CAVENDISH UNIVERSITY ZAMBIA

ASSESSING THE EFFECT OF FINANCIAL TECHNOLOGY ON COMMERCIAL BANK DEPOSITS IN ZAMBIA. A CASE STUDY OF ZANACO

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A dissertation submitted in Partial Fulfilment of the requirement for the Awards of The Bachelor’s Degree of Business Administration from Cavendish University of Zambia.
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ABSTRACT

Over the years, we have witnessed extraordinary advances in financial technology. This include innovation in mobile payments, digital currencies, peer-to-peer lending and many more. It is imperative to note that most of these financial technology innovations have emerged outside the traditional financial and banking system since they are largely driven by non-bank entities. The aim of this study is to summarize the research and findings in this developing field. It thereof assesses the effect it has brought on the traditional financial and banking system as it identifies the gaps in between and provides directions for further studies. Lastly, with the pressure that financial technology has erected in the traditional financial and banking system to embrace new technologies, the banking system has taken a significant step in this track in a quest to protect its stakeholders and its market.
DECLARATION

I…………………………………………declare that the work presented in this dissertation is original. It has not been presented to any other university or institution. Where the work of other people has been used references have been provided. It is in this context that I declare this work as originally mine, and it is hereby presented in in fulfillment of the requirements for the award of the Bachelor of Business Administration, Cavendish University, Zambia.

Student’s signature…………………………….. Date………………

I………………………………….being the supervisor, has read this dissertation and approved it for the requirements of the Bachelor of Business Administration, Cavendish University, Zambia.

Supervisor’s signature…………………………….. Date………………
Dedication

This study is dedicated specially to my elder brother George and elder sister Jessie for their tireless effort and sacrifice to ensure I attain university education. My parents and rest of my siblings for their guidance, encouragement and caring support. The Almighty God for His never-ending blessings without which it is impossible to accomplish anything.
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Thank you to my supervisor, Mr. J.C Phiri for providing guidance and feedback throughout this project.
List of Acronyms

ACH- Automated Clearing Houses
APIs - Application Programming Interfaces
ATMs-Automated Teller Machines
BoZ- Bank of Zambia
CCPC- Competition and Consumer Protection Commission
COVID-19- Corona Virus 2019
FinTech-Financial Technology
ICT- Information and Communications Technology
IT- Information Technology
MoH- Ministry of Health
MNOs- Mobile Network Operators
MoMo- Mobile money
MTN- Mobile Telephone Network
PACRA- Patents and Companies Registration Agency
SMEs- Small and Medium Enterprises
UNCDF- United Nations Capital Development Fund
W.H.O- World Health Organization
ZANACO- Zambia National Commercial Bank
ZECHL- Zambia Electronic Clearing House Limited
ZICTA- Zambia Information and Communications Technology Authority
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CHAPTER ONE

1.0 Introduction

“When fintech emerged in the 21st Century, the term was initially applied to the technology employed at the back-end systems of established financial institutions. Since then, however, there has been a shift to more consumer-oriented services and therefore a more consumer-oriented definition. Fintech now includes different sectors and industries such as education, retail banking, fundraising and nonprofit, and investment management to name a few” (Kagan, 2019).

(Kagan, 2019) describes financial technology as new tech that seeks to improve and automate the delivery and use of financial services. At its core, fintech is utilized to help companies, business owners and consumers better manage their financial operations, processes, and lives by utilizing specialized software and algorithms that are used on computers and, increasingly, smartphones.

The study sought to contribute on the already existing literature on how best banks have made it possible to move with time and technological trends that are here to stay and many others are yet to come by breaking down the theme or topic under discussion “Assessing the effect of Financial Technologies on Bank Deposits in Zambia.

1.2 Background to the study

Since the introduction of financial technologies, innovators have come with several financial technology mediums creating a wide variety of such platforms and some of them have been birthed with the aim to compete with traditional financial intermediaries in the delivery service systems to their customers. FinTech is a new industry that uses technology to improve activities in finance. Kagan J. (2019) defines a commercial bank as a type of financial institution that accepts deposits; offers checking account services; makes business, personal and mortgage loans; and offer basic financial products like certificates of deposit and savings accounts to individuals and small business.

Bank deposits consist of money placed into banking institutions for safe keeping. These deposits are made to deposit accounts such as savings accounts, checking accounts and money market
accounts and can be withdrawn by the account holder as set forth in the terms and conditions governing the account agreement (Kagan, 2018).

1.2.1 Institutional Profile
The Zambia National Commercial Bank Plc is a Zambia-based company, which is engaged in the provision of commercial banking and related services to the general public. The Bank's segments include Corporate Banking, Retail Banking, Treasury and Others. The Corporate banking segment consists of direct debit facilities, accounts, deposits, overdrafts, loans and other credit facilities and foreign currency. The Retail banking segment consists of private banking services, private customer accounts, savings, deposits, investment savings products, safe custody, credit and debit cards, consumer loans and mortgages. The personal account, electronic banking, loans, retail tariffs and agent banking. ZANACO’s other operations consist of Treasury management, Credit and computer services. It also offers personal banking services, agri-business, small or medium-sized enterprise (SME), corporate and treasury services (ZANACO, 2020). As of 2019, ZANACO had 69 branches in 10 provinces across the country (Barwuah, 2019).

1.2.2 ZANACO’s Response to Financial Technology
In a quest to meet some of the business environment demands due to the coming in of fintechs on the Zambian financial scene, ZANACO and Airtel Zambia a telecommunications company partnered to allow Airtel Money Agents and Dealers to deposit cash into their Airtel Money wallet at any ZANACO branch or ZANACO Express shop across the country (Sandi, 2018).

Chona (2018) postulates that the push of digital financial services Airtel Zambia had undertaken was about creating access and affordable products and services to financially include the populations at large. He believed the partnership was a great opportunity to enhance already existing platforms and also encourage customers to move from exclusively cash-based transactions to formal digital financial services.

Chona (2018) further says that as technology continues to evolve with time, the partnership with ZANACO would create many points for Airtel money agents to rebalance their mobile money accounts so they can continue to service customers more effectively.
“ZANACO has continued to invest heavily in new systems and digital technology to enhance our banking services offering through the development of new products and services to customers. therefore, today ZANACO is happy to be partnering with airtel to enhance the use of digital innovations as a tool for driving economic growth and financial inclusion. ZANACO has a vision to be the top transactional bank by 2020, which can be achieved through the creation of products and services that add value to people’s lives” (Ng’ambi, 2018).

Sandi (2018) concluded that the partnership would deal with some of the missing links in the digital financial services space, aimed at driving financial inclusion for the “the mass market consumers”. She also noted with concern that corporates focus on the top of the pyramid, without paying attention to the low-income earners who are equally as important. The partnership is evidence that this can be a reality.”

In 2019, MTN mobile money partnered with ZANACO Bill Muster to launch a service that enable customers to conveniently pay school fees which was aimed at growing financial inclusion and bringing banking services to the unbanked (TechTrends, 2019). As of 2019, MTN Mobile Money platform had more than 1.1 million customers which made it the largest mobile money platform in Zambia (Barwuah, 2019).

1.2.3 ZANACO Xpress
ZANACO Xpress is a partnership with a large number of agents in urban and rural areas through which ZANACO customers can deposit cash into a ZANACO account or can withdraw money from their own account at ZANACO. In this way, ZANACO further expands and strengthens its distribution network and our clients can deposit and withdraw cash at any nearby agent (ZANACO,2020).

1.2.4 Currently the following services are available: (ZANACO,2020)
- Mini statement
- Balance enquiry
- money transfers
- Deposit money into your account using your card
• Withdraw money from your ZANACO account using your card and PIN identification.
• Deposit money into any account held at ZANACO by providing the account number.

1.2.5 The benefits of ZANACO Xpress for customers are: (ZANACO, 2020)
• Reduced travel costs and time to get access to your bank account
• Convenience - less travel and waiting time as the Xpress agents are close to you
• Transactions speeds – all transactions are carried out in real-time
• Extended service hours - some agent outlets operate for longer hours and over the weekend

1.3 Statement of the Problem
The rate at which financial technology has taken over the banking system in Zambia is undeniably strong. It has without doubt changed the game as it has given traditional banking system quite a competition making it a threat. The challenge however, is to understand the influence financial technology has brought in the traditional banking system and how the use of mobile money service has enhanced deposits in commercial banks.

1.4 Research Purpose
With the continuous evolving of trends in various sectors of the world, financial technology has made transactions, payment processes, buying of things to mention but few quick, easier and smart. The aim of the study is to assess the effect of financial technologies on commercial bank deposits in Zambia. It also tries to understand how the banking system has embraced the use of mobile money services in a quest to meet the demands of the industry introduced by financial technology and lastly but not the least, how relevant it has proven to be.

1.5 Rationale of the Study
Given the thriving of mobile money services business in Zambia (mostly by telecommunication companies) at an expense of commercial banking, it is undeniable that financial technology is here to stay and many that appreciate change have embraced it making it grow exponentially. The critical question amidst all this is how commercial banks have to embrace the new era of banking and how best they can incorporate it to their operations and it is with this motive that this
study seeks to give an empirical overview of the effectiveness of financial technology on commercial bank deposits in Zambia.

1.6 Objectives of the Study
The study is conducted to achieve the following objectives.

1.6.1 General Objective
To assess the effect of financial technology on commercial bank deposits in Zambia.

1.6.2 Specific Objectives
i. To determine the effect of financial technology on bank deposits.
ii. To assess the contribution of mobile money banking on commercial bank deposits.

1.7 Research questions
The study attempts to answer the following questions in relation to the objectives outlined above.
1. How has financial technology influenced commercial bank deposits in Zambia?
2. How has mobile money banking enhanced commercial bank deposits in Zambia?

1.8 Significance of the Study
The significance of this study is the worth to note the role financial technology is playing in banking to achieve its efficiency and effectiveness in serving customers as well as other operations as well as contributing to the already existing knowledge of academia and also to offer recommendations to key players of the industry.

1.9 Scope of the Study
The coverage of this study focuses on understanding to what extent financial technology has affected the traditional banking system in Zambia and how the mobile money service has enhanced deposits in banks.
1.10 Outline of the Study

Chapter one investigates the assessment of the effect of financial technology on commercial bank deposits in Zambia. It used ZANACO as for a case study. The second chapter reviews several literature that has been written relating to the topic under discussion. Chapter three on the other hand explains the methodology used to achieve the objectives of the study as chapter four outlines the data analysis segment which presents all its findings based on the relevant data collected. Chapter five then discusses all the findings using the data collected in the field and lastly, the sixth chapter of the study concludes by stating its point of view based on findings of the research as it also suggests a number of recommendations.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
A wide range of literature has been written and published by several academicians from all over the world on financial technology and how it has influenced the banking sector.

2.2 Theoretical Framework
The emerging and fast growing of financial technology on the banking scene has been of interest in recent years. The financial services sector is at the forefront of technological innovation and widely recognized as the most extensive IT user among the service sectors (Iman, 2014).

In 2009, a national Finscope financial survey revealed that 63% of the Zambian adult population was excluded from formal financial services. Of this percentage, 66% were estimated to live in rural areas and depend on traditional agriculture. While the picture has improved to about 40% as of July 2016, the majority of the rural populace remains financially excluded, hindering their potential to access credit (Phiri, 2017).

2.2.1 Financial Innovation
Financial innovation is the unanticipated improvement in the arrangement of financial products and instruments that are stimulated by unexpected change in customer needs and preferences, tax policy, technology and regulatory impulses (Bhattacharyya & Nanda, 2000). The developments in the financial sector have not only led to the increase in the number of financial institutions, but also the development in level of complexity with new payment systems and asset alternatives to holding money. This has resulted mainly from technological advancement and increase in competition as the number of institutions increase. Developments in payment systems have started to create close substitutes for hard currency, thus affecting a core part of banking (Nyathira, 2009).

Other effects risen from the innovations in the banking sector include: increased use of paper money instead of cash. Cheques are the main paper-based mode of payment accounting for 48% of non-cash payments. Use of Magnetic Ink Character Recognition (MICR) ensures clearing of cheques speedily and efficiently. Other financial innovations include mobile banking and internet banking (Nyathira, 2009).
The primary revenue-enhancing innovations occurring today are in platform automation for branch and phone center employees, and in the newest distribution channel, internet and mobile banking. While these innovations have aspects in common, they each serve different needs in the distribution strategy of commercial banks (Mansury & Love, 2008).

According to Noyer (2007), financial innovation has not only opened up new opportunities for the sector participants, but also increased new market players arising from new products in the financial market. These developments have increased the range of financing and investment opportunities available to economic agents besides changing the role of banks with expanded diversification choices in terms of portfolio and sources of financing. He added that such developments affect the speed and strength of the channels of monetary policy transmission mechanism in the economy. Nyathira (2009) concludes that as financial markets become more liquid and complete, changes in official interest rates are more readily transmitted to the whole term structure and more generally to financial asset prices.

Financial innovation in this case financial technology indeed contributes to and is positively correlated to profitability in the banking sector particularly that of commercial banks. This is further supported by high uptake of more efficient financial systems in substitution for the less efficient traditional systems. This is evidenced by the negative correlation between Real Time Gross Settlement and Automated Clearing House (Cheques & EFTs) throughput over time; as well as that of profitability and Automated Clearing House throughput. Development of more efficient payment systems, with adequate regulation, should therefore be encouraged for improved financial performance and faster economic growth (Nyathira, 2009).

Theories concerning advantages of financial innovation have typically evolved out of the Schumpeterian argument that new products and processes developed by a firm are protected from imitation for a certain period. A successful innovation thus generates a proprietary competitive position that bestows on the firm a competitive advantage and superior performance (Lyons, Chatman & Joyce, 2007). The imitation that occurs during the Schumpeterian process of creative destruction then generates the need for enterprises to produce still more innovations in order to maintain a competitive advantage (Nyathira, 2009).
Lyons, Chatman & Joyce (2007) argue that the relevant aspects of technological change include innovations that reduce costs related to the collection, storage, processing, and transmission of information, as well as innovations that transform the means by which customers’ access bank services. They cite ATMs (automated teller machines), telephone banking, internet banking, and e-money as being among the significant innovations affecting the banking distribution system that influence banking performance significantly. Mansury & Love (2008) add that client relation management systems, bank management technologies, and various other technologies are among the major changes in internal banking systems that also have exercised a positive influence on banking performance and profitability.

2.2.2 Financial Technology

Lee & Kim (2015) describes financial technology as a portrayed new form of monetary service trade that merges IT with fiscal services similar to payments, remittances and also management of assets. Bitler (2002) adds on to say that FinTech is applied today to many financial transactions including mobile banking, a link amid a mobile cell phone with a staff or bank account. Internet banking is providing financial services through a website operated by the bank.

Schumpeter (1911) argued that the services provided by financial intermediaries mobilizing savings, evaluating projects, managing risk, monitoring managers, and facilitating transactions are essential for technological innovation and economic development.

Financial technology has come in the system due to the innovation by various parties from various areas all in a quest to improve the financial system starting from security, profitability as well as ease of access. It is through digitalization and innovation that FinTech was birthed and continuously developed and improved.

Digitalization in the banking sector opens up a whole world full of possibilities both for the institutions themselves and for consumers. Until recently, it was almost impossible to obtain credit online or for there to be banks that only carry out transactions through their mobile platforms. Today, the trend towards digitalization is increasing. So much so that digital banking is expected
to generate about $8.646 billion by 2025, with a Compound Annual Growth Rate (CAGR) of about 3.8% between 2019 and 2025 (Vector ITC, 2019).

Vector ITC (2019) describes digital transformation as a process of constant technological evolution, where companies must be up to date in the tools available for the improvement and efficiency of processes to achieve greater profitability, such as Big Data or Machine Learning. That is why it is essential to determine the benefits of digitalization for banking institutions as it further points out the following advantages:

1. **User experience**: The advance of digitalization has enabled institutions to improve the user experience in a comprehensive manner and to improve omni canal banking in its evolution towards a customer-centric model. This implies having analytical technology solutions to offer products and services tailored to users. To do this, it is necessary to take into account the knowledge of their preferences, purchasing behavior and attitudes to risk and financial health.

2. **Increase in the number of clients**: Faced with the loss of confidence by traditional banking and the growth in the use of banking apps and online banking by consumers, financial institutions have recently increased the number of customers. With the emergence of Fintech in the sector, it is clear that banks will have to change the way they conduct their business in order to avoid losing customers.

3. **Greater efficiency in processes**: With the implementation of different cutting-edge technologies such as the electronic signature or the creation of banking applications for the smartphone, banks aim to improve the efficiency of their manual processes. In this way, they seek to reduce human errors in dealings with customers. According to the company, it is estimated that correcting this type of error is usually between three and four times more expensive than creating a digital process. Digitalization in the processes grants very important improvements, since all the data and signatures are captured correctly the first time.

4. **Cost reduction**: Another advantage of digitization in banks is cost savings, both for institutions and customers, through the use of new means of payment and cashless transactions. An example could be Challenger Banks, which are those Neobanks that have a banking license to offer savings products, financing and cards in the same way as a traditional bank, but with a 100% digital operation.
5. **Better decisions based on data**: With the increasing digitalization of banks, data becomes one of the most important assets when making dynamic decisions, based on large volumes of information available to institutions. Technologies such as Big Data allow banks to base their decisions or improve processes on the data available to their customers. In recent times, the arrival of large technology companies has been a great challenge for banks, as they have a greater amount of data and have a deep knowledge of the technological solutions they offer.

### 2.2.3 Bank Deposits

Bank deposits are a sum of money held on deposit with a commercial bank or savings bank. There are two main types of deposits the first one being the current account which are withdrawable on demand. The second one is a time deposit or deposit accounts which are withdrawable subject usually to some notice being given. Sight or current accounts represent instant liquidity: they are used to finance day to day transactions and regular payments either in form of a currency withdraw or a cheque transfer whereas time deposits are usually held for longer periods of time to meet irregular payments and as a form of savings (Pass, Lowes & Davies, 2005).

Bank deposit at any particular point of time is determined by supply factors, as well as factors influencing demand for it by the public. Supply of bank deposits by the banking industry and the monetary authority of the country is generally governed by the components affecting high powered money like government budget operations, foreign exchange assets, monetary policy packages like open market operations, bank rate, etc. Demand for bank deposits is determined by factors like income or wealth, interest rate (both own interest and that of competing assets) and the number of bank branches (Bhattacharyay and Thomas, 1986).

Lacoma (2017) contributed by saying that bank deposits are a common occurrence in which customers deposit funds into their accounts. The bank must provide cash to the customer whenever funds are withdrawn; if not withdrawn, however, banks will typically use the funds as investments or loans to other customers until the depositor makes a withdrawal. This process is significant in regards to money supply, and has several ramifications.
2.2.4 Financial Technology and Bank Deposits

FinTech companies have undoubtedly penetrated the banking industry making the relevance of old tradition banking quite stunned. This simply means that these companies have made inroads into the traditional banking.

Despite the strength of having the oldest banking systems in place, commercial banks have faced business pressure in several areas due to the emerging of FinTechs. Below are some of the areas:

2.2.4.1 Online Deposits

Technology has facilitated the growth of digital deposits, so banks no longer need to rely as heavily on branches to accumulate deposits. This has leveled the playing field, enabling a host of digital players to compete for deposits. For years, a handful of digital banks have offered accounts that attracted consumers through high yields and digital convenience. Without branch networks, those companies—including American Express, Discover Financial, Ally Financial Inc., Synchrony Financial, and more recently, Goldman Sachs Group Inc.'s Marcus—have been able to accumulate significant increases in deposits using a digital platform, offering higher rates than peers. It remains questionable whether these deposits are sticky, as we believe many of these customers can move deposits quickly based on rate sensitivity. Still, deposit growth rates of banks offering online deposits is impressive and has turned out to be a competitive threat to the traditional means of gathering deposits (Plessers, Aurora & Browne, 2019).
Plesser, Aurora & Browne (2019) further stated that some banks have responded to the digital threat by offering their own digital platform, including Citigroup Inc., JPMorgan Chase & Co., PNC Financial Services Group Inc., and Citizens Financial Group Inc. Such is a necessary step to take and wise for management to do, so as digital deposits stays relevant for the protection of their deposit market share since the strategy also helps banks expand deposit footprints in new regions without the expense of building branches.

2.2.4.2 Payments

Within the payment space, consumers continue to mostly initiate electronic payments with bank-issued credit and debit cards, sending funds mainly through the open-loop networks of Visa and Mastercard or the smaller closed-loop networks of American Express and Discover. Banks collect fees from merchants when consumers use the cards they issue. Many fintech advancements (e.g., mobile card readers, QR codes, and contactless cards) are also facilitating payments via banks cards rather than replacing them. PayPal is one nonbank player that has established a material market position with consumers, as well as merchants who accept PayPal payments. PayPal still relies to a degree on the card networks as well as banks, but transactions on the PayPal system can diminish the economics for banks, depriving them of fees they would have otherwise collected on a card transaction (Plesser, Aurora & Browne, 2019).

2.2.4.3 The Bank’s Response to FinTech Competition

Banks are responding in different ways to this digital threat. The following are five from several digital threat responses banks have undertaken according to Arnold (2018);

One of the responses banks have undertaken is of digital attackers. This simply means that banks in this group consider that the best form of defense is attack. He gave an example of banks with the most advanced digital strategies, like DBS, which launched their own digital banks to enter new markets or defend their patch.

The second response is acquisitions. He stated that banks hampered by the vast cost and complexity of maintaining their old systems, sometimes find it easier to buy or invest in a start-up that has built a digital platform from scratch.
Thirdly, partnerships are one of the many ways banks have responded to the digital threat. He alluded that bank bosses complain loudly of an uneven playing field that allows big technology groups to offer financial services without the burdensome regulation that traditional lenders face and that has prompted some banks teaming up with Big Tech groups. The plan is simply to expand the service to other markets he added.

Diversification on the other hand is one of the responses banks have undertaken to combat digital threats as he said while their core payments and lending businesses may be under pressure from digital competitors, some banks are using new technologies to move into new markets.

Arnold (2018) further concluded with his fifth response to digital threats undertaken by banks by stating ‘If you can’t beat them, join them’ of which some banks decide that the threat from digital competition is so great that they just have to amend their business models.

2.3 Previous Studies

The use of smartphones for mobile banking, investing services and cryptocurrency are examples of technologies aiming to make financial services more accessible to the general public. Financial technology companies consist of both startups and established financial and technology companies trying to replace or enhance the usage of financial services provided by existing financial companies.

Many existing financial institutions are implementing Fintech solutions and technologies in order to improve and develop their services, as well as gaining an improved competition.

2.3.1 Technology and its role in Banking

The banking sector has embraced the use of technology to serve its client’s faster and also to do more with less. Emerging technologies have changed the banking industry from paper and branch-based banks to” digitized and networked banking services. Unlike before, broadband internet is cheap and it makes the transfer of data easy and fast. Technology has changed the accounting and management system of all banks. And it is now changing the way how banks are delivering services to their customers. However, this technology comes at a cost, implementing all this technology has been expensive but the rewards are limitless (Ramey, 2012).
According to Ramey K. (2012), the following are some of the roles that technology has and is playing in the banking industry:

- **E-banking**: This enables the bank to deliver its services easily to its high-end customers. To make the system user friendly to all clients, banks have used a Graphical User Interface (GUI), with this software, customers can access their bank details on their own computers, make money transfers from one account to another, print bank statements and inquire about their financial transactions. Another technology used by banks to exchange data between the bank and clients is called Electronic Data Interchange (EDI); this software can be used to transmit business transaction in a computer-readable form. So, the client on the other end will be in position to read the information clearly.

- **NRI Banking Services**: This technology has been embraced in countries like India, USA, UAE, just to mention but a few. Since many people go abroad to work, they have a need of supporting their families. So, technology has made it simple for them to send money to their loved ones easily.

- **RURAL Banking**: Unlike in the past when banking was centralized in urban areas, now day’s technology has made it simple to set up banking facilities in rural areas. For example: In Africa, they have introduced Mobile money banking facilities. In this case, a user in a rural area will have an account with a mobile company which is opened for free. They can then deposit money on that account via a nearby mobile money operating center. This money can be withdrawn at any time any were in that area and they can also receive or send money using the same system.

- **Plastic money**: Credit cards or smart cards like ‘’VISA ELECTRON’’ have made the banking industry more flexible than before. With a credit card, a customer can borrow a specific amount of money from the bank to purchase any thing and the bank bills them later. In this case, they don’t have to go through the hassle of borrowing small money. Then with Smart Cards like visa electron, a customer can pay for anything using that card and that money is deducted from their bank accounts automatically, they can also use the same card to deposit or withdraw money from their accounts using an ATM machine.

- **Self-inquiry facility**: Instead of customers lining up or going to the help desk, banks have provided simple self-inquiry systems on all branches. A customer can use their ATM card to know their account balance, or to get their bank statement. This saves time on both sides.
• **Remote banking**: Banks have installed ATM machines in various areas; this means a customer does not have to go to the main branch to make transactions. This facility has also enabled anytime banking, because customers can use ATM machines to deposit money on their accounts. Remote banking has helped people in rural areas improve on their culture of saving money.

• **Centralized Information results to quick services**: This enables banks to transfer information from one branch to another at ease. For example, if a customer registered their account with a rural branch, they can still get details of their account while at the main branch in an urban area.

• **Signature retrieval facilities**: Technology has played a big role in reducing fraud in banks which protects its clients. For example, banks use a technology which verifies signatures before a customer’s withdraws large sums of money on a specific account and this reduces on the errors or risks which might arise due to forgery.

### 2.3.2 Bank Deposits

Kagan J. (2018) bank deposits consist of money placed into banking institutions for safekeeping. These deposits are made to deposit accounts such as savings accounts, checking accounts and money market accounts. The account holder has the right to withdraw deposited funds, as set forth in the terms and conditions governing the account agreement.

The deposit itself is a liability owed by the bank to the depositor. Bank deposits refer to this liability rather than to the actual funds that have been deposited. When someone opens a bank account and makes a cash deposit, he surrenders legal title to the cash, and it becomes an asset of the bank. In turn, the account is a liability to the bank (Kagan J. 2018).

There are several different types of deposit accounts including current accounts, savings accounts, call deposit accounts, money market accounts and certificates of deposit (CDs). Bank depositing can also refer to an amount of money in cash or check form or sent via a wire transfer that is placed into a bank account. The target bank account for the Bank Deposit can be any kind of account that accepts deposits (Kagan J. 2018).
A typical example of a bank deposit according to (Kagan J. 2018) is normally made when opening an account or in the course of routine business or personal transactions that involve placing funds with the bank for future use. Bank deposits can be made in a number of different ways. The most direct way is to walk into a bank or a bank branch in which you hold an account. You are then usually required to fill in a Bank Deposit slip with the particulars of your account and the amount of money you wish to deposit. In addition, Bank deposits can be made via wire transfer, as well as through a direct deposit plan from employers in many cases.

2.3.3 Financial Technology in Zambia

The Financial Technology (Fintech) revolution across the globe continues to disrupt status quo as it brings solutions that are helping organizations improve their service and operations while enjoying the benefits of cost savings and operational efficiencies. This revolution is committed to delivering the next level banking experience to the client, one that will bring forth a paradigm shift (Mofya, 2019).

Mofya (2019) further explains that there has been increased collaboration between Fintech companies and banks seeking to enhance their product offering. It’s safe to say Fintech’s and banks complement each other in that the former rely on banks to provide back-end transaction details, risk management and regulatory compliance support for their solutions to work. Furthermore, there has been a notable trend in financial institutions making investments in modern technology to support their businesses while partnering with Fintech’s and Mobile Network Operators.

“It’s no secret that mobile, card and automated clearing house (ACH) transactions are growing while cash use is decreasing. The Bank of Zambia (BoZ) reports that mobile transactions on digital platforms have drastically grown from 17,000 worth of volumes in December 2012 to 300,000 in December 2018 and these volumes are yet to increase. Such statistics show an upward trend in digital adoption which means that there is potential for financial institutions in Zambia to support technological advancements that will facilitate business operations on digital platforms. This presents a unique opportunity for Fintech’s to bring innovative solutions that better meet the customers’ needs and drive regular usage of digital platforms – It would also be useful to
understand that because Fintech’s are not regulated by the same laws as banks, they tend to be more flexible with digital capabilities that sustain convenience” (Mofya, 2019).

Figure 2: Zambia Fintech Landscape-Critical Stakeholders (source UNCDF)

Figure 3: Zambia Fintech Players-Initial Scoping (source UNCDF)

As at 2018, the United Nations Capital Development Fund (UNCDF) reported at least 25 Fintech’s providing solutions for sectors which included health, agriculture and financial services. Of the 25 above, the most common used Fintech’s are Kwikfin and Jumo for digital financial solutions
offering credit lending, Zoono, Kazang and Zazu for cash payments/transfers providing solutions to retailers, Necor and Probase for ICT solutions to financial institutions and Bongohive, Zambia’s first and only technology innovation hub. However, these Fintech’s depend on collaborations with stakeholders to function and remain relevant. Some of the key stakeholders in Zambia include Zambia’s three MNOs – Airtel, MTN and Zamtel, all banks and of course the regulators – BoZ, ZICTA, ZECHL, CCPC and PACRA.

Mofya (2019) further postulates; from the landscape above, you may be wondering why some Fintech’s are more successful than others. Could it be that others have not been exploited enough? Are they costly to use? Or is there no support to drive innovation for start-ups? He identified a few challenges holding back the growth of tech-driven start-ups in Zambia below.

- **Entry barriers** – High lending rates make it difficult for start-ups to access funding for their innovative ideas and even when they do get funding, access to the right contacts (decision makers) in these institutions to discuss collaboration possibilities can also make it difficult for fintech’s to start hence foreign players/brands with already existing partnerships are given priority to take up these opportunities.

- **Regulation** – Regulators consistently struggle to keep pace with the speed of innovation. Given the intense scrutiny financial institutions face, they may be wary of investing in fintech solutions as that has the potential to derail partnership conversations. However, the launch of the ZICTA ICT innovation programme has since provided a regulatory platform for entrepreneurs with innovative ideas to thrive but there is a need for policies and incentives to be formulated that will guide the workings of the local Fintech space.

- **Compatibility with existing IT systems** – Banks are now more than ever focusing on establishing stable IT infrastructures which require updates to core systems that allow them to operate efficiently. A lot of time and resources are invested in doing this hence the aspect of incorporating new innovations is therefore closely scrutinized. Some banks are not willing to support integration of their application programming interfaces (APIs) (systems which enable developers to create software apps) with Fintech’s due to concerns around data & cyber security. In addition, some new technologies being created by Fintech’s are incompatible or require significant changes to existing IT infrastructures hence become hard to sell despite their potential benefits.
• Innovation hubs – There isn’t a huge presence of technology incubators in Zambia such as Bongohive to promote skill, capacity and capability development in the Fintech space. There is a need for active innovators and believers who will see Fintech’s potential to transform banking the way Uber has impacted transportation; Airbnb has disrupted travel accommodations and Amazon has revolutionized commerce.

Mofya (2019) lastly concluded by saying there is no shortage of opportunities for Fintech’s to contribute to the financial inclusion sector by bringing financial services within the reach of all Zambians. As a matter of fact, in November 2017, the Ministry of Finance unveiled the country’s first National Financial Inclusion Strategy which targets an overall increase in financial inclusion from 59% to 80% in the formal sector and 38% to 70% for the informal sector by 2022 with key drivers being (1) accessible digital platforms through mobile phones, branches & ATMs and (2) creation of innovative client focused products to promote savings and credit facilities for start-ups and SMEs.

2.4 Research Variables

The research variable arising from this literature review are independent and dependent variables. In this case, financial technology has mobile money as the independent variable whereas the dependent variable is the bank deposits.

2.5 Conclusion

Although, it took less than a decade for FinTech to disrupt the global financial service sector, there isn’t still a common understanding of the definition of FinTech (Schueffel 2016). This study thereof concludes that the disruption of financial technology in the financial sector specifically in banks, was timely because of the continuous evolving of global trends from all works of life.

Lastly, it can only be fair for the banking sector to embrace and incorporate their various operations with financial technology so as to meet customers’ and the markets’ current and present trends and demand for efficiencies
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
A qualitative study is appropriate when the goal of research is to explain a phenomenon by relying on the perception of a person’s experience in a given situation (Stake, 2010). As outlined by Creswell (2003), a quantitative approach is appropriate when a researcher seeks to understand relationships between variables.

This section focuses on the methodology of the Study. It also looks at the research approach, design, strategy and sources of data collection. The other components that are encompassed are sampling frame, sample size, sampling techniques, data collection techniques, reliability and validity, ethical considerations and the limitations of the study.

3.2 Research Philosophy and Approach
The researcher adopted the objectivism philosophy based on the fact that the researcher seeks to understand the banking system after the introduction of fintech in the financial fraternity and the approach employed was a deductive approach which works from a more general reasoning to a more specific level of reasoning.

In this view, the research firstly drew up a general objective, then narrowed that down into more specific research questions that can be tested and further, observations collected. This ultimately guided the research to be able to test the research questions with specific data.

3.3 Research Design
This study used an explanatory type of research to assess the effectiveness of FinTech on commercial bank deposits in Zambia and both quantitative and qualitative research design were used to gain information.

The study will also implore a descriptive research design to describe the spectacle as it exists.
3.3.1 Research Strategy
Isaac & Michael (1997, p. 136) describes a survey’s purpose as to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objectives have been met, to establish baselines against which future comparisons can be made, to analyze trends across time, and generally, to describe what exists, in what amount, and in what context.

In spite of the COVID-19 pandemic which has put most activities on a stand still globally, the strategy (face to face survey) used to collect data took into full account all the health measures given by the MoH and the W.H.O for the safety of both the researcher and respondents. The research strategies include group focus on the people who own bank accounts but prefer using mobile money/banking, people who do not own bank accounts but have mobile money accounts and people who only have bank accounts and have no interest in using mobile money accounts. Other strategies included qualitative interviews, case study as well as quantitative survey.

3.3.2 Research Choice
The data gathered for this research did not only require one technique hence the use of the multiple methods research choice. In this research thereof, quantitative and qualitative data collection techniques and analysis procedures were used, either at the same interval or one after the other but not combining them.

3.3.3 Time Horizon
A longitudinal study was conducted in this research as it gathered vast amounts of data from various sources and respondents through the use of a questionnaire.

3.4 Conceptual model and operationalization of research variables
Conceptual framework is a diagram that shows the how the independent variable is related to the dependent variable. Mobile banking is the independent variable in this study which will be measured by the number of transactions conducted through them and the dependent variable is
number of deposits made at the bank physically. Technology innovation will be used in this study as a control variable as shown in Figure 4.

Financial Technology is an industry that uses technology to improve activities in finance. The use of smartphones for mobile banking, investing services and cryptocurrency are examples of technologies aiming to make financial services more accessible to the general public.

3.5 Source of data

3.5.1 Primary Data

Primary data refers to data observed or collected from firsthand experience thus original data collected at the source and compiled. This data will be collected from the self and interviewer administered questionnaire.

According to (Sekaran and Bougie, 2010), primary research issued to collect the required data to answers the research question. Primary data can be collected from the following sources: individuals, focus groups, panels and respondents or even from the Internet when the questionnaire is sent via this medium.
For the purpose of this dissertation, a questionnaire was part of the survey strategy and it was given to the target population so as to obtain their views.

### 3.6 Sampling Design

#### 3.6.1 Sampling frame

In sampling, the population targeted for this investigation, participants were not randomly selected since not everyone has a bank account, mobile banking (mobile money), has both or does not have any. The sampling technique used is known as criterion sampling.

During the process of conducting the interviews, the sample method used is guided by the following principles: all the cases that meet the criterion have to be chosen for quality assurance. In this case the bank and FinTech users meet the criterion to be interviewed. Parallel to this method the purposeful sampling method is used to complement criterion sampling. This method requires that the researcher selects information-rich cases and allows the population size and specific cases to be dependent on the study purpose. The main advantage of this method is that it allows the researcher to target those places where the information required is in abundance to ensure that the investigation is comprehensive (Jacob, 2007: 34).

#### 3.6.2 Sample size

The questionnaire was given to 200 people of which only 100 showed interest is doing the survey. The questionnaire was spread via snowball effect, meaning an exact sample size could not be given before the research. All participants are Ndola residents consisting of bank account owners, mobile money banking users, bank employees and mobile money booth operators.

#### 3.6.3 Sampling Techniques

The study employed purposive sampling technique based on the position hold respondents during the survey. Respondents were chosen based on the researcher’s judgment that they have desirable characteristics and can provide the required information. Purposive sampling technique was chosen because of its time-and cost-effectiveness.
3.7 Data Collection Techniques

3.7.1 Questionnaire
This instrument was used to collect primary data. It contained self-administered questions that are both open and close ended for those who know how to read and write. The researcher designed questions which respondents answered in writing. Data would be easy and quick at collecting as respondents answered the questions in their own time. This instrument is good as some respondents prefer to offer information in their own time.

3.8 Data processing
Data was processed manually and scientifically. Tallies were made for each question, sorting cards where data is to be recorded using computer packages such as Microsoft excel and word so as to process collected data.

3.9 Reliability and Validity

3.9.1 Reliability
The reliability of this research is based on the consistent methods used in various literatures it is relating to. According to Middleton (2019), the extent to which the results can be reproduced when the research is repeated under the same conditions by checking the consistency of results across time, across different observers, and across parts of the test itself. A reliable measurement is not always valid: the results might be reproducible, but they’re not necessarily correct

3.9.2 Validity
The validity of this research is that it gives an overview of how fintechs have influenced the banking sector in Zambia. Middleton (2019) postulates, the extent to which the results really measure what they are supposed to measure by checking how well the results correspond to established theories and other measures of the same concept. A valid measurement is generally reliable: if a test produces accurate results, they should be reproducible.
3.10 Ethical Considerations

In order to observe the integrity of the research, permission to carry out the study was obtained from the relevant individuals and institutions. An explanation on the purpose of conducting this research was given before involving the potential respondents so as to reduce the possibility of misinterpretation of the study topic by the respondent.

Lastly, in avoiding imposition and infringing of privacy, the right of privacy was observed by obtaining direct consent for participation from the respondent and measures were taken to ensure confidentiality. The Researcher also omitted the names of the respondents to ensure anonymity.

3.11 Limitation of Study

• Corona Virus pandemic restrictions
• The population under the study being limited may not result into generalizability.
• The sample size selected by the researcher is limited
• The time aspect in collecting the responses when conducting the research study was a limiting factor
• Resources were limited, which hindered the research to be conducted on a wider geographic area.
CHAPTER FOUR
DATA ANALYSIS

4.1 Introduction
The study sought to critically examine the effect of financial technology on commercial bank deposits in Zambia. The findings are presented according to the themes derived from research questions. This research will employ both qualitative and quantitative methods in analyzing the data that will be collected. The data will be presented and analyzed using tables, graphs, charts and interpretation of the data contained therein.

4.2 Data Analysis
4.2.1.0 Table 1 Which platform do you prefer between Mobile Money or Bank?
Table 1 depicts the number of respondents that have different preferences of platforms they deem fit for their deposits.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>Mobile money</td>
<td>70</td>
<td>70%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>
4.2.1.1 Reasons for choosing MoMo services?

Table 2 depicts the number of respondents with various reasons for choosing the mobile money service as opposed to banks.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easily Accessible</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Easy to use</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Use of USSD</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>No internet needed</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>No/Less paperwork</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Table 2 Reasons*

4.2.1.2 Table 3. Has it brought more good than bad?

Table 3 depicts the number of respondents that believe that fintech has brought more good against those that believe that it has brought in problems according to their different experiences with the platforms.

<table>
<thead>
<tr>
<th>Influence</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Bad</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Table 3: What influence has fintech brought?*

4.2.1.2 Are banks still relevant?

Table 4 depicts the number of respondents that still think banks are still relevant against the number of respondents that think banks are no longer relevant with the introduction of financial technology.
### Table 4: Relevance of Banks

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

#### 4.2.1.4 Social demographic characteristics

It is imperative to note that social demographic characteristics play a vital role in parameters that can have a behaviour on any phenomenon in any society. It can act as an indicator of how informed the society of various demography is giving all the relevant and needed data for the study. These were looked at in relation to the assessment of the effect of financial technology on bank deposits in Zambia. The study targeted both male and female respondents of different age groups, class and income levels who gave an assortment of findings that were not biased.

#### 4.2.1.5 Gender of the respondents

The number of respondents in the study area by gender was established. Demographic data on the general respondents reveal a skewed distribution in respect of gender as the majority was males with 60% as opposed to the females 40%. The study findings indicate that males had a bigger share of participation than females in the study. Table 1 depict gender proportions in preferences.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>40</td>
</tr>
<tr>
<td>Male</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 5: Gender composition of respondents**

Based on the table shown above, the high number of (60) male participants shows how willing, approachable and interactive the male respondents where as opposed to the female respondents’ number of only 40.
4.2.1.6 Age of Respondents
The ages of respondents varied from 20-50 years old. The majority of research respondents, about 79% fall within the range 20-35 years followed by respondents aged between 35-45 years who made up 16% of respondents while the remaining 5% fell in the category 45-50 years old as shown in the chart below.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>25</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>28</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>30</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>33</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>35</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>40</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>45</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>50</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 6: Age

4.2.2 Content Analysis
The main focus of the research was to assess the effect of financial technologies on bank deposits in Zambia. The results are however debatable as its implementation lies between forecasts and challenges. The research thereof admits that after FinTech was introduced on the Zambian financial scene, it became a game changer as the use of platforms such as MoMo services mainly introduced by telecommunication companies received an overwhelming response from the general public as the number of users increased drastically as some users abandoned banks completely.
CHAPTER FIVE
DISCUSSION OF FINDINGS

Figure 5: Platform

As a question was asked to 100 respondents, the findings in figure 5 show a high percentage of 70% from the total number of respondents that prefer MoMo services (depositing, transactions etc.). From the findings, 70% have migrated to new financial innovations due to their own various reasons whereas the remaining 30% still prefer to be depositing in banks as opposed to MoMo services.
Based on figure 6 shown above, people have various reasons for opting to switch from ordinary bank depositing to the use of new financial innovations in this case mobile money. 40% of these people being the highest of the many reasons given by the respondents, most of them find the use of mobile money to be very easy to use whereas 30% find mobile money kiosks easily accessible due to the mushrooming of this business. 25% of the respondents prefer it due to the fact that there is no need for internet connectivity for one to make a transaction or access their account and with the use of unique USSD codes, 15% of the respondents find it ever better and user friendly specially with how expensive mobile data (internet bundles) have been in Zambia in the recent
past and lastly, 10% of the respondents find the use of paperwork as boring and a time waster specially in this digital era.

**Figure 7: What Influence has fintech brought?**

Based on figure 7 shown above, the highest number of respondents of 90% believe that the introduction of financial technology of the financial scene has brought in a lot of good than bad as it has made it easier to do many things that used to be quite complex when dealing with bank branches. 10% on the other hand say it has brought in bad than good of which most of them raised
security concerns that they think can easily be compromised by the manipulation of systems to mention but a few.

**Figure 8: Relevance of Banks**

Based on the chart shown above, 70% of the respondents say traditional banks are still relevant in Zambia even after the introduction of financial technology since MoMo accounts have a maximum limited amount of money to be deposited or kept in them as opposed to banks which has no maximum amount. The 30% of respondents on the other hand think banks are now irrelevant after the introduction of financial technology and that is the reason why many banks have either
diversified to having their own mobile money services or partnered with mobile money services business in a quest to meet the demands of the current business environment.

![Age of Respondents](image)

**Figure 9: Age of Respondents**

Figure 9 shows the ages of that are active users of the platforms based on their activities on the platforms influenced by their levels of income, spending habits and need to embrace the digital world (change).
CHAPTER SIX
CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter carries its significance since it closes down the whole research while summarizing all the essential aspects of the research along with pointing out the limitations and the recommendations which can be presented to the concerned company in this research. The last section of a research is critically important since this depict the main purpose for which the whole research was being conducted and the outcomes which were expected out of the study.

5.2 Conclusions and Implications
In spite of the fact that the Fintech area in Zambia is as yet unfolding, open doors are there! This division vows to help address difficulties of low money related access and improve budgetary consideration by making new tech-empowered arrangements that improve the accessibility and openness of monetary administrations to all Zambians. Fintech's currently like never before need to discover methods for showing all the more commonly gainful strategic agreements for their proposed answers for support coordinated efforts and speculations with the current monetary establishments.

This study was carried out with the objective of assessing the effect of financial technology on bank deposits in Zambia. The results indicate that the introduction of financial technology on the Zambia financial scene has been timely and should be adopted as it has influenced effectiveness and efficiency in the industry and banks should diversify and consider massive investments in financial technology to meet the environment’s demands. Zambia has proven to have quite a number of factors that support the growth and success of financial technologies.

Generally, the research indicates how financial inclusion has been met in the Zambian environment due to the accessibility of finances through financial technology by different parties including those that could not be considered by banks. Facilities such as loans have also been made readily available.
On the other hand, the impact of financial technology on banks is that it has reduced on cash which is one of the ways banks sustain themselves through being liquid on cash. In simpler terms, banks and fintech’s are now sharing the money in circulation.

5.3 Recommendation
The researcher recommends the following measures:

- Commercial banks should diversify adopt all new financial technology trends. This will help them stay relevant and meet the environment’s demands.
- Companies should welcome and accommodate the use of financial technology platforms such as mobile money services for payments and transactions.
- The users should be at liberty to use whichever financial technology platform to use provided it is a legal platform.
- Terms of usage and service should be clearly be defined. Thus, the pros and cons of using the platform.
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Ng’ambi W. (2018), MTN Zambia General Manager. Lusaka


APPENDICES

A. Questionnaire

1. What do you know about financial technology?

2. Does it have a future in Zambia?
   Yes   No

3. Why do you prefer MoMo services?

4. Has it brought more good than bad?
   Yes   No

5. Are banks still relevant?
   Strongly Agree
   Agree
   Neutral
   Disagree
   Strongly Disagree

6. Do you think fintech as an innovation, future of money or mode of bringing social change?
   Strongly Agree
   Agree
   Neutral
   Disagree
   Strongly Disagree

7. What is your take on fintech and banks collaboration?
   In support
   Neutral
   Not in support
### B. Appendix I. Table 1: Platform

<table>
<thead>
<tr>
<th>Platform</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>Mobile money</td>
<td>70</td>
<td>70%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Appendix II. Table 2: Reasons

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency</th>
<th>Percentage</th>
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</thead>
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<tr>
<td>Easily Accessible</td>
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<tr>
<td>Easy to use</td>
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<td>40</td>
</tr>
<tr>
<td>Use of USSD</td>
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<td>10</td>
</tr>
<tr>
<td>No internet needed</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>No/Less paperwork</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
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### Appendix III. Table 3: What influence has fintech brought to banks?

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<td>Bad</td>
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<td>Total</td>
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### Appendix IV. Table 4: Relevance of banks

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### Appendix V. Table 5: Gender composition of respondents

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### Appendix VI. Table 6: Age

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<tr>
<td>Total</td>
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</table>
C. Appendix I. Figure 1 Online deposit growth

Appendix II. Figure 2- Zambia Fintech Landscape-Critical Stakeholders
Appendix iii. Figure 3- Zambia Fintech Players- Initial Scoping

Appendix IV. Figure 4- Conceptual Framework

Independent Variable

Financial Technology
Mobile Banking

Dependent Variable

Commercial Banks
Bank Deposits

FinTech Innovation
Appendix V. Figure 5 - Platform?

Platform

- 70%
- 30%

MoMo  Bank

Appendix VI. Figure 6 - Reasons

REASONS FOR CHOOSING MOMO

- Easily Accessible
- Easy to use
- Use of USSD
- No Internet needed
- No/less paperwork

Reasons for choosing MoMo
Appendix VII. Figure 7- is Fintech Good or Bad?

HAS FINTECH BROUGHT IN MORE GOOD THAN BAD?

- Yes: 90%
- No: 10%

Appendix VIII. Figure 8 Relevance of Banks

RELEVANCE OF BANKS

- Yes: 70%
- No: 30%
Appendix IX. Figure 9 Age

AGE RANGE OF RESPONDENTS

Age range of Respondents

20-35 years
35-45 years
45-50 years