bank of Uganda, 2019).

2.6 Relationship between electronic banking and performance

According to Monyoncho (2015), an increase in mobile banking will lead to increase in the performance of commercial banks. The study also found a strong positive correlation between financial performance of commercial banks in Kenya and adoption of mobile banking strategy of funds as shown by correlation coefficient of 0.773at 0.000 levels of confidence, that mobile phone banking has the potential to be transformational owing to various facts it is able to reach the unbankable. Mobile Banking is convenient to customers as they can perform transaction at their seat which increases the market penetration. The study also established that with mobile banking, users of mobile phones can perform several financial functions conveniently and securely from their mobile. Customers could check their account balance, review recent transaction, transfer funds, pay bills, locate ATMs, deposit cheques, manage investments. Mobile

banking is available round the clock, 24/7/365; it is easy and convenient and an ideal choice for accessing financial services for most mobile phone owners in the rural areas.

Technology is being used by businesses today to enhance growth and competitiveness (Anyasi and Otubu, 2009). Firms are developing new and innovative products to be able to maintain existing customers and attract new markets. One such innovation is the introduction of M-banking technology in the banking sector. M-banking has changed the way banks perform their operations, which has led to the introduction of new products and services that are aimed at lowering transaction costs and reaching a larger number of customers (Adewoye and Oni, 2010). M-banking provides the potential of increasing efficiency of payments system and expanding access to formal financial services by those who presently lack them. At the same time, it could make banking more convenient and cheaper to those who already have bank accounts (Porteous, 2006).

Okibo and Wario (2014) using the descriptive survey research methodology, examined a random group of selected banks in Kenya to examine the impacts of e-banking on growth of client base. They concluded that e-banking has influenced the development of the client base for the banking institutions in Kenya, by improving the accessibility of banking services to a larger populace in the nation. In addition, Okiro (2013) explored the effects of Mobile and Online banking in the Kenyan market. The research work used descriptive and qualitative study design, which was consistent with the objective intended in establishing the effects of e-banking infrastructure in the Kenyan institutions. The study concluded that Internet banking has enhanced financial performance for banks.

In a study about the role of e-banking on operational efficiency of Banks in Nigeria, Taiwo (2017) concluded that –"It is evident that electronic banking plays a significant role in banks operational efficiency in Nigeria and it is obvious that it is one of the major sources of increase in banks' general performance. Though it is still to be secured enough to ensure adequate support, it is possible that with the introduction of new channels, alongside technology advancement, performance of banks in Nigeria can be drastically increased. Most especially if efforts are put in place for an efficient implementation."Banks are utilizing their distributed network of computer terminals and internet connectivity to extend services beyond brick and mortar branches, with internet banking over personal computers, point of sale terminals, agency banking, credit card services and stand-alone Automated Teller Machines (ATMs) - some of which are owned by their competitors. Banks also connect to systemically important payments infrastructure: the Uganda National Interbank Settlement System (UNISS) which is a high-value real-time gross settlement system; and the Automated Clearing House (ACH) through which cheques and high-volume electronic funds transfers (EFTs) are cleared (Bank of Uganda, 2019).

In contrast, however, according to a study by retail banking researchers in 2011, there is electronic banking fraud which costs US $8.6 billion annually in Ghana. This was anticipated to increase in the next years. The Bank of Uganda Financial Stability Report (2015 - 2016) revealed that the total customer base of Centenary Bank declined by 11.4%, customer deposit declined by 7%, total credit slowed down by 12% and customer complaint due to electronic fraud increased by 6.3%.

Mudiri (2014) reports that the key enablers of mobile banking fraud include but are not limited to: weak regulation, low consumer awareness levels and poor communication with the main

players. For example, the inability of regulators to monitor the mobile money ecosystem, to set guidelines for different stakeholders increases the likelihood of fraud associated with mobile banking.

Another emerging risk to financial institutions is the reduction in transactions due to the introduction of Mobile money. Mudiri (2014) maintains that the introduction of mobile money services has greatly changed the dynamics of the industry, bringing financial services closer to the public. Financial institutions such as commercial banks and microfinance institutions are also investing in the provision of mobile money financial services.

In this connection, FinTech-based lending based on Mobile Banking that relaxes creditworthiness assessment and underwriting standards can lead to a build-up in loans with higher credit risk, and thus expose the financial firm and/or financial sector to greater potential credit losses, especially if such loans constitute a material proportion of the firms' or industry balance sheet (Bank of Uganda, 2017).

2.7 Conclusion

While benefits of electronic Banking have been realized in Nigeria, Kenya, Namibia, India and other countries according to the research literature available, little has been found out in Uganda and particularly in Kabale District. For instance, in a study about the role of e-banking on operational efficiency of Banks in Nigeria, Taiwo (2017) concluded that "It is evident that electronic banking plays a significant role in banks operational efficiency in Nigeria and it is obvious that it is one of the major sources of increase in banks' general performance. Monyoncho (2015) concluded that internet banking had a positive influence on the financial performance of commercial banks in Kenya. However Mlungisi (2013), in a research about

benefits and risks of E-Banking in Zimbabwe, concluded that by adopting e- banking, banks exposed themselves to operational and reputational risks. For example, the cost of implementation for e-banking can be too high for commercial banks as it largely requires infrastructural development, training of staff members and sometimes even outsourcing some of the electronic banking services.

In her study on the impact of Mobile Banking on financial performance of Bank of Kigali, Asia (2015) concluded that Different electronic Banking System tools like ATM, Pay direct, mobile phone banking, debit/visa card payment and electronic cheque payment have a great impact on bank performance because they increase profitability, return on investment, return on equity and loans, improve bank management quality, increase bank asset and promote bank growth and expansion.

In Uganda, Mireal (2018) in his study on the factors affecting mobile banking in Commercial Banks concluded that the use of Mobile Banking has bridged the gap between customers and the bank as distance used to be a barrier. Therefore, while Electronic Banking has positive impacts on the banking industry, banks should develop strategic plans to address the challenges associated with Electronic Banking to further enhance profitability and reduce costs. Training should be provided to educate conservative customers on Electronic Banking and its benefits while taking steps to address cybercrime.

Owing to the above literature, it is clear that electronic banking has potential benefits for the Banking industry and the customers. However, there are a number of risks customers and financial institutions are exposed to which need to be mitigated. Most of the current literature relates to electronic Banking and financial performance on a wider scale in the commercial

banking sector and nothing is available especially for financial institutions in general in the context of Kabale District.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the research design, study population, target population and sample, sampling techniques, tools of data collection, research procedure and data management and analysis, limitations of the study and ethical considerations.

3.1 Research design

Creswell (2009) defines research design as an outline of how data is collected and analysed in pursuit of obtaining specific answers to research questions. This research adopted a descriptive research design and survey design. Descriptive Research design according to Kothari (2004) is one that seeks to explain the particular characteristics of an individual, group or a phenomenon. It describes the special features attributable to a particular phenomenon and concerns special predictions with specific narration of facts regarding the phenomenon. In this study, survey research design was employed to investigate secondary data (Oso and Onen, 2009). Qualitative and quantitative approaches were adopted for the research. The design was chosen in order to ensure that the study accurately describes the nature of the e-banking services/products offered by different financial institutions and how they affect the overall performance of financial institutions in the market place.

3.2 Population size

Mugenda and Mugenda (2003) describe a population as a complete set of individuals, cases or objects with some common observable characteristics. It is that which conforms to a given selected specification. Population for this study included: Financial Institutions in Kabale District

including7 Commercial Banks, 2 Microfinance Deposit taking institutions and 8 Savings and Credit Associations (SACCOs). A total of 16 Managers, 160 technical banking staff and about 5,000 Bank customers formed the population making a total population of 5176 people.

3.3 Target population and sample

The target population was drawn from the total population in Commercial banks, Microfinance Deposit Institutions and SACCOs. The Banks, Bank Managers, technical banking staff and Customers formed the target population of the study. For convenience, 2 financial institutions from each of the clusters of Commercial Banks, MDIs, and SACCOs were chosen.

3.4 Determination of Sample Size

According to Adèr et al. (2008), sampling is that part of the statistical practice that is concerned with the selection of individual observations with an intention to yield some knowledge about a population of concern especially for the purposes of statistical inferences. According to Kitavi (2014), a sample is a small group obtained from the accessible population. The study sample was selected using Slovin‘s formula:

$$n = \frac{\quad}{\quad}$$

Where: **n** is the sample size in the study **N** is the Accessible Population

e is marginal error set as 0.05

Thus, it was assumed that the specific banking staff, customers of financial institutions and Managers in the accessible banks is 210 within Kabale District from which the sample was drawn.

Using Slovin‘s formula;

Sample (n) = ——————— —— = 138

The total respondents were 138 respondents

Table 2: Sample size

Category	**Target Population**	**Sample Size**	**Sampling technique**
Branch Managers	6	6	Purposive
Banking staff (only technical banking staff)	54	48	Simple random sampling
Customers	150	84	Convenience sampling
Total	**210**	**138**	

Source: *Field Research data 2020*

3.4 Sampling techniques

Financial institution Tiers formed the clusters because of having nearly same characteristics. From the Clusters, customers of financial institutions, Banking staff, Bank Management were chosen to participate in the study as respondents. Non-Probability sampling techniques such as Purposive sampling was used. Random sampling which is a probability sampling technique was also used to select the respondents for the study.

According to Welman and Kruger (2001), the advantage of non-probability sampling is that it is economical and less complicated. Purposive sampling procedure was used because the researcher

believes it is convenient and time-saving. Purposive sampling is used to select only those respondents considered to be key and resourceful in providing the required data. The purposive method of sampling was used to select Bank Managers of the selected financial institutions for interview.

Convenience sampling technique was used to get information from respondents who are customers of the financial institutions in Kabale District. Clustered sampling was used to select financial institutions where tiers represented clusters.

Simple random sampling technique was used on the Banking staff. This was done to ensure that there is adequate and fair representation depending on the duties handled. Tellers, customer care consultants, accountants, IT team and Loans officers were included in the banking staff who were randomly selected.

3.5 Data sources

The study used both Primary and Secondary Data sources

3.5.1 Primary data source

Questionnaires and interview were the main sources of primary data. These questionnaires were distributed to staff and customers of financial institutions who were randomly selected. Primary data is regarded as the first-hand information collected from respondents.

3.5.2 Secondary data source

These were obtained from the banks' records, financial reports, previous research reports, journals, newspapers, newsletters and internet.

3.6 Data collection tools and instruments

In order to exhaustively obtain and compile the collected data, it was necessary to combine questionnaires and interview methods.

3.6.1 Questionnaire

During the study, one set of questionnaires was used with closed-ended questions for staff of commercial banks, Savings and Credit Organizations and Microfinance Deposit taking institutions to collect the necessary information. Such information can best be tapped on a closed ended questionnaire which allows for easy analysis to quantify the influence of the independent variable on the dependent variables as observed by Amin (2005). Secondly, the use of questionnaires allows the respondents to respond by filling questionnaires at their own convenient time. It also allows respondents to express their views and opinions without fear of being victimized as suggested by Oso and Onen (2008).The closed questions assist the researcher in coding and analysing data easily and were self- administered. Questions were set and pretested and given to the bank staff and bank customers to fill and express their views about the problem under investigation. A 5-point Likert scale ranging from 1 – 5 where 1(Strongly disagree), 2(disagree), 3(not sure), 4(agree), and 5(strongly agree) was used to collect the qualitative data.

3.6.2 Interview

This involved face-to-face discussion with specific respondents such as Bank Managers in a relaxed and conversational atmosphere. According to Cooper and Schindler (2014), the method of interview permits collection of first-hand detailed information about the themes of the study. In addition, it gives respondents a chance to answer questions unlimitedly and flexibly and therefore is an appropriate method to use to collect data from key informants. The semi-structured interviews help in collecting systematic, comprehensive and in-depth information.

3.6.3 Document analysis

Document analysis is used to evaluate historical or contemporary confidential or public records, reports, government documents, and opinions (Cooper and Schindler (2014). This method was used to help retrieve data from the secondary sources which include archives of records containing audited annual financial reports and annual reports published by the financial institutions from 2015 to 2019.

3.7 Validity and reliability of the research Instruments

The study instruments are valid if they measure what they intend to measure. For that reason therefore, the data collected were constructed and given to fellow research experts for constructive criticisms. The tools were pre-tested on 20 informants outside the research respondents. The questions in the tools for data collection were made clear, and in a logical way, and valid for the study.

Table 3: Reliability Statistics

Variable List	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
E-Banking Services	.841	.840	7
E-Banking Effects	.917	.923	29
Performance	.857	.857	4
Overall	**0.872**	**0.873**	**40**

Source: *Field data*, **2020**

Basing on Cronbach‘s alpha coefficient, this study found the overall alpha coefficient (α = .872), which was above the acceptable level of 0.7. This therefore, means that the instrument used was reliable, and the items were internally stable to generate consistent results across repeated experiments.

3.8 Data collection procedure

The researcher himself distributed the questionnaires to various respondents including customers of financial institutions conveniently reached and staff of financial institutions randomly selected. He conducted one-on-one interviews with the managers of financial institutions during the study and made analysis of the data collected in the interviews and data collected using the questionnaires.

After collecting the data from the field, the researcher edited the data to ensure that the questions had been properly, correctly answered and wereconsistent. Tables and figures were used to present the findings. Frequency distribution tables were used to tabulate data to show percentages calculated and the relationships between the Electronic banking and performance in financial institutions.

3.9 Data management and analysis

According to Bryman and Bell (2003) data analysis refers to a technique used to make inferences from data collected by means of a systematic and objective identification of specific characteristics. Regarding the analysis of data, the researcher applied a statistical tool, namely, Statistical Package for Social Sciences [SPSS v.20] to analyse the gathered data and Microsoft Excel. With these packages, the researcher used descriptive statistics, notably, frequency tables, percentages and coefficients. The process of data analysis was done with reference to the research objectives.

3.10 Ethical consideration

The researcher contacted respondents in order to obtain their consent especially the Bank Managers who in turn informed the bank staff of the research being conducted. The respondents

were informed of the study and what was not clear was clarified to them. Respondents were shown the purpose of the study that it was not to expose the bank performance but an academic study for future knowledge generation.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter presents the findings of the study, which were based on the research questions. The chapter is structured basically into two sections that is: bio-data and analysis of the research problem. Categorical data was presented on charts and graphs. Frequency tables were very important in describing the nature and patterns of responses.

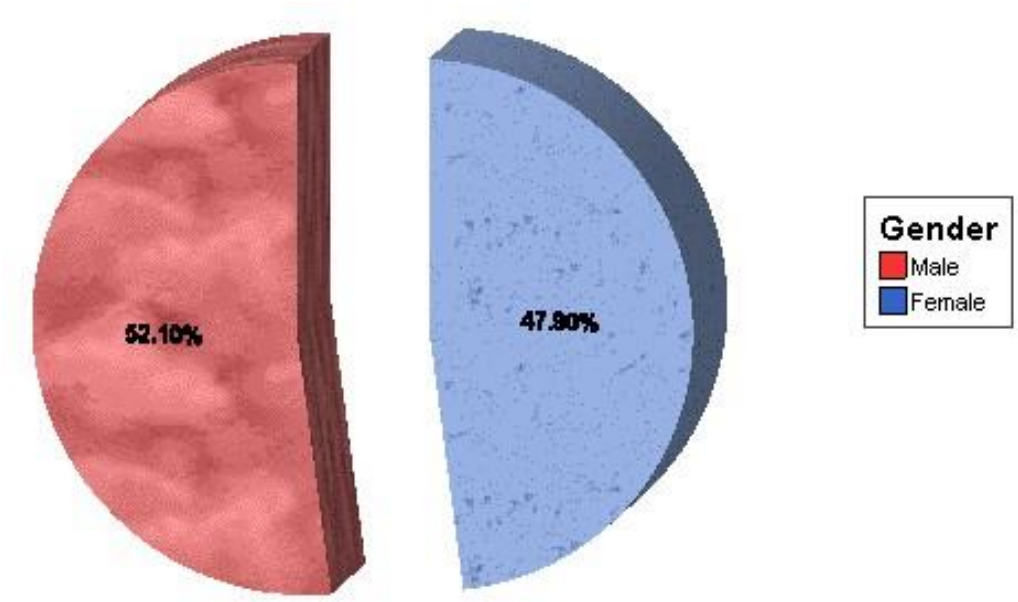
4.1 Response rate

The study targeted a sample size of 138 participants, of whom 119 responded, which implies a response rate of 86.2%. This response rate is considered high and acceptable. Therefore, the findings can be used for conclusions and generalizability of results.

4.2 Bio-data

This study examined different background characteristics of participants, namely gender, age, experience with the bank and level of education.

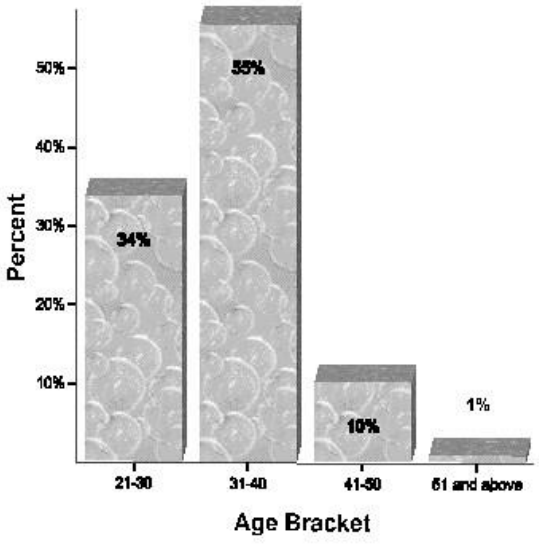
Figure 2: Gender of participants



Source: Field data, 2020

The findings on gender indicate that 62 (52.1%) were male while 57 (47.9%) were female. These statistics imply that the study was dominated by male participants than female participants. This indicates that more Males than Females utilize the electronic Banking services of the financial institutions in Kabale District. This partly is caused by low level of women inclusion in financial services in Kabale District.

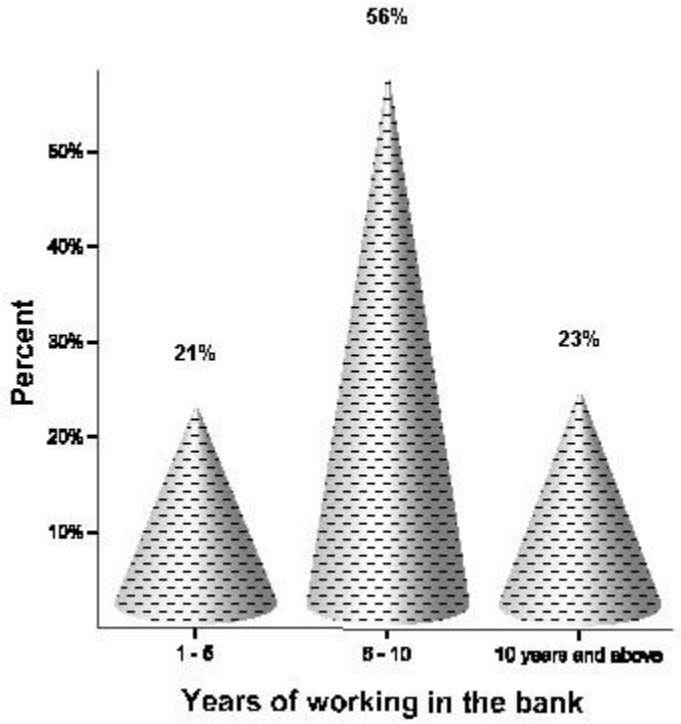
Figure 3: Age of participants in complete years



Source: Field data, 2020

Regarding age, the study found that most of the participants were below 40 years of age. Specifically, 65 (55%) belonged to the 31 to 40 years age bracket while 40 (34%) belonged to the 21 to 30 years age bracket. These people seek flexible and quick financial services than the traditional banking services. They use innovative technologies seeking financial services from the different financial institutions in Kabale District. This distribution is more characteristic of young people who seek financial assistance from financial institutions to fight unemployment. The percentage of the participants who would constitute the adults 12 (10%) and the elderly 2 (1%) were indeed very small. This is attributed to inadequate acceptance of new and innovative technologies by the older people in Kabale. This category of respondents seeks financial services in SACCOs which have not yet adopted most of the e-banking tools in Kabale District.

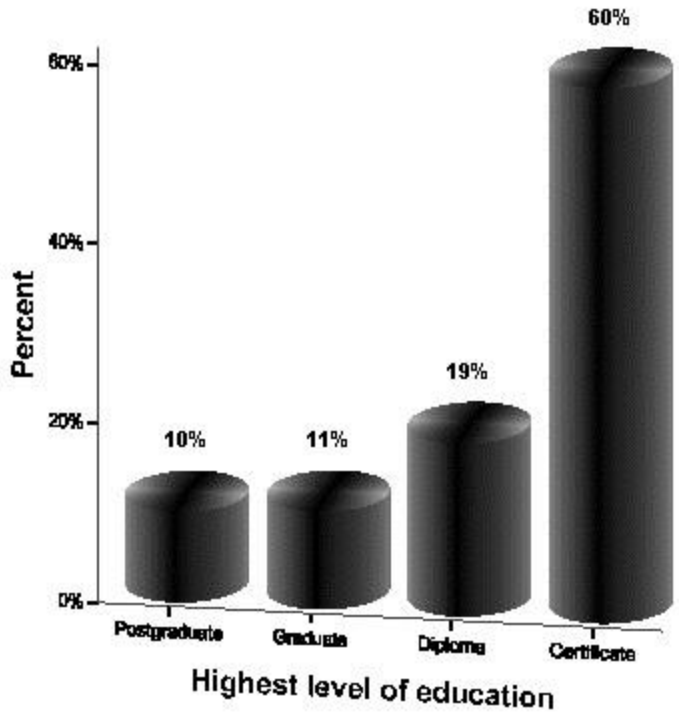
Figure 4: Years in the bank



Source: Field data, 2020

The findings on the number of years participants had interacted with the banks shows that 67 (56%) had a working relationship with the banks of over 5 years but not exceeding 10 years. 27 (23%) had a working relationship of over 10 years while 25 (21%) had a working relationship not exceeding 5 years. This implies that the majority of the participants averaged around 5 to 10 years of experience with the banks. This is partly attributed to the fact that most people in Kabale open up Bank accounts after getting their first job or after establishing their first business. Adoption of e-banking in Kabale District is almost in its fifteenth year with a few financial institutions in their tenth year. These tools attracted clients for the financial institutions in this period especially the rural population who seek financial services from their Mobile Phones than travelling long distances to seek financial services.

Figure 5: Participants' level of education



Source: Field data, 2020

In view of the highest level of education of participants, this study found that 71 (60%) were certificate holders, 23 (19%) were diploma holders, 13 (11%) were graduates while 12 (10%) had postgraduate qualifications. The certificate and diploma holders suggest clients while those with graduate and postgraduate education levels suggest banking staff. This implies that most of the Bank customers sampled had completed Certificate level in Kabale District.

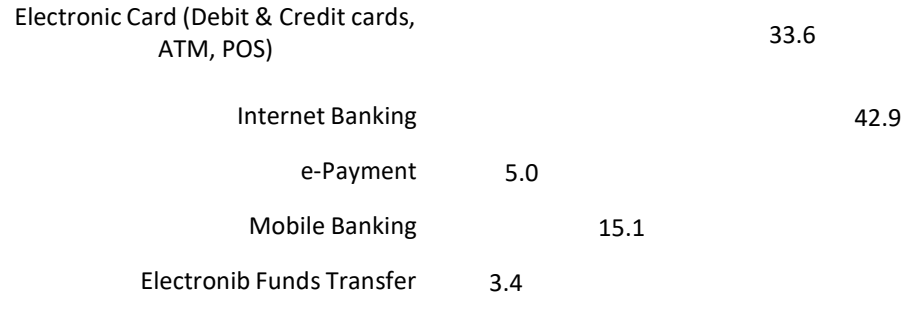
4.3 Analysis of the research problem

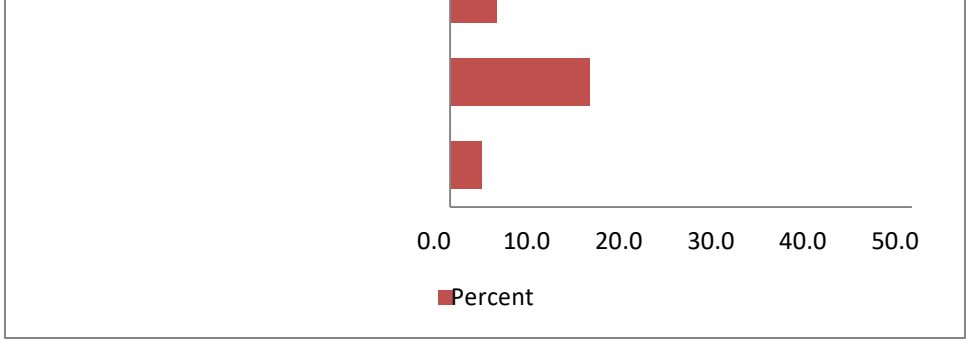
The research problem was analysed based on research questions. Consequently, the techniques of analysis varied according to the research questions. Research question was analysed using descriptive statistical techniques (percentages) while research questions two and three were analysed using inferential statistical techniques (correlation and regression).

4.3.1 What are the forms of e-banking used in Financial Institutions?

This study examined the forms of electronic banking used in financial institutions. To analyse this question, this study used percentages, which were presented on a chart to show the different forms of electronic banking. The figure below shows the details.

Figure 6: E-Banking tools





Source: Field data, 2020

The study observes that electronic banking products are differently used among different financial institutions, and falls in three broad categories. For example, more than 36 (30%) of the participants appear to use internet banking 51 (42.9%) and electronic cards 40 (33.6%) among the financial institutions investigated. These two forms of electronic banking appear to be the most widely used forms by clients and not the banks. However, the financial institutions that use internet banking are more than those that use electronic cards. This is due to the fact that most customers have access to a Smart phone which can access the internet. Others Prefer the use of cards to other forms because cards are more secure with the Personal Identification Number which is used to access the Bank account. More than 10% of the participants appear to use mobile banking (15.1%) among the financial institutions investigated. This is partly attributed to the high risks involves in Mobile Banking as they rely on third -party companies such as MTN Uganda, Airtel Uganda, Africel Uganda, among others, which have had irregularities in Security in the recent past. Finally, less than 10% of the participants appear to use e-payments (5.0%) and EFT (3.4%). This is attributed to low volumes of money transfers made by customers of financial institutions which do no necessitate the use of EFTs and inadequate sensitization of clients on e-payments by the financial institutions. Overall, this study establishes internet banking as the most used form of electronic banking. However, the perception is likely to vary among banking staff and bank clients.

4.3.2 What is the relationship between e-banking and performance among financial institutions in Kabale District?

To establish the relationship between electronic banking and performance of financial institutions, this study used correlation analysis. Correlation is a statistical technique that measures the relationship between two numerical variables. Correlation uses the correlation coefficient to measure the degree of the strength and the direction of the relationship between two variables. Correlation coefficient ranges from 0.00 to 1.00. Correlation coefficients closer to 1.00 indicate strong relationships while those that are closer to 0.00 indicate weak relationships between variables. Positive correlation coefficients indicate that the two variables change in the same direction while negative correlation coefficients indicate that the two variables change in opposite directions. This technique uses probability values (p-value) to indicate the significance of the relationship. If (p-value < .05), the relationship is significant while (p-value > .05) indicates a non-significant relationship between the two variables. The following table shows the details of the relationship between electronic banking and performance of financial institutions.

Table 4: Correlations

		Performance	Electronic Banking
Performance	Pearson Correlation	1	.761(**)
	Sig. (2-tailed)		.000
	N	119	119
Electronic Banking	Pearson Correlation	.761(**)	1
	Sig. (2-tailed)	.000	
	N	119	119

** Correlation is significant at the 0.01 level (2-tailed).

Source: Field data 2020

This study found the correlation between electronic banking and performance (r = .761; sig.

<.05) as strong. This implies operating electronic banking in financial institutions is associated with a strong change in the performance of these institutions. This is due to the fact that electronic Banking reduces financial institution's transaction costs and increases in customer base as the services reach even the rural population. This improves the Financial Institution's position in terms of deposits, profits, transaction processing time which indicates improved performance. The positive correlation coefficient indicates that electronic banking and performance change in the same direction. The significant value, which is less than 0.05 suggests the relationship between electronic banking and performance is statistically significant, and the results of this study are not by chance. The significance level also indicates that electronic banking and performance are linearly related.

4.3.3 What is the effect of E-banking on performance of financial Institutions?

This study used the regression model to establish the impact of electronic banking on performance of financial institutions. Regression is a statistical technique that is used for establishing a mathematical function that relates the independent and dependent variables. This study assumed electronic banking as the independent variable and performance as the dependent. Regression uses coefficients to indicate the effect of change in the dependent variable accountable to the independent variable. Higher regression coefficients (Beta) indicate higher effects while low coefficients indicate low effects. The model uses R Square to measure the overall effect of the independent variable on the dependent variable. Table 5 shows the details.

Table 5: Regression Coefficients

	Unstandardized Coefficients	Standardized Coefficients

Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.155	.269		-.577	.565
	Mobile Banking	.127	.081	.117	1.570	.119
	Internet Banking	.166	.090	.137	1.840	.068
	e-Payment	-.057	.063	-.053	-.898	.371
	Electronic Fund Transfer	.207	.067	.188	3.072	.003
	Electronic Cards	.609	.058	.616	10.448	.000

Dependent Variable: Performance

Source: Field data, 2020

This study adopted the standardized beta coefficients to measure the relative impact of each form of electronic banking on performance of financial institutions. The study used standardized beta coefficients than the unstandardized to make the variables comparable. Accordingly, a unit- change in mobile banking (β = .117; sig. >.05) predicts about 11.7% of the level of change in performance. A unit-change in internet banking (β = .137; sig. >.05) is likely to predict about 13.7% of the level of change in performance. A unit-change in e-payment (β = -.053; sig. >.05) is likely to reduce performance of financial institutions by about 5.3%. A unit-change in EFT (β= .188; sig <.05) is likely to predict changes in performance by 18.8%. A unit-change in electronic cards (β = .616; sig. <.05) is likely to predict changes in performance by 61.6%. This study observes that all the forms of electronic banking appear to have positive effects on performance, except e-payment, which has negative effects. This could be because of the low volumes of transactions made with e-payments and customer preference to use physical cash and cheques in making transactions.

Examining the significance level of each of the forms of electronic banking, this study observes that mobile banking, internet banking, and e-payment do not have significant impacts on

changes in performance of financial institutions. This is because of their significance levels that are above

0.05. This means that these results are true only among less than 95% of the sample. On the other hand, EFT and electronic cards appear to have significant impacts on changes in performance of financial institutions. This is because of their significance levels that are below

0.05. This means that the researcher is confident of obtaining the same results from over 95% of the sample. This study therefore concludes that using electronic cards has the greatest impact on the performance of financial institutions.

Table 6: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.863(a)	.745	.734	.38528

Predictors: (Constant), Electronic Cards, e-Payment, Electronic Fund Transfer, Mobile Banking, Internet Banking

Source: Field data 2020

The overall impact of electronic banking stands at 74.5% according to (R Square = .745). This means that electronic banking is responsible for 74.5% of the level of changes in performance of financial institutions. This statistic is high and suggests that electronic banking plays a very high role in accounting for the performance of financial institutions. This is because the volume of deposits increased in financial institutions in Kabale District because of electronic banking and reduction in transaction processing time and costs positively impacted profitability in these financial institutions. Therefore, the study concludes that among the financial institutions that are using electronic banking, performance is likely to vary by 74.5%. These results are reliable compared to merely guessing the performance of financial institutions.

4.4 Discussion of Results

4.4.1 Objective one:

The study investigated the forms of E-electronic banking used in the financial institutions, and found internet banking. The use of internet banking has close relationships with the promotions of 'get out of the line and get online', which are popular in the financial institutions, especially commercial banks. This is facilitated by the availability of smart phones and personal computers among the customers of financial institutions in Kabale District. However, in a section of financial institutions such as the SACCOs, the most popular according to the study was Mobile Banking especially with the introduction of MSACCO by Future Technologies Inc.

This study is consistent with previous studies that have established the importance of internet banking in making payments like buying tickets, consumer bills and settlement of goods and services (Littler, 2006; Deutsche Bundesbank, 2000). The fact is that Kabale is surrounded by tourist attractions such as forest vegetation and mountain gorillas in Bwindi and Mgahinga National Park. Tourism requires booking online for hotels, reservations, tracking days, etc; all these must be paid in advance, and the best mode of payment is online. The findings are consistent with Post Bank (2018) who established that with internet banking, customers perform routine transactions, bill payments, balance inquiries and account transfers. This is true from the study carried out in financial institutions in Kabale District as clients use the e-banking services to making online payments, making account-to-account transfers and performing routine transactions.

The findings, however, seem to disagree with Siddik (2015) in as far as popularity of internet banking is concerned. In his study in Bangladesh, the author established that ATMs and mobile banking are the most popular. In Kabale district, it was established that internet Banking is popular among a section of participants in the study especially the Bank staff.

This study further established that electronic fund transfer is not popular among clients of financial institutions. It is possible that participants found EFTs not commonly cherished in Kabale because of their level of education, and perhaps the amount of money they normally transact. The selection of participants was not judgmental and, therefore, it might have been possible to purposively target those who use EFT. The findings seem to contradict with Bank of Uganda (2019) who implemented EFT to facilitate fast, convenient, reliable and secure domestic payments and collection of funds. Since the system is commonly used for payment of salaries by government and corporates, it is not surprising that the participants who were not from corporates or government could find the service very important to them. This study has come out with findings that disagree with Bank of Uganda (2018) who documented that EFT transactions were rising by 21.7% from UGX 19.1 trillion to 23.3 trillion. The rise in EFT transactions implies its popularity in some circles of bank customers. This partly is attributed to the compulsory introduction of EFTs by Bank of Uganda in August 2003 for both credit transfers and direct debits migrating from the traditional Cheque system where cheques of over 20 million shillings were stopped in 2007 in Paying government suppliers and employees making it less popular in Kabale District.

4.4.2 Objective two

This study established strong and positive significant relationship between electronic banking and performance of financial institutions. The findings generally inform that changes in electronic banking are associated to a strong change in performance of financial institutions. This is because of the improvement in customer base, reduction in transaction costs and reduced customer service time. Given the fact that e-banking rests on reliable and adequate data communication infrastructure (Gruber, 2011), most of the financial institutions investigated in Kabale appear to have the infrastructure. The positive association between e-banking and

performance of financial institutions supports Windrum and De-Berranger (2003) who viewed the benefits of e-banking in the following areas: expanding banking coverage, improving efficiency in service delivery, improving customer communication and management, reducing barriers to new market entrants and facilitating development of products and new business models for generating revenues in different ways. In Kabale district, e-banking has expanded banking coverage, improved service delivery, customer communication through SMS and new products such as School Pay, Agent Banking which has improved the performance of financial institutions. The findings further support Mudiri (2014 and Akindele (2010) who observed that it is no longer necessary to access bank accounts by waiting for the bank's opening hours and hanging in long queues in the banking halls. However, experiences in financial institutions in Kabale District indicate that customers still find themselves queuing in meandering lines in banking halls. This, therefore, suggests that the positive association that exists between electronic banking and the performance of financial institutions cannot be generalized to all financial institutions.

The appeal for the increase in customers' take-up of electronic banking rests on the convenience that the system creates for the customer that is devoid of print information, forms, and conducting banking outside the branch. However, most customers have not appreciated this wealth of services and they keep glued to bank branches. Consistently, Njenga (2009) points out that multiple outlets across the country increase contact points between the customers and the bank. While this might be profitable, banks have to incur very high capital to set up outlets across the country, which is likely to affect the level of profitability and capital level (Goddard et al., 2004).

The results of the study offer results that contradict Josefowicz and Novarica (2011) who found that investment in e-banking is associated with low economic growth, excess branch capacity, and pressure from regulatory authorities. These costs are likely to reduce the bank's profitability. This is because in Kabale district, financial institutions have not faced such challenges as a result of electronic banking apart from money transfer limits put by different telecom companies, the maximum that can be withdrawn using an electronic card.

4.4.3 Objective three

This study established a significant quantitative effect of e-banking on performance of financial institutions. The portion of the performance predicted by electronic banking alone is very large, which is suggestive of either increased e-banking application or customer take-up of the same. The study provides evidence that the adoption of electronic banking in financial institutions might be one channel of building their performance. In terms of economic growth, the number of jobs e- banking (mobile banking and agent banking) have provided to people in communities is inestimable. The findings are in line with Monyoncho (2015) who investigated mobile banking and its effect on performance of commercial banks. The author found that mobile banking has a significant impact on financial performance of commercial banks as it reaches the unbankable. This is true in Kabale district as e-banking services have attracted many players who serve as agents of different financial institutions in what is called 'Agent Banking'. These agents are widely distributed geographically reaching the previously unbankable populations which has increased the number of customers subscribing to e-banking services.

In a related study, Okibo and Wario (2014) examined the impact of e-banking on growth of client base. Their findings show that e-banking influenced the development of client base for the banking institutions in Kenya. This is also true in Kabale District as the use of Mobile banking

and Electronic cards has attracted more customers to the financial institutions because of flexibility in Banking and access to their accounts almost anytime and anywhere. This study presents consistent results with Taiwo (2017) who studied the role of e-banking on operational efficiency of banks in Nigeria. The author concluded that e-banking was significant in the banks' general performance. This is because financial institutions in Kabale were able to downsize staff, and automate transactions thus reducing the customer service time and the cost per transaction resulting is better operational efficiency.

The findings on the impact of e-banking on performance of financial institutions in Kabale disagree with Bank of Uganda Financial Stability Report 2015 - 2016) which revealed an 11.4% decline in customer base, 7% decline in customer deposits, a 12% total credit slowdown and customer decline of 6.3% due to electronic fraud in Centenary Bank. Electronic fraud suffocates financial institutions more than the customers. This is because of the loss in revenue to the financial institutions while trying to maintain customer balances. If it happens on the customer side, it leads to frustration and inability to transact with such a financial institution in case measures are not put to track the source of Fraud. Electronic Fraud in general reduces the volume of transactions customers make with the financial institutions and the deposits they make as well as general loss of financial trust in electronic Banking platforms.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of findings, the conclusions, and recommendations of the study. Conclusions and summary are presented based on empirical results while recommendations are presented according to the gaps revealed in theory and practice of electronic banking and performance of financial institutions in Kabale.

5.1 Summary of findings

Of the forms of E-electronic banking used in the financial institutions, internet banking, which was confirmed by 42.9% of the participants, is mostly used while Electronic Funds Transfer confirmed by only 3.4% of the participants is the least used. A strong significant relationship ($r = .761$; sig. $<.05$) exists between electronic banking and performance of financial institutions. In terms of significant impact, electronic cards have the greatest impact on performance of financial institutions, predicting 61.6% of changes in performance for every unit-change. Overall, electronic banking accounts for 74.5% of variations in performance levels of financial institutions.

5.2 Conclusions

This study investigated the impact of electronic banking on performance of financial institutions in Uganda: A case of Kabale District. Among the electronic banking forms used in financial institutions in Kabale, internet banking, electronic card and mobile banking scored high. These

forms offer great customer satisfaction to both local and modern customers. However, their firm usage is likely to be limited by accessibility and network issues. The reported cyber-attacks on some financial institutions, ATM fraud, mobile money fraud pose frustration to some clients of the financial institutions which may negatively influence subscription to these e-banking services.

The strong relationship observed between electronic banking and performance is important to the practice of financial institutions. When financial institutions increase the usage of electronic banking and or introduce new electronic banking products on market, the chances of the institutions increasing their performance to greater height are eminent. Electronic banking leads to greater access to banking even by the previously un bankable populations and the customer needs for flexibility even after official banking hours is fulfilled. This percentage, however, should not blind bankers to ignore the other factors that are likely to influence the relationship between electronic banking and performance.

There is a significant effect of electronic banking on performance, with electronic cards contributing the most. This is because electronic cards (debit cards, Credit cards, and ATM cards are held by most customers of financial institutions according to the Financial Stability report 2019 and they attract transaction charges which prove the profitability of financial institutions. Much as all the financial institutions in this study appeared to predominantly use internet banking, its impact on performance is low compared to electronic cards and EFT. This could be due to the fact that transaction charges on electronic Funds Transfers and electronic cards are higher fetching high inflows to financial institutions compared to internet Banking.

This study has contributed to the existing knowledge on electronic banking and performance of financial institutions. Importantly, this has shown that mobile money and internet banking are marketing potentials. Similarly, it has been established empirically that electronic cards are very significant in influencing the performance of financial institutions. This study finds the results replicable and transferable to other contextual and theoretical applications.

5.3 Recommendations

Bank of Uganda which is responsible for financial regulation and the Ministry of Finance, Planning and Economic Development should encourage financial institutions to sensitize their customers on the e-banking products as can satisfy customer needs leave alone increasing efficiency in business operations -- for example, Internet Banking and ATM Cards in SACCOs.

Financial institutions should promote e-banking workshops and training to their customers to make them user-friendly. This will encourage many clients to buy e-banking products. Some e-banking services like Internet banking, EFTs, e-payments are not user- friendly for ICT beginners. This will promote trust in e-banking products and confidence as clients use such services.

Overall, electronic banking accounts for 74.5% of variations in performance levels of financial institutions. Therefore financial institutions which have not adopted some e-banking tools should introduce them if their performance is to improve.

5.4 Areas for further study

a) The relationship between EFT and financial performance of commercial banks in Kabale district, Uganda

b) The technological challenges and scaling of electronic banking in rural Kigezi sub-region, Uganda.

c) Marketing strategies and adoption of electronic banking services among bank customers in Kigezi sub-region, Uganda

5.5 Limitations of the study

Most of the respondents used specific technical banking terminologies and language, which were bit hard for the researcher to understand, thus the researcher required additional time to study and understand the specific language used in the financial institutions which he did.

Time: The respondents were busy with routine work so they did not answer the questionnaires in the required time. This was mitigated by extending the time of collection of questionnaires.

Bureaucracy of the administration in the financial institutions made it hard for the researcher to reach the sample target in time. This was mitigated by being patient with the authorities of financial institutions up to when the researcher was allowed to interact with the employees of the financial institutions.

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APPENDICES

QUESTIONNAIRE 1: Bank Staff and Bank Customers

Dear Respondent,

I am a student at Kabale University pursuing a Master of Business Administration Degree (Accounting and Finance). I am conducting a research on the effect of Electronic Banking on the Performance of financial Institutions in Kabale District. You have been selected as one of the respondents for this study. The information you provide will be confidential and shall be used for academic purposes only. Feel free to answer these questions.

……..

BASHAIJA ISMAIL BOSCO

This Questionnaire is divided into three sections i.e. Bio-data, E- Banking services and Performance of financial institutions. Write the appropriate answer in the spaces provided or tick where it is most appropriate in the options provided.

Bio-Data

1. Please tick (√) your sex

   Male ☐ Female ☐

2. Level of Education

   Postgraduate ☐

   Graduate ☐

   Diploma ☐

   Certificate ☐

   Other (specify) ……..

3. Tick your age group

   21 – 30 ☐

   31 – 40 ☐

   41 – 50 ☐

   51 and above ☐

4. How long have you been working in this Bank?

   ☐

1 – 3 Years

3 – 5 Years ☐

5 – 7 years ☐

7 – 9 years ☐

10 years and above ☐

Section A: E-BANKING TOOLS/SERVICES USED BY THE BANK

5. Please tick the E-Banking tools used in you Bank to transact with customers

Tool	**Tick (√) if Present**
◦ Electronic Funds Transfer	
◦ Mobile Banking	
◦ e- Payments	
◦ Internet Banking	
◦ Electronic Card (Debit and Credit Cards, ATM and POS)	

6. How effective is E-Banking in Promoting the Transactions listed below.

Rate how E-Banking promotes the following services. **Definition of scale for assessing how E-Banking has promoted the services offered.**

Strongly agree (**5**), *Agree* (**4**), *Not sure* (**3**), *Disagree* (**2**), *Strongly Disagree* (**1**)

	Roles of E-Banking	**5**	**4**	**3**	**2**	**1**
a.	Electronic Banking services have contributed to the increase in the customer deposits to the Bank.					
b.	Electronic Banking services have contributed to increasing number of clients to the Bank					
c.	Electronic Banking services have increased the quality of work offered by the bank to satisfy customers.					
d.	Electronic Banking services have contributed to reduction in physical cash deposits and cash withdraw transactions.					
e.	Electronic Banking services have contributed to lessening the burden of account auditing by bank official which improves management of the Bank.					
f.	Electronic Banking services have contributed to increasing the					

	percentage of transactions processed and completed by financial institutions.					
g	Electronic Banking services have contributed to receipt of financial transactions pertaining to payment of bills, fees etc. (e-payments)					

Section B: EFFECT OF E-BANKING ON PERFORMANCE OF THE FINANCIAL INSTITUTION

7. Effect of electronic Banking on Transaction Costs

Key: *Strongly agree* (5), *Agree* (4), *Not sure* (3), *Disagree* (2), *Strongly Disagree* (1)

	Response	**5**	**4**	**3**	**2**	**1**
A	The low transaction costs of electronic banking has led to increased customer deposits					
B	The low transaction costs of e-banking has increased frequency of customer transactions hence increase in transaction fees					
C	The low transaction costs has led to payment of credit facilities promptly					
D	The low transaction costs had increased product uptake such as ATM service Mobile money					

For questions 7 – 12, Tick your rating on how electronic banking tools facilitate Transactions, customer satisfaction, Management quality, return on investment and Customer deposits. Key: *Strongly agree* (5), *Agree* (4), *Not sure* (3), *Disagree* (2), *Strongly Disagree* (1)

	Response	**5**	**4**	**3**	**2**	**1**
7.	**Mobile Banking and performance**					
A	Mobile banking service helps to reduce transaction costs					
B	Mobile Banking service improves customer satisfaction and access to banking services					
C	Mobile Banking improves Bank management by reducing transaction processing time, ease in auditing, risk management and loan administration					
D	Mobile Banking lead to increased return on investment to Bank shareholders					
E	Mobile Banking increases customer deposits					

8.	**Internet Banking and Performance**					
A	Internet banking service helps to reduce transaction costs					
B	Internet Banking service improves customer satisfaction and access to banking services					
C	Internet Banking improves Bank management by reducing transaction processing time, ease in auditing, risk management and loan administration					
D	Internet Banking lead to increased profitability of the bank					
E	Internet Banking increases customer deposits					
9.	**E-Payments and performance**					
A	E-payments service helps to reduce transaction costs					
B	E-payments service improves customer satisfaction and access to banking services					
C	E-payments improve Bank management by reducing transaction processing time, ease in auditing, risk management and loan administration					
D	E-payments lead to increased profitability of the financial institution					
E	E-payments are associated with increase in customer deposits					
10.	**EFTs and performance**					
A	With EFTs transaction costs are cheaper than traditional cheque processing					
B	EFTs improve customer satisfaction and access to financial services					
C	EFTS improve management quality by reducing transaction processing time, ease in auditing, risk management and loan administration					
D	E-payments lead to increased Profitability of the financial institutions					
E	E-payments are associated with increase in customer deposits					
11.	**Electronic Card (ATM, Debit and Credit Cards) and performance**					
A	With Electronic cards transaction costs are cheaper than traditional cheque processing					
B	Electronic card improve customer satisfaction and access to financial services					
C	Electronic Card improve management quality by reducing transaction processing time, ease in auditing, risk management and loan					

	administration					
D	Electronic Card lead to profitability of the financial institutions					
E	Electronic Card are associated with increase in customer deposits					

SECTION C: RELATIONSHIP BETWEEN ELECTONIC BANKING AND PERFORMANCE OF FINANCIAL INSTITUTIONS

12. How do you rate the relationship between electronic Banking and Banks performance using the following indicators?

Definition of scale for assessing how E-Banking has Promoted performance of the Bank

Strongly agree (**5**), *Agree* (**4**), *Not sure* (**3**), *Disagree* (**2**), *Strongly Disagree* (**1**)

Performance Measures	**5**	**4**	**3**	**2**	**1**
Reduced Cost					
Increased Profit					
Increased customer satisfaction and access to accounts					
Increased Customer deposits					
Improved management quality					

13. Factors affecting effectiveness of electronic Banking. (Tick (√)the factors you think affect the effectiveness of electronic Banking in your financial institution)

a. Regulation by Bank of Uganda ☐
b. Availability of Internet ☐
c. Reliability of Network ☐
d. Security problems ☐
e. Power failure ☐
f. Inadequate knowledge of using the e-banking tools ☐
g. Low confidence levels in E-Banking ☐

14. Rate how you perceive electronic Banking in day to day transactions with the bank.

Very good ☐ Good ☐ Fair ☐ Poor ☐ Not Sure ☐

Thank you for your cooperation

INTERVIEW GUIDE: BANK MANAGERS

Section A: Bio-Data

1. Managers Sex

Male ☐ Female ☐

2. Level of Education

Postgraduate ☐

Graduate ☐

Diploma ☐

Certificate ☐

Other (specify) ……..

3. Age group

21 – 30 ☐

31 – 40 ☐

41 – 50 ☐

51 and above ☐

4. How long have you been a customer of this Bank?

1 – 3 Years ☐

3 – 5 Years ☐

5 – 7 years ☐

7 – 9 years ☐

10 years and above ☐

Section A: E-BANKING TOOLS/SERVICES USED BY THE BANK

5. What could be the E-Banking tools adopted by this Bank

Tool	**Tick (√) if Present**
• Electronic Funds Transfer	
• Mobile Banking	
• e- Payments	
• Internet Banking	
• Electronic Card	

6. How effective is E-Banking in promoting the services listed below.

Rate how E-Banking promotes the following Transactions. **Definition of scale for assessing how E-Banking has promoted the services offered.**

Strongly agree (**5**), *Agree* (**4**), *Not sure* (**3**), *Disagree* (**2**), *Strongly Disagree* (**1**)

	Roles of E-Banking	**5**	**4**	**3**	**2**	**1**
a.	Electronic Banking services have contributed to the increase in the customer deposits to the Bank.					
b.	Electronic Banking services have contributed to increasing number of clients to the Bank					
c.	Electronic Banking services have increased the quality of work offered by the bank to satisfy customers.					
d.	Electronic Banking services have contributed to reduction in physical cash deposits and cash withdraw transactions.					
e.	Electronic Banking services have contributed to lessening the burden of account auditing by bank official which improves management of the Bank.					
f.	Electronic Banking services have contributed to increasing the percentage of transactions processed and completed by financial institutions.					
g	Electronic Banking services have contributed to receipt of financial transactions pertaining to payment of bills, fees etc. (e-payments)					

Section C: EFFECT OF E-BANKING ON PERFORMANCE OF THE FINANCIAL INSTITUTION

7. Effect of electronic Banking on Transaction Costs. Rate the net effect of e-banking on transaction according to the statements below.

Key: *Strongly agree* (5), *Agree* (4), *Not sure* (3), *Disagree* (2), *Strongly Disagree* (1)

	Response	**5**	**4**	**3**	**2**	**1**
A	The low transaction costs of electronic banking has led to increased customer deposits					
B	The low transaction costs of e-banking has increased frequency of customer transactions hence increase in transaction fees charged					
C	The low transaction costs has led to payment of credit facilities promptly					
D	The low transaction costs had increased product uptake such as ATM service, Mobile money etc.					

8. How do you rate the effect of electronic Banking on Banks performance using the following indicators?

Definition of scale for assessing how E-Banking has Promoted performance of the Bank

Strongly agree (**5**), *Agree* (**4**), *Not sure* (**3**), *Disagree* (**2**), *Strongly Disagree* (**1**)

Performance Measures	**5**	**4**	**3**	**2**	**1**
Increased Return on Investment					
Reduced Cost					
Customer satisfaction					
Increased Customer deposits					
Improved management quality					

9. Factors affecting effectiveness of electronic Banking. (According to the factors listed below, what do you think affect the effectiveness of electronic Banking in your financial institution?)

a. Security problems ☐
b. Difficulty in use by the customers ☐
c. Poor perception by the customers ☐
d. Low confidence levels in E-Banking ☐
e. Unfavorable Laws by Bank of Uganda ☐

10. In your view, what is the general perception about electronic banking with regard to performance of your financial institution?

Documents to be reviewed

Indicator	Years				
	2015	2016	2017	2018	2019
Electronic Banking					
Investment in FinTech Infrastructure					
Electronic Banking Subscribers					
Performance Indicators					
Customers deposit growth					
Profitability (Growth in Profit after Tax)					
Number of Active Deposit accounts/Customers					
Transaction fees and commission Income					