
# MUNHUMUTAPA SCHOOL OF COMMERCE

## GRADUATE BUSINESS SCHOOL

**FINANCIAL TECHNOLOGY SOLUTIONS ON FINANCIAL INCLUSION IN THE ZIMBABWEAN FINANCIAL ECOSYSTEM**

**BY**

**TARIRO ZIMUNHU (M223472)**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE MASTER OF DEVELOPMENT FINANCE DEGREE**

**NOVEMBER 2023**

## DECLARATION FORM

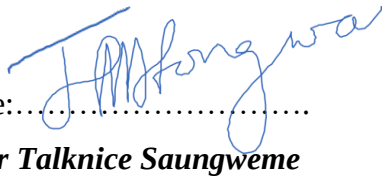
I declare that this research project titled: **Financial Technology Solutions on Financial Inclusion in the Zimbabwean Financial Ecosystem** is my work and the sources I used have been acknowledged. No part of this work may be reproduced without prior permission of the author and the Great Zimbabwe University.

Signature:…  … Date:…26 November 2023...

***Tariro Zimunhu (M223472)***

## SUPERVISOR'S APPROVAL FORM

I, the undersigned do acknowledge that the above-named student has consulted me for the supervision of her research dissertation entitled **Financial Technology Solutions on Financial Inclusion in the Zimbabwean Financial Ecosystem.** I, therefore, advise the student to submit her work for the final assessment.



Signature:……. Date:… 01/12/2023….

***Professor Talknice Saungweme***

**RELEASE FORM**

| | |
|---|---|
| NAME OF STUDENT: | TARIRO ZIMUNHU |
| PROJECT TITLE: | FINANCIAL TECHNOLOGY SOLUTIONS ON FINANCIAL INCLUSION IN THE ZIMBABWEAN FINANCIAL ECOSYSTEM. |
| DEGREE TITLE: | MASTER OF DEVELOPMENT FINANCE |
| YEAR OF COMPLETION: | NOVEMBER 2023 |

The Great Zimbabwe University Library is hereby authorized to print one copy of this project for private, academic, or scientific research needs. Without the author's permission, neither the project nor any of its extracts may be printed or otherwise reproduced. The author neither reserves the right of additional publication rights.

Signed: ……  ….

Date: …26/11/2023…….…….

Permanent Address: 01 MWENA CLOSE, MSASA PARK, HARARE, ZIMBABWE

## DEDICATION

*"Again, I saw that under the sun the race is not to the swift, nor the battle to the strong, nor bread to the wise, nor riches to the intelligent, nor favour to the men of skill; but time and chance happen to them all." (**Ecclesiastes 9 vs. 11**)*

This research is dedicated to God Almighty, for the strength, wisdom and understanding He has given me throughout my study and to **my family** for their unwavering support, help and encouragement. They take pride in my success.

## ACKNOWLEDGEMENTS

I am grateful to God for enabling me to undertake this research, and I express my appreciation to Him for the opportunity. Secondly, this research could not have been completed without the unwavering support and valuable contribution of Professor T Saungweme, my supervisor, for his patience and guidance throughout this project. I am grateful for him taking a personal interest in my study, being patient with me when time was not on my side and delivering on his pledge. He made it a rich one.

Not forgetting my fellow academic colleagues; Fadzai, Kudzai, Edwin and Kelly for their ideas and constructive criticism, I thank you. I could not have come this far without my family's unconditional love, especially my Husband-Edmore, for assisting with proofreading this entire research and for caring for the kids while I was studying, as well as my sisters for their constant encouragement, support, and direction in completing this project.

Above all, glory be to God to whom I owe the intelligence and life.

## ABSTRACT

*Financial technology (FinTech) has emerged as a disruptive force, revolutionizing the way financial services are delivered and accessed across the globe. Zimbabwe is no exception as it is characterized by several obstacles despite the advancements achieved in promoting financial inclusion through FinTech solutions. The main purpose of this study was to evaluate the effect of FinTech Solutions on the Zimbabwean financial ecosystem. The study was guided by objectives which were to assess the extent to which FinTech solutions have improved financial access and usage in Zimbabwe, to examine the challenges and barriers faced in implementing FinTech solutions for financial inclusion in the Zimbabwean context, to evaluate the impact of FinTech solutions on financial literacy and consumer education in Zimbabwe and to explore the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe. The study adopted a pragmatism research philosophy. The correlation results showed a positive relationship between the dependent variables (financial inclusion) and the FinTech services. Explicitly, the results revealed that FinTech solutions are performing well and are not failing to meet key performance indicators on improved financial access and usage in Zimbabwe. FinTech solutions have contributed to bridging financial literacy gaps by offering innovative digital financial services that are accessible, affordable, and user-friendly. In this way, FinTech companies can help integrate these individuals into the formal financial system, providing them with the means to save, invest, and build wealth. The researcher recommended that the government should also develop policies that encourage financial innovations to breed more value into the ecosystem and effectively benefit the end users.*



**Key words:** ***Financial inclusion, Financial solution, Financial technology***

## TABLE OF CONTENTS

## LIST OF FIGURES

## LIST OF TABLES

## LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| FinTech | Financial Technology |
| MFIs | Microfinance Institutions |
| MF | Microfinance |
| SMEs | Small and Medium Enterprises |
| RBZ | Reserve Bank of Zimbabwe |
| ZIMSTAT | Zimbabwe National Statistics Agency |
| SDGs | Sustainable Development Goals |
| UN | United Nations |
| UNCDF | United Nations Capital Development Fund |
| CBZ | Commercial Bank of Zimbabwe |
| ISALS | Income, Savings and Lending Initiatives |
| CABS | Central Africa Business Society |
| POTRAZ | Postal and Telecommunication Regulatory Authority of Zimbabwe |

# CHAPTER ONE

# INTRODUCTION AND BACKGROUND OF THE STUDY

## 1.1 Introduction to the Study

Financial technology (FinTech) has emerged as a disruptive force, revolutionizing the way financial services are delivered and accessed across the globe (Zeidy, 2022). Furthermore, Zeidy (2022) views FinTech as a catalyst for financial inclusion, economic growth, and innovation, with the potential to reshape traditional financial systems and empower individuals and businesses. In recent years, the emergence and rapid advancement of financial technology (FinTech) solutions have presented new opportunities to address the challenges of financial inclusion. FinTech solutions leverage technological innovations to provide accessible, efficient, and affordable financial services to previously marginalized individuals and communities.

FinTech is the technology in finance that is changing the banking behavior of stakeholders in doing financial transactions (Abdul, 2019). Financial technology has the potential to disrupt and completely change the way users do their everyday activities: payments, credit, insurance, and financial compliance services (RegTech). In the main, FinTech refers to the collaboration of innovative business process models with technology to disrupt, change, or enhance financial products and services (Rafay, 2018).

For economic growth and poverty reduction, financial inclusion, which is defined as having access to and using cheap financial services, is essential. Financial inclusion plays a vital role in fostering inclusive economic growth and reducing poverty (Ismael and Ali; 2021). However, traditional financial systems often fall short of reaching underserved populations, particularly in developing countries. The United Nations Sustainable Development Goals (SDGs) place a strong emphasis on the value of inclusive financial systems, making financial inclusion a top priority globally (Ernest and Young FinTech Adoption Index report, 2019). The Global Findex Database of the World Bank (2021) estimates that 1.7 billion persons worldwide do not have access to formal financial services. Only 43% of individuals in Sub-Saharan Africa have access to formal financial services, according to the Global Findex Database, making this region home to the greatest percentage of unbanked persons. For economic growth and poverty reduction,

financial inclusion, which is defined as having access to and using cheap financial services, is essential. The United Nations Sustainable Development Goals (SDGs) placed a strong emphasis on the value of inclusive financial systems, making financial inclusion a top priority globally (Rupeika-Apoga and Thalassinos, 2020).

It is paramount to note that the global swing of the Fourth Industrial Revolution (4IR) brought the advent of FinTech solutions (Global Findex, 2021). The financial industry is utilizing these technological advancements to enhance effectiveness, decrease financing costs, and improve the convenience, speed, and quality of services provided to users. Financial technology has revolutionized how people pay, save, borrow, invest and insure among many other financial transactions. Figure 1 illustrates the evolution of FinTech from 1866 to post-2014.

**Figure 1: The Evolution of FinTech**


*Adapted from COMESA: The Role of Financial Technology (FINTECH) in Changing Financial Industry and Increasing Efficiency in the Economy (2021: page 3)*

Figure 1 illustrates how FinTech developments are interrelated and synergistic since they build upon one another. The transition from conventional physical transactions with physical payments to virtual, paperless settlements demonstrates how FinTech is transforming business.

These developments make it possible to conduct transactions without having to engage physically.

Financial inclusion has been a concern across the global financial system, and several efforts have been made to mitigate these challenges (Akturan and Tezcan, 2015). One of the most significant global efforts in promoting financial inclusion is the G20's Financial Inclusion Action Plan, which has the objective of ensuring that all citizens have access to formal financial services (Pattnaik, Routray and Jayalekshmi, 2017). This plan has been adopted by several European countries, and considerable progress has been made in addressing challenges such as low financial literacy levels, limited financial infrastructure, and access to banking services. Moreover, The European Union introduced regulations to promote access to basic payment accounts and facilitate cross-border banking services (European Commission, 2013).

In India, financial technology has reshaped the financial services and financial inclusion landscape in fundamental ways (Varun, 2020). Through their innovations, new business models and applications, FinTech firms have helped in increasing competition and playing an important role in accelerating Financial Inclusion in India by helping reduce costs and improving access to financial services to the under-served, persons in low-income groups, rural and other under-served sectors of the Indian economy (Raj, 2020).

At the heart of Sub-Saharan Africa, the FinTech revolution influenced the meteoric rise of mobile money platforms (Central Bank of Kenya, 2022). These innovative solutions, epitomized by Kenya's M-Pesa and Zambia's Kazang, have transcended the boundaries of traditional banking. Mobile money has empowered millions of previously unbanked individuals in remote areas to take part in the formal financial system using just their mobile devices (Abdul, 2019). The convenience and accessibility offered by mobile money services have ignited a fundamental shift, bringing financial services closer to those who were previously marginalized.

Kazang is a mobile money platform that allows users to send and receive money, pay bills, and make purchases. It has over 1 million active users in Zambia and has helped to bring financial services to people who were previously excluded from the formal financial system (Mohumba, 2019). Moreover, mobile money platforms, such as M-Pesa in Kenya, have revolutionized the financial landscape by enabling individuals to make payments, save money, and access credit

through their mobile phones (Jack and Suri, 2014). M-Pesa launched in Kenya in 2007 is the world's largest mobile money platform, with over 40 million active users. M-Pesa has been credited with helping to reduce poverty and financial exclusion in the country. Tigo Pesa is the Tanzanian equivalent that launched in 2009 and has accumulated over 15 million subscribers (Ernest and Young FinTech Adoption Index report, 2019). These mobile-based solutions have demonstrated the potential to extend financial services to previously underserved populations, including rural communities and low-income individuals.

In order to provide financial access for marginalized people, digital banking solutions and mobile payment systems have also been created (Bounie et al., 2019). Through initiatives like the creation of a National Financial Inclusion Strategy and the use of agency banking, the Central Bank has aggressively pushed for financial inclusion in African nations like Nigeria (Ogbuabor, Eigbiremolen, Orji, Manasseh and Onuigbo, 2020). These programs seek to target people who were previously unreached while enhancing the financial system. The advent of low-cost transaction accounts, mobile banking, and financial literacy efforts, on the other hand, have all helped to increase financial inclusion in South Africa (PwC Global Fintech Survey, 2019).

Despite international efforts, there are still difficulties in attaining financial inclusion using FinTech solutions. For instance, in industrialized nations like the USA and Canada, issues include a lack of financial literacy among some people, excessive banking fees, and restricted access to banking services in rural regions (Demirgüç-Kunt et al., 2015). In addition, according to Jack and Suri (2014), a sizeable portion of Canadians still lack access to banking services because of issues including economic inequality, a lack of financial knowledge, and weak financial infrastructure.

Limited physical infrastructure, low financial literacy, and regulatory hurdles that impede the development of FinTech solutions are issues in African nations like Nigeria and South Africa (Adegbite et al., 2019). The largest economy in Africa, Nigeria, has low levels of financial penetration, according to Mohumba (2019), which may be attributed to several variables including high rates of poverty, a fragile financial system, and restricted access to banking services. On the other hand, while having a robust financial system, South Africa still has enormous challenges related to financial exclusion because of concerns about inequality (PwC Global Fintech Survey; 2019).

Zimbabwe is no exception as it is characterized by several obstacles despite the advancements achieved in promoting financial inclusion through FinTech solutions. Regulatory frameworks that could restrict innovation, problems with interoperability between various financial service providers, and the digital divide, particularly in rural regions with poor internet access, are some of these difficulties (Chigada et al., 2018). The lack of actual bank branches in rural regions, according to Muhomba (2017), makes it difficult for remote communities to acquire financial services. Additionally, Mohen and Beja (2018) noted that high transaction costs, particularly for people with low incomes and those who are poor, together with political and economic instability, are difficulties that contribute to the continuance of financial exclusion in Zimbabwe.

The use of FinTech solutions has the potential to raise financial inclusion levels in Zimbabwe, which is important for economic growth. It is necessary to assess the effects of FinTech solutions because it is unknown how they will affect financial inclusion in Zimbabwe. Therefore, the goal of this study is to assess how financial inclusion in Zimbabwe's financial ecosystem is impacted by FinTech solutions. The context of the study, problem statement, research aims and questions, research hypotheses, the importance of the investigation, and definitions of essential words are therefore covered in this chapter. The chapter also included a summary of the chapter and information on how the study was structured.

## 1.2 Background to the Study

In Zimbabwe, efforts to address financial inclusion challenges have included the formulation of the National Financial Inclusion Strategy 2016-2020 by the Reserve Bank of Zimbabwe (Reserve Bank of Zimbabwe/RBZ, 2016). This strategy aims to enhance financial access, literacy, and consumer protection through the promotion of digital financial services. Mobile money platforms, such as EcoCash and One Money, have gained significant traction in the country, allowing individuals to send and receive money, pay bills, and access other financial services through their mobile phones.

Zoning in, only 38% of the Zimbabwean adult population had access to formal financial services in 2017, according to the Reserve Bank of Zimbabwe (RBZ, 2017). Therefore, to close the gap, FinTech solutions have been created and used. According to Bounie, Camara and Mbaye (2019), FinTech solutions cover a wide spectrum of technologies, including peer-

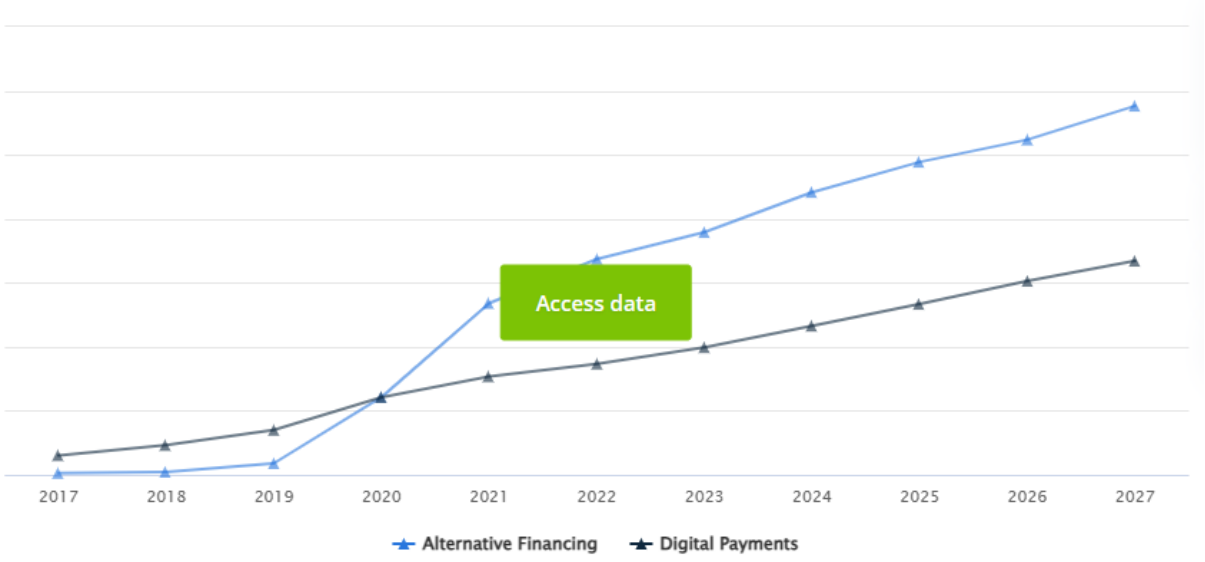
to-peer lending, digital payments, mobile banking, and blockchain-based platforms. These platforms have experienced rapid expansion, with the number of mobile money subscribers in the nation surpassing the number of people with bank accounts (Mawere and Mawere, 2019). By offering inexpensive and easy financial services, these technologies have the potential to reach underserved communities, particularly in developing nations, Zimbabwe included.

Zimbabwe has seen a substantial increase in FinTech across several industries, notably in the introduction of cryptocurrencies, insurance, payments, and trade. Mobile money, electronic platforms (such as ZimSwitch, PayServ, Paynow money. Ecocash, E-transact, Instant pay, Bitmari, and WhatsEco) switching services, and cryptocurrencies are a few notable examples of innovative goods and services. Even if there are several research on the connection between FinTech and financial inclusion both worldwide and locally, there are still gaps.

This study aims to fill this gap by conducting an in-depth evaluation of FinTech solutions for financial inclusion within the Zimbabwean financial ecosystem. By examining the current state of financial inclusion, identifying key FinTech solutions operating in Zimbabwe, and analyzing their impact on various dimensions of financial inclusion, this research will provide empirical evidence on the role of FinTech in promoting financial inclusion in Zimbabwe. The findings will contribute to the existing literature on FinTech and financial inclusion and offer insights to policymakers, regulators, and industry practitioners in Zimbabwe and other similar contexts (Gopalan and Rajan, 2022). This research will help inform the development of effective strategies and policies to leverage FinTech solutions for sustainable financial inclusion in Zimbabwe.

Financial inclusion has long been a challenge in developing countries, including Zimbabwe. In 2016, Zimbabwe introduced a National Financial Inclusion Strategy in response to significant difficulties faced by its financial system (Maune, Matanda and Mundonde, 2020). These challenges curtailed the level of confidence in local and international markets, primarily attributed to the historical effects of hyperinflation, limited availability of liquid assets, and a struggling economy (RBZ, 2016). Moreover, the RBZ as the supreme regulator in financial inclusion through its arm of the National Steering Committee, are the policies comprehensively adequate to obtain the most up-to-date information on financial inclusivity of all stakeholders in embracing FinTech solutions. Figure 2 shows the growth of FinTech digital payments in Zimbabwe past and forecast from 2017 to 2027.

**Figure 2: The growth of FinTech digital payments in Zimbabwe past and forecast from 2017 to 2027**




*Source: RBZ (2023)*

Figure 2 shows the rate of the Zimbabwean population's effective involvement in the use of FinTech from 2017 up to 2027 inclusive of a five-year projection from 2023. Moreover, financial inclusion has been facilitated by extending access to financial services through digital payments to marginalized communities. This initiative aims to empower these individuals, enabling them to participate in productive economic activities that contribute to overall economic development between 2017 and 2020. The impact of the implementation of the National Development Strategy 1, is witnessed by the growing numbers in digitized financial services. Alternative financing refers to the provision of funding by entities other than conventional financial institutions, such as banks, to individuals or businesses whereas digital payments are electronic transactions solely conducted through online platforms or mobile devices for the exchange of money or goods (McKenzie, 2019).

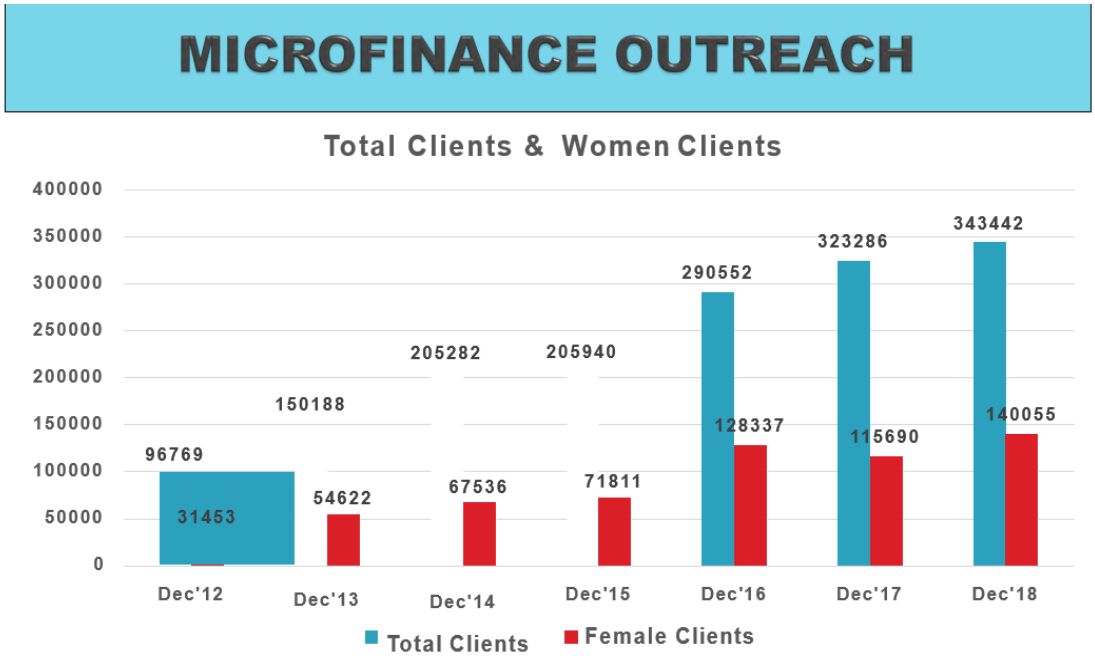
The period following 2020, saw how the Zimbabwean financial market matched up and showed up for financial inclusion to conduct business differently and remotely for instance crisis management of the global pandemic- COVID-19 (Mawere and Mawere, 2019). In addition, in Figure 2, the blue strand spiking from 2019 shows the adoption of alternative financing which is a form of finance that is outside the institutional finance system (Rabbani, Khan, and Thalassinos, 2020). The latter academics describe FinTech solutions to be in this

category to improve financial activities in areas such as blockchain, cryptocurrencies, crowdfunding and equity financing. The RBZ Financial Inclusion Bulletin of 2022 draws to elucidate that the journey continues in financial inclusion and FinTech solutions (RBZ, 2023).

Into the bargain, Figure 3 below shows how relevant is FinTech in the Zimbabwean population comparing 2014 and 2022 based on the percentage banked, other formal (non-banked), informal only, excluded and overall level of financial inclusion (bank and other) reported by the RBZ (2018). The statistics shown in Figure 3, exhibit that FinTech is relevant in the Zimbabwean context. By harnessing the power of digital platforms, mobile technology, and data analytics, FinTech solutions have the potential to overcome geographical barriers, reduce transaction costs, and expand access to a wide range of financial services, including payments, savings, credit, and insurance.

Initiatives from the private and public sectors were formulated by the central bank of Zimbabwe (RBZ, 2018). Collaborative efforts of various players in Zimbabwe to leverage FinTech solutions and promote financial inclusion. Strides in financial inclusion through MFIs were remarkable as shown in Figure 1.3.

**Figure 3: Microfinance Outreach in Financial Inclusion**




*Adapted from RBZ (MPS, 2018)*

Figure 3 shows the microfinance outreach as of 31 December 2018, active women clients constituted 40.78% of the total number of active clients compared to 32.50% as of 31 December 2012. Total loans to women clients ($112.28m) constituted 29.01% of the total loans ($386.99m).

Various players in Zimbabwe, including financial institutions, government entities, and FinTech startups, have taken initiatives to promote financial inclusion using FinTech solutions (Barugahara, 2021). Actions and initiatives undertaken include:

*Mobile Money Providers*: Mobile money platforms have played a significant role in expanding financial inclusion in Zimbabwe. Providers such as EcoCash, OneMoney, and Telecash have made it easier for individuals to access basic financial services through their mobile phones, even in remote areas. These platforms allow users to send and receive money, make bill payments, and access other financial services without the need for a traditional bank account.

*Digital Payments Solutions*: FinTech companies in Zimbabwe have developed digital payment solutions that enable individuals and businesses to make transactions electronically. For example, platforms like Paynow, Zipit, and Hello Paisa facilitate seamless digital payments, including person-to-person transfers, merchant payments, and utility bill payments.

*Agent Banking*: FinTech solutions have facilitated the growth of agent banking networks in Zimbabwe. Agent banking allows individuals to access basic financial services through authorized agents located in their communities. Players like Steward Bank's Square Wallet and CBZ Touch have set up agent networks, enabling individuals to deposit and withdraw cash, make payments, and access other banking services through these agents.

*Online Lending Platforms:* FinTech startups in Zimbabwe have introduced online lending platforms that leverage technology to provide quick and convenient access to credit. Companies like GetBucks, CredAccess, and Steward Bank's Kwenga offer digital lending services, allowing individuals and small businesses to apply for loans online and receive funds directly into their bank accounts.

*Digital Savings and Investment Platforms:* FinTech solutions have also emerged to promote savings and investment among the unbanked population. Platforms such as C-Trade and

MobiGrow provide individuals with opportunities to invest in stocks, bonds, and other financial instruments using their mobile phones. These platforms offer simplified investment options and educational resources to encourage individuals to save and invest.

*Regulatory Support:* The Reserve Bank of Zimbabwe (RBZ) has taken steps to promote FinTech innovations and financial inclusion. The RBZ has established a regulatory sandbox, allowing FinTech startups to test their innovative solutions in a controlled environment (RBZ, 2016). This initiative encourages the development of new FinTech products and services while ensuring consumer protection and regulatory compliance.

*Financial Education and Awareness*: FinTech players, in collaboration with government agencies and NGOs, have conducted financial education campaigns to raise awareness about the benefits of FinTech and improve financial literacy among the population. These initiatives aim to empower individuals with knowledge and skills to make informed financial decisions and take advantage of FinTech solutions.

While various players, including public entities, play a crucial role in fostering financial inclusion in Zimbabwe, several challenges which stem from macro-economic factors, can impede their efforts. Zimbabwe experienced significant economic challenges during this period, characterized by high inflation and currency volatility. These economic conditions affected various financial inclusion spearheads such as microfinance institutions (MFIs) in ways, including:

*Difficulty in assessing credit risk*: High inflation and currency volatility made it challenging for MFIs to accurately assess borrowers' creditworthiness and determine appropriate interest rates.

*Loan portfolio deterioration*: Economic instability increased the risk of loan defaults and non-performing loans, which negatively impacted the financial health and sustainability of MFIs.

*Reduced access to funding:* The limited availability of foreign currency and the constrained local financial sector made it difficult for MFIs to access affordable funding sources, hindering their ability to meet the growing demand for financial services.

*Limited Access to Funding*: MFIs often rely on external funding to sustain their operations and support lending activities.

However, accessing affordable funding proved challenging due to the country's economic conditions and limited access to international capital markets. Many MFIs faced difficulties in raising funds from international investors or development finance institutions due to concerns about the country's economic and political stability. Local funding sources, such as commercial banks, had limited capacity to provide funding to MFIs due to their liquidity constraints and risk aversion.

Zimbabwe has a large informal economy, where a significant portion of the population engages in informal or subsistence activities. The informality of these businesses and individuals posed challenges for MFIs, for instance:

*Limited collateral*: Informal businesses often lack formal documentation or assets that can be used as collateral, making it challenging for MFIs to assess creditworthiness and manage credit risk effectively.

*Lack of credit history:* Individuals in the informal economy may not have a formal credit history, making it difficult for MFIs to evaluate their creditworthiness and offer appropriate loan products.

*Political and Regulatory Environment*: The political and regulatory environment in Zimbabwe can have an impact on the operations of MFIs. Inadequate or overly restrictive regulations, cumbersome licensing processes, and limited coordination among regulatory bodies can hinder the entry and operations of financial service providers, including public entities. Changes in regulations, licensing requirements, or government policies can introduce uncertainty and affect the ability of MFIs to operate effectively and expand their outreach.

*Compliance burden*: Adhering to regulatory requirements and compliance obligations can be resource-intensive for MFIs, particularly smaller institutions with limited capacity.

*Loan Default and Portfolio Quality*: MFIs faced challenges related to loan default and portfolio quality, which were exacerbated by economic instability and borrowers' financial difficulties. Loan defaults increased due to the economic downturn-2008/9 liquidity crunch, affecting the financial performance and sustainability of MFIs. Challenges in collateral valuation and

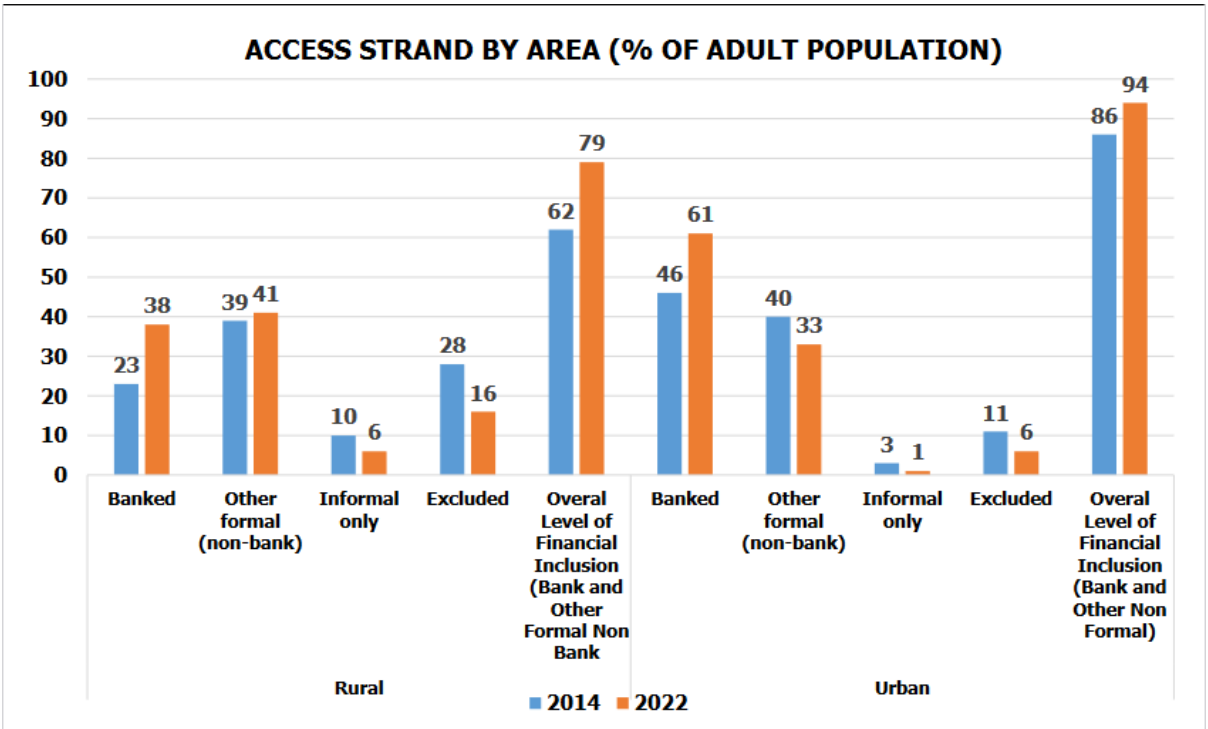
recovery processes made it difficult for MFIs to manage non-performing loans effectively and mitigate credit risk.

These challenges highlight the complex operating environment for MFIs in Zimbabwe and the need for targeted interventions and support to overcome them and promote financial inclusion. In addition, these factors affect the affordability of financial services, erode consumer trust, and introduce risks that may deter financial service providers from expanding their operations.

Addressing these challenges requires a coordinated effort among various stakeholders, including public entities, regulators, financial institutions, and civil society organizations. It involves implementing policies and initiatives that promote infrastructure development, financial education, regulatory reforms, and the design of inclusive financial products and services.

Figure 4 below shows statistics on financial inclusion for rural communities in Zimbabwe through access strand by area:

**Figure 4: Access strand by area**




*Source: RBZ (2022)*

Drawing from Figure 4, financial inclusion for rural communities improved from 62% in 2014 to 79% in 2022. The majority of the population resides in rural areas. Rural communities and smallholder farmers remain a target group for financial inclusion initiatives (RBZ, 2022).

As FinTech solutions collect and process vast amounts of user data, privacy, security, and consumer protection concerns arise. Concerns around data privacy and security can impact individuals' trust and confidence in using formal financial services. Inadequate data protection measures and cybersecurity threats can discourage individuals from sharing personal and financial information, limiting their participation in digital financial services (Daud, 2023). Understanding the trends, risks and addressing them through appropriate policy frameworks and regulatory measures is crucial to ensure that FinTech advancements are aligned with the principles of financial inclusion and societal well-being.

Despite continuous initiatives to increase financial inclusion, difficulties still exist because of weak physical infrastructure, low banking penetration, and a sizable informal sector. The development of financial technology (FinTech) solutions presents possible ways to get through these obstacles and advance financial inclusion. To assess the impact and efficacy of FinTech solutions on financial inclusion within the Zimbabwean financial ecosystem, however, is necessary.

Adoption and utilization are further hampered by low levels of financial knowledge and confidence in digital financial services (Mawere and Mawere, 2019). Furthermore, according to Chigada and Mhaka (2018), there are still major obstacles to financial inclusion through FinTech solutions in Zimbabwe due to poor financial literacy levels, a lack of financial infrastructure, and restricted access to digital financial services. These challenges have widened the digital divide and hindered the participation of individuals and businesses in economic activities, saving, and investing thereby reinforcing poverty, inequality and impeding economic growth (Barugahara, 2021). The traditional banking system has struggled to address these issues, particularly in remote and rural areas where infrastructure is lacking. Therefore, there is a need to explore the potential of FinTech solutions to overcome these barriers and promote financial inclusion in Zimbabwe.

Regardless of the growing adoption of financial technology (FinTech) solutions worldwide, there exists a significant gap in addressing financial inclusion within the Zimbabwean financial ecosystem. This gap hinders the effective participation of underserved populations, the

unbanked and underbanked, in accessing essential financial services, resulting in limited economic opportunities, heightened inequality, and constrained overall economic growth as accentuated by Taherdoost (2023). While FinTech can be the panacea to bridge this gap, the current landscape in Zimbabwe lacks comprehensive and tailored solutions that can effectively address the unique challenges faced by marginalized individuals and small businesses. Zimbabwe faces similar obstacles to financial inclusion as other developing countries. The barriers include the physical presence, which affects accessibility, affordability, usage, and quality of financial product or service delivery (Naidoo, 2014; Chikalipah, 2017; Munyegera and Matsumoto, 2018).

According to Global Findex (2021), because a financial ecosystem's components are interdependent, disturbances or imbalances in one sector can have an impact on the entire system. According to Bayram (2022), the financial ecosystem's efficiency and stability are essential for promoting financial inclusion, controlling risk, allocating capital, and fostering economic growth. This study will produce useful insights for stakeholders and add to the academic knowledge of FinTech's role in promoting financial inclusion by undertaking an in-depth investigation of the present state of financial inclusion, identifying major FinTech solutions, and analyzing their effect. Ultimately, the study results will guide the establishment of best practices for Zimbabwe's inclusive and sustainable financial growth. Hence, the primary focus of this current study is to examine and bring to light through this study, the effects of FinTech solutions and how they have propagated financial inclusion in Zimbabwe’s financial ecosystem paying attention to salient and pertinent aspects surrounding the matter in motion.

### 1.3 Statement of the Problem

The current landscape in Zimbabwe lacks comprehensive and tailored solutions that can effectively address the unique challenges faced by marginalized individuals and small businesses. Thus, there are limited studies that have been done on the subject of Zimbabwe as far as financial technology solutions for financial inclusion. The limited past papers conducted on the subject in Zimbabwe include Munyengera and Matsumoto (2018) on the role of mobile banking on financial inclusion in Zimbabwe, Maune et. al (2020) on FI nexus economic growth, and Chitimira and Tonderai (2021) on determinants, challenges, and opportunities of mobile money in Zimbabwe. Therefore, the primary focus of this current study is to examine and bring to light through this study, the effects of FinTech solutions and how they have

propagated financial inclusion in Zimbabwe's financial ecosystem paying attention to salient and pertinent aspects surrounding the matter in motion.

This thesis explores the impact of FinTech solutions on financial inclusion, with a specific focus on their potential to empower individuals and promote inclusive economic development since it is evolving. IMF (2022) echoes that FinTech solutions continue to narrow down the digital gaps making rural areas statistics even scarcer. There is a sheer lack of data on FinTech in the Zimbabwean context with regards to FinTech variables nexus digital indicators from past research to effectively assess the impact of FinTech solutions in promoting financial inclusion in Zimbabwe. This study seeks to provide valuable insights into the effectiveness in cognizance of the limitations of FinTech solutions in advancing financial inclusion in Zimbabwe.

### 1.4 Research Objectives

The purpose of this study is to evaluate the effect of FinTech Solutions on the Zimbabwean financial ecosystem. The study will be guided by the following objectives.

1. To assess the extent to which FinTech solutions have improved financial access and usage in Zimbabwe.
2. To examine the challenges and barriers faced in implementing FinTech solutions for financial inclusion in the Zimbabwean context.
3. To evaluate the impact of FinTech solutions on financial literacy and consumer education in Zimbabwe.
4. To explore the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe.

### 1.5 Research Questions

To what extent have FinTech solutions improved financial access and usage in the Zimbabwean financial ecosystem?

1. What are the key challenges and barriers faced in implementing FinTech solutions for financial inclusion in Zimbabwe?
2. How has the adoption of FinTech solutions impacted financial literacy and consumer education in Zimbabwe?
3. What are the policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe?

## 1.6 Significance to the Study

### 1.6.1 Significance to Theory

The theoretical perception of the relationship between FinTech services and financial inclusion has been positive based on the presumption that more access to the internet and smart devices improves access to finance. However, in some markets, some developing countries in Africa, the World Bank has reported negative effects of some of these FinTech services due to the profit maximization behaviors of service (Ozili, 2018). The study can contribute to the existing literature by making a significant original contribution. This study will give more knowledge on how FinTech can be an important tool to enhance financial inclusion using Zimbabwe as a case.

### 1.6.2 Significance to Practice

The government and its regulators are likely to benefit as the study sheds light on gaps in policy development which can be sealed to boost financial inclusion in the overall Zimbabwean population. The government for example, through its agencies and parastatals such as the RBZ's National Steering Committee, the POTRAZ, ZimStats and other unnamed policymakers will utilize value on the useful information to approach and develop more effective policies and frameworks to drive the much-needed improvement in the telecommunications and financial services sector.

*Financial institutions*: The study will provide financial institutions with insights into the potential of FinTech solutions to increase financial inclusion. This will enable financial institutions to develop and implement FinTech solutions that are suitable for the Zimbabwean market.

*FinTech companies*: The study will provide FinTech solutions to companies with insights into the needs and preferences of Zimbabwean consumers. This will enable FinTech companies to develop solutions that are tailored to the needs of Zimbabwean consumers.

*Regulators*: The study will provide regulators with insights into the potential of FinTech solutions to increase financial inclusion. This will enable regulators to develop policies and regulations that support the growth of FinTech solutions in Zimbabwe.

*Consumers*: The study will benefit consumers by providing them with access to formal financial services. This will enable consumers to save, borrow and invest, thereby improving their financial well-being.

### 1.7 Delimitations

Time delimitation: The study's time delimitation is from 2018 to 2023.

Geographical scope: The study will focus on Zimbabwe's financial ecosystem, mainly in the outskirts of Harare- particularly in Chitungwiza.

Methodological scope: The research approach used in this study is a mixed methods approach, combining both qualitative and quantitative methods. This approach allows for a comprehensive understanding of the effects of FinTech solutions on financial inclusion in the Zimbabwean financial ecosystem. The study will use a concurrent research design. The population for the study will be limited to specific companies in Zimbabwe that are involved in the FinTech industry, including FinTech companies, regulators, and financial institutions. The sampling method for selecting these companies will be purposive sampling.

Literature scope: The study will review the literature on financial inclusions and FinTech solutions.

### 1.8 Assumptions

- The study assumes that Zimbabwe has an interest and would find the results and recommendations of the current study crucial in designing policy options on financial inclusion through the use of FinTech solutions, thus contributing to the development of Zimbabwe.

- The study assumes that the utilization of secondary data sources will yield ample and dependable information, enabling the generation of reliable and valid results. This, in turn, instills confidence in the study's findings among its users.

- The sample used for the study was representative of the total population.

## 1.9 Limitations

The researcher might be constrained in how participants respond to certain questions. This is because people prefer to offer responses that they assume the researcher wants to hear, resulting in some bias. To reduce bias, indirect questioning was used, and the researcher was very objective.

The study will focus on Zimbabwe's financial ecosystem, mainly in the outskirts of Harare. The study will consider the opinions of experts, policymakers, financial institutions, and FinTech startups. However, due to resource constraints, the study may not be as exhaustive due to budgetary constraints the researcher could not cover all areas in the outskirts of Harare. Resultantly, the researcher resorted to using a representative sample covering Harare, particularly in Chitungwiza where the marginalized communities are concentrated. Additionally, the study may not be generalizable for Zimbabwe's entire financial ecosystem neither to other countries nor contexts.

## 1.10 Definition of key terms

**Financial Technology (FinTech)**: FinTech refers to the use of technology to deliver financial products and services.

**Financial inclusion**: Financial inclusion refers to the ability of individuals and businesses to access and use affordable financial services conveniently, safely, and responsibly (World Bank, 2020).

**Financial Ecosystem**: Refers to the environment and to the interconnected network of institutions, markets, participants, and infrastructure that facilitate the flow of funds, investments, and financial services within an economy. It encompasses various elements that work together to support the functioning of the financial system in which financial institutions, regulators, and consumers operate (EY, 2019).

**Financial Institutions**: This includes banks, credit unions, insurance companies, investment firms, asset management companies, and other entities that provide financial services and intermediation. These institutions play a crucial role in mobilizing savings, providing credit, managing risk, and facilitating transactions (RBZ, 2017).

**Financial Markets**: RBZ (2017), financial markets are platforms where buyers and sellers trade financial instruments such as stocks, bonds, derivatives, currencies, and commodities. These markets can be categorized into primary markets (where new securities are issued) and secondary markets (where existing securities are traded).

**Regulatory Bodies**: Regulatory bodies, such as central banks, financial regulatory authorities, and supervisory agencies, oversee and regulate the financial system. They establish rules, regulations, and standards to ensure stability, transparency, and fair practices within the financial ecosystem (Muhomba, 2017).

### 1.11 Organization of the Study

**Chapter 1** presented the background of the study, problem statement, research questions and objectives. Justification of the study as well as the delimitations and limitations of the study will be part of this chapter.

**Chapter 2** will present the theoretical frameworks that will guide the study and review literature that is related to the topic. Furthermore, the study will also show the research gap that the study sought to fill.

**Chapter 3** will comprise the methodology that will be used in this study to obtain the information concerning the topic, research design, research strategy, sampling techniques and sample size. In addition, data collection tools and data analysis will also be presented as well as ethical considerations.

**Chapter 4** will present the findings that will be obtained during the study. Thematic content analysis will be used to analyze the data and the information will be presented using themes whilst the demographic characteristics of participants will be presented in the form of tables. Also, SPPS and thematic analysis will be used to analyze the data obtained from the questionnaires since the study will adopt the mixed research method.

**Chapter 5** will discuss the issues that arose during the study period and make connections to previous research. The results are contrasted and concluded based on the research goals. Furthermore, the consequences of the acquired results are discussed in this chapter. Furthermore, suggestions for further research will be made.

## 1.12 Chapter Summary

This chapter has introduced the purpose of the research which examines the FinTech Solutions for Financial Inclusion in the Zimbabwean Financial Ecosystem. The background for the study was presented which revealed the historical developments of FinTech solutions and how it promotes financial inclusion. This research paper delves into the ongoing advancements in these technologies and their implications for expanding access to financial services and promoting overall economic growth. This was followed by a discussion of the statement of the problem. The study clearly outlined its objectives and research questions, providing a clear direction and focus for the researcher. The significance of the study was elucidated through various categories, and the study's limitations were also acknowledged. The next chapter concentrated on reviewing relevant literature from other authors who have explored the subject understudy.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter examines both theoretical and previous research studies on financial technology solutions and financial inclusion in the financial ecosystem. The conceptual and theoretical frameworks that present FinTech services and financial inclusion from a global and local viewpoint are also highlighted.

## 2.2 Theoretical Background

This part discusses the financial topic theories on which the study is based in light of the factors under consideration. These are the following theories: innovation diffusion theory, financial intermediation theory, and Silber's constraint theory of innovation.

### 2.2.1 Financial intermediation theory

Through his exemplary research paper in 1937, Keynes proposed the Financial Intermediation theory. Financial Intermediation is a situation whereby units, organizations and individuals have extra deposits with financial institutions, which then loan some to entities in need of cash (Keynes, 1937). It is simply a system enabling the transfer of resources from net savers to net spenders. Diamond and Dybvig (1983) examine the utilization of liquidity in the four operational, restricted, contingent, and strategic functions. Operational is the cash requirement in running daily business transactions while ensuring timely clearance of bills. Restricted liquidity is limited to precisely defined business transactions, while contingent liquidity is available to meet general financial obligations under a stress scenario. Strategic liquidity is meant for future business needs outside the course of regular business needs. Financial institutions enable the changing of assets into liquid commitments. Normally, savers are not high risk-takers in their approach and are uncertain about estimates of inflation and future consumption. Without an intermediary, all investors have to consider long-term investments that might yield significant additions while sacrificing liquidity.

The function of financial intermediaries is largely recognized as that of creating unique financial products (Besley and Brigham, 2014). These are put in place every time the intermediary notices that it can sell them for prices that can cover all opportunities a direct expense related to the service or product. Market imperfections give rise to the existence and prosperity of financial intermediaries. This implies that financial intermediaries cease to exist

in ideal market environments, without transactional or information expenses. Many markets show different levels of information between the different component players. Moral hazard hinders sharing of information among participants in the market and this is a key requirement for funding of key projects by investors.

Financial intermediation is the control process and procedure used by institutions to transform funds given by savers into funds used by borrowers (Besley and Brigham, 2014). Investors generally loan to financial institutions like banks at a good rate. The financial institutions then loan to customers and companies that borrow. Investors prefer not to lend directly because financial intermediaries have robust credit risk monitoring systems. Moreover, financial intermediaries offer secondary financial instruments to enable clients and investors to purchase primary instruments (Boulware, 2014). If any services are available at a financial intermediary, then it makes no sense to have them. In fact, instead of purchasing the secondary assets from the intermediary, the investor is better off buying primary securities directly without having to pay the intermediation fees.

Irregularities and abrasions in financial markets are the drivers of scarcity traps or income disparity. These market irregularities include unbalanced distribution of information and transaction costs which play a vital role in determining essential judgments regarding capital staking and return alternatives. This theory is pivotal to this study as it captures financial inclusion, and is illustrated by the concept of financial intermediation. This theory also broadens the discussions on how much financial intermediation should be in place to enable higher financial inclusion and thus, how such inclusion helps tap financial innovations into the untapped unbanked population (Jerinabi and Santhi, 2012).

An efficient financial intermediary mobilizes funds from savers to those seeking these funds for more productive use at an affordable cost to help propel the growth and development of the population. This implies that FinTech is the most potent weapon for the disintermediation of banks. In the theory of financial intermediation, transaction costs have been a fundamental issue in discussing the existence of financial intermediaries, including FinTech services in this research (Lynn et al., 2018).

A limitation of this intermediation theory is that it does not recognize the risk management aspect of lenders in the financing relationships (Lynn et al., 2018). It also builds on the notion

that intermediaries have a static role in alleviating imperfections in the market, reducing transaction costs, and informational asymmetries that exist.

### 2.2.2 Innovation Diffusion Theory

Rogers officially presented this theory in 1962. It holds the view that in order to defend their strategic position, maintain competitive advantage and minimize cost, then organizations must selectively adopt an innovation that gives them an edge (Rogers, 1962). This theory recognizes that innovation is absorbed into the market based on the relative advantage with the likelihood of acceptance leaning towards new products (Back, 2013). It also brings out the purchaser's personality through their buying behaviour which makes them switch to new products with a higher perceived value compared to older products.

A highly innovative product with highly coveted benefits might not be perceived that way by everyone in the market as some people tend to wait and see if it works. Other consumers are likely to be at the forefront of testing the new product (Back, 2013). These adoption behaviours lead to the bell-shaped distribution curve used to group the population into the five categories (innovators, early adopters, early majority, late majority, and laggards) involved in traversing innovations (Buckley, 2012). The frameworks and models associated with traditional technology acceptance also mirror those accepting and implementing transformational financial innovations.

Therefore, this research study aims to bring the argument to the conventional techniques and innovations. Big data has also had a significant impact on extending financial services to unserved and underserved markets. Therefore, this theory will be instrumental in explaining how FinTech fits into the financial inclusion story in Zimbabwe. A weakness of the theory is that it portrays the idea that most innovations are valuable and should be adopted straight away, even without careful testing and proof of concept, which is not exactly the way to go (Resources, 2018).

### 2.2.3 The Silber's Constraint Theory of Innovation

William Silber developed and presented this theory in 1975. Financial innovations are attempts to maximize profits by using technology to squeeze as much productivity as possible from the bottlenecks in a company. The theory presents the argument that the organizational efficiency

of a financial institution minimizes its profit maximization potential. According to Silber's observations, some limitations (such as administrative management) hinder profit maximization. Government regulations or controls create difficulties for companies to increase their profits.

Thus, financial institutions reduce government regulations to a minimum or even circumvent government regulations to maximize their profits. Even though these limitations enable a steadfast approach by management, they slow down financial institutions, such that the struggle in these organizations is to try to minimize the expense (Silber, 1975). Based on research findings, if organizations are not very successful in a certain segment, and hence do not achieve high profitability, they become very innovative. This decreased profitability pushes them to innovate more and increase their profitability. This coincides with what was proposed in Silber's work (1983) that the more an organization invests in technology and innovation, the harder it shields off competition's advances into its success. In the long run, it results in more profitability and sustainable performance.

Since FinTechs are financial innovations, this theory is easy to relate to them. The theoretical concepts outlined in Silber's Constraint Theory can also enlighten our understanding of the variables and their association with financial inclusion. However, just like other innovation theories, they are based on theoretical models that overlook incomplete markets, principle-agent problems, legal regulations, volatility, tax rates, asymmetric information problems, and many other challenges in the market (Hasan and Serhat, 2018). As a result, it tends to hold an impractical view that financial innovations are the tools and driving forces in perfect financial markets while underlining the importance of risk concerns in how financial institutions work.

### 2.3 Empirical Literature

FinTech is a high-paced technology-driven innovation sub-sector of the financial services industry and has caused a radical disruption to traditional banking. Still, the culture between the incumbent banks and FinTech must convert from competitive to collaborative (Mohan, 2020). The literature being discussed here is in the context of the various studies that have been conducted in FinTech and financial inclusion. As such, we will classify it as either global or Zimbabwean landscape.

### 2.3.1 The Global Perspective

Vincent and Levi (2018) investigated the role of FinTech companies in financial inclusion in the Indian population. The main objective of the research was to investigate how, from a business model perspective, FinTech companies could improve financial inclusion. They also explored how barriers and main challenges facing FinTech companies translate to financial inclusion. India stands out as a global tech hub, hence qualifies as a great practical environment for the study. The research study, based in Bangalore, utilized a qualitative approach characterized by semi-structured interviews with FinTech executives (Kathuria, et.al., 2019). The study proved that with the digital wave, half of the financially excluded population can cross over the barrier to join the financially included population. The research also highlighted the plight of players in the bottom half of the market who incur very high operating costs.

For the states in India, Uppal and his research associates studied the influence of the penetration of mobile technology on the economic growth witnessed in those states. The latter researchers studied nineteen states for eight years from 2006 and created a structural model from their data. The model showed that Indian states with more mobile penetration rates will more likely develop faster than the rest. At a levelling penetration rate of 25%, there is a limiting point above which network impacts to enhance the role of mobile phone technologies on growth. Network behaviour determines telecom networks and the development impact is better when the optimum size and coverage of the network are reached (Kathuria, et.al., 2019).

### 2.3.2 African Perspective

Following the advent of mobile money transfer, Etim (2018) investigated the impact of mobile banking services and their acceptance in the population of financially included Nigerians. Etim researched the impact of mobile banking and its adoption on financial inclusion in the population in Nigeria. The research was meant to highlight how mobile gadgets have bolstered financial inclusion whether the population viewed these gadgets as user-friendly enablers for cash transfers, and if this utilization was positively accepted in the community. The study found out that mobile phones' widest use was in communication, mainly making calls and sending messages, while rarely being used for other tasks like mobile money transfers or mobile banking.

Saliu's research was carried out among the residents of Kumasi in Ghana, to investigate how their social welfare and economic status was impacted by mobile cash transfer products that had been innovated. The study population on which this research was based on over a hundred mobile money vendors in Kumasi Metropolis. Interviews were done to collect data from the vendors while SPSS was used to carry out the data analysis and interpretation (Etim, 2018). The study indicated that the income levels, living standards, and employment characteristics that define these vendors' socio-economic status were heavily impacted by the mobile cash services. In addition, the study illustrated that mobile financial services positively correlate with financial inclusion in the Ghanaian people population.

In the Tanzania Republic, Kossey and Ishengoma, (2018) did a study on access to banking services via mobile devices and the impact of their distribution and adoption on financial inclusion. The population in Kibaha District was made up of mobile banking services customers and cash transfer agents in the district, with more than twenty million accounts. The findings showed a positive relationship between mobile money banking and financial inclusion (Ishengoma, 2020). Another team led by Gomber researched and distinguished between the normal formal financial institutions and the modern FinTech outfits, majorly funded start-ups that launch into the financial services industry (UNCDF, 2021). The FinTech companies thrive on the inefficiencies that the previous generation of financial institutions have not been able to fix. The FinTech outfits have the flexibility, infrastructure and versatility to tailor and democratize financial services compared to the rigid conventional banks and insurance companies. As a result, consumers are empowered to source their products and services from any providers of their choice.

For financial inclusion, several studies provide evidence supporting the correlation between mobile money and financial inclusion. Sekantsi and Motelle (2021) as well as Tsemane (2021) conducted research in Lesotho, examining this relationship. Sekantsi and Motelle discovered both short-term and long-term connections between mobile money and financial inclusion. Tsemane (2022) further investigated the impact of mobile money on advancing financial inclusion in Lesotho, focusing on the benefits and challenges experienced by users, particularly across different demographic groups. The study used questionnaires and surveyed 140 individuals who use mobile money in Lesotho. Tsemane found that the majority of mobile money users fell within the age range of 22 to 30 years, followed by the age range of 31 to 40 years. According to Tsemane (2022), the most prominent challenge faced by mobile money users in Lesotho is the liquidity of agents, resulting in frequent unavailability of deposit and

withdrawal services. Despite these challenges, the adoption of mobile money innovation continues to expand in Lesotho.

FinTechs now come out strongly as fierce competitors of conventional banks and insurance companies by filling in the gaps for needs not catered to these institutions. FinTech companies provide services in digital insurance, digital credit, digital currencies, digital payment services, digital investment services and digital financial advice (Bournie; 2019). Digital financing involves digital financial capital raising methods like crowdfunding, while digital investments enable consumers to invest using their technology devices, such as smartphones, to participate and sign up for global investment platforms. Digital assets can be currencies or stores of value that exist digitally and could be issued by central banks or available publicly as powered by blockchain technology.

Digital currencies are decentralized and form a central part of the blockchain payment systems. Digital payments are non-physical forms of payments and these are currently dominated by mobile payment systems, online banking, card, check and blockchain payment systems. Others include Peer-to-peer money transfer methods and platforms like Payoneer, Skrill, PayPal and digital wallets where convertible electronic money is managed and transferred. In as much as FinTech helps consumers develop a closer personal relationship with their providers, for example in the insurance sector and financial consultancy, little attention has been focused on studies on these digital products (Gomber et al., 2018).

Furthermore, FinTech companies have spurred innovation and growth in near-field communication (NFC) technology in payments, blockchain technology across many products, peer-to-peer (P2P) technology in digital payments and big data analytics across the board, including the spread psychology inspired by social media networks (Gomber et al., 2022). Cloud computing has enabled the hosting of many of these technologies, while the Internet of Things (IoT) has grown a base for data provision and monitoring done by robotics, machine learning and artificial intelligence which are all technologies that drive financial innovations.

### 2.3.3 The Zimbabwean Perspective:

Based on a descriptive research technique, Kwakwa, did his research on the topic of mobile banking, while addressing its impact on financial inclusion in Zimbabwe. The study was based on the period of eight years from the year 2009 and utilized multiple regression methodology

while analyzing the relationship between financial inclusion and mobile banking services. The researcher noted that mobile money transfer services and financial inclusion correlate positively for the population tested (Kwakwa, 2018). The researcher also noted that mobile banking services had deepened and increased in scope during that period.

Dzingirai (2021) conducted a research study that examined financial inclusion in the Zimbabwean population based on the variables of mobile banking. The researcher based their studies on the Eco-Cash model to establish its role in financial inclusivity and economic empowerment. The researcher builds some work around the assessment structure of measuring how the country's financial inclusion and economic setup have been influenced by mobile money services. In the study findings, the researcher highlighted a significant positive relationship between financial inclusion and mobile banking (Malunga ,2021). The researcher recommended that policymakers should be flexible in adapting to policy changes as innovations and technology develop.

The coronavirus pandemic disrupted the socio-economic well-being of informal players through the adoption of FinTech financing and digitization. Nyagadza et al, (2023) , says the majority were excluded- for instance, women and youths, in Sub-Saharan Africa in general and Zimbabwe in particular. Evidently, the ubiquity of digital technology is seen transforming the manner in which customers engage with financial institutions. However, by innovation, the pandemic disrupted the gains made in gender equality, women's empowerment and accessibility to be brought in the palm of one's hands. Malunga postulated that small-scale trade generated substantial income - accounting for 40% of intra-SADC trade and employment in the region. That resulted in vulnerable populations accessing goods and services that were key for their economic and social recovery hence playing a critical role in poverty alleviation, food security and household livelihoods.

According to the Zimbabwe Financial Inclusion Bulletin (RBZ, 2023); in order to enhance collaboration and foster active engagement of multiple stakeholders in financial inclusion initiatives, a total of ten (10) specialized working groups have been formed. These thematic working groups are tasked with leading focused action plans, aiming to not only provide access to a broader range of financial services for marginalized and target groups but also to promote their active utilization through FinTech solutions.

## 2.4 Critique of Existing Literature

Many studies have been conducted to relate FinTechs and financial inclusion. However, Vincent and Levi's research done in 2018 on the case study of the role of FinTech Companies in India's population financial inclusion was only dedicated to that one specific country and did not explore many details on the factors in the deliverables. This is also true for Kathuria and fellow researchers who concentrated on how economic growth in India has been spurred by the impact of the penetration of mobile technologies.

Etim's study took a different approach, mainly tackling the acceptance and uptake of mobile gadgets for financial services and products. The researcher explored if the study participants regarded mobile phones as suitable and favourable devices for cash transfers, and if this kind of utilization was warmly welcomed in society (Etim, 2018). The study was mainly focused on the receptiveness to the use of mobile devices for other tasks, like money transfers or mobile banking.

The same scope limitation is applicable to Kwakwa (2018), who based his research on data for eight years beginning in 2009 in his study of the impact of mobile banking on financial inclusion. Given that the period is far back, the study research results might not be relevant to the current economic situation, as the research was done more than five years ago. Chirume (2020), did concentrate a lot on Eco-Cash, the transactional facility that most FinTechs use. His research was mainly focused on the number and value of transactions and not the other factors driving the transactions either in terms of the credit services or savings services.

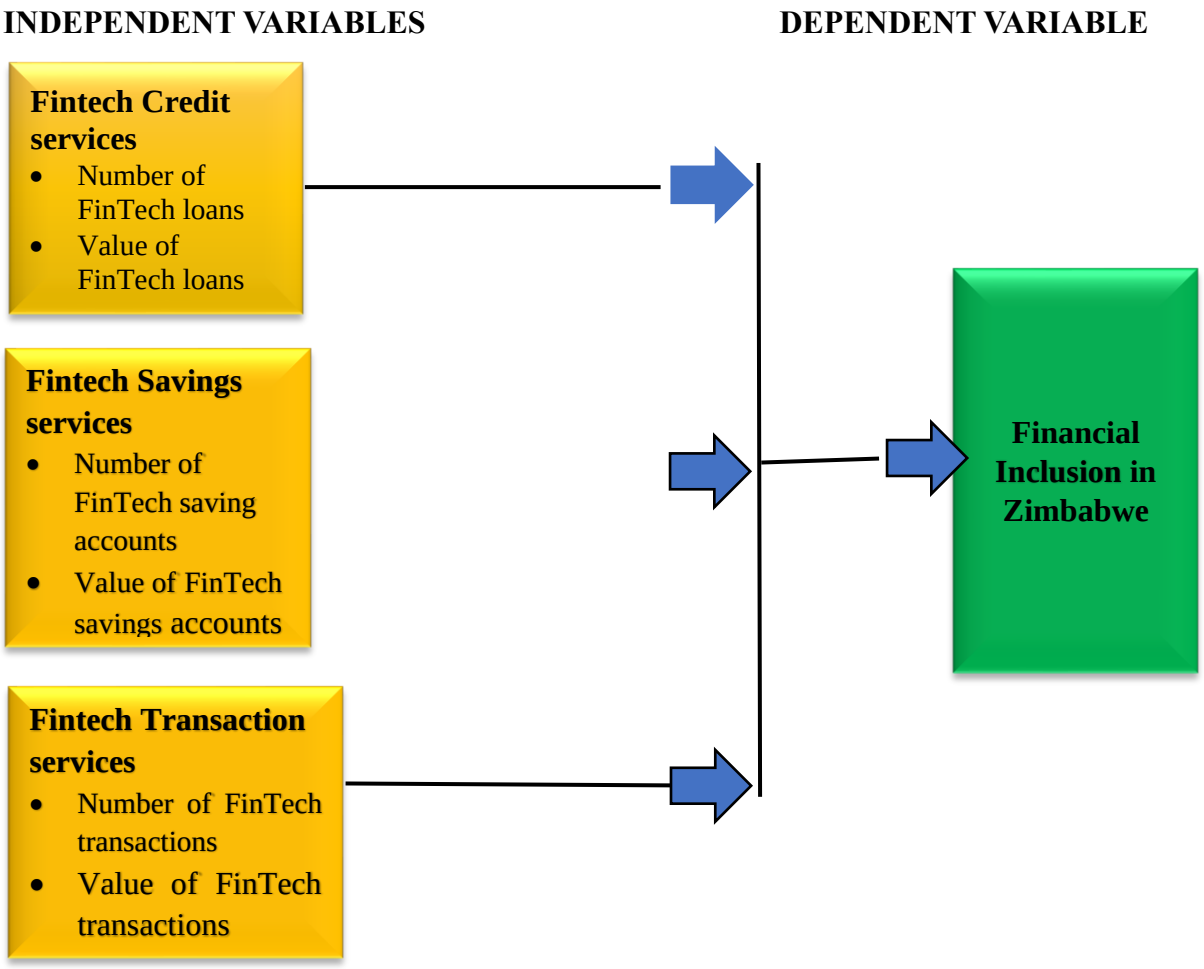
Gomber's research team indicated that FinTech companies are more equipped and versatile with the flexibility to give consumers tailored offerings as opposed to conventional financial institutions while taking advantage of their inefficiencies. These outfits have now come out strong as fierce competitors to traditional banks and insurance institutions by addressing the overlooked needs of the marginalized market. The new customized services and products leverage new technologies and create interesting opportunities in the market. The research explored the successful streak of FinTechs without investigating other impacts surrounding them (Gomber et al., 2022).

Gomber and fellow researchers have dived deep into the technologies that FinTech companies use to bolster their innovative ideas and these technologies include big data analytics, near-field communication (NFC) technology, blockchain technology, social media networks and peer-to-peer (P2P) technology (Gomber et al., 2022). Nicoletti (2022) also supports the idea that artificial intelligence, the Internet of Things (IoT), cloud computing, and robotics are essential technologies for FinTech organizations. However, most of these researchers have not looked at the impact of these FinTechs on financial inclusion.

### 2.5 Conceptual Framework

The conceptual framework diagram depicts the links between the dependent and independent variables in the research investigation (Cullity, 2022). Figure 2.1 presents the conceptual framework for this study.

**Figure 5: Study conceptual framework**




Source: *Researcher's Construct* (Conceptual Framework)

### 2.5.1 Independent Variables: FinTech Credit, Savings and Transaction Services

The concepts that constitute a conceptual framework support one another, articulate their respective phenomena and establish a framework-specific philosophy that defines relationships. The conceptual framework of this study relates to independent variables; FinTech credit services, FinTech savings services, FinTech transactional services, and the dependent variable; financial inclusion in Zimbabwe. FinTech credit services refer to the lending products in the FinTech space. These apply artificial intelligence and machine learning algorithms and have been linked to credit rating databases to instantly appraise loan applications based on customer data as they disburse loans to the applications right away.

FinTech savings services are available for all customers with access to the applications. Some offer savings accounts for clients to enable them to achieve short-term goals through tailored savings plans offered as simple savings opportunities. For all FinTech products, the transaction services are tied to the package as withdrawals and cash deposits are essential for both credit and savings services to exist. The transaction services enable the movement of funds from one individual or platform to another for various purposes.

### 2.5.2 Dependent Variable: Financial Inclusion

The most recognized mode of measurement of financial inclusion is by metrics based on access to formal financial services, for example, basic bank accounts (RBZ, 2018). For numerous family institutions, the extent of banking diffusion is more profound through the number of deposit accounts than any other measurement method (Carol and Mehta, 2019). Knowing the population's exposure to formal bank services in rural and city settings indicates the level of financial inclusion.

Better well-being is not dictated by the extent of financial inclusion. It is more demanding and expensive for organized groups to pay for informal financial services than for the same groups to work with formal financial institutions (Donovan, 2018). There are two major divisions of financial access; one is the supply side, where service providers are, mainly loan providers, like financial organizations and other institutions. The other category is the demand side, which includes organizations, institutions and families or individual consumers. One of the most common approaches to assessing financial inclusion is based on the number of bank accounts per population (for example, the number of accounts per 1,000 adult individuals in the population).

The other common approach is based on the number of automatic teller machines per population (for example, ATMs per million people) or the number of bank branches (number per million people). The measures mentioned still portray weaknesses, as they give incomplete details in an economic set up to enable one to get all the information in sufficient quantities for complete justification. Families that utilize financial services provided by banks or other formal financial institutions are formally encompassed (Etim, 2021).

With reference to studies done globally, financial inclusion in rural areas opens up more when people in those remote areas provide financial services to their neighbouring communities as well. Mahmood and Sahai (2021) attest to this being a significant variable where there is motivation to establish a financial services presence, as this enhances the services for the local communities provided that the providers of these services deem it viable to offer the services in these areas. According to Gakure, Anene, Arimi, Mutulu and Kiara (2022), mobile banking is a more readily available service compared to other financial products meant for the masses.

The driver of FinTechs is mainly smartphone penetration and internet access, in addition to other supporting factors. These included the impact of literacy, the population, credit, income and deposits of knowledge (Chithra and Selvam, 2019) among the people in India. The environmental structure in India is also an influential factor in dictating the population's character and attitude towards finance management. According to Camara, Peña and Tuesta (2019), who conducted a study in Peru, they determined that financial inclusion in the population is impacted by the level of education and earnings. On the other hand, Africa's financial inclusion is critically influenced by population density in addition to mobile banking which has been found to increase financial access according to Allen et al. (2018).

### 2.6 Research Gaps

Financial inclusion has long been a challenge in developing countries, including Zimbabwe. In 2016, Zimbabwe introduced a National Financial Inclusion Strategy in response to significant difficulties faced by its financial system (MoF, 2022). These challenges entailed a lack of confidence in both local and international markets, which were primarily attributed to the lasting effects of hyperinflation, limited availability of liquid assets, and a struggling economy (RBZ, 2018). Additionally, policy obstacles arose concerning the generation of sufficient foreign currency to address domestic and external requirements. As a result, there has been limited access to financial services and barriers to financial inclusion in the country and these

include challenges such as limited availability of banking services, high transaction costs, inefficient processes, limited credit access, and low levels of financial literacy and education (Kwakwa, 2021).

These challenges have widened the digital divide and hindered the participation of individuals and businesses in economic activities, saving, and investing, thereby reinforcing poverty, inequality and hindering economic growth. The traditional banking system has struggled to address these issues, particularly in remote and rural areas where infrastructure is lacking. Therefore, there is a need to explore the potential of FinTech solutions to overcome these barriers and promote financial inclusion in Zimbabwe. FinTech solutions in Zimbabwe have the potential to improve financial inclusion by increasing access to financial services, lowering transaction costs, enhancing efficiency and convenience, improving credit access, and promoting financial literacy (Maune et.al, 2020). These innovations leverage digital technologies to provide affordable and accessible financial services, particularly to underserved populations. By addressing barriers to financial inclusion, FinTech solutions can contribute to inclusive economic growth and empower marginalized communities. However, challenges such as limited internet connectivity and digital literacy need to be addressed to ensure that these benefits are accessible to all.

There are also various gaps to explore in the subject of FinTech and financial inclusion. Due to this, there are limited studies that have been done on the subject of Zimbabwe as far as financial technology solutions for financial inclusion. The limited past papers conducted on the subject in Zimbabwe include Munyengera and Matsumoto (2018) on the role of mobile banking on financial inclusion in Zimbabwe, Maune et. al (2020) on financial inclusion nexus economic growth, and Chitimira and Tonderai (2021) on determinants, challenges, and opportunities of mobile money in Zimbabwe. Evidently, the Zimbabwean context suffers from a significant scarcity of data pertaining to FinTech, specifically in relation to the interconnection between FinTech variables and digital indicators derived from previous studies. Vincent and Levi (2018) did a detailed case study of FinTech companies' role in financial inclusion in India. This was a study based on the Indian population, creating a gap for more to be done to the population in the Zimbabwean scenario as per the objectives set out in this study.

Additionally, most studies in Zimbabwe have not introduced diaspora remittances and lending rate as control variables given that the two variables play critical roles in financial inclusion in

the empirical literature. Other schools of thought have paved the way and basis for the financial inclusion nexus economic growth and development of Zimbabwe (Maune, Matanda and Mundonde, 2020). Moreover, many studies have been based on bank-level studies with few macro-level analysis in Zimbabwe.

Etim's investigation of banking services through mobile avenues and the acceptance of mobile money for financial inclusion. The research study leaned towards exploring the utilization of mobile technologies and the financial products and services provided through them. The researcher examined whether research respondents viewed mobile phones as user-friendly for mobile money transfers and whether such utilization was welcome and acceptable in society (Etim, 2018). They were seldom used for other tasks like mobile money transfers or mobile banking.

This concentration on the acceptability of mobile phones leaves a gap for other enabled FinTechs to be explored. Most of these FinTech solutions run based on smartphones and offer the credit, savings, and transactional features that form our objectives. Saliu evaluated the influence of mobile money transfer services on the socio-economic status of mobile money agents in Kumasi Metropolis. The population was the MM vendors in Kumasi Metropolis, Ghana. The research conclusively indicated a strong correlation between mobile financial services and financial inclusion in the study area (Saliu, 2021). This can also be extended to FinTechs from the Zimbabwean perspective, especially regarding the services the FinTechs offer to the population in Zimbabwe.

In Tanzania's Coast region at the Kibaha district council, Ishengoma's work in 2018 on banking via mobile phones contributed to the literature on financial inclusion. The targeted population for this study consisted of over 20 million Tanzanian customers who subscribed to mobile services and agents who offered mobile banking systems. This was specific to Tanzania. The findings of a research study carried out in Zimbabwe would bring forth an essential relationship between FinTechs and financial inclusion.

Based on secondary data for the period of eight years from 2009, Ngugi applied a descriptive research technique that empirically explored the variables of mobile banking against financial inclusion in Zimbabwe. The researcher used statistical tools, specifically multiple regression

methods to establish the link between financial inclusion and the variables in mobile banking services (Ngugi, 2022). The gap can be closed by doing similar research in a more recent period, exploring the present array of FinTechs, and relating them to financial inclusion. This would also apply to Mutsune (2019). The other gap is in exploring both aspects of banking in terms of credit and savings or investments and the transactional nature.

Most of the studies have been done globally. For example, Vincent and Levi (2018) did a wider-scope research study of the FinTech companies' role in financial inclusion in the Indian setup. However, limited research has been done in the Zimbabwean context in recent times, leaving a research vacuum. The study brings more insight into the matter by investigating the effect of FinTech on financial inclusion among Zimbabweans in a more recent period to provide a more relevant case study and also reflect on the objectives to cover the subject from a credit, savings, and transactional services view.

By conducting an in-depth analysis of the current state of financial inclusion, identifying key FinTech solutions, and assessing their impact, this study will generate valuable insights for stakeholders and contribute to the scholarly understanding of FinTech's role in fostering financial inclusion (Munyegera et.al. 2018). Challenges counter various attempts by monetary organizations to try to incentivize financial inclusion by increasing the number of bank branches and investing while educating the masses on the adoption of financial innovations (Etim, 2021). The financial innovations coming up are based on new technologies like artificial intelligence (AI) and do not rely on the same information and technology used in conventional systems (Gardeva and Rhyne, 2021).

Ultimately, the research findings will help shape best practices that promote inclusive and sustainable financial development in Zimbabwe. FinTech solutions in Zimbabwe have the potential to improve financial inclusion by increasing access to financial services, lowering transaction costs, enhancing efficiency and convenience, improving credit access, quality of financial services, usage and promoting financial literacy and education (Zeidy, 2022). These innovations leverage digital technologies to provide affordable and accessible financial services, particularly to underserved populations. By addressing barriers to financial inclusion, FinTech solutions can contribute to inclusive economic growth and empower marginalized and unbanked communities.

## 2.7 Chapter Summary

The chapter puts across an examination of the fundamental theories that shape the study and make the basis for the analysis being conducted. Concisely, literature, empirical review and conceptual framework were discussed. The study utilized financial intermediation theory, innovation diffusion theory and Silber's constraint theory. Many recent research studies indicate a direct contribution of the recent technologies to financial inclusion. The direct contribution has been evident in terms of the improvement in the financial inclusion metrics. Still, questions have come up on the effect of FinTech and the magnitude of their impact on financial inclusion in the Zimbabwean financial ecosystem. This research therefore focuses on studying how the adoption of financial technology solutions propagates financial inclusion in the Zimbabwean financial ecosystem. The following chapter will look at the methodology that was used by the researcher in collecting data and information relevant to the research under study.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter presents the research methodology, employed in this study. The chapter constituted of the following: research design, research approach, target population, sample size, sampling procedure, research instruments, and data analysis procedure.

## 3.2 Research paradigm

The study adopted a pragmatism research philosophy. Pragmatism includes the study that incorporates approaches that will work best in finding solutions for the phenomena under investigation, and this enables dynamic methods to find solutions on the paraphernalia of FinTech solutions on financial inclusion in the Zimbabwean financial ecosystem**.** This philosophy accepts all the concepts to be more relevant if they support action. Pragmatism was considered by the researcher as a way to modify the philosophical assumptions of two extremes positivism and interpretivism and it combines the scope of the two other philosophies. The other advantage of using this philosophy is that it also gives room to use both approaches qualitative and quantitative in the data collection and data analysis to understand the phenomena.

## 3.3 Research design

A research design, according to Fathing (2016), clearly specifies the processes of the research process. It gives a project outline and arranges the project's activity step by step (Niknejad, Hussin and Amiri, 2019:43). Explanatory research was utilized by the researcher because it is a study approach that investigates why something occurs when there is minimal information available. It can aid in expanding understanding of a certain issue by determining how or why a specific phenomenon occurs and forecasting future occurrences (George and Merkus, 2021).

## 3.4 Population

Momoh (2020) defines a population as "…a distinct group that consists of a nation or a collection of individuals who share a similar trait.". The target population in this study comprises financial institutions, FinTech companies and end users. Table 3.1 gives a detailed breakdown of the population.

The target population included 18 members of management, 60 general staff and 72 resident clients across 6 financial institutions and FinTech companies based in Chitungwiza namely (CABS, CBZ, EcoCash Holdings, ZB Bank, Steward Bank and Lomabil (Pvt) Limited.

**Table 3.1: Target population**

| | Financial Institutions | | | | FinTech Companies | | |
|---|---|---|---|---|---|---|---|
| **Companies** | **CABS** | **ZB Bank** | **CBZ** | **Steward Bank** | **EcoCash** | **Lomabil** | **Total** |
| **Managerial** | 3 | 3 | 3 | 3 | 3 | 3 | 18 |
| **General staff** | 10 | 10 | 10 | 10 | 10 | 10 | 60 |
| **End Users** | 12 | 12 | 12 | 12 | 12 | 12 | 72 |
| **Total** | 25 | 25 | 25 | 25 | 25 | 25 | **150** |

*Source: Author's compilation: (2023)*

### 3.5 Sampling

According to Sapsford (2007), a sample is a subset of a population that generally reflects the whole population under investigation. Because it is impossible to conduct research on the entire population, data collection from a representative of the population is thought to be viable. The presence of a research sample in this study enabled the researcher to get the planned number of respondents. A sample size is a subset of a target population chosen to participate in a study (Kothari, 2014). According to Horn and McArdle (2018), a sample size can only be significant if it is more than 30% of the target population. The sample mean was used as the population mean's point estimate, and the margin of error was supplied by:

$$Z\frac{\sigma}{n} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.1$$

This makes it large enough to reflect the target population in an unbiased manner. A tiny sample size may result in a high margin of error, but a very big sample is costly and difficult to persuade the target group to participate; so, the researcher utilized Slovin's Formula to compute the sample size, which is as follows:

$$n= \frac{N}{1+Ne^2} \text{ , where } \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.2$$

n is the sample size;

N is the total population size; and

*e* is the margin of error/sampling error/confidence interval.

5% precision was used as the margin of error of the study. This gave the sample size below.

$$n = \frac{150}{(1+150(0.05)^2} = 109$$

For this research,109 participants will be targeted to give insights on the effects of FinTech solutions on financial inclusion.

**Table 3.2: Sample Size**

| | Financial Institutions | | | | Fintech companies | | |
|---|---|---|---|---|---|---|---|
| **Companies** | **CABS** | **ZB Bank** | **CBZ** | **Steward Bank** | **EcoCash** | **Lomabil** | **Total** |
| **Managerial** | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| **General staff** | 10 | 10 | 10 | 10 | 10 | 10 | 60 |
| **End Users** | 6 | 6 | 6 | 6 | 10 | 9 | 43 |
| **Total** | 17 | 17 | 17 | 17 | 20 | 21 | **109** |

*Source: Author's compilation: (2023)*

### 3.6 Research Instrumentation

Research instruments are tools used for collecting data in order to obtain a better understanding of the research problem. For this study, the researcher used questionnaires and interviews.

#### 3.6.1 Questionnaires

The researcher employed both structured and unstructured questions to acquire data from general staff and customers for the aim of this study. Unstructured (open-ended) questions will be employed to allow respondents to express their feelings freely, in the sense that respondents provided appropriate information. The researcher favoured questionnaires because they avoided interviewer bias because they were filled out in the researcher's absence. Furthermore, because customers were anonymous, surveys allowed participants to express themselves freely. The questionnaires were also a low-cost method of gathering data and permitted simple data processing.

### 3.6.2 Interviews

Interviews, according to Yin (2018), are a method of acquiring relevant data through direct verbal contact between the interviewer and respondent as described by research objectives. The researcher will use an interview guide to conduct face-to-face interviews with management and the end users in order to capture the gradation of inclusivity by FinTech solutions. The questions that will be asked, as well as the sequence in which they will be answered, will be given by an interview guide. The researcher chose face-to-face interviews to allow for clarification of questions whenever the respondents required clarity on questions.

## 3.7 Data collection procedures

For data to be collected in the study the researcher will seek approval from the university department of research and ethical clearance committee and also seek approval from the financial institutions for the research to commence. The researcher made use of tools such as individual interview guides and questionnaires. Bryman (2012) notes that research tools are used for collecting information and data needed to generate themes for the problem under investigation When conducting interviews, the researcher will make sure that the participants are briefed on the aim of the study, to make them aware of their rights in case they wish to withdraw.

## 3.8 Reliability and Validity

Reliability refers to the derivation of similar results if questions are repeatedly asked after a certain period under similar conditions (Palys and Atchison, 2014). Additionally, Saunders et al. (2009), say data reliability is concerned with whether if another researcher were to do the same study, using the same data collection techniques and analysis procedures, that researcher would get the same results as obtained in the current study. Validity refers to the ability of a question to measure what it is intended to measure and it also aims to measure the truthfulness of results (McArdle, 2018). Moreover, Kombo and Tromp (2009) add that validity measures how well a research instrument measures what it is supposed to measure. Validity is divided into internal and external validity. Internal data validity is concerned with whether the instrument used to collect data measured what it was supposed to measure or not. External validity examines if, and to what extent, findings can be generalized to other organizations, places, and times or transferability in other words, (Saunders et al., 2009).

The validity of the questionnaires was judged using content validity, face validity, predictive validity and construct validity. In this instance, the questionnaires were given to the researcher's mentor, group members and other academics in the same corridors of knowledge to test their validity before being distributed to the respondents. To ensure the validity and reliability of the research questions, the researcher will do a pre-testing process with colleagues and the supervisor and adjustments will be made to avoid unnecessary mistakes thus making some adjustments where necessary. This will involve the distribution of ten questionnaires to five general staff.

Moreover, the interview guide will also be studied by three-level managers of managers of these commercial banks understudy. This will allow the researcher to establish the correct sequence of questions as well as the time needed to respond to all questions. In addition, this enabled the identification and correction of the weaknesses of the instruments before distribution to the actual respondents.

### 3.9 Data analysis and presentation

Due to the inherently noisy nature of raw data, questionnaire entries have to be processed before being applied to any analytical models. Data processing involves coding responses using numeric symbols, categorizing respondents into individual and institutional investors as well and adjusting for non-responses. Data analysis is the process of breaking down large amounts of data into understandable patterns and trends. To analyze data, the researcher will employ the inductive research approach (Patton, 2018). To guarantee understandability, data will be presented in both qualitative and quantitative formats, including graphs, tables, and charts. The Statistical Package (SPSS v24) will be used to exhibit data in line with respondents' replies from the questionnaires, clearly demonstrating how conclusions will be derived. Descriptive statistics such as the measures of central tendency, measure of dispersion and cross tables were used to analyze research results obtained from the respondents on the research questions. Inferential statistics were used for making inferences about the population based on a randomly selected sample including Cronbach's alpha and Spearman's correlation coefficient. Through good data presentation, data will be converted into relevant information. Further, the study findings were presented in tables and figures such as graphs and pie charts. The analysis and conclusions for data acquired from interviews will be formed by skewing commonly offered replies.

### 3.10 Ethical considerations

Ethics have emerged as a fundamental pillar in the pursuit of conducting research that is both impactful and ethically sound. The researcher received ethical approval from the Great Zimbabwe Munhumutapa School of Commerce, which assisted the researcher in obtaining authorization from the financial institutions understudy and other stakeholders. To acquire informed permission, the researcher addressed all participants who matched the eligibility and credibility requirements. Face-to-face interviews and questionnaires will be employed to gather data for the study. The researcher ensured that participants would be anonymous in order to minimize victimization. Furthermore, the information gathered will be solely for scholarly reasons. Furthermore, the researcher relied solely on volunteer involvement. Since the researcher recognized the respondents' willingness or reluctance to engage in the study, those who were hesitant to participate will be excused.

### 3.11 Chapter Summary

The preceding chapter looked at the methodology which was used by the researcher in conducting the research. The target population was identified as well as the sampling techniques and the sampling methods which were used. The researcher went on to explain the research instruments used and why they were chosen. Moreover, the researcher’s efforts to ensure the reliability and validity of data were postulated. The data collection procedure was well described and the researcher ended up giving an insight on the data analysis and presentation tools that were used in carrying out this study. Having identified the research methodology, the next chapter presents data findings and analysis.

# CHAPTER FOUR

# DATA PRESENTATION, ANALYSIS AND DISCUSSION

## 4.1 Introduction

This chapter presents the findings from the research giving a detailed analysis, presentation and interpretation of the research findings. Analysis of data collected from the survey is analyzed using appropriate data analysis tools and is presented for easy interpretation and following by the readers. Therefore, careful and appropriate steps were taken to ensure data was organized, synchronized, cleaned, sorted and analyzed. Since the study used a mixed methods model, combining quantitative and qualitative paradigms, for quantitative data analysis, SPSS Version 25 was used and qualitative data was used. Therefore, demographic information is presented and analyzed following various thematic areas analyzed according to research objectives.

## 4.2 Quantitative Analysis

### 4.2.1 Research Response Rate Analysis

Response rate mainly is the consideration of total administered instruments against those returned and non-responses of the study, if any. Table 4.1 is the presentation on response rate by stratum.

**Table 4.1: Research response rate**

| Group Title | Sample | Issued questionnaires | Responses | % rating |
|---|---|---|---|---|
| **General staff** | 60 | 60 | 43 | 72% |
| **End Users** | 43 | 43 | 35 | 81% |
| **Total** | 103 | 103 | 78 | |

Source: *Researcher's Survey Data (2023)*

The study generally achieved an excellent and overwhelming response as indicated in Table 4.1 on the questionnaire self-administered by the researcher. The study targeted 103 questionnaires and these were all responded to and returned. Similarly, the study targeted 6 personal interviews mainly on 4 commercial Banks namely (CABS, CBZ, Steward Bank, ZB Bank and fin-tech (Ecocash and Lomabil) based in Chitungwiza and these were successfully

conducted giving a 100 percent response rate. Strict adherence to schedules, the close cooperation of participants and high accessibility resulted in an excellent response rate. Several studies support the need for a favourable response rate as critical in enhancing the validity and authenticity of data collected (Bougie and Sekeran, 2016; Rahi, 2017). Saunders (2015) and Ponelis (2015) posit that the researcher's approach to data collection including the timing of interview schedules and questionnaire distribution does affect the level of success of research instruments and ultimately response rate.

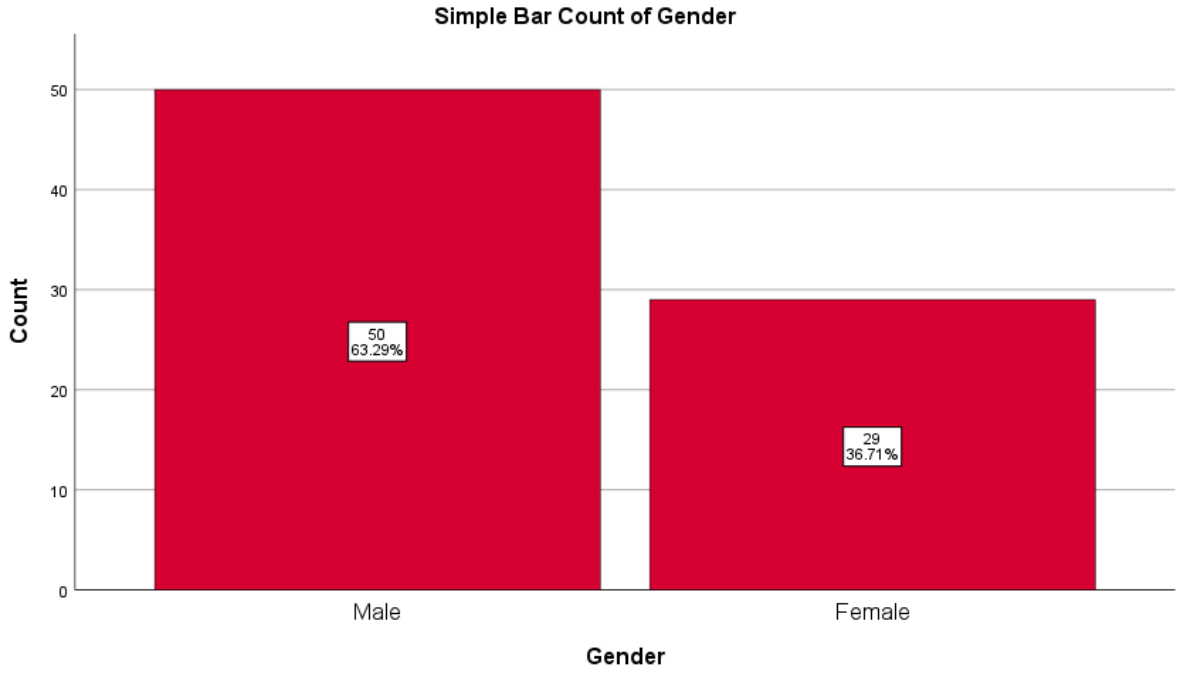
### 4.2.2 Respondents' demographic information

Generally, the study prioritized understanding of demographic characteristics of respondents/participants as a critical parameter to the authenticity and validity of results from the study. Thus, information related to gender, age distribution, and level of literacy constituted part of the survey questionnaire.

### 4.3.1 Gender distribution

Results in Table 4.1 indicate responses collected on demographic data of respondents pertaining to gender in this study.

**Figure 6: Gender Distribution**



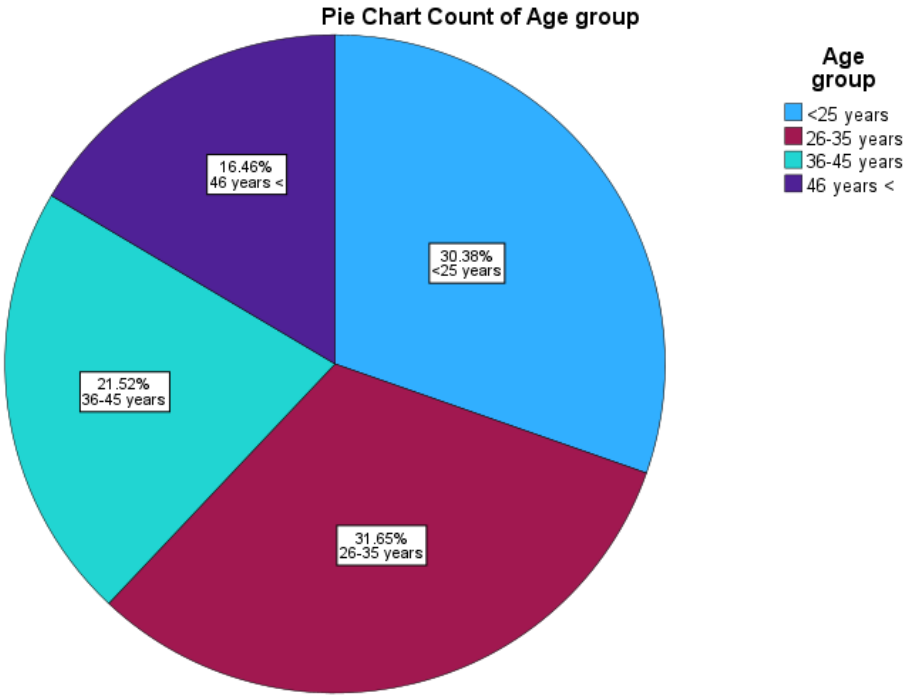

Source*: Researcher's Field Results, (2023)*

Gender participation in the study shows participation by males, 50 (63 %) of the respondents and females 29 (37%). Thus, female participants were lower compared to the females, thus reflecting unfavorable gender still across major sectors in many developing countries in most sub-Saharan, third-world countries. This pattern of gender distribution has also been featured in major surveys by the African Development Bank (ADB, 2020); World Bank (2019); and OECD, (2018), reflecting persistent male dominance in most sectors of economies in developing countries. Women in third-world countries continue to face opportunity hurdles across various areas of the economy, according to research conducted by the World (2013) and the OECD (2014).

### 4.3.2 Age Distribution

Results in Figure 4.2 indicate responses collected on demographic data of respondents pertaining to the age of respondents.

**Figure 7: Age distribution**



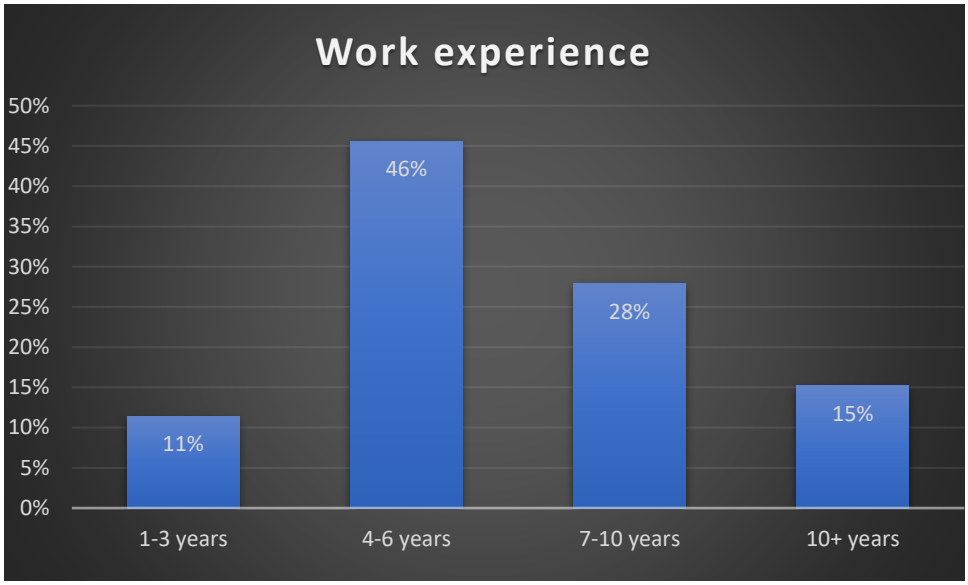

The study participants comprised considerable age disparities, with the study targeting an age range from 25 years and below (30%), the age distribution shows that the majority of research respondents were found in the age category 26-35 years (32%), followed by (36-45 years), constituting (22%) of the total respondents. An important observation on age distribution was

that the research participants were dominated by an active population between 25-45 years, with 53% being male participants.

### 4.3.3 Work Experience

The main purpose of the inquiry was to get an understanding of the respondent's level of experience in dealing with financial technology solutions on financial inclusion in the Zimbabwean financial ecosystem. In order to eliminate experience bias, the researcher considered input from all segments without prejudice Results in Figure 4.3 show the responses of the participants.

**Figure 8: Work Experience**




Source: *Field data (2023)*

From the results presented in Figure 4.3, most respondents (46%) have been associated with FinTech and financial inclusion for 4-6 years while (28%) of the participants fall in the category of 7-10 years. However, 12 respondents (15 %) were found in 10+ years and (11%) of the respondents were 1-3 years old in terms of exposure to FinTech and financial inclusion. The researcher managed to equally consider views from groupings to eliminate experience bias. However, since the majority of the participants had spent over 5 years in FinTech and financial inclusion were thus in a position to give credible data.

## 4.4 Univariate analysis of research constructs

The study performed a univariate analysis of variables, mainly using descriptive and responses were aggregated based on the questionnaire responses. Thus, descriptive statistics on three

variable dimensions have univariate analysis performed on financial inclusion the dependent variable and the independent variables: FinTech credit, FinTech savings, and FinTech transactions.

### 4.4.1 Descriptive statistics for the extent to which FinTech solutions have improved financial access and usage in Zimbabwe.

The researcher performed descriptive statistics on the extent to which FinTech solutions have improved financial access and usage in Zimbabwe. Table 4.2 below shows the extent to which FinTech solutions have improved financial access and usage in Zimbabwe.

**Table 4.2: Extent to which FinTech solutions have improved financial access and usage in Zimbabwe.**

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| To assess the extent to which FinTech solutions have improved financial access and usage in Zimbabwe | 79 | 1.00 | 3.00 | 1.6835 | .72579 |
| Valid N (listwise) | 79 | | | | |

Source: *SPSS Field data (2023)*

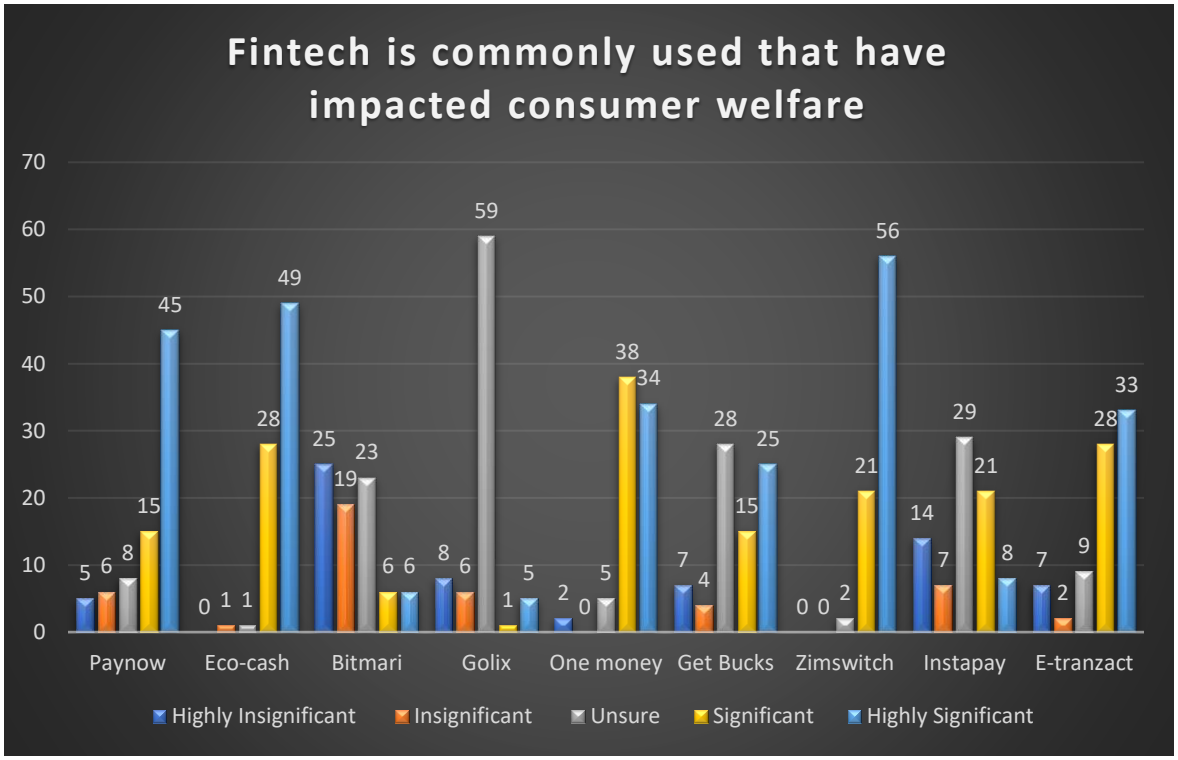
From the descriptive statistics on the extent to which FinTech solutions have improved financial access and usage in Zimbabwe, an aggregate mean score of 1.6835 means the majority of the respondents agreed that it is high as facilitated by technological innovation and literacy. A small standard deviation found below 1 at 0.7259, means that there were little variations in responses given therefore respondents had similar views. Analysis reveals that FinTech solutions are performing well and are not failing to meet key performance indicators on improved financial access and usage in Zimbabwe. These findings are in line with the innovation theory that holds the view that in order to defend their strategic position, maintain competitive advantage and minimize cost, organizations must selectively adopt an innovation that gives them an edge (Rogers, 1962).

### 4.4.2 Descriptive statistics of FinTech commonly used that have impacted consumer welfare

The objective of the study was to determine FinTech companies commonly used in Zimbabwe in relation to their significance. The participants were given a platform to tick in the box on the

listed FinTechs indicating their rate of significance. Below in Figure 4.4 are the findings revealed by the participants.

**Figure 9: FinTech platform commonly used that has impacted consumer welfare**




Source*: Field data (2023)*

From the study findings, on Paynow FinTech, majority of participant agreed that it is highly significant with (45/79) (57%), followed by a 15/79(19%) significant figure. Eight out of seventy-nine indicated that there were not sure by 6/79 of the respondents agreed that it was insignificant followed my 5/79 participants who highlighted highly insignificant. The responses shew that, this FinTech in Zimbabwe is commonly used.

On Eco-cash, majority of the participants showed that they were familiar with the financial technology. 49/79 (64%) indicated that it was highly significant to them followed by (15/79) 19% revealed significant. Small number of participants (1/79) , (1/79) ,(0/79) were unsure ,insignificant and highly significant respectively. As far as financial inclusion is concerned, significance and highly significance figures indicated that, majority of participants are using this FinTech therefore qualifying as one of the FinTech commonly used in Zimbabwe.

From the study findings, Bitmari was one of the FinTechs that were revealed as not commonly used by participants. Majority of participants (25/79) and (19/79) and (23/79) showed highly

insignificant, insignificant and not sure. This might be attributed to its link to Bitcoin payment systems as the majority of people are not familiar with it.

Golix was one of the FinTechs that recorded the highest number of no-sure responses among other FinTechs with (59/79) attributing 75% of the participants not knowing the FinTech at hand. It was followed by (8/79)(10%) highlighting highly insignificant.

One-money was revealed as significant by respondents (38/79) (49%), followed by (25/79) highly significant. Five out of seventy-nine were not sure followed by 2/79 who indicated highly insignificant.

Among the general staff and clients who were the participants, Get-bucks recorded the highest figure as not sure (28/79) (37%), followed by (25/79) (32%) showed highly significant followed by (7/79) (9%) and four out of seventy-five indicating insignificant. The population of those who were not sure, significant and highly significant, demonstrates that FinTech is commonly used.

The study findings revealed that (56/75) (75%) of the participants commonly used it as they stated highly significant followed by 21/75 (27%) was significant to them. Two out of seventy-nine were not sure.

InstaPay was one of the FinTechs that recorded the highest number of no-sure responses among other FinTechs with (29/79) (39%) attributing, (21) (27%) of the participants indicated significance followed by (14/75) highly insignificant. These statistics indicated that it was commonly used.

The findings revealed above, show that FinTech has impacted the lives of Zimbabweans in various ways. These findings are in connection with, Kossey andIshengoma, (2018) as they did a study on access to banking services via mobile devices and the impact of their distribution and adoption on financial inclusion. The findings showed a positive relationship between FinTech and financial inclusion.

### 4.4.3 On challenges and barriers faced in implementing FinTech solutions for financial inclusion in the Zimbabwean context.

The study undertook descriptive statistics on challenges and barriers in implementing FinTech solutions for financial inclusion in Zimbabwe. The responses were based on a Likert scale measurement. A standard deviation of more than one implies a significant difference in respondents. These findings are presented in Table 4.3 below.

**Table 4.3: Descriptive statistics on challenges and barriers faced in implementing FinTech solutions for financial inclusion.**

| Measurement Item | N | Mean | Mean Response | St Dev |
|---|---|---|---|---|
| **Paperwork woes** | 79 | 4.70 | Agree | **0.510** |
| **Reaching scale and profitability** | 79 | 4.68 | Agree | **0.508** |
| **Operational challenges** | 79 | 4.65 | Strongly agree | **0.581** |
| **Navigating an uncertain regulatory environment** | 79 | 4.66 | Agree | **0.535** |
| **Lack of infrastructure and access to reliable internet connectivity in many parts of the continent** | 79 | 4.58 | Agree | **0.545** |
| **Unaffordable internet** | 79 | 4.55 | Agree | **0.575** |
| **Trust issues** | 79 | 4.61 | Agree | **0.715** |
| **Lack of regulations** | 79 | 4.52 | Neutral | **0.812** |
| **Competition** | 79 | 4.21 | Strongly agree | **0.891** |
| **Total** | **79** | **4.10** | | **0.630** |

Source: *Field data (2023)*

Descriptive statistics as shown in Table 4.3 were done to understand the profile of challenges and barriers faced in implementing FinTech solutions for financial inclusion. The items to be measured on challenges and barriers faced had mean scores well above 4 (4.55-4.70) with a small standard deviation below 1. The aggregate mean score of 4.10 denotes "agree" with a standard deviation of 0.630. The small standard deviation demonstrated little variability between responses signified by a standard deviation below 1. Therefore, the aggregate mean score shows that challenges and barriers faced in implementing FinTech solutions for financial inclusion were prioritized. Thus, there is still a lot of work needed to be done to address these issues for FinTech to smoothly flow in this country. These findings are in line with financial intermediation theory as it highlights that, its challenges are pivotal to this study as it captures financial inclusion, which is illustrated by the concept of financial intermediation. This theory

also broadens the discussions on how much financial intermediation should be in place to enable higher financial inclusion and thus, how such inclusion helps tap financial innovations into the untapped unbanked population (Jerinabi and Santhi, 2012).

### 4.4.4 The impact of FinTech solutions on financial literacy and consumer empowerment in Zimbabwe.

The study undertook descriptive statistics impact of FinTech solutions on financial literacy and consumer empowerment. The responses were based on a Likert scale measurement from strongly agree to strongly disagree. A standard deviation of more than one implies a significant difference in respondents. These findings are presented in Table 4.4 below:

**Table 4.4: Descriptive statistics for the impact of FinTech solutions on financial literacy and consumer empowerment**

| Measurement item | N | Mean | Mean response | St Dev |
|---|---|---|---|---|
| **Increased efficiency and productivity for financial institutions and customer** | 79 | 4.78 | Agree | **0.595** |
| **Lower costs for both providers and users of financial services** | 79 | 4.65 | Agree | **0.582** |
| **Improved security and risk management** | 79 | 4.58 | Agree | **0.518** |
| **Greater convenience and accessibility for customers, especially the unbanked** | 79 | 4.55 | Agree | **0.535** |
| **Personalization and customization of financial products and services** | 79 | 4.53 | Agree | **0.525** |
| **Aggregate** | **79** | **4.60** | **Agree** | **0.550** |

Source*: Survey Data (2023)*

From the descriptive statistics on the impact of FinTech solutions on financial literacy and consumer empowerment, an aggregate mean score of 4.601 means that the majority of respondents agreed that FinTech has a role it plays in providing financial solutions in financial

inclusion in terms of increased efficiency and productivity for financial institutions and end users, lower costs for both providers and users of financial services, improved security and risk management, greater convenience and accessibility for customers, especially the unbanked and Personalization and customization of financial products and services. With a small standard deviation found below on 1 at 0.550, this means that there were little variations in responses given therefore respondents had similar views. Analysis reveals that the impact of FinTech solutions on financial literacy and consumer empowerment is performing positively to meet the key indicators of achieving FinTech solutions. A standard deviation of more than one implies a significant difference in respondents. Since all items on FinTech solutions were found below 1, this implied consistency of responses with no major differences. From an inclusive perspective, respondents considered FinTech to be on the above-expected performance in influencing financial inclusion.

### 4.4.5 Descriptive statistics on FinTech solutions on empowerment effectiveness

The study undertook descriptive statistics on FinTech solutions on empowerment effectiveness. The responses were based on three rating options, effective, moderate and not helpful. A standard deviation of more than one implies a significant difference in respondents. These findings are presented in Table 4.5 below.

**Table 4.5: Descriptive statistics on FinTech solutions on empowerment effectiveness**

| Measurement item | N | Mean | St Dev | Rating |
|---|---|---|---|---|
| **Sales** | 79 | 4.78 | 0.558 | **Effective** |
| **Profit** | 79 | 4.75 | 0.508 | **Effective** |
| **Cashflow** | 79 | 4.72 | 0.535 | **Effective** |
| **Customer base** | 79 | 4.66 | 0.545 | **Effective** |
| **Aggregate** | **79** | **4.73** | **0.467** | |

*Source: Survey Data (2023)*

Descriptive statistics FinTech solutions on empowerment effectiveness Table 4.5 was done in order to understand the profile of financial solutions flow as far as empowering the citizens is concerned. The items to be measured on FinTech solutions on empowerment effectiveness had mean scores well above 4 (4.66 to 4.78) with a small standard deviation below 1. The aggregate

mean score of 4.73 denotes “Effective” with a standard deviation of 0.467. The small standard deviation demonstrated little variability between responses signified by a standard deviation below 1. Therefore, the aggregate mean score shows that FinTech solutions on empowerment effectiveness flows were prioritized and thus met expected standards. The findings also highlight the effective role FinTech is playing in the day-to-day running of formal and informal channels as far as getting empowered.

### 4.4.6 Descriptive statistics on the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe.

The study undertook descriptive statistics on the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions. The responses were based on a Likert scale measurement from strongly agree to strongly disagree. A standard deviation of more than one implies a significant difference in respondents. These findings are presented in Table 4.6 below:

**Table 4.6: Descriptive statistics on the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions.**

| Measurement item | N | Mean | St Dev | Rating |
|---|---|---|---|---|
| **Enhancement of digital Infrastructure** | 79 | 4.85 | 0.658 | **Very high** |
| **Policy harmonisation** | 79 | 4.78 | 0.558 | **Very High** |
| **Policy clarity** | 79 | 4.75 | 0.508 | **Very high** |
| **Developing local capital markets** | 79 | 4.72 | 0.535 | **Very high** |
| **Growing the local talent pool** | 79 | 4.66 | 0.545 | **Very high** |
| **Aggregate** | **79** | **4.75** | **0.561** | |

Source*: Survey Data (2023)*

Descriptive statistics of potential policy implications and recommendations as shown in Table 4.6 were done in order to understand the profile of potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions. The items to be measured on potential policy implications and recommendations had mean scores well above 4 (4.66 to 4.85) with a small standard deviation below 1. The aggregate mean score of

4.73 denotes “agree” with a standard deviation of 0.467. The small standard deviation demonstrated little variability between responses signified by a standard deviation below 1. Therefore, the aggregate mean score shows that potential policy implications and recommendations were prioritized and thus meeting expected standards. Going by the results on the overall mean with “agree” means that the presence of effective policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe. The study reveals that companies must combine and achieve the same goals in improving financial inclusion in the nation of Zimbabwe in all corners.

### 4.5 Inferential statistical analysis

With the aim of establishing a relationship between independent and dependent variables, the study performed inferential statistics computed in SPSS, these were done in the form of correlation analysis. Based on the inferential statistics, a model is showing the financial technology solutions on financial inclusion in the Zimbabwean financial ecosystem.

#### 4.5.1 Normality test

To determine the normality of the data or not the study performed the Shapiro-Wilk test in order to consider the use of the appropriate bivariate for analysis between Spearman’s correlation and Pearson correlation test Table 4.7 below presents the results.

**Table 4.7: Shapiro Wilk tests**

| Variable construct | Shapiro Wilk statistic | df | Sig |
|---|---|---|---|
| **Challenges and barriers faced in implementing FinTech solutions for financial inclusion** | 0.882 | 79 | 0.056 |
| **The impact of FinTech solutions on financial literacy and consumer empowerment** | 0.913 | 79 | 0.057 |
| **FinTech Solutions on empowerment effectiveness** | 0.844 | 79 | 0.670 |
| **Potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions** | 0.758 | 79 | 0.772 |

Source*: Field data (2023)*

Shapiro-Wilk test shows that research variables had p-values greater than 0.05. Pallant (2005) avers that when significant values are more than 0.05, data is normally distributed and parametric thus, Pearson correlation was used to infer association between variables.

### 4.5.2 Correlational analysis

As part of determining the relationship between variables, the study undertook a Pearson correlation of variables (Independent and dependent). Results presented in Table 4.8 below:

**Table 4.8: Correlation**

| | | **Challenges and barriers faced in implementing FinTech solutions** | **Impact of FinTech solutions on financial literacy and consumer empowerment** | **FinTech Solutions on empowerment effectiveness** | **Potential policy implications and recommendations** |
|---|---|---|---|---|---|
| **ASP** | Pearson Correlation | .523** | .457** | .649** | **.588**** |
| | Sig. (2-tailed) | .002 | .009 | .000 | **.001** |
| | N | 79 | 79 | 79 | **79** |
| ****. Correlation is significant at the 0.01 level (2-tailed).**<br>***. Correlation is significant at the 0.05 level (2-tailed).** | | | | | |

From the computations on correlation made, challenges and barriers faced in implementing FinTech solutions where to have a positive linearity and significance to FinTech solutions (r = 0.523, p-value = 0.002<0.005). Furthermore, the impact of FinTech solutions on financial literacy and consumer empowerment was found to be positively and significantly related to financial technology solutions on financial inclusion (r = 0.456, p-value = 0.009<0.005). Also, FinTech solutions on empowerment effectiveness were established to have a positive and significant influence on financial technology solutions on financial inclusion (r = 0.649, p-value = 0.000<0.005). Lastly, potential policy implications and recommendations were found

to have a positive and significant influence on financial technology solutions on financial inclusion with ($r = 0.588$, p-value = $0.001<0.005$) as presented in Table 4.8. From the table above, all variables were seen to be positively correlated to financial technology solutions on financial inclusion.

### 4.6 Qualitative analysis

Given that the study employed a mixed-methods approach and that the use of qualitative methods is minor in the study, this part deals with the qualitative analysis of data. Interviews were done with six participants from their respective companies. Data was analyzed thematically, and it was presented in prose.

#### 4.6.1 The extent to which FinTech solutions have improved financial access and usage in Zimbabwe.

*……" to a larger extent it had improved financial access and usage in Zimbabwe as data is the new currency in today's financial landscape, and the FinTech industry is at the forefront of leveraging technology to solve problems and create better financial solutions, so " ……*interviewee 1,2,3 and 4.

*…" FinTech has disrupted traditional banking, bringing innovation to a sector that was once considered unchangeable" ….* All interviewees….. *"The influx of new players has challenged the status quo, forcing financial institutions to adapt and leave behind legacy systems, or risk becoming obsolete" …*interviewee 6.

Interviewees 1 and 3 said…… "*It led to an incredible opportunity for the financial services to utilize the data that is at their fingertips by leaning on the solutions the FinTech industry is providing" ……" it has helped in navigating the new landscape, enhancing data access leading to more efficient and customer-centric services, meaning banks can remain competitive in an increasingly digital world" …...* Interviewee 1, 3, 5 and6…….

….. "*FinTech solutions has improved by targeting the underserved population, including the youth, women, low-income earners, rural communities, and SMEs"…..* interviewee 2…… "*On my point of view FinTech has emerged as a technological enabler in the region, improving financial inclusion and serving as a catalyst for the emergence of innovations in other sectors, such as agriculture and infrastructure" …… "FinTech has emerged as an engine of growth, promoting financial inclusion and stimulating development in key sectors such as agriculture and infrastructure.*

*"In addition, FinTech businesses are promoting financial inclusion in Zimbabwe through a variety of channels, including mobile money, online lending, and digital payments"* ……Interviewee 6

### 4.6.2 Challenges and barriers faced in implementing FinTech solutions for financial inclusion in the Zimbabwean context.

*……." Complex licensing procedures and stringent compliance requirements deter many FinTech startups from entering the market or force them to operate in a legal grey area. Here in Zimbabwe, EcoCash once faced hiccups for the past 2 years, initially facing regulatory obstacles, but the RBZ recognized the need for tailored regulations for mobile money services*". Interviewee 2,5 and 6.

Interviewees 2 and 3 said …*"Unclear Regulatory Frameworks is one of the challenges affecting FinTech in Zimbabwe. These evolving and ambiguous regulatory frameworks can create uncertainty for FinTech firms."*

*"Poor FinTech infrastructure is one of the challenges affecting FinTech solutions in the financial ecosystem"* Interviewee 2

*"In Zimbabwe, data to effectively gain access to FinTech is generally expensive*" …interviewee 4

*"FinTechs aiming to expand beyond their home countries face obstacles such as licensing hurdles, foreign exchange restrictions, and data protection laws. Zimbabwean startups in mobile banking have faced challenges related to anti-money laundering regulations and Know Your Customer (KYC) requirements"*. Interviewee 1

### 4.6.3 To evaluate the impact of FinTech solutions on financial literacy and consumer empowerment in Zimbabwe.

*"It allowed users to make digital payments, transfer money, pay bills, and access other financial services using their mobile phones".* Interviewee 4

*"By leveraging innovative technologies, FinTech has provided a tailored financial education. As individuals have become more financially literate, they made better decisions that not only improve their own well-being but also contribute to broader economic prosperity for society in Zimbabwe".* Interviewee 3.

*"FinTechs have democratized access to products and revolutionized the way we access and manage our money, offering user-friendly solutions that have made financial services more convenient than ever before"* interviewees 2,4 and 6.

*"FinTech solutions have contributed to bridging financial literacy gaps by offering innovative digital financial services that are accessible, affordable, and user-friendly. In this way, FinTech companies can help integrate these individuals into the formal financial system, providing them with the means to save, invest, and build wealth"* Interviewee 2.

*"In my point of view, FinTech has impacted in a way of demonstrating mobile money dominance. Mobile money services like EcoCash have gained widespread acceptance, demonstrating the appetite for digital financial solutions."* Interviewee 5&6.

### 4.6.4 To explore the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe.

Interviewees revealed that:

*"FinTech is a relatively new concept for many Zimbabweans. Raising awareness and educating the public about the benefits of FinTech services is crucial. This can be started at schools and Universities through case studies and sessions with guest speakers".* Interviewee 1&2.

*"Strengthening cybersecurity measures and building trust in digital financial services is paramount"* interviewees 4,5 and 6.

*"Continued investment in digital infrastructure, including internet connectivity, is essential. POTRAZ must take an extensive look at this issue"*.

*"Encouraging the growth of venture capital firms and angel investors can provide much-needed funding for FinTech startups"*. interviewee 1

*"Simplifying and streamlining regulatory processes that can make it easier for startups to operate within the law".* Interviewee 5.

## 4.7 Chapter Summary

The chapter focused on the presentation of the research findings. The chapter provided data gathered through interviews and questionnaires and performed data analysis. The questionnaire

response rate was justifiable according to the literature to carry on with data presentation. For quantitative data, the information in this chapter was provided in the form of graphs, frequency tables, and prose. Based on the opinions of the respondents, the study produced its findings. The data collected successfully addressed the study's specific goals to a large extent. Chapter 5 concludes with implications and suggestions for further research after providing a summary of the findings, conclusions, and recommendations.

# CHAPTER FIVE

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This chapter provides key findings and contributions of this study by focusing on summaries of previous chapters. Major findings, conclusions and recommendations on financial technology solutions on financial inclusion in the Zimbabwean financial ecosystem was discussed and the chapter concluded by summarizing all research findings and highlighting areas for further research.

## 5.2 Summary of findings

The main objective of the research study was to assess impact of financial technology solutions on financial inclusion in the Zimbabwean financial ecosystem. The main objective was split into the sub-objectives: assess the extent to which FinTech solutions have improved financial access and usage in Zimbabwe, to examine the challenges and barriers faced in implementing FinTech solutions for financial inclusion in the Zimbabwean and to evaluate the impact of FinTech solutions on financial literacy and consumer empowerment in Zimbabwe.

### 5.2.1 Objective one: To assess the extent to which FinTech solutions have improved financial access and usage in Zimbabwe.

The study findings concluded that, FinTech solutions have improved financial access and usage in Zimbabwe an aggregate mean score of 1.6835 means the majority of the respondents agreed that its high as facilitated by technological innovation and literacy. With small standard deviation found below 1 at 0.7259, means that there were little variations on responses given therefore respondents had similar views. Analysis revealed that FinTech solutions are performing well and are not failing to meet key performance indicators on improved financial access and usage in Zimbabwe.

### 5.2.2 Objective two: To examine the challenges and barriers faced in implementing FinTech solutions for financial inclusion in the Zimbabwean context.

The study findings concluded that, items to be measured on challenges and barriers faced had mean scores well above 4 (4.55-4.70) with a small standard deviation below 1. The aggregate mean score of 4.10 denotes “agree” with standard deviation of 0.630. The small standard deviation demonstrated little variability between responses signified by standard deviation

below 1. Therefore, the study concluded that aggregate mean score show that challenges and barriers faced in implementing fintech solutions for financial inclusion were prioritized. Thus, there is still a lot of work needed to be done to address these issues for FinTech to smoothly flow in this country. Challenges commonly affecting fintech where, lack of regulations, Unaffordable internet charges and operational challenges.

### 5.2.3 Objective 3: To evaluate the impact of FinTech solutions on financial literacy and consumer education empowerment in Zimbabwe.

The researcher found out that, the on impact of FinTech solutions on financial literacy and consumer empowerment an aggregate mean score 4.601 means that majority of respondents agreed that the FinTech has a role it plays in providing financial solution in financial inclusion in terms of increased efficiency and productivity for financial institutions and end users, Lower costs for both providers and users of financial services, Improved security and risk management, greater convenience and accessibility for customers, especially the unbanked and Personalization and customization of financial products and services.With small standard deviation found below on 1 at 0.550, this means that there were little variations on responses given therefore respondents had similar views. Analysis reveals that the impact of FinTech solutions on financial literacy and consumer empowerment is performing positively to meet the key indicators achieving FinTech solutions. The study also concluded that FinTech's have democratized access to products and revolutionized the way we access and manage our money, offering user-friendly solutions that have made financial services more convenient than ever before. It was further concluded that FinTech have contributed to bridging financial literacy gaps by offering innovative digital financial services that are accessible, affordable, and user-friendly. In this way, FinTech companies can help integrate these individuals into the formal financial system, providing them with the means to save, invest, and build wealth.

### 5.2.4 Objective 4: To explore the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe.

In order to seek the potential policy implications and recommendations for enhancing financial inclusion, the researcher concluded that, items to be measured on potential policy implications and recommendations had mean scores well above 4 (4.66 to 4.85) with a small standard deviation below 1. The aggregate mean score of 4.73 denotes "agree" with standard deviation of 0.467. The small standard deviation demonstrated little variability between responses signified by standard deviation below 1. Therefore, the aggregate mean score shows that

potential policy implications and recommendations were prioritized and thus meeting expected standards. Going by the results on the overall mean with “agree” mean that the presence of effective policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe. The study concluded that companies must combine and achieve same goals in improving financial inclusion in the nation of Zimbabwe on all corners. More so, FinTech is a relatively new concept for many Zimbabweans, raising awareness and educating the public about the benefits of FinTech services is crucial. This can be started at schools and universities through case studies and sessions with guest speakers. The study also concludes that ccontinued investment in digital infrastructure, including internet connectivity, is essential.

### 5.3 Conclusion

According to the study's findings, all independent variables; FinTech credit services, FinTech savings services, and FinTech transactional services, properly explain financial inclusion. It may also be argued that understanding the impact of the unique favourable digital infrastructure and environment aimed toward boosting financial inclusion is crucial in determining the amount of financial inclusion. In addition, the research has shown that FinTech services enhance financial inclusion, with FinTech transaction services leading the way.

### 5.4 Policy Recommendations

1. The researcher urges the regulator to enhance the policies and regulations around the FinTech space, starting with the prevalent FinTech service providers, especially in the credit and savings product offerings.
2. The Central Bank also needs to further monitor the liquidity of these digital credit providers as a section of the population will use them for savings products.
3. The RBZ should enhance their control over these agencies to ensure they do not use risk mitigating measures to generalize credit provision through blanket blacklisting that might influence penetration of FinTech services.
4. Through the regulators namely, the RBZ, the government should deliberately outline policies that enhance financial inclusion without prohibiting or hindering the autonomy of the players to enable more access to the services.
5. The government should also develop policies that encourage innovations to breed more value into the ecosystem and effectively benefit the end users.

6. The banking regulator should also enhance segmented reporting of the various revenue channels to boost availability of information from registered digital credit providers to sharpen the focus of policy improvements focused on financial inclusion.

### 5.5 Recommendations for further research

1. This study is not yet exhaustive in terms of context and nature. More research on other financial innovations, such as online banking platforms and agencies, is needed to see if the findings mirror the patterns revealed in this study.
2. A larger-scale study of FinTech and financial innovations can be conducted to demonstrate how other financial innovations contribute to financial inclusion.
3. Scoping can be extended to the entire SADC region to see if the same variables at work in various economies can impact the findings to match what the study showed or not. Fresh research might also be conducted to give insight on the operational and environmental difficulties that FinTech faces within the SADC region or throughout Zimbabwe.
4. As a follow-up to the study's findings, research may be conducted to investigate why credit FinTech services do not correlate favourably with financial inclusion, as well as legislation and business practices that can improve the influence of credit services on financial inclusion.

## REFERENCES


Adedoyin, Olasile. (2020). Research Methodology.

Adegbite, E., Amaeshi, K., and Nakpodia, F. (2019). FinTech and the challenge of financial inclusion in Nigeria. International Journal of Emerging Markets, 14(2), 335-355.

Adeusi, S. O., and Babajide, A. A. (2015). Financial inclusion initiatives in Nigeria: A survey and strategic perspectives. Journal of Internet Banking and Commerce, 20(2), 1-21.

Adewunmi, O. (2016). Financial inclusion in Nigeria: Issues and challenges. Journal of Sustainable Development, 9(1), 1-13.

Akturan, U., and Tezcan, N. (2015). The effects Of Innovation Characteristics On Mobile Banking Adoption. 10th Global Conference on Business and Economics, (July).

Bell, E., Bryman, A., and Harley, B. (2018). Business research methods. Oxford university Chapter 4. Delhi: New Age International (P) Limited.

Bounie, D., Camara, M., and Mbaye, S. (2019). Mobile money and financial inclusion in Sub-Saharan Africa: Evidence from a panel data analysis. World Development, 117, 214-227.

Business Today in collaboration with PwC, BT Print Edition: December 16, 2018. Available

Chigada, A., Chigada, P., and Mhaka, C. (2018). Financial inclusion and the role of mobile money transfer services in Zimbabwe. Journal of Economics and Behavioral Studies, 10(3), 1-12.

Chikalipah, S. (2017). What determines financial inclusion in Sub-Saharan Africa? African Journal of Economic and Management Studies, 8(1), 8–18.

Chitimira, H. and Torerai, E., 2021. The nexus between mobile money regulation, innovative technology and the promotion of financial inclusion in Zimbabwe. Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad, 24(1); commercial banks in Kenya. Unpublished Masters Project, University of Nairobi, Kenya

Daud, S.N., and Ahmad, A.H. (2022). Financial inclusion, economic growth and the role of digital technology. Finance Research Letters.

Daud, S.N.M., 2023. Financial inclusion, economic growth and the role of digital technology. Finance Research Letters, 53, p.103602.

Demirgüç-Kunt, A., Klapper, L., Singer, D., and Van Oudheusden, P. (2015). The Global Findex Database 2014: Measuring financial inclusion around the world. World Bank Policy Research Working Paper, (7255).

Digital Financial Inclusion; An Anecdotal Evidence from Bogor City. Independent Journal of Management and Production, 9(4), 1338-1353.Available at: https://dialnet.unirioja.es/servlet/articulo?codigo=6747791

Dzingirai, M (2021).Managerial Challenges Under FinTech: Evidence From Zimbabwean Commercial Banks

emerging economies: the Indian context. Information Technology andPeople. 33, (1), pp.198-

Etim, N.A. and Edet, G., 2021. Measuring The Impact of Credit on The Welfare of Rural Farmers in Akwa Ibom State, Nigeria. Journal La Bisecoman, 2(1), pp.32-38.

European Commission. (2013). Proposal for a directive of the European Parliament and of the Council on the comparability of fees related to payment accounts, payment account switching, and access to payment accounts with basic features. Brussels: European Commission.

EY (2019). Global FinTech Adoption Index 2019. Retrieved from https://www.ey.com/en_gl/financial-services/ey-global-FinTech-adoption-index-2019.

EY Global FinTech Adoption Index 2019, Available at https://www.ey.com/en_gl/ey- global-fintech-adoption-index, accessed on January 09, 2020

Farthing, S (2016). Research Design in Urban Planning: A Student's Guide. Financial intermediation scenario. MPRA Paper 85228. Retrieved from FinTech for Inclusion: Challenges and Opportunities, Roundtable.

Gardeva and Rhyne, (2021). Virtual Banking and Financial Inclusion.

Gomber, Peter andKauffman, Robert andParker, Chris andWeber, Bruce. (2022). On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in

Financial Services. Journal of Management Information Systems. 35. 220-265. 10.1080/07421222.2018.1440766.

Goundar, S. (2012). Chapter 3 - Research Methodology and Research Method. Higher Ed. https://doi.org/10.4135/9781506347592

https://mpra.ub.uni-muenchen.de/85228

Ismael, D.M. and Ali, S.S., 2021. Measuring digital and traditional financial inclusion in Egypt: a new index. International Journal of Applied Research in Management and Economics, 4(2), pp.13-34.

Jack, W., and Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. American Economic Review, 104(1), 183-223.

Kathuria, R., Siddiqui, S.H., Mahmood, I. and Khan, S.N., 2019. Financial inclusion for SMEs:

Kithinji, E. (2018). Effects of digital banking strategy on financial Inclusion among

Kossey, M. M., and Ishengoma, J. M. (2018). Issues and Challenges of Student Financing Systems in Africa: The Case of Tanzania. International Journal of African Higher Education, 4(1). https://doi.org/10.6017/ijahe.v4i1.10250

Kothari, C. R. (2014). Research Methodology: Methods and Techniques (3rd ed.). New Kumari, S. and Nair, J., (2022). Interswitch Drives Financial Inclusion: Can Africa's Fintech Unicorn Sustain the Momentum?. IUP Journal of Entrepreneurship Development, 19(4).

Kwakwa, P.A. and Agozie, D.Q., 2023. The role of financial inclusion and green investments. Journal of Environmental Management, 340, p.117911.

Langley, P. and Rodima-Taylor, D., 2022. FinTech in Africa: an editorial introduction. Journal of Cultural Economy, 15(4), pp.387-400.

Lune, H. and Berg, B. L. (2016). Qualitative research methods for the social sciences. Pearson.

Mago S, Chitokwindo S. The impact of mobile banking on financial inclusion in Zimbabwe: A case for Masvingo province. Mediterranean Journal of Social Sciences.

Malunga, M. F. (2021). Experiences of women in the informal economy in Zimbabwe

Mawere, M., and Mawere, C. (2019). Mobile money and financial inclusion in Zimbabwe: A case of EcoCash. Journal of Economics and Sustainable Development, 10(3), 1-11.

Mirchandani, A., Gupta, N. and Ndiweni, E., 2020. Understanding the Fintech Wave: a search for a theoretical explanation. International journal of economics and financial issues, 10(5), p.331.

Mohen, L., and Beja, H. (2018). Barriers to financial inclusion in Zimbabwe: Case study of Harare. Review of Economics and Finance, 2(1), 63-80.

Momoh, A (2020). Momoh-2020 (3). 8. 10-15. methods approach (5th ed.). Toronto, Canada.

Muhomba, S. (2017). Financial inclusion and economic development in Africa: The case of Zimbabwe. Global Journal of Economic, Business, and Social Sciences, 1(1), 1-14.

Munyegera, G. K. for financial access: M. money and the financial behavior of rural households in U and Matsumoto, T. (2018). ICT for financial access: Mobile money and the financial behavior of rural households in Uganda. Review of Development Economics, 22(1), 45–66. https://doi.org/10.1111/rode.12327

Ngugi, B. 2022. Digital Financial Services and Strategic Financial Management: Financial Services Firms and Microenterprises in African Markets. Sustainability, 14(24), p.16994.

Nyagadza, B.; Muzira D. and Chuchu T. (2023). Mobile Fin-Tech Ecosystem Shaping Financial Inclusion in Zimbabwean Banking and Financial Services Markets. 10.1007/978-3-031-23863-5_12.

Ogbuabor, J.E., Eigbiremolen, G.O., Orji, A., Manasseh, C.O. and Onuigbo, F.N., 2020. ICT and financial inclusion in Nigeria: An overview of current challenges and policy options. Nigerian Journal of Banking and Finance, 12(1), pp.90-96.

Ogbuabor, J.E., Eigbiremolen, G.O., Orji, A., Manasseh, C.O. and Onuigbo, F.N., 2020. ICT and financial inclusion in Nigeria: An overview of current challenges and policy options. Nigerian Journal of Banking and Finance, 12(1), pp.90-96.

Ogunode, O. and Akintoye, R. (2023). Financial Technologies and Financial Inclusion in Emerging Economies: Perspectives from Ghana. Asian Journal of Economics Business and Accounting. 23. 38-54. 10.9734/AJEBA/2023/v23i1915.

Omarini, A. (2017). The digital transformation in banking and the role of FinTechs in the new

Ozili, P.K., (2022). CBDC, Fintech and cryptocurrency for financial inclusion and financial stability. Digital Policy, Regulation and Governance, 25(1), pp.40-57.

Pakhnenko, O., Rubanov, P., Hacar, D., Yatsenko, V. and Vida, I., (2021). Digitalization of financial services in European countries: Evaluation and comparative analysis. Journal of International Studies, pp.267-282.

Palys, T. and Atchison, C. (2014). Research decisions: Quantitative, qualitative, and mixed

Patton, M. Q. (2018). Facilitating Evaluation: Principles in Practice. Sage. press.

Popescu, A.D., (2019). Empowering financial inclusion through fintech. Social Sciences and Education Research Review, 6(2), pp.198-215.

Rabbani, M.R., Khan, S. and Thalassinos, E.I., (2020). FinTech, blockchain and Islamic finance: An extensive literature review.

Rabbani, M.R., Khan, S. and Thalassinos, E.I., 2020. FinTech, blockchain and Islamic finance: An extensive literature review.

Raj, B. and Upadhyay, V., 2020. Role of FinTech in Accelerating Financial Inclusion in India. In 3rd International Conference on Economics and Finance organised by the Nepal Rastra Bank at Kathmandu, Nepal during February (pp. 28-29).

Rana, N.P., Luthra, S. and Rao, H.R., 2019. Key challenges to digital financial services in

Reserve Bank of Zimbabwe. (2016d). Zimbabwe National Financial Inclusion Strategy 2016-2020. Harare, Zimbabwe: RBZ. Retrieved from http://rbz.co.zw/assets/zimbabwenational-financial-inclusion-strategy-2016---2020.pdf

Reserve Bank of Zimbabwe. (2017). National Financial Inclusion Strategy 2016-2020. Harare: Reserve Bank of Zimbabwe. Role of digital micro-financial services. Review of Economics and Development Studies, 5(3),

Rupeika-Apoga, R. and Thalassinos, E.I., (2020) Ideas for a regulatory definition of FinTech.

SADC-dfrc. (n.d). Zimbabwe DFIs. Retrieved February 09, 2023, from https://www.sadc-dfrc.org/zimbabwe-dfis

Sapsford R. (2007) Survey Research. Sage, London. https://doi.org/10.4135/9780857024664

Saunders, M. and Bristow, A. (2023). Research Methods for Business Students Preface and

Taherdoost, H., (2023) Blockchain: A catalyst in FinTech future revolution. Future Technology (FUTECH) The Global Findex Database 2017, available at https://globalfindex.worldbank.org/ PwC 2019 Global Fintech Survey, available athttps://www.pwc.com/gx/en/industries/financial services/fintech-survey/blurred- lines.html

The Global Findex Database 2017, available at https://globalfindex.worldbank.org/ PwC 2019 Global Fintech Survey, available athttps://www.pwc.com/gx/en/industries/financial services/fintech-survey/blurred- lines.

UNCDF (2021). The Fintech start-up landscape in Tanzania. Available at: https://www.

Wayne T, Soetan T, Bajepade G, and Mogaji E. (2020) Technologies for financial inclusion in Nigeria. Research Agenda Working Papers. 2020;4(1):40-56

Wibella, N., Fahmi, I., andSaptono, I. T. 2018. Factors Affecting Consumer Acceptance of World Bank. (2020), Financial Inclusion Overview. Retrieved from https://www.worldbank.org/en/topic/financialinclusion/overview

Zeidy, I.A., (2022), The role of financial technology (FinTech) in changing financial industry and increasing efficiency in the economy.

## APPENDIX A: RESEARCH INSTRUMENTS

### RESEARCH QUESTIONNAIRE GUIDE

**PARTICIPANT IDENTIFICATION NUMBER: 000X**

Dear Sir/ Madam

My name is Tariro Zimunhu, a Master's student from the Munhumutapa School of Commerce at the Great Zimbabwe State University (GZU), undertaking a research study to investigate the financial technology solutions on financial inclusion in the Zimbabwean financial ecosystem. The questionnaire seeks to gather information needed in the research study. To help conduct the study, you have been identified as a key respondent and therefore, your participation and cooperation will be heartily appreciated. You are kindly being asked to complete the questionnaire with appropriate responses. I wish to reiterate and assure you that the information provided will remain confidential during and after the study and will strictly be used for academic purposes.

I am therefore kindly asking you to answer the questions below by ticking in the spaces provided to show your answer. Your name or any form of identity is not required on this questionnaire in order to maintain your anonymity.

Thanking you in advance.

To ensure utmost confidentiality and anonymity, strict measures will be implemented throughout the research process. Please indicate your response by selecting the appropriate checkbox, which represents the most suitable answer. I appreciate your willingness to participate in this study.

**PART A: Demographics and Background Information**

1. Gender Male ☐ Female ☐

2. Age group: <25yrs ☐ 26 -35 ☐ 36- 45 ☐ 46> ☐

3. Professional Qualifications

Certificate ☐ Diploma ☐ Degree ☐

Other (please specify) …….

4. How long have you been in this organisation?

1-3 years ☐ 4-6 years ☐ . 7- 10 years ☐ 10 + years ☐

**PART B:**

5. **To assess the extent to which FinTech solutions have improved financial access and usage in Zimbabwe.**

*Please specify by ticking*

| | High | Neutral | Low |
|---|---|---|---|
| To what extent has the current set of FinTech solutions have improved financial access and usage in Zimbabwe | | | |

***Please state the reason why***

.....

.....

.....

.....

.....

6. **Please rate on a scale of 1 to 5 how significant the impact is** *(if you feel the impact is negative, please explain why you say so*).

| Highly insignificant (1) | Insignificant (2) | Unsure (3) | Significant (4) | Highly Significant (5) |
|---|---|---|---|---|
| | | | | |

***Which fintech company is commonly used that has impacted consumer socio-economic welfare on a scale of 1 to 5?***

**Impact 1. Highly Insignificant 2. Insignificant 3. Unsure 4. Significant 5. Highly Significant*

| **FinTech** | **1** | **2** | **3** | **4** | **4** | **5** |
|---|---|---|---|---|---|---|
| Paynow | | | | | | |
| Eco-cash | | | | | | |
| Bitmari | | | | | | |
| Golix | | | | | | |
| One money | | | | | | |
| Get Bucks | | | | | | |
| Zimswitch | | | | | | |
| Instapay | | | | | | |
| E-tranzact | | | | | | |

**Other, specify**

.....

.....

.....

.....

.....

**7. Challenges and barriers faced in implementing FinTech solutions for financial inclusion in the Zimbabwean financial service sector.**

Which of the following challenges and barriers affect the institution/ company in implementing FinTech solutions for financial inclusion? Use the scale *1 – Strongly Agree) 2 –Agree) 3 – Neither Agree nor Disagree) 4 – Disagree) 5 – Strongly Disagree)*

| **Statements** | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Reaching scale and profitability | | | | | |
| Operational challenges | | | | | |
| Navigating an uncertain regulatory environment | | | | | |
| Lack of infrastructure and access to reliable internet connectivity in many parts of the continent | | | | | |
| Unaffordable internet | | | | | |
| Trust issues | | | | | |
| Paperwork woes | | | | | |
| Lack of regulations | | | | | |
| Competition | | | | | |
| Building robust Corporate Governance Foundations | | | | | |

***If there are other, please specify***

.....

.....

.....

**8. The impact of FinTech solutions on financial literacy and consumer empowerment in Zimbabwe.**

Which of the following are fintech Solutions for financial literacy? Use the scale *1 – Strongly agree) 2 –Agree) 3 – Neither Agree nor Disagree) 4 – Disagree) 5 – Strongly Disagree)*

| **Variables** | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Increased efficiency and productivity for financial institutions and customer | | | | | |
| Lower costs for both providers and users of financial services | | | | | |
| Improved security and risk management | | | | | |
| Greater convenience and accessibility for customers, especially the unbanked | | | | | |
| Personalization and customization of financial products and services | | | | | |

**9. FinTech Solutions on empowerment through financial education effectiveness.**

Please indicate your level of agreement with the following statements using the following rating on the effectiveness of FinTech solutions on empowerment:

1-*Effective* 2-*Moderate* 3- *Not helpful*

| **Variable** | **1** | **2** | **3** |
|---|---|---|---|
| Sales | | | |

| | | | |
|---|---|---|---|
| Profit | | | |
| Cashflow | | | |
| Customer base | | | |

**10. The potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe.**

Show your level of agreement with the following statement on policy implications and recommendations for enhancing financial inclusion through FinTech solutions with: *1 – Strongly Disagree) 2 – Disagree) 3 – Neither Agree nor Disagree) 4 – Agree) 5 – Strongly Agree)*

| **Statements** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Enhancement of digital Infrastructure | | | | | |
| Policy harmonisation | | | | | |
| Policy clarity | | | | | |
| Developing local Capital Markets | | | | | |
| Growing the local talent pool | | | | | |

……*Thank you for your participation*…….


**INTERVIEW QUESTIONS GUIDE FOR KEY INFORMANTS**

**PARTICIPANT IDENTIFICATION NUMBER: 000X**

This interview question guide has been administered by Tariro Zimunhu, a Master's student from the Munhumutapa School of Commerce at the Great Zimbabwe State University. The student needs to do an analysis of financial technology solutions on financial inclusion in the Zimbabwean financial ecosystem. To this end, I am generously requesting you to partake in this research as one of the interviewees and spare approximately 30 minutes to answer my questions. Although your response is of utmost importance to me your participation in this interview is entirely voluntary. All information you give shall be used for academic purposes only, remain confidential and will be reported in summary format.

1. What is your basic understanding of FinTech?
2. Have you personally utilized any FinTech platforms or applications to access financial services in Zimbabwe? If yes, which ones and how frequently?
3. How would you describe the ease of use and convenience of FinTech solutions compared to traditional banking methods in Zimbabwe?
4. Have you noticed any changes in the accessibility of financial services since the introduction of FinTech solutions in Zimbabwe? If yes, to what extent have FinTech solutions improved financial access and usage in Zimbabwe?
5. What challenges and barriers are faced in implementing FinTech solutions for financial inclusion in the Zimbabwean context?

6. Which factors/ mechanisms, for instance, ICT infrastructure, have been crucial to the penetration or the impediment of FinTech technologies into the economy through your institution or company? (Can you make reference to government, industry-level factors, and consumer acceptance?)
7. In your experience, do you feel that FinTech solutions have made financial services more accessible and understandable for the general population in Zimbabwe?
8. What are the impacts of FinTech solutions on financial literacy and consumer empowerment in Zimbabwe?
9. How significant has the impact been so far in attempting to reduce financial illiteracy?
10. Have you observed any specific initiatives or programs by FinTech companies or organizations aimed at enhancing financial literacy and consumer education in Zimbabwe?
11. Are digital payment channels, digital savings, and digital credit products **safe** for consumers (end users)?
12. What are the potential policy implications and recommendations for enhancing financial inclusion through FinTech solutions in Zimbabwe?

**The End** (*Thank you*)

## APPENDIX B: LETTER OF CONFIRMATION

**GREAT ZIMBABWE UNIVERSITY**

**BENARD CHIDZERO GRADUATE BUSINESS SCHOOL**

CONFIRMATION LETTER

TO: WHOM IT MAY CONCERN

FROM: DIRECTOR OF GRADUATE BUSINESS SCHOOL

DATE: 10 NOVEMBER 2023

This letter serves to confirm that Tariro Zimunhu, student number M223472 is a registered Master of Development Finance student in the Graduate Business School.

She is in the last semester of her studies and as such is required to submit a dissertation at the end of the programme. She is therefore undertaking a study on issues related to Financial Technology Solutions.

You may assist her to attain this goal. Any queries may be addressed to her supervisor Prof T Saungweme on his cell: 0772 685 837.

I thank you in advance

Yours faithfully

Munyaradzi Mutsikiwa (PhD)
(0773 206 114)

## APPENDIX C: TEST RESULTS

SPSS- Field data

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| To assess the extent to which FinTech solutions have improved financial access and usage in Zimbabwe | 79 | 1.00 | 3.00 | 1.6835 | .72579 |
| Valid N (listwise) | 79 | | | | |

Cronbach Alpha

```
Test scale = mean (unstandardized items)
Reversed items:    fintech-fin.inclusion.

Average interitem covariance:     .1519231
Number of items in the scale:            4
Scale reliability coefficient:      0.6540
```

Pearson Correlation

| | | | | | |
|---|---|---|---|---|---|
| ASP | Pearson Correlation | .523** | .457** | .649** | .588** |
| | Sig. (2-tailed) | .002 | .009 | .000 | .001 |
| | N | 79 | 79 | 79 | 79 |

**Correlations**

| | | | | | |
|---|---|---|---|---|---|
| challenges and barriers faced in implementing FinTech solutions | Pearson Correlation | 1 | .149 | .023 | .[a] |
| | Sig. (2-tailed) | | .523 | .841 | . |
| | N | 79 | 79 | 79 | 0 |
| the impact of FinTech solutions on financial literacy and consumer empowerment | Pearson Correlation | .149 | 1 | .815** | .[a] |
| | Sig. (2-tailed) | .456 | | <.001 | . |
| | N | 79 | 79 | 79 | 0 |
| financial technology solutions on financial inclusion | Pearson Correlation | .023 | .815** | 1 | .[a] |
| | Sig. (2-tailed) | .649 | <.001 | | . |
| | N | 79 | 79 | 79 | 0 |
| potential policy implications and recommendations | Pearson Correlation | .[a] | .[a] | .[a] | .[a] |
| | Sig. (2-tailed) | .588 | . | . | |
| | N | 0 | 0 | 0 | 0 |

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

a. Cannot be computed because at least one of the variables is constant.