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BUSINESS SCHOOL

STRENGTHENING FINANCIAL INCLUSION THROUGH DIGITAL BANKING IN THE WAKE OF COVID 19 PANDEMIC IN ZIMBABWE

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MASTER'S DEGREE IN BUSINESS ADMINISTRATION

BY

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DECLARATION

I, Victor T.Mudzamiri, hereby declare that this research project is the result of my independent scholarly work and that in all cases material from the work of others is properly acknowledged. Quotations and paraphrases are referenced using the Havard Citation Style.
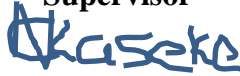
RELEASE FORM

I certify that I have read and recommended to the University of Zimbabwe Business Schoolfor acceptance; a dissertation entitled " Strengthening Financial Inclusion Through Digital Banking in the Wake of Covid-19 Pandemic in Zimbabwe" in partial fulfilment of the requirements for the Master's degree in Business Administration.

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I, therefore, release the student to submit his dissertation for marking.

Dr N. Kaseke

Supervisor

……………………………………..

Signature

……14/05/2021…..

Date

DEDICATION

I dedicate this research project to my late brother Garikai Owen Mudzamiri. You inspired and motivated me to work hard and go the extra mile. I am sure you are smiling there in heaven at what we have accomplished. We might not be together physically but we are always together in spirit. Till we meet again!!!

ACKNOWLEDGEMENTS

ABSTRACT

Despite notable progress made by Zimbabwe's financial sector to increase financial inclusion for the poor and low-income population in the country, many people remain financially excluded. This research investigates the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the wake of the COVID-19-induced rectricting measures such as national lockdown, social distancing, movement restrictions and closure of banking halls.The study provides insight into the forms of digital banking products offered by commercial banks in Zimbabwe (mobile banking, Internet banking, electronic money transfer systems (ZIPIT and RTGs), ATM and POS Machines, plastic money (credit cards and debits cards). Besides, the study assesses the extent to which digital banking is increasing access and usage of key financial inclusion services such as payment systems, microfinance, insurance and savings products. The study further highlights the benefits and challenges of accessing and using digital financial services. Moreover, the study investigates the necessary reforms needed to further strengthens financial inclusion for the poor and low-income people through digital banking. A mixed methods research methodology was used, which allowed for the integration of quantitative and qualitative research methods. Data was collected from a sample of 150 questionnaire respondents, and 23 interview participants. Findings revealed that financial innovation through mobile banking is a key mechanism for driving financial inclusion. Although increased adoption of digital banking technology by all commercial banks in Zimbabwe has made payment systems more accessible, accessibility to and usage of other key financial inclusion services like microfinance, insurance and savings remain low among the poor and low-income groups. Digital financial services are associated with convenience and value-added services for banking clients, yet key challenges such as unstable economic environment, inadequate digital infrastructure and technical support, high costs for accessing banking services, digital trust challenges and low financial literacy levels militate against access and usage of digital financial services by the poor and low-income people in Zimbabwe.Based on the results, commercial banks in Zimbabwe should improve their partnerships with Fintech firms, budget for robust financial literacy programs, introduce joint financial education, create gender-sensitive digital banking products to increase women's access to financial services, encourage microfinance uptake through lower interest rates, and use digital banking solutions to simplify the Know-Your-Client (KYC) process. The government of Zimbabwe must craft policies that

create investor confidence in the country and attract foreign direct investment that can spur long-term economic recovery and growth, develop a national financial literacy policy to promote financial education for the country's poor and low-income population, and strengthen banking supervision to ensure compliance.

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COVID-19   Coronavirus disease

NFIS   National Financial Inclusion Strategy

RBZ   Reserve Bank of Zimbabwe

SDG   Sustainable Development Goals

UN   United Nations

<center>**CHAPTER 1**</center>

<center>**INTRODUCTION AND BACKGROUND OF STUDY**</center>

1.1 Introduction

The coronavirus (COVID-19/SARS-CoV-2) pandemic took the world into a state of emergency at the beginning of 2020 (Nyanga and Zirima, 2020). Since then, the COVID-19 pandemic has caused unprecedented disruptions to many business operations worldwide. National lockdowns, movement restrictions and closure of banking halls imposed by governments in many countries, including Zimbabwe, created the urgent need for digital transformation in financial services (Machasio, 2020). As the economic crisis caused by the pandemic is mostly felt by the vulnerable population, governments and financial institutions have been called upon to play their part in advancing digital financial services for the adult poor population as soon as possible during and post-pandemic(Ozili, 2020). Amid social distancing and other travelling restrictions, technology has provided the opportunity to accelerate and enhance financial inclusion more than ever before. Kasradze (2020) pointed out that COVID-19's financial implications may be far-reaching if measures are not implemented now to make sure vulnerable populations' access to and integration of financial services in the new difficult circumstances and recovery time.

Zimbabwe launched The National Financial Inclusion Strategy 2016-2020 in March 2016 and made great strides in the expansion of financial inclusion, yet COVID-19 has revived the urgent need to further strengthen financial inclusion. The International Monetary Fund (2021)posits that many considerations must fall into place to maximise the high potential of digital financial systems and expand financial inclusion during and after the COVID period.In Zimbabwe, this is more critical against the background of slow and low uptake of electronic banking (e-banking) services byconsumers in the country (Maswaure and Choga, 2016; Sandada, Simbarashe and Shamhuyenhanzva, 2016; Mavaza, 2019). Although financial inclusion through digitalisation had gained considerable momentum before the pandemic in developing economies (International Monetary Fund, 2021), the need to accelerate digital financial inclusion gained special significance during COVID-19 (Kasradze, 2020). This study, therefore, aims at assessing the model that can strengthen financial inclusion in Zimbabwe with COVID 19 pandemic effects through digital banking.

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1.2 Background to the Study

Financial inclusion has been embraced by many countries as a key to economic empowerment and an effective solution for poverty alleviation in developing countries (Ozili, 2020).Broadly, financial inclusion is defined as "the broadening of access to and usage of financial services"(Matekenya, Moyo and Jeke, 2020).Financial inclusion focuses on the "unbanked" population to get into the formal financial system(Boshkov, 2019). Despite the huge efforts that have been made to expand financial inclusion in Zimbabwe, many segments of the population remain financially excluded; and these include Micro, Small and Medium-sized Enterprises (MSMEs), rural community, women, young people and communal farmers (Reserve Bank of Zimbabwe, 2016; Gambe and Sandada, 2018). Among the trends currently observed in the pursuit of financial inclusion is the deployment of digital financial services by commercial banks to reach the unbanked. The need to leverage digital financial services to expand financial inclusion has been further fuelled by the outbreak of the COVID-19 pandemic. It has been stated that the COVID-19 pandemic is set to boost the use of digital financial services in developing economies; allowing the adult poor and small firms in low-income countries to benefit hugely from advances in fintech services, Internet banking and mobile wallets(IMF, 2020).

1.2.1 A Global Overview of Financial inclusion

Globally, financial inclusion is considered an integral element of economic inclusion; and an important factor of inclusive growth and sustainable economic development (Ozili, 2020). Kasradze (2020) contend that even though the United Nation's Sustainable Development Goals (SDGs) may not directly mention financial inclusion; all of SDGs would be difficult to achieve without promoting financial inclusion. Apart from that, financial inclusion is viewed as a global problem by the World Bank, and United Nations (UN) member states make use the Global Financial Inclusion (Global Findex) database to assessachievements towards sustainable development goals (Kasradze, 2020).

Financial inclusion is linked to many benefits which include: economic development; poverty reduction especially among women and adult poor; improving people's incomes and savings; and helping people manage financial risks(World Bank Group, 2018).Financial inclusion enable the poor people to invest in their businesses, improve savings, mange their risks and improve the

welfare of their families (Kasradze, 2020). The Global Findex database reveals that about 515 million adults opened a bank account or mobile money account between 2014 and 2017 (World Bank Group, 2018). Globally, account ownership rose from 51 per cent in 2011 to 62 per cent in 2014. However, approximately 2.9 billion people are financially excluded globally (Gambe and Sandada, 2018).

1.2.2 Financial Inclusion in Africa

Financial inclusion has received further attention in policy making in the African region, and there exist many published research on financial inclusion in Africa(Ozili, 2020). Research indicates that recent innovations in financial services and mobile banking in African have helped to address infrastructural barriers and improve financial access(Allen *et al.*, 2014; Gambe and Sandada, 2018).Basing on the World Bank's Global Findex Database, financial inclusion in Sub-Saharan Africa has risen sharply from 23% in 2011 to 43% in 2017as shown in Figure 1.1(World Bank Group, 2018).Moreover, mobile money has been greatly used as a strategy for financial inclusion to reach the unbanked in Africa (such as women, youth, adult poor and rural communities) primarily because of its convenience and affordability (Gambe and Sandada, 2018; Matekenya, Moyo and Jeke, 2020).Between 2014 and 2017, the number of adults with mobile money accounts almost doubled, from 12% to 21% (Figure 1.2). Despite all this progress, it has been noted that the rate of financial inclusion in Africa is still slow as compared to other continents (Zins and Weill, 2016; Safari and Chanceline, 2019).Based on the current literature, the region also lags behind and has the highest proportion of unbanked people, as well as a major gender gap in terms of access to financial services(Machasio, 2020; Matekenya, Moyo and Jeke, 2020).
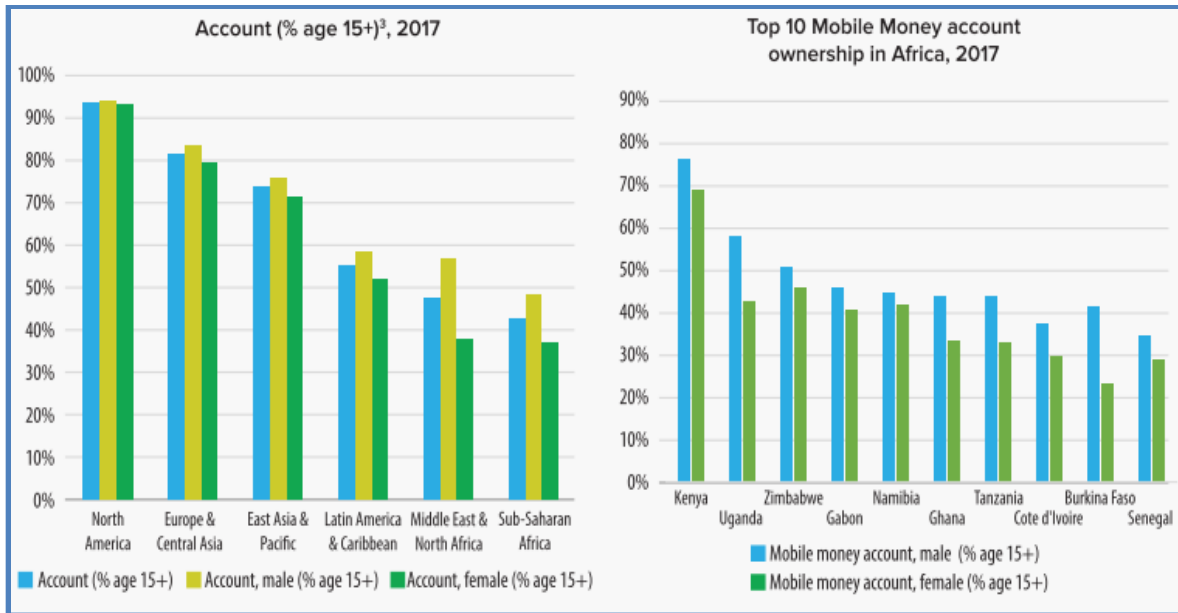
Figure 1:Financial Accounts Ownership in SSA

Source: World Bank Group (2018)

To make matters worse, the outbreak of the COVID-19 pandemic has posed a deep threat to financial inclusion in Africa(Machasio, 2020).The World Bank Group (2020) estimate that the COVID-19 pandemic and ensuingmitigation measures are likely to cause the Sub-Saharan African economy to contract by 2.8%. Thus the COVID-19 crisis has necessitated the increased call for more strong financial inclusion mechanisms(Machasio, 2020). The same author declared that "moving forward, the main consideration to boost financial inclusion in light of the pandemic entails accelerating access to digital technology and the improvement of existing mechanisms".

1.2.3 Financial Inclusion in Zimbabwe

In recent years, efforts have been made to broaden financial inclusion in Zimbabwe. The country launched a"National Financial Inclusion Strategy 2016 – 2020" in March 2016(Reserve Bank of Zimbabwe, 2016); and, thanks to the emergence of mobile banking, we've seen the banking industry expand into historically underserved and unbanked markets(Chitokwindo, Mago and Hofisi, 2014; Mupfiga and Padare, 2017). Moreover, mobile network operators, banking and non-bank financial institutionshave continued to explore ways of delivering financial services to the marginalised segments by leveraging on technology(Chipika, 2019).To date, three surveys have been conducted to ascertain the level of financial inclusion in Zimbabwe:

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- FinScope Consumer Survey Zimbabwe 2011;
- FinScope MSME Survey Zimbabwe 2012; and
- FinScope Consumer Survey Zimbabwe 2014 (Reserve Bank of Zimbabwe *et al.*, 2019; Chipika, 2019).

According to the 2014 FinScope Survey, 67 percent of Zimbabwe's adult population dwell in rural areas, while 33 percent lives in the urban. The 2014 FinScope Survey (Figure 1.2) showed that:

- 23% of Zimbabwe's adult population remain financially excluded, down from 40% in 2011
- Banking facilities is used by 30% of Zimbabwe's adult population
- While merely 20% of the adult population utilised formal savings channels

According to the survey, financial inclusion is tilted in favor of the urban populace (89%) over the rural populace (62%) despite the fact that rural areas account for 67 percent of Zimbabwe's population(Reserve Bank of Zimbabwe, 2016). The government of Zimbabwe, through the Reserve of Zimbabwe, has acknowledged the importance of technology (such as mobile money platforms) as critical conduits through which to drive financial inclusion to support financial development in Zimbabwe(Reserve Bank of Zimbabwe, 2016).
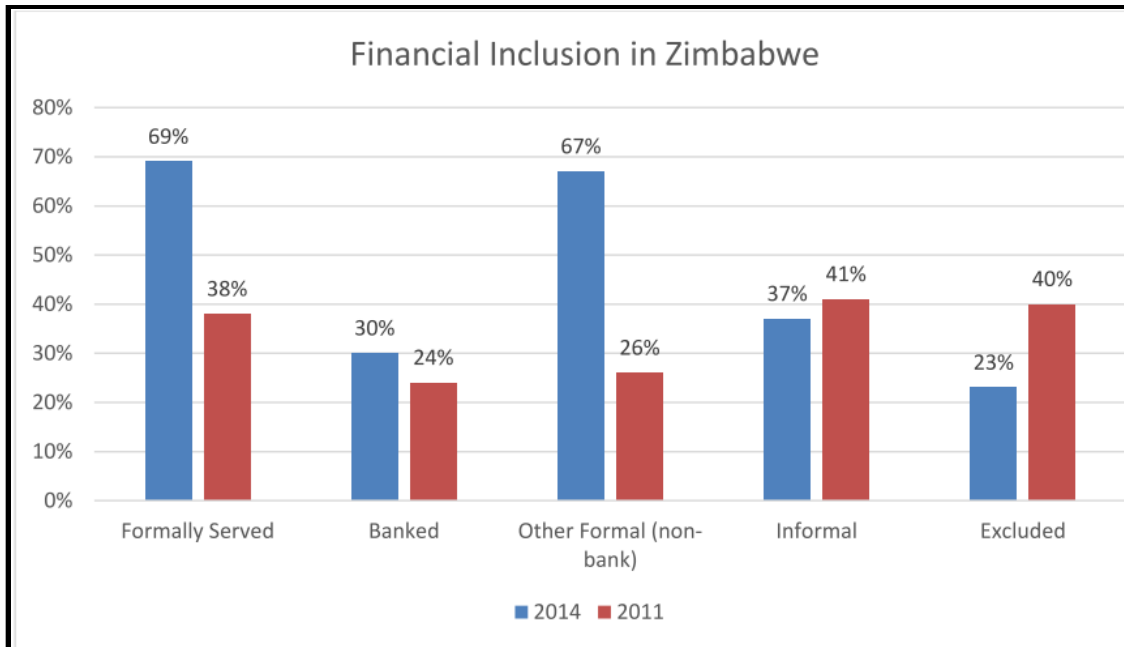
Figure 2:Key Financial Inclusion Statistics for Zimbabwe as of 2011 and 2014

Source: Finscope Survey (2014), cited in Reserve Bank of Zimbabwe (2016)

1.2.4 Digital banking amid COVID-19

Avoiding personal contact is recommended as one of the most effective ways to prevent the spread of the current COVID-19. This entails reducing the movement of people and encouraging social distancing. In line with these and other COVID-19 mitigation measures, banks have been encouraging their customers to use digital banking platforms. While different terminology such as 'online banking', 'electronic banking', 'virtual banking', 'portable banking', 'innovative bankingare used in literature to represent the concept, digital banking can be defined as "conducting of transactions and accessing bank account information electronically via personal computers (PC)" (Shaikh, Glavee-geo and Karjaluoto, 2017). Various forms of electronic channels such as ATMs, mobile, telephone, POS, and social media are used in digital banking.Although existing evidence indicates that financial inclusion through digital financial services has progressed in developing economies ever since 2014 (International Monetary Fund, 2020), the pandemic is speeding up the shift to digital banking. However, the current challenge of the pandemic where human activity, mobility and business operations are limited raises the question of the importance of leveraging on technology to deliver digital financial services to the marginalised segments of the economy. Financial inclusion needs to be developed sufficiently enough to effectively reach the most financially vulnerable groups, especially in response to

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exogenous shocks (Ayadi and Shaban, 2020).The internet and mobile phone are key drivers for financial inclusion in Africa (Evans, 2018), hence the need to explore strategies for strengthening financial inclusion for the adult poor and low income through digital banking.

Financial institutions such as microfinance organisations, insurance companies, banks and many others in conjunction with the government play a big role in advancing financial inclusion.the banking sector in Zimbabwe had 13 commercial banks, 5 building societies, and 1 savings bank supervised by the Reserve Bank of Zimbabwe(Reserve Bank of Zimbabwe, 2019). The focus of this study revolved around commercial banks in Zimbabwe.

Table 1:Composition of the Banking Sector in Zimbabwe as of December 2020

Type of Institution	Number
Commercial Banks	13
Building Societies	5
Savings Bank (POSB)	1
Total Banking Institutions	**19**
Other Operational Institutions under the supervision of Reserve Bank	
Credit-only-MFIs	209
Deposit-taking MFIs	8
Development Financial Institutions (SMEDCO & IDBZ)	2
Total Other Institutions	**216**

Source: Reserve Bank of Zimbabwe (2021)

1.3 Statement of the Problem

Prior to the COVID-19 pandemic, Zimbabwe had made substantial strides against financial inclusion, as indicated by significant increases in the country's financial inclusion level between 2011 and 2014(Marime, 2016; Reserve Bank of Zimbabwe, 2016). Nevertheless, despite the huge efforts made to deal with the challenge of financial exclusion, literature shows that many people in Zimbabwe remains financially excluded (Chitokwindo, Mago and Hofisi, 2014; Ngwenya, Pelser and Chivaura, 2018). Speaking at the Third Zimbabwe SME Banking &Microfinance Summit 2015, which took place at the Meikles Hotel in Harare, Mataruka (2015) (Director of Bank Supervision, Reserve Bank of Zimbabwe) had this to say:

Despite the geographical and functional reach of the commercial banks and microfinance institutions in Zimbabwe, large numbers of people remain financially excluded.

Furthermore, the positive developments towards the improvement of financial inclusion in the country have been dampened by the economic impact of COVID-19 mitigation measures. Not only did the pandemic disrupt the use of formal banking approaches, but it reduced incomes such that some people stopped using or no longer have access to financial services, thereby increasing financial exclusion. In Zimbabwe, most financially excluded include the adult poor and low-income households(Reserve Bank of Zimbabwe, 2016). Digital financial services have been identified as a solution to accelerate financial inclusion in coping with COVID-19 shocks, yet many people still face challenges in accessing and using these services. Therefore, this study focuses on investigating the most suitable strategies/models to improve access and usage of digital financial productsby the adult poor and low-income people in Zimbabwe during the COVID-19 era.

1.4 Research Objectives

The primary objective of this study was toexaminethemost appropriate waysto accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era. To achieve this main objective, the following sub-objectives were formulated:

i.   To determine forms of digital financial services implemented by commercial banks in Zimbabwe to foster financial inclusion in the COVID 19 era;

ii.   To assess how the forms of digital financial services are helping the adult poor and low-income people in terms of accessing financial services in the COVID 19 era;

iii. To examine the major benefits and challenges of accessing and using digital financial services by the adult poor and low-income people in the COVD 19 era; and

iv.   To consider the reforms needed to enhance financial inclusion through the use of digital financial services for the adult poor and low-income people in Zimbabwe in the COVD 19 era.

1.5 Research Questions

The study sought to answer the primary research question: What are the most appropriate waysto accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era?To address this research question, the following sub-research questions were formulated:

i. What forms of digital financial services have been implemented by commercial banks in Zimbabwe to foster financial inclusion in the COVD 19 era?

ii. To what extent are the forms of digital financial services helping the adult poor and low-income people to access financial services in the COVID-19 era?

iii. What are the major benefits and challenges of accessing and using digital financial services by the adult poor and low-income people in the COVID-19 era?

iv. Whatreforms are needed to enhance financial inclusion through the use of digital financial services in Zimbabwe during and post-COVID-era?

1.6 Research Proposition

COVID-19 provided an opportunity for commercial banks in Zimbabwe to embrace and maximise the use of digital financial services as a necessary strategy to advance financial inclusion in Zimbabwe.

1.7 Scope of Research

This study focused on digital banking as one of the key solutions for driving financial inclusion for the adult poor and low-income people in the light of the COVID-19 pandemic. In carrying out the study, the researcher consulted literature on financial inclusion in general, implications of COVID-19 pandemic on financial inclusivity, digital financial services and financial inclusion.The study examined the digital forms of digital financial services implemented by commercial banks in Zimbabwe to foster financial inclusion and assessed how the services are helping the adult poor and low income to access financial services in the COVID-19 era. The study also focused on the benefits and challenges of accessing digital financial services, as well as the necessary reforms needed to enhance financial inclusion for the adult poor and low income through digital banking.

1.8 Significance of Research

Although studies exist on the concept of financial inclusion(Chitokwindo, Mago and Hofisi, 2014; Munyanyi, 2014; Mupfiga and Padare, 2017; Moyo, 2018); there is a need to further

explore the subject area given that the issue is still prevalent especially within the current context of COVID-19 pandemic. The purpose of this study is to identify strategies and main policy considerations for increasing access to and use of digital financial services to further strengthen financial inclusion in Zimbabwe. The study contributes to the growing literature on leveraging technology to cope with the economic implications of the COVID-19 pandemic in a developing country like Zimbabwe. The information generated from the study may be used by regulating bodies in the Zimbabwe financial sector (e.g Reserve Bank of Zimbabwe) to create an enabling regulatory environment and develop appropriate infrastructure that supportsfinancial inclusion through digital financial services.

Other players of the financial sector may also benefit from this study as it sought tomap the strategies and main policy considerations for enhancing financial inclusion in Zimbabwe to effectively reach the most marginalised segments of the economy amidCOVID-19. Data generated from this study may also be useful by other researchers who would want to conduct further in-depth studies on digital financial inclusion post-COVID-19 pandemic.

1.9 Limitation of the study

This study was conducted during the COVID-19 pandemic where health professionals, the World Health Organisation and the government of Zimbabwe is encouraging social distancing, travel restrictions and avoiding personal contact. In compliance with COVID-19 prevention measures, the study utilised a small sample size and focused on those who were accessible. The study was also conducted during a time when the pandemic was still in our midst and presenting new challenges which may influence the direction of future research. However, the study provides a useful basis on which future research can be carried out.

1.10 Dissertation Structure

This study is divided into five separate chapters, as shown in Figure 1.3 below.

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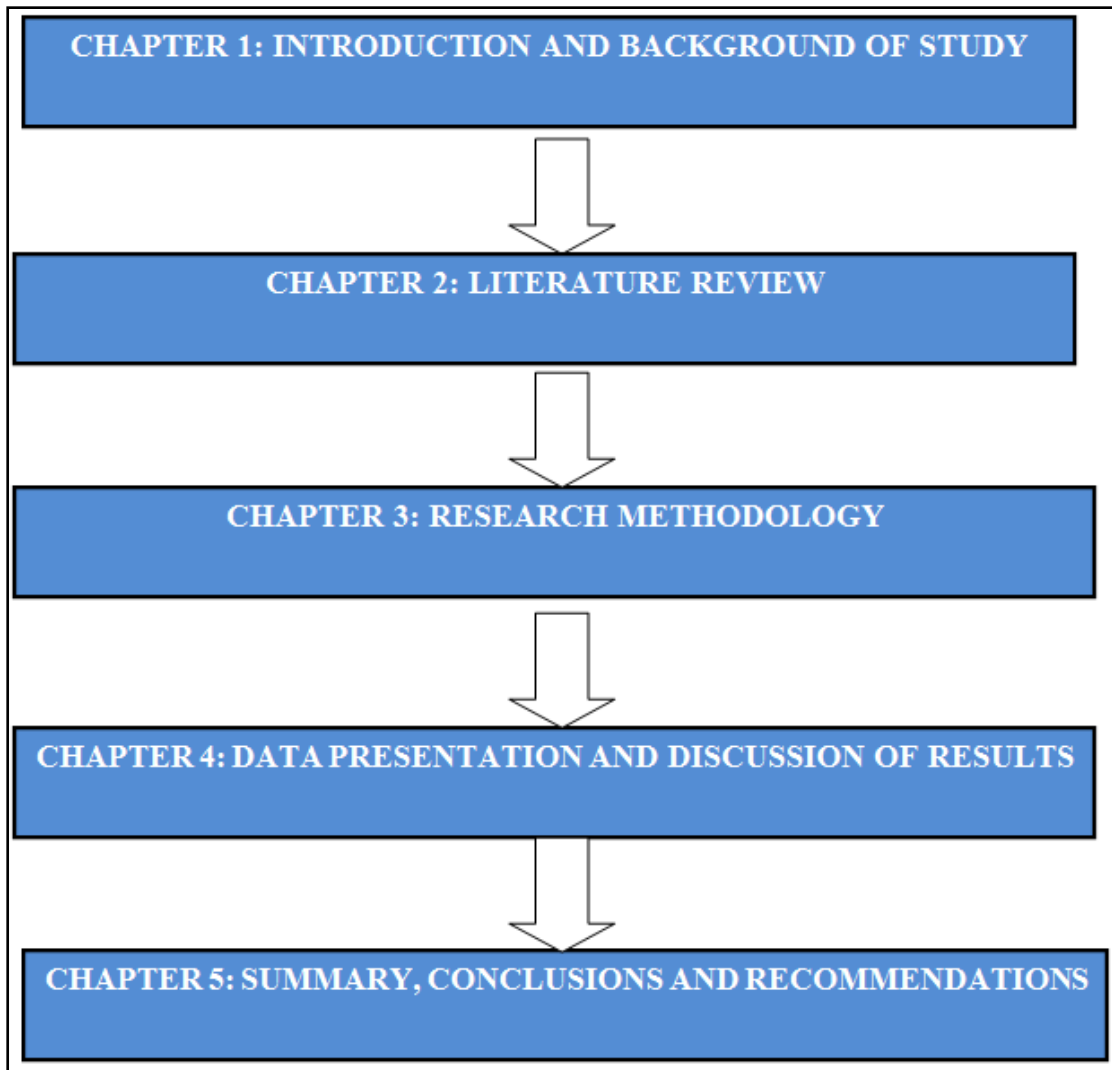
Figure 3:Dissertation Outline

Chapter one introduces the contextual basis of the research problem and provides an outline of how the research problem will be addressed. Chapter two provide a conceptual basis for the study, situating the study within the framework of existing theoretical and empirical studies on financial inclusion and digital financial services. Chapter three discusses the methodological decisions and procedures taken to address the research objectives and research questions. The fourth chapter reports on the study findings and analyses the results. Finally, chapter five gives a summary of key findings, major conclusions to research questions and suggested recommendations based on study findings.

1.11 Chapter Summary

This chapter looked at the importance of financial inclusion to economic development and poverty alleviation. The chapter discussed the contextual background of the challenge of expanding financial inclusion in Zimbabwe. It became clear in the background that despite tremendous efforts made in the banking sector to reach the unbanked through digital financial services, many people in Zimbabwe are still financially excluded. The study, therefore, sought to examine the key strategies for strengthening financial inclusion through digital banking services. The chapter went on to present the sub-objectives and research questions that were formulated to fulfil the primary objective and address the problem statement. The next chapter examines previous studies related to the current study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This Chapter reviews literature based on the theme of financial inclusion to provide a theoretical basis and conceptual framework for the present study. Also examined in this section are previous studies on the influence of COVID-19 on financial inclusion, digital banking in the context of COVID-19, benefits for accessing digital financial services and challenges of accessing digital financial services.Basing on the guidelines provided byCreswell and Creswell (2018), as well as by Hammond and Wellington (2013) the review of literature assisted in situating the study within the broader framework of the ongoing debate on financial inclusion as an effective strategy for eliminating poverty in emerging countries.Articles in this review are post-2010 studies. The review focused mainly on journal articles, policy discussion papers and working papers exploring the theme of financial inclusion. Unpublished information from websites and blogs were excluded for the review, save for website content and blogs from the World Bank or International Monetary Fund exploring the concept of financial inclusion and its linkages to digital financial services and COVID-19 pandemic.

2.2Foundations

2.2.1Concept of Financial Inclusion

Recognised as a "key pillar of the global development agenda", financial inclusion is defined as "the use of formal financial services"(Zins and Weill, 2016). Formal account ownership is a common indicator of financial inclusion(Demirguc-Kunt, Klapper and Singer, 2017). While in its most basic meaning it is regarded as the use of formal accounts(Allen *et al.*, 2012), Based on Demirguc-Kunt, Klapper and Singer (2017), financial inclusion is described as adults having access to a diverse variety of appropriate financial resources and being able to properly use them. Financial inclusion, according to the World Bank, is defined as "access to and use of formal financial services" by the general population and small and medium-sized enterprises.(SMEs) (World Bank Group, 2018).For Matekenya, Moyo and Jeke (2020) financial inclusion relates to the extension of access to and use of financial services.Kasradze (2020)further explainsthat financial inclusion is a much wider term that encompasses a vast variety of financial and non-

financial goods and services aimed at eradicating financial exclusion. Financial inclusion, in a general context, refers to having access to a variety of financial goods and services, such as loans, savings accounts, insurance, pensions, payment schemes, financial education, and so on.In a nutshell, financial inclusion is a process to make sure the adult poor have access to financial services through formal systems (Ozili, 2020).

2.2.2 Financial Inclusion and Development

Financial inclusionhas gained wider recognition by policy-makers and researchers for several reasons. Researchers have demonstrated its positive correlation to several social-economic indicators which include poverty reduction, economic growth, human development and women empowerment. First, financial inclusion around the world has been promoted as a key tool for inclusive economic growth (Demirguc-Kunt, Klapper and Singer, 2017; Achugamonu *et al.*, 2020) and a solution for rising poverty levels (Ozili, 2020).Financial inclusion has been advocated by the World Bank as a viable option for reducing hunger in developed and emerging economies.Through greater financial inclusion, low-income individuals and poor households can have an opportunity to build savings, make investments and access credit thereby causing personal financial stability (Ozili, 2018). Ozili (2018) elaborated that financial inclusion has a positive effect on financial stability. The author illustrated that financial inclusion results in increased bank deposits contributing to a more secure stable deposit base for banks, thus increasing banking system stability.Hannig and Jansen (2010) prove that financial players that cater to lower-income people do better amid macroeconomic downturns and contribute to the maintenance of local economic activity.Demirguc-Kunt, Klapper and Singer (2017)also prove that financial inclusion will help people plan for the future, smooth their spending, and mitigate financial risks, reducing poverty and inequalities. Gupta *et al*. (2014) suggested that financial inclusion provides opportunities for poverty alleviation as well as social and economic development by providing access to affordable financial services amongst the low-income and vulnerable groups within a society. Thus financial inclusion facilitates economic integration for economically marginalised persons by promoting fair opportunity for access to financial resources. By ensuring that all people in the economy have convenient access, availability and use of formal financial resources, financial inclusion is an important aspect of economic development.

Several researchers have looked at the relationship between financial inclusion and economic development, but the data has been mixed and inconclusive across countries and methodologies (Chinoda, 2020).According to some findings (Sharma, 2016; Lenka and Sharma, 2017; Okoye *et al.*, 2017; Iqbal and Sami, 2017), financial inclusion has a positive effect on economic development Others discovered a minimal or non-existent causal relationship between the two variables (Gour'eneandMendy, 2017), while on the other hand others considered the relationship to be much more negative. (Kim *et al.*, 2018).

Furthermore, other researchers(Evans andLawanson, 2017; Kim *et al.*, 2018) have discovered a bi-directional association between economic development and financial inclusion. According to Demirguc-Kunt, Klapper and Singer (2017), althoughuse of formalised financial systemsand adequate credit will theoretically make it possible to investment in education and market opportunities and fuel economic growth, in the long run, the association between financial inclusion and macroeconomic development is not well proven due to a lack of adequate evidence and limited research on the subject. Although the International Monetary Fund (IMF) has used country-level data to relate financial inclusion to a variety of macroeconomic indicators, including economic development, prosperity, and equality, Demirguc-Kunt, Klapper and Singer (2017)argue that there is no robust evidence demonstrating that financial inclusion has a significant effect on economic prosperity and inequalities at the national level.Nonetheless, Chinoda (2020)used panel data of 30 African countries for the period 2004–2017 to examine the "effect of financial inclusion and trade transparency on economic development" and discovered that financial inclusion has an impact on the trade-growth nexus.

Researchers have also linked financial inclusion to human development. According to Matekenya, Moyo (and Jeke, 2020), several prior studies have used correlational analysis to demonstrate the positive relationship between financial inclusion and human development. For example, Gupta *et al.* (2014) constructed financial inclusion indices using variables that capture penetration, availability and usage of banking services and concluded that there is a strong link between financial inclusion and human development in Indian states. Similarly, Sarma and Pais (2011); Dutta and Singh (2019) also constructed financial inclusion indices for developing and developed countries and found a positive association between financial inclusion and human

development.In Sub Saharan Africa, Matekenya, Moyo and Jeke(2020)employed the panel data approach and utilised the Generalised Method of Moments (GMM) technique to investigate the effect of financial inclusion and found that financial inclusion has a positive effect on human development.The study also recommended policy initiatives that would lower the costs of accessing and using financial resources, such as infrastructure upgrades and increasing public understanding of available financial services.

Financial inclusion has also been used as an important tool for women empowerment and closing gender gaps (Mutsonziwa and Maposa, 2016; Sahay *et al.*, 2020).Demirguc-Kunt, Klapper and Singer (2017) observed changing payments from cash to transfers may be beneficial for women, who profit from the increased privacy and control that such payments have.In research done in Philippians, it was shown that financial inclusion has a positive effect on women empowerment. They discovered that when women have access to dedicated savings, women are more likely to participate in household decision-making (Tampuri and Yusheng, 2019).Additionally, Ozili (2020) noted there is growing evidence demonstrating the substantial benefits of financial inclusion to the excluded population in many countries, especially for women.It has been discovered that digital finance platforms have given millions of women around the world more opportunities(Sekantsi, 2019a; Better Than Cash Alliance, Women's World Banking and World Bank Group, 2020). Through increased account ownership, women have expanded their participation in the formal economy, and this has improved their resilience to economic, financial and health shocks.

Some researchers summarise the relevance of financial inclusion into four key justifications(Demirguc-Kunt, Klapper and Singer, 2017; Ozili, 2020). One, financial inclusion is a significant tool used to achieve the sustainable development goals(SDGs) of the United Nations; secondly, in many countries, financial inclusion tends to increase the degree of social inclusion, thirdly, financial inclusion can help to reduce poverty levels; and finally, financial inclusion has other socio-economic advantages. By having access to formal financial services, people are empowered to conduct financial transactions more efficiently because they have access to structured financial institutions, which allows adult vulnerable people to escape hardship by allowing them to engage in education and industry. (Demirguc-Kunt, Klapper and

Singer, 2017). In a nutshell, financial inclusion has several benefits for the poor, the government, the financial service providers and the general economy and that is why it has been embraced as a catalyst for economic growth by policy-makers at global, regional and national levels, including Zimbabwe(Reserve Bank of Zimbabwe, 2016).

2.2.3 Conceptual Framework

Based on the theoretical and empirical literature on financial inclusion, digital banking products and implications of COVID-19 pandemic on financial inclusion(World Bank Group, 2018; Perlman, 2019; Razon, 2019; Sekantsi, 2019a; Machasio, 2020; International Monetary Fund, 2021). The conceptual framework in Figure 4 was used to provide a conceptual basis of the study. The conceptual framework illustrates key elements for enabling access and usage of digital financial services by the majority of people in Zimbabwe including the poor and low-income households. Amid the mitigatory measures for the COVID-19 pandemic encouraging social distancing, restricted travel and causing increased financial vulnerability, there is a greater opportunity to promote greater financial inclusion through digital banking (Machasio, 2020; Mogaji, 2020). Promoting financial inclusion via digital banking has several benefits for the users of the financial services, the government, the financial service providers and the economy at large(Demirguc-Kunt, Klapper and Singer, 2017; Ozili, 2018, 2019, 2020). As key players in financial services provision, commercial banks have deployed various forms of digital banking to expand access and usage of financial services and products sought by adult Zimbabweans. However, a greater majority of people face challenges in accessing and using the forms of digital banking.Moreover, access and usage of digital financial services are broadly driven by certain critical pillars (financial and digital literacy, financial innovation, financial consumer protection and readily available access points), and it is influenced by facilitating conditions such as conducive economic environment, regulatory environment, appropriate digital infrastructure, and public and private sector partnership and commitment)(Sarma and Pais, 2011; Reserve Bank of Zimbabwe, 2016; Matekenya, Moyo and Jeke, 2020; Ozili, 2020). These elements are examined in the literature review
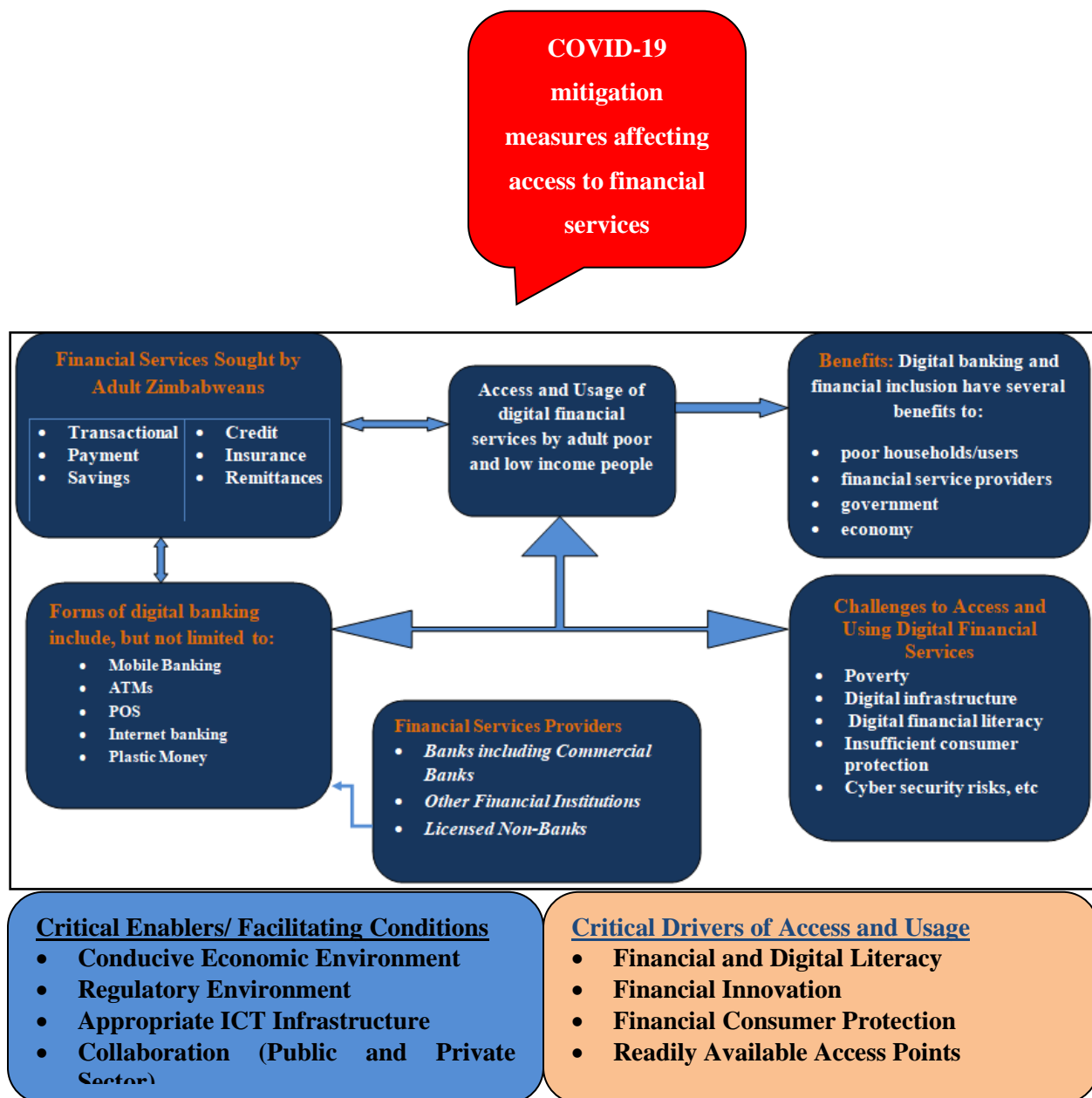
Figure 4: Modified Conceptual Framework (Researcher)
Source: Adopted and modified from literature (Chitokwindo, Mago and Hofisi, 2014; Mago and Chitokwindo, 2014; Reserve Bank of Zimbabwe, 2016; Ozili, 2018, 2019, 2020)

2.3 Financial Inclusion in Zimbabwe

Financial inclusion is not a new concept in Zimbabwe as demonstrated by the presence of considerable local research on various aspects of financial inclusion in Zimbabwe(e.g Laurine, 2012; Makina, Chiwunze and Ndari, 2014; Abel, Mutandwa and Roux, 2018; Sakarombe, 2018;

Mavaza, Halimani and Dzapasi, 2020). However, financial inclusion remains a hot research topic locally because a large percentage of low income and poor population remains financially excluded (Barugahara, 2021), and there is an increased shift towards improving financial inclusion through digital financial services(Nuryakin *et al.*, 2017; International Monetary Fund, 2021). The importance of financial inclusion is recognised by the government and regulatory bodies, demonstrated by the country's membership in different networks across the globe(Ngoma, 2019). In 2012, the nation became a member of the Alliance for Financial Inclusion and began adopting the Southern African Development Committee's financial inclusion policy(Ngoma, 2019). The Reserve Bank of Zimbabwe (RBZ) unveiled the National Financial Inclusion Strategy (2016-2020) in 2016as a demonstration of the growing value of financial inclusion in Zimbabwe(Reserve Bank of Zimbabwe, 2016). The policy aimed to ensure the creation of an inclusive financial system that allows all to access and use financial resources to foster social and economic growth(Reserve Bank of Zimbabwe, 2016). Key aspects that define financial inclusion in Zimbabwe are access, usage and quality services. The Reserve Bank of Zimbabwe defines financial inclusion as follows:

> "The effective use of a wide range of quality, affordable & accessible financial services, provided fairly and transparently through formal/ regulated entities, by all Zimbabweans"(Reserve Bank of Zimbabwe, 2016).

The finance sector is one of the main players in Zimbabwe's effort to achieve financial inclusion; other players include the government, regulatory authorities, development partners, mobile network providers, and trade associations(Reserve Bank of Zimbabwe, 2016). The financial sector is made up of multiple players involved in the provision of a wide spectrum of financial products and services. Banking, savings, pensions, stock markets, microfinance, developmental financial institutions, and payment networks are all important participants in Zimbabwe's financial services.The banking sector in Zimbabwe is made up of commercial banks, merchant banks, building societies, savings bank, microfinance institutions and development finance institutions(Reserve Bank of Zimbabwe, 2016). The focus of this study is on commercial banks, comprising 13 banking institutions as shown in Table 2 below

Table 2: Banking Sector Architecture in Zimbabwe

Type of institution	Number of Institutions
Commercial Banks	13
Merchant Banks	1
Building Societies	4
Savings Bank	1
Total Banking Institutions	19

Source: Reserve Bank of Zimbabwe (2020)

The financially excluded segments of the economy in Zimbabwe include the Micro to Small and Medium Enterprises (MSMEs), women, people with disabilities (PWDs), rural population, smallholder farmers, the youth and adult population (Reserve Bank of Zimbabwe, 2016). Significant progress has been made in recent years to encourage financial inclusion in the country, owing to deliberate efforts by the government, regulatory authorities, financial sector, and other stakeholders to increase financial inclusion levels in the country; and the continuing adoption of technology-based models of providing financial services by banking and non-bank financial institutions(Mataruka, 2015). The FinScope Consumer Survey 2014 results proved that Zimbabwe has made good progress in expanding financial inclusion since 2011(Reserve Bank of Zimbabwe, 2016). The 2014 results demonstrated that:

a) Financial exclusion now affects just 23% of Zimbabweans, down from 40% in 2011;
b) 37% of people depend only informal financial products or services, down from 41% in 2011;
c) 69 percent are formally served, a significant increase from the 38 percent that were formally served in 2011; and
d) In 2014, 30% of those formally serving had access to bank products and services, while 67% had access to official non-bank financial products and services.

Despite the significant progress made in improving financial inclusion, large numbers remain financially excluded(Reserve Bank of Zimbabwe, 2016).The Reserve Bank has chosen a bank-led financial inclusion approach. In a bank-led model, banks collaborate with cell phone providers to provide mobile banking with a broader variety of services(Chitokwindo, Mago and Hofisi, 2014).Adult Zimbabweans are most interested in transactional, savings, loans, insurance, and remittance financial services(Chitokwindo, Mago and Hofisi, 2014; Makina, Chiwunze and Ndari, 2014). Elsewhere, other studies have identified payments, savings, credit, and insurance as the major four types of formal financial products(Demirguc-Kunt, Klapper and Singer, 2017).

2.4 Impact of COVID-19 onFinancial Inclusion

Research on the impacts of COVID-19 in financial inclusion is still growing, as we are still relying mainly on early evidence and predictions from the World Bank, the International Monetary Fund and few researchers (Kasradze, 2020; Machasio, 2020; Mogaji, 2020; World Bank Group, 2020; International Monetary Fund, 2021). Early evidence demonstrates that the COVID-19 and resulting mitigation measures have triggered an economic downturn across the globe. With regards to Sub-Saharan Africa, it is estimated that the economy will decline by 2.8 per cent (World Bank Group, 2020).The World Bank suggests that the economic crisis arising from the COVID-19 pandemic represents a profound threat to financial inclusion, among the many detrimental impacts on the global economy(Machasio, 2020).For instance, Kasradze (2020) examined the impact of the COVID-19 pandemic on financial inclusion in Georgia and discovered that COVID-19 threatened the positive trends that had been registered on financial inclusion before the pandemic in terms of access to financial resources.A preliminary study by Mogaji (2020) found that in many developing nations, financial vulnerability has increased as many workers have become unemployed as a result of the pandemic.Bank branches were closed as a result of temporary lockdowns and curfews enacted to stop the epidemic from spreading. The use of cashless and contactless payment systems has been promoted by the government and health professionals to minimise the possibility of virus transmission by cash handling, thereby providing new possibilities for the potentialadoption of digital financial services(International Monetary Fund, 2021).As many individuals are becoming financially vulnerable, financial institutions are expected to reach out and support their consumers, especially the under-banked, to ensure financial inclusivity(Mogaji, 2020).According to Machasio (2020), one of the key

consideration to drive financial inclusion in light of COVID-19 encompasses accelerating access to and usage of digital financial services, as well as strengthening existing mechanisms.

2.5Forms of Digital Banking

Digital banking offers an abundance of services through a plethora of channels(Mavaza, 2019).Based on existing literature, examples of digital financial services offered by banks to facilitate online transactions include mobile banking, electronic funds transfer point of sale (EFTPOS), internet banking, electronic funds transfer (RTGs), electronic payment systems, plastic money (credit cards and debits cards), and automated teller machines (ATMs) (Reserve Bank of Zimbabwe, 2016; Boshkov, 2019; Mavaza, 2019). In Africa, fintech has taken the form of mobile money (Sahay *et al*., 2020), hence mobile money financial services have been identified as the most crucial instrument in the drive of financial inclusion in Africa (Perlman, 2019; Safari and Chanceline, 2019; Machasio, 2020).Furthermore, available evidence suggests that mobile money payment systems are becoming increasingly important in low-income countries(Mago and Chitokwindo, 2014; Sahay *et al.*, 2020).According to several studies conducted in Zimbabwe, banks have taken advantage of the country's strong cell phone penetration to deliver a variety of digital financial services in collaboration with mobile network operators(Bara, 2013; Ndlovu and Ndlovu, 2013; Chitokwindo, Mago and Hofisi, 2014; Mago and Chitokwindo, 2014; Mutsonziwa and Maposa, 2016; Reserve Bank of Zimbabwe, 2016; Mupfiga and Padare, 2017; Gambe and Sandada, 2018). With ATMs, people can access their bank accounts and perform cash withdrawal and check their bank balances. Electronic transfer systems help customers to move money from one bank account to another by exchanging physical money.According to Sahay *et al*. (2020), digital payment mechanisms have been the most widely used instrument of financial inclusion to date, and this trend is likely to continue in the post-COVID period.. This is demonstrated by the growth in usage of digital payments, either using mobile services or the internet.The increase in financial innovation has helped to facilitate the accessibility of financial services at reasonable costs (Boshkov, 2019). Based on a study by the International Monetary Fund (2020) measuring digital financial inclusion in 52 developing countries and emerging markets, it was found that digitalisation increased financial inclusion between 2014 and 2017, mostly in Africa and Asia as a result of advances in online banking, fintech services and mobile money. As a result, digital banking provides a means for households

to gain access to financial markets by allowing them to invest, borrow, make payments, and handle risks using digital tools.

2.6 Benefits of AccessingDigital Financial Services

Literature indicates that the use of digital financial services provides significant opportunities in the drive to boost financial inclusion (Srivastava, 2015; Paramasivan and Arunkumar, 2019; Tampuri and Yusheng, 2019).Access to financial services was deemed critical even before the COVID-19 crisis in scaling up global development initiatives to ensure access to health, small business projects, education, and other essential services(Machasio, 2020). Researchers continue to emphasize the importance of using digital financial services to drive financial inclusion during a crisis, mentioning that during a crisis people critically need the ability to cope with a shock (Tampuri and Yusheng, 2019; Machasio, 2020). Bank accounts and mobile money accounts are seen as critical tools for assisting households in dealing with financial crises during the pandemic while reducing the likelihood of falling into poverty (International Monetary Fund, 2021).

In a study examining financial inclusion in Zimbabwe, Chitokwindo, Mago and Hofisi (2014) revealedmany benefits of electronic banking which include convenience, low cost, simple to open a bank account and availability on various channels (mobile phone, internet, ATM, and POS).Maswaure and Choga (2016) further identified the benefits of electronic banking as time-saving, cost-saving, and that it can be accessed any time of the day. Demirguc-Kunt, Klapper and Singer (2017)suggested that having access to structured financial institutions encourages people to conduct financial activities more effectively and securely, as well as allowing vulnerable people to engage in education and industry. Additionally, the 2017 Global Findex Report (World Bank Group, 2018)pointed out that the use of digital financial serviceshelp to reduce extreme poverty, help to improve people's income; help people manage financial risk by enabling them to receive money from distant friends and relatives during difficult times and help to lower the cost of receiving payments by eliminating the need to travel and time.Furthermore, the use of digital financial services helps people to accumulate savings and increase spending on necessities. Ozili (2018)explains how using digital financial systems affects consumers, suppliers of digital financial services, communities, and the economy as a whole. Digital financial services, according to the author, aim to expand access to finance for the vulnerable, reduce the cost of

financial intermediation for banks and Fintech providers, and are linked to macroeconomic growth.

Findings by Paramasivan and Arunkumar (2019) showed that digital financial services offer more convenience, is more affordable than traditional banking services, and enable the adult poor and low-income people to save and borrow through formal financial systems. Machasio (2020) reiterate that digital financial services will substantially lead to economic growth, poverty reduction, and narrowing wage disparities without compromising financial stability. Additionally, an international report on digital financial services for women suggest that access and usage of digital financial services contribute to gender equality and poverty reduction by helping women to control their own money, make business investments and manage financial risk (Better Than Cash Alliance, Women's World Banking and World Bank Group, 2020)

2.7 Challenges to Accessing Digital financial Services

A growing body of literature indicates that although the use of digital financial services has several potential benefits, many people still face challenges in accessing and using these services.Arora (2012) noted that due to low awareness and comprehension of the financial services available, high illiteracy levels in developing economies may prevent a large segment of the population from benefiting from financial inclusion efforts.. Bagli and Dutta (2012) suggested that the major causes of financial exclusion are the geographical distance from a bank, financial illiteracy, gender inequality, lack of income and collateral assets and lack of identity documents amongst disadvantaged individuals. On the other hand, staff shortages, high transaction costs and the economic viability of branches are common problems encountered by financial institutions in extending financial services to the disadvantaged.In a study examining the role of mobile money and digital financial services in India, Srivastava (2015) identified a lack of basic infrastructure, illiteracy and poverty as key challenges to financial inclusion. Findings in Tita and Aziakpono (2017) indicated the availability of financial services may not lead to usage, noting that first-time account users may experience difficulties in accessing loans due to information asymmetries.

Studies on financial inclusion through digital financial services carried out in Indonesia (Nuryakin *et al.*, 2017), India (Paramasivan and Arunkumar, 2019), and Philipines(Razon, 2019)have also cited infrastructure as one of the notable challenges to accessing digital financial

services among the adult poor. Furthermore, Kim *et al.* (2018) argue that the benefits of access to financial services are only limited to the developed world settings because in many developing countries people face challenges in accessing digital financial services. The author noted that many people who live in rural areas in developing countries have lesser access to financial services due to adult poor economic conditions and lack of infrastructure.

Evidence from literature demonstrates that although banks in Zimbabwe had embraced electronic banking before the outbreak of the pandemic, uptake of e-banking by customers is slow due to several challenges (Maswaure and Choga, 2016).As cited in Maswaure and Choga (2016), some of the challenges faced by customers in accessing digital banking were: lack of technical support, inadequate awareness of the available products and services, and lack of appropriate technology. In a study exploring the major reasons for urban financial exclusion in Zimbabwe, Marime (2016) concluded that adult poor financial literacy, stringent bank account requirements, high bankcharges, low disposable income and lack of a saving culture were the major causes of financial exclusion of the urban adult poor in Zimbabwe.In Mavaza (2019), it was established that access to electronic banking in Zimbabwe was affected by a lack of internet security and system failure as a result of power outages.Based on their survey data from 2017 and 2018, Afrobarometer found that most households in Zimbabwe lacked access to the internet and reliable electricity(Moyo-Nyede and Ndoma, 2020). The survey found that although most Zimbabweans had cellphones and used them regularly, less than half (43%) of cellphone owners indicated that their phones had access to the Internet.The Afrobarometer survey results are partly supported by the International Monetary Fund (2021) who asserted thatunequal access to digital infrastructure(electricity, mobile and internet coverage) is one of the key challenges to accessing digital financial services. Furthermore, the International Monetary Fund (2021) agree with Matekenya, Moyo and Jeke (2020) in stating that the lack of usage of financial services is also due to lack of financial and digital literacy. Other key challenges highligfhted in literature includeinsufficient consumer protection, cyber risks and money laundering, which discourages ordinary people from putting their trust in digital financial transactions(International Monetary Fund, 2021). Literature therefore demonstrate that a number of challenges need to be eliminated to increase access to and usage of digital financial services by the poor and low-income population in Zimbabwe.

2.8 Chapter Summary

This chapter presented the conceptual framework used in this study. It went further to examine the concept of financial inclusion in general and from the Zimbabwean perspective. The chapter also examined previous literature focusing on forms of digital banking, benefits from using digital financial services, and challenges to accessing these services. The literature review established that while studies exist on various aspects of the concept of financial inclusion, due to the outbreak of the COVID-19 pandemic which has disrupted access to financial services, there is an urgent shift towards digital banking. From the literature review, it was established that despite the advancement in digital banking, a lot of people especially the adult poor and low-income population are still facing challenges in accessing and using digital financial services. The conclusion that could be drawn from the literature review is that more research is needed to explore new strategies and ideas that can be employed by commercial banks in Zimbabwe, and other key stakeholders to overcome factors inhibiting access to digital financial services by the adult poor and low-income people. The next chapter focuses on the research methodology used to address the research problem.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter helped to enhance the understanding of key concepts related to this study and to develop a conceptual framework applicable to this study. The research methodology section provides an overview of the systematic and scientific steps that were adopted in this study to solve the research problem, along with the logic behind the decisions (Kothari, 2004). As described in Mohajan (2018), research methodology explains the procedural framework within which research is conducted, and it describes the general approach taken by the researcher in carrying out this study (Marvasti, 2007). Informed by existing views on what constitutes research methodology (Fisher, 2010; Bell and Bryman, 2011; Gray, 2014; Kumar, 2014), key issues addressed in this section relates to the research philosophy, research design, research strategy, sample design, data collection, data analysis techniques and other technical procedures that were relevant to this present study.

3.2 Recap of research aim, main study objective, major question

The research methodological decisions in this study were informed by the nature of the research aim, the main study objectives and the major research question which are restated below. This study aims to strengthen financial inclusion by increasing access and usage of digital financial services to the poor and low-income people in Zimbabwe in the wake of the COVID-19 pandemic.The primary objective of this study is to examine the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era. The study was guided by the following sub-objectives:

v.   To determine forms of digital financial services implemented by commercial banks in Zimbabwe to foster financial inclusion in the COVID 19 era;

vi.   To assess how the forms of digital financial services are helping the poor and low-income people in terms of accessing financial services in the COVID 19 era;

vii.   To examine the major benefits and challenges of accessing and using digital financial services by the poor and low-income people in the COVD 19 era; and

viii.   To consider the reforms needed to enhance financial inclusion through the use of digital financial services for the poor and low-income people in Zimbabwe in the COVD 19 era.

The methodological procedures used in this study were mainly chosen to accommodate the application of both qualitative and quantitative research methods which allowed searching for deeper insight into the subject as well as gathering statistical data.

3.3 Research Design

A research design is defined in Dulock (2003) as a blueprint or plan created specifically to answer the research question or control variance. Although there exists no common agreement for categorising research designs, they are generally categorised into four types which are descriptive, correlational, exploratory and explanatory. This study adopted a descriptive research design to study the phenomenon. A descriptive research design proved to be well suited to the type of main research question of this study which focused on the 'What' and not the why. A descriptive research design is best suited in studies that seek to describe conditions or variables as they are in nature (Siedlecki, 2020).This approach focuses more on the research subject's "what" than the research subject's "why".

3.4 Research Philosophy

In carrying out this study, the researcher noted the ongoing debates on the classification of research philosophies as researchers have used different terminology, descriptions and categorisations with overlapping meanings and conflicting applications (Mkansi and Acheampong, 2012). This has given rise to the confusion of what is rooted where, and there seems to be no consensus on the classification of research philosophies. Creswell (2014) demonstrated that research philosophy is described in various terms such as 'paradigms' or philosophical world views. For Creswell and Creswell (2018), philosophical worldviews refer to "a set of beliefs that guide action" in research. Basing on Saunders, Lewis and Thornhill (2009), most researchers view research philosophies from an ontological, epistemological and axiological stance. Advocates of research philosophies hold the belief that the researcher's stance on ontology and epistemology influences how research is conducted and how findings are reported and evaluated (Saunders, Lewis and Thornhill, 2009; Kamil, 2011; Mkansi and Acheampong, 2012). Ontology is the study of what constitutes reality, while epistemology is about what kind of knowledge is legitimate or valid (Fisher, 2010). Two contrasting ontological

positions are often presented in literature: objectivism and subjectivism (Gray, 2014). According to Gray (2014), objectivism holds that reality exists independent of the mind, meaning that there is objective knowledge 'out there'. On the other hand, subjectivism holds the belief that knowledge is socially constructed and is subjective.

Ontological debates have divided methodological arguments into two general opposing camps, often described as positivism and phenomenology as illustrated in Table 1 below.

Table 3: Summary of two opposing perspectives (positivism and phenomenology)

	Positivism	Phenomenology
Basic beliefs	Reality is external and objective; the observer is independent and science is value free	Reality is socially constructed and subjective; the observer is a part of what is being observed, and science is driven by human interests
The researcher should	Focus on facts, locate causality between variables, and formulate and test hypothesis	Focus on meanings, try to understand what is happening, and construct theories and models from the data
Research approach and Methods	Employs a deductive approach and quantitative methods, using large samples from which to make generalisations.	Employs the inductive approach and qualitative methods using small samples researched in-depth.

Adapted fromGray (2014)

However, several methodologies occupy different positions between these two extreme camps (Fisher, 2010). Thus a multiplicity of other research philosophies exist in the literature, which includes postmodernism, transformative worldview, critical inquiry, post-positivism worldview, pragmatic worldview and many others (Saunders, Lewis and Thornhill, 2009; Fisher, 2010; Gray, 2014). This study employed the pragmatic research philosophy which is recognised as a philosophical justification for mixing the quantitative and qualitative methods in one research

(Maarouf, 2019). Pragmatism is recognised as a theoretical underpinning of mixed methods research (Creswell and Creswell, 2018). It focuses on what works and holds the assumption that different tools may be useful in different research contexts.(Leavy, 2017). Instead of being based on assumptions about the nature of knowledge, pragmatism is geared towards addressing practical issues in the real world(Creswell, 2014). Supporters of pragmatism hold the belief that true knowledge is generated through the use of a mixed-methods approach (Rahi, 2017).

The motivation to employ a pragmatic worldview stemmed from the realisation that it holds no allegiance to a particular set of theories hence it provided the researcher with the freedom to use different approaches and tools useful to generate knowledge about the problem of improving access to digital financial services by the poor and low-income people in Zimbabwe (Leavy, 2017; Creswell and Creswell, 2018). Pragmatism is well suited to mixed methods research, and its application in this study opened opportunities to employ numerous methods, different philosophies, as well as different methods of data collection and analysis (Creswell and Creswell, 2018). In employing pragmatism in this study, the researcher was able to liberally draw from both quantitative and qualitative assumptions, selecting the best methods, techniques and procedures that were deemed most appropriate to achieve the study objectives and address the research question.This allowed the researcher to collect both qualitative and quantitative data from a study sample comprising both providers of the financial services and the users of the services. Thus the study utilised both semi-structured interviews and questionnaires to collect primary data.

In the wake of the 'paradigm wars' and conflicting philosophical debates, this study sought to focus on what works to address the study objectives and research questions. Pragmatism is widely hailed for placing importance on the research problem and then applying pluralistic methodologies to generate knowledge about the problem (Morgan, 2014; Leavy, 2017; Creswell and Creswell, 2018).In the mixed-methods approach, the most important thing is the problem, not the method itself, hence the researcher is free to utilise all approaches to understand the problem statement (Rahi, 2017).To adequately address the demands of the main study objective and major research question related to this study, it required the use of different tools embraced in pragmatism.

3.5 Research approach

Two research approaches that can be used in conducting a study exist in the literature: a deductive approach and an inductive approach (David and Sutton, 2016). An inductive approach is used when a study is based upon observations originating from reality (Saunders, Lewis and Thornhill, 2012). In inductive studies, categories of interest originate from participants rather than from a predefined framework identified by the researcher (Bengtsson, 2016).

A deductive approach is appropriate when a study is built on previous literature, models, theories or a predefined framework (Saunders, Lewis and Thornhill, 2012). In this study, previous literature related to the field was critically examined to develop the research objectives and research questions of the study. A literature review exercise was also used to compose a conceptual framework for this study. Data collection instruments were also designed based on existing guidelines in previous literature, and the results of the study were tested against reviewed literature.

The study utilised both deductive and inductive approaches in that existing literature in this study was used to provide a framework for composing study objectives and research questions, while at the same time research findings were reported and discussed based on themes that emerged from the study objectives as well as from the data itself.

3.6 Research Strategies

A research strategy is described in the literature as the general plan of how the researcher will go about answering the research questions (Saunders, Lewis and Thornhill, 2009). Several research strategies linked to quantitative and qualitative research methods exist. Quantitative research strategies include survey research and experiments, whereas qualitative research strategies comprise ethnography, grounded theory, narrative research, phenomenology and many others. Case study applies to both quantitative and qualitative research design.

3.6.1 Survey

Basing on guidance from existing literature (Gray, 2014), this research utilised survey questionnaires in conjunction with semi-structured interviews. Survey research is among the most prevalent and popular research strategies in business research (Gray, 2014) and is

commonly used to answer the who, what, where, how much and how many questions. As described in Sapsford (2006), a survey is a detailed and quantified description of a population and involves the systematic collecting of data. Survey data can be collected through interviews, questionnaires or observation methods. At the centre of the survey lies the significance of standardisation. A survey method was adopted in this study mainly because it accommodated the gathering of vast volumes of data in a highly economical and cost-effective way from a sizeable population (Gray, 2014). For this particular reason, survey research has been applied by other several business-related studies. For instance, a survey research method was applied by Gumbe and Kaseke (2011) in a study to analyse the survival strategies implemented by Zimbabwean manufacturing firms based in Harare. The authors indicated that they chose to use this particular method because it was very economical. A survey questionnaire was also used by Mavaza (2019)to investigate the extent of e-banking adoption among commercial banks in Zimbabwe.

Two broad categories of surveys are identified in the literature: descriptive and analytical. This study used the descriptive survey method that often makes use of open-ended questions to explore perspectives (Gray, 2014).

3.7 Methodology and Data Collection Methods

Research is usually divided into two opposing camps: quantitative and qualitative research approaches. The quantitative research approach is rooted in objectivism and positivism(Maarouf, 2019). Based on the quantitative paradigm, there is a single objective reality separated from the researchers' perceptions, and it uses a value-free framework to measure causal relationships (Creswell, 2014).The quantitative approach follows the quantitative research paradigm and depends on the collection and analysis of quantitative data (Maarouf, 2019). On the contrary, the qualitative research approach is entrenched in subjectivism and interpretivism.Qualitative researchers believe in multiple reality socially constructed through interaction between the researcher and the participant.The qualitative approach follows the qualitative research paradigm and depends on the collection and analysis of qualitative data (Maarouf, 2019).

However, over the past two decades, the mixed methods research has emerged as the third methodological movement (Creswell, 2014; Creswell and Creswell, 2018; Maarouf, 2019). Mixed methods research is use of both qualitative and quantitative approaches in the same analysis (Molina-Azorin, 2016). The mixed-method research originated from the integrated view

of combining both the quantitative and qualitative research approaches (designs and methods) (Maarouf, 2019). Researchers no longer view quantitative and qualitative research approaches as two distinct opposite approaches. Rather, the two represent two ends of a continuum. A stud can be more qualitative than quantitative vice versa. The mixed methods research is in the middle of the continuum (Fisher, 2010; Creswell, 2014; Gray, 2014).

Besides the fact that it is well situated within the pragmatic research paradigm/framework employed in this study, the mixed methods research was chosen in this study based on two major advantages. The mixed-methods approach was embraced because of complementary strengths and its ability to accommodate triangulation. Mixed methods allowed the researcher to take advantage of the inherent advantages of both quantitative and qualitative research methods to enhance each method. This was inspired by the realisation that using only quantitative or qualitative research is limited and deficient for many research problems, hence the need to combine the two to increase research quality and avoid overlapping weaknesses(Sale, Lohfield and Brazil, 2002; Johnson and Onwuegbuzie, 2004).

In using mixed methods, triangulation was used to enrich and improve the findings of research by using multiple data collection and analysis techniques to study the same phenomenon to achieve a full understanding of the phenomenon. Semi-structured interviews and questionnaires were used to collect data from ordinary people as well as from digital financial service providers.In this case, both quantitative and qualitative methods were combined to obtain complimentary or contrasting views from people as well as the digital banking service providers.

Out of the three mixed methods research designs described in the literature, this study used the concurrent mixed approach, which combines qualitative and quantitative approaches at the same time(Creswell, 2014; Maarouf, 2019). A concurrent mixed-method approach seeks to gather complementary yet different data on the same topic from different sources, utilising different methods; which can then be integrated for analysis and interpretation (Almalki, 2016). The study preferred to integrate both quantitative and qualitative research data to capitalise on the advantages of triangulation of data. Triangulation provided an opportunity for corroboration of results obtained from both questionnaires and interviews and this enhanced the evaluation of study findings. Therefore, the integration of quantitative and qualitative research methods in this study helped to enhance the validity and reliability of the research through triangulation of data

sources. Triangulation is considered in the literature as one of the strategies to strengthen the validity of data and findings as it involves gathering information from a variety of sources and using a variety of techniques to validate observations (Zohrabi, 2013).

3.7.1 Secondary data collection

Data collected by previous researchers were collected and used to refine study objectives and research questions. Both empirical and grey literature was searched to obtain secondary data in the form of journal articles, academic books, working papers, discussion papers, and website content.

3.7.2 Primary data collection

Different research instruments and data collection techniques are used to collect data for the specific research problem (Wilkinson and Birmingham, 2003). Quantitative data collection strategies include survey questionnaires and experiments whereas qualitative data collection strategies include interviews, observation, documentary analysis and focus group discussions. As indicated earlier, mixed methods involve combining or integrating qualitative and quantitative research and data in a research study. Qualitative data tends to be open-ended without predetermined responses while quantitative data usually includes closed-ended(Creswell and Creswell, 2018). This study utilised semi-structured interviews and questionnaires to obtain both quantitative and qualitative data.

3.7.2.1 Semi-structured Interviews

Interviews are one way of collecting data from individuals through conversation, talking and listening to people (Kajornboon, 2005). Interviews allow verbal exchange in which the interviewer attempts to acquire information from the interviewee (Gray, 2014). Three types of interviews exist in the literature: open interview, pre-coded interview and semi-structured interview (Fisher, 2010), and these are briefly explained below. In an open interview, the interviewer engages participants in an informal conversation about a particular topic. The interviewer kick starts the conversation a little but the respondent generally leads the direction of the interview. Pre-coded interview is controlled by the researcher, and questions are organised into a logical sequence. Semi-structured interviews were chosen for this study because they are in between the above two extremes, and they possess the strengths of both open and structured

interviews. In semi-structured interviews, the interviewer has a schedule to remind them the main issues and topics that need to be covered by the respondent.

The goal of semi-structured interviews is to understand the lived experiences of other people, and the meaning they make of that experience (Gray, 2014). Both face-to-face and telephone interviews were mainly used to collect data from banking personnel: managers, supervisors, and Information Technology personnel. Interviews proved most suitable mainly because these were too busy to read questionnaires and they wanted clarification and explanation of the study. The research intended to gather data from a banker's point of view hence this needed an open approach with a low degree of structure to allow banking personnel to express their views and opinions on improving access and usage of digital financial services to the low income and poor people in Zimbabwe (Fisher, 2010; Gray, 2014). Interviews with banking personnel allowed opportunities for probing and to counteract the weaknesses of questionnaires. Questionnaires are usually associated with a low return rate, while interviews are used to maximise a good return rate among banking personnel(Gray, 2014). Using questionnaires on banking personnel was likely to result in a low response rate due to their busy schedule, hence the use of interviews allowed verbal exchanges to agree on the most suitable interview time and method of conducting the interview. The research also used interviews to obtain detailed information from banking personnel that would help to answer the research problem (Wilkinson and Birmingham, 2003).

3.7.2.2 Questionnaires

Considered one of the most widely used primary data gathering techniques, questionnaires are research tools through which people are asked to respond to the same set of questions in a pre-determined order (Gray, 2014). Questionnaires were chosen for this study because of their capability to collect vast quantities of information from a variety of respondents, in this case, the users of financial services (Wilkinson and Birmingham, 2003). The advantages that motivated the application of questionnaires in this study were that they are usually inexpensive in terms of time and money, given that the study needed to accomplish within a specified time frame (Gray, 2014). Besides, questionnaires in this study were used to collect data covering a broad range of issues ranging from forms of digital banking, benefits and challenges to accessing digital financial services and necessary reforms for improving access to digital financial services (Wilkinson and Birmingham, 2003). Apart from that, questionnaires ensured the respondent's

anonymity since the researcher could not recognise or tell who has responded. The use of questionnaires also reduced the researcher's bias because respondents were able to complete the questionnaire at a time and place that suits them (Gray, 2014). The other justification for using questionnaires in this study was to increase validity and reliability through triangulation of data sources. Questionnaires were used to collect data from users of financial services, while interviews were used to collect data from financial service providers, hence helping to corroborate information from questionnaires while also generating different perspectives (Yin, 2014).

Semi-structured questionnaires were chosen to make provision for both structured questionnaires and open-ended questionnaires. Structured questionnaires were used where the researcher had a set of pre-defined responses, whereas open-ended questions were utilised to solicit new ideas and to compare views and experiences of respondents(Fisher, 2010).

3.7.3 Interview guide and Questionnaire development

The research used an interview guide as an essential component for conducting the interviews(Kajornboon, 2005). An interview guide was used todevelop a list of questions that the researcher wanted to cover during the interview.Issues of validity and reliability were of prime importance in designing the interview guide and the questionnaire (Gray, 2014). The interview guide and questionnaire instruments were designed to reflect the study objectives and the research questions. Questions for the interview guide and questionnaire were guided by the literature review as well as the conceptual framework used for this study. Existing guidelines on the interview guide and questionnaire design were also utilised to increase the credibility of research findings(Kajornboon, 2005; Fisher, 2010; Gray, 2014).

Interview Guide

In designing the interview guide, the following framework by Wilkinson and Birmingham (2003) was used.
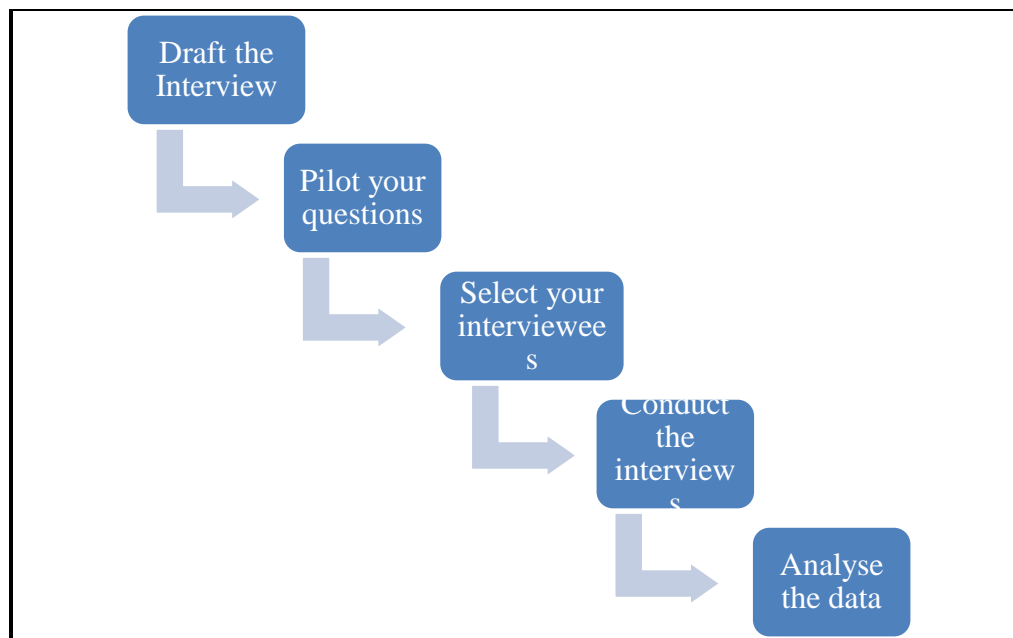
Figure 5: Stages in developing an interview guide

The interview development process started by identifying appropriate questions and topics and deciding on the level of detail. Questions were structured in a way to allow flexibility and enable the interviewee an opportunity to shape the flow of information. The questions were then drafted and ordered according to study objectives. The draft questions were piloted to identify problems that needed correction. Expert advice was also sought from the supervisor before implementing the interview guide. Comments were incorporated into the interview guide. The target population was defined and participants were identified and selected for interview. Finally, data were collected and analysed.

Questionnaire

The questionnaire was designed to maximise the response rate. Where necessary, questions were kept short and clear (Gray, 2014).A covering letter was used on the questionnaire to explain the research clearly and understandably (Gray, 2014). The questionnaire was designed to take approximately 30 minutes of the respondent's time. The questionnaire contained both closed-ended and open-ended questions to collect both quantitative and qualitative data. Guidelines obtained from Wilkinson and Birmingham (2003); Gray (2014) influenced the development process of the questionnaire.

3.7.4 Pilot Testing

A small-scale pilot testing of a questionnaire to gauge the appropriateness of the research instrument was conducted. Piloting of the questionnaire was done to obtain peer review as a step towards attaining validity and ensuring that the researcher's biases are not colouring the research design. The piloting exercise involved consulting the project supervisor, three academic experts and personnel in the banking sector.Through piloting the questionnaire, questions that were misleading were eliminated. Suggestions and recommendations obtained from the pilot testing were used to refine the questionnaire.

3.8 Population and Sampling

Study population, sampling and sample sizes are important elements of a research methodology. The next sections focus on the population and sampling.

3.8.1 Population

The term population is used to refer to the total number of possible units or elements that are part of the study(Gray, 2014). The target population was made up of i) all 13 commercial banks of Zimbabwe, who are the financial service providers, and ii) the poor and low-income population who are financially excluded. All commercial banks of Zimbabwe are based in the capital city of Harare. The research targeted ordinary people in high traffic areas, in this case, major Terminuses in MbareMusika and Harare Central Business District where ordinary people board public transport and open trucks to various rural locations in Zimbabwe as well as to various high-density suburbs in Harare. Currently, the Zimbabwe United Passengers Company (ZUPCO) is the major provider of public transport and it is associated with long queues which presented opportunities for questionnaire distribution. High urban density suburbs and rural communities in Zimbabwe are associated with high levels of poverty and financial vulnerability (Manjengwa, Matema and Tirivanhu, 2016; Marime, 2016), hence the target population constituted the poor and low-income population in the form of rural farmers, informally employed, and low working class.

3.8.2 Sample sizes

To calculate sample size for questionnaire respondents, the study used a web-based sample size calculator (Select Statistical Services, 2021). The online sample size calculator was applied in

this study as a way of embracing modern research tools in sample size determination. The sample size calculator applied in this study makes use of the following formula:

n = N*X / (X + N – 1),
Where,
X = Zα/22 -*p*(1-p) / MOE2,

and **Zα/2** is the critical value of the Normal distribution at α/2, **MOE** is the margin of error, **p** is the sample proportion, and **N** is the population size.

Using a maximum population size of 10 000, and a confidence level of 90%, with 6% as an acceptable amount of sample error, a sample of 150 survey questionnaire respondents was determined for this research.

The sample frame for interview participants was based on the list of commercial banks in Zimbabwe by the Banking Association of Zimbabwe (2019) illustrated in Figure 6.

Figure 6: List of Commercial Banks in Zimbabwe

Source: Banking Association of Zimbabwe (2019)

A sample size of 26 was determined based on judgemental sampling and the common rule that 1 to 30 informants are generally accepted as adequate for qualitative interviews (Bengtsson, 2016; Boddy, 2016).Using the judgemental sampling method, the study purposed to interview at least two banking officials from each of the 13 commercial banks.

3.8.3 Sampling methods

Sampling is the process of selecting a statistically representative sample of individuals from the population of interest (Majid, 2018). Both probability and non-probability sampling procedures were used in this research based on the mixed methods approach. Stratified random sampling was first used to divide respondents into commercial banks and poor population/low-income people. Stratified random sampling increases the likelihood of key groups being in the sample while still ensuring an element of random selection. Purposive sampling in commercial banks understudy was adopted to obtain some specific results from key informants in the form of electronic banking managers/personnel, supervisors, and IT personnel. Purposive sampling is defined as the deliberate selection of a participant due to the qualities the participant possesses(Etikan, 2016). On the other hand, convenience sampling was used to identify data from the low-income population at bus terminuses in Harare and MbareMusika. Confidence sampling proved the most appropriate because it focuses on the accessibility of respondents and their willingness to participate which was a key deciding factor in identifying questionnaire respondents.

3.9 Questionnaire administration/Conducting interviews

Interviews were conducted with key informants selected from the banking personnel. Each interview took about 45 minutes. Interviews schedules were sent in advance after making an appointment with interview participants. Interview conversations were held at the most convenient time as per the interview participant's agreement. The purpose of the interview was well explained to the research participant before starting the interview conversation. Interview conversations were recorded using a smartphone.

In this study, the choice of questionnaire administration was informed by Saunders, Lewis and Thornhill (2016). The study administered two types of questionnaires namely self-completed and interviewer-completed questionnaires to collect data from the financially vulnerable population. A self-completed questionnaire comprising closed and open-ended questions was distributed to

ordinary people in high traffic areas which included major Terminuses in MbareMusika and Harare where various low income and poor people board public transport to various locations in Harare and outside Harare. The same self-completed questionnaire was also converted to electronic format using Google Forms and it was then distributed via mobile applications. A face-to-face questionnaire was also used to accommodate respondents who felt comfortable using a local language and thought they were not adequately equipped to respond to an English-based questionnaire. Questionnaires were administered while observing COVID-19 precautionary measures such as hand sanitisation, wearing of masks and keeping physical distancing of at least one meter apart from the respondents.

3.10 Methods of data analysis

A mixed-method data analysis strategy was used in this study which entails the analysis of quantitative and qualitative data (Moseholm and Fetters, 2017; Vogl, 2019). Qualitative data was analysed using thematic content analysis, whereas quantitative responses were manipulated using Statistical Package for Social Sciences(SPSS). An integrative strategy was used whereby quantitative and qualitative datawere presented interactively side by side and together during the analysis process, then merged at the interpretation phase. Interpretation of results was done through narrative descriptions, data transformation and data visualisations.

3.11 Validity and reliability

Reliability is the extent to which the test is a consistent measure over time, whereas validity is defined as the suitability of the data, processes and tools(Leung, 2015). Yin (2018) describes four tests that are widely used to establish the quality of most empirical social research. The author articulates the four design tests as follows:

- Construct validity: identifying correct operational measures for the concepts being studied
- Internal validity (for explanatory or causal studies only and not for descriptive or exploratory studies): seeking to establish a causal relationship, whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships
- External validity: showing whether and how a case study's findings can be generalised

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- Reliability: demonstrating that the operations of a study such as its data collection procedures can be repeated, with the same results

This researchadopted and used reliability and validity tests when designing this research. According to Yin (2018), construct validity is addressed at the data collection phase through the use of multiple sources of evidence. To ensure that this study measured what it claimed(Riege, 2003), survey questionnaires and interviews were used to obtain both quantitative and qualitative data. Also, respondents comprised banking personnel and users of financial services. Thus triangulation of data sources helped to obtain different perspectives on the research question.

Internal validity seeks to establish a causal relationship, whereby certain conditions are believed to lead to other conditions(Yin, 2018). Internal validity is not a methodological issue when performing a descriptive study(Yin, 2018). Since this study applied a descriptive research design, no measures to increase the internal validity were made.

External validity refers to how well the main empirical findings of this research study can be generalised to other populations and settings outside this study(Riege, 2003; Yin, 2018). Conducting research using a bigger sample, increases the external validity (Gray, 2014), hence a sample size of more than 100 questionnaire respondents and 20 interview participants was used for this study. Furthermore, the theoretical and empirical literature on financial inclusion was used to inform this study and findings were tested against empirical studies.

Reliability demonstrates that the operations of a study such as its data collection procedures can be repeated, with the same results(Riege, 2003; Leung, 2015; Yin, 2018). The study documented the procedures taken through the research processes and every stage of research was explained in this study.

3.12Ethical Considerations

There is increased attention to ethical issues in today's research. Existing literature was used to identify ethical issues to be observed when conducting research (Creswell, 2014; Creswell and Creswell, 2018). First, a research proposal to conduct this study was submitted to the University of Zimbabwe Business School for approval of research objectives and research questions. The researcher selected study sites where there were no personal interests. At the onset of data collection, the purpose of the study was well explained to the research participants and informed

consent was sought without coercion. Participation of participants was voluntary, no incentive was offered and participants were free to withdraw at any time. Privacy of participants was also observed. Names of interviewees were kept anonymous to ensure confidentiality. Other sources of information used in this study were acknowledged and cited using the Havard Citation style through a citation manager known as Mendeley.

3.13 Chapter Summary

The chapter concentrated on explaining the methodological decisions and procedures undertaken in developing an appropriate methodology for addressing the research problem. Various sub-sections are outlined including the underlying philosophical assumptions guiding the research, the research design and research approach chosen, the research strategy and the methodological choice applied in this study. The study embraced a mixed methods research methodology underpinned by pragmatism. Both quantitative and qualitative methods were integrated into this study, accommodating the use of survey research and interviews. A concurrent mixed method design was chosen and data was mixed at interpretation and reporting through an integrative strategy of mixed-method data analysis. The next chapter reports on findings.

CHAPTER 4

ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

4.1 Introduction

The previous chapter presented the research methodology applied in this study and the research methods that were used to collect data from the study population. This chapter presents the findings and discussion of results. Data obtained from questionnaire respondents and interview participants were analysed using both quantitative and qualitative techniques. SPSS was used to manipulate quantitative data, whereas qualitative responses were analysed using thematic analysis. Findings from questionnaire respondents and interview participants are presented concurrently based on themes derived from the questionnaire and interview questions. Data was also reported through the use of descriptive statistics, factor analysis and narrative statements.Interview participants are reported using the code Participant01-Participant23 to protect their real identity and maintain confidentiality.

4.2 Response Rate and Profile of Respondents

It is important to provide background information on the study population to contextualise the findings. A total of 150 questionnaires were administered to the adult poor and low-income groups in Zimbabwe and 90 questionnaires were returned giving a response rate of 60%.

4.2.1 Gender

The questionnaire requested respondents to indicate their gender and the study found that the respondents comprised 57.8% males and 42.2% females. As illustrated in Figure 8, the majority of respondents for this study were males. Gender aspects are very critical in financial inclusion studies because women are regarded as one of the most financially excluded groups in Zimbabwe (Reserve Bank of Zimbabwe, 2016). It has been found that females are less likely to open a formal bank account than males (Barugahara, 2021).
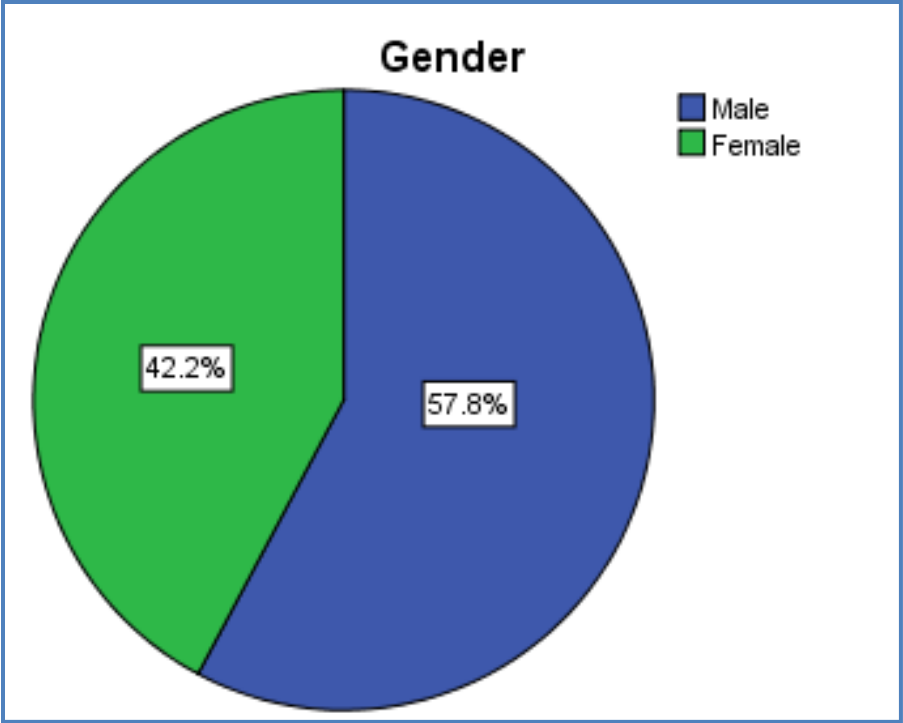
Figure 7: Respondents by Gender

4.2.2 Age

Respondents were asked to indicate their age category and results are depicted in Figure 9. As illustrated in Figure 2, the majority of the respondents were in the age group of 40-49 years (33.3%), followed by 50-59 years (22.2%); 30-39 years (15.6%), 18-29 years (15.6%); and lastly above 60 years which recorded 13.3%. This implies that the views expressed in this study are mainly from middle-aged adults (36-55years) (Petry, 2002). When compared to young adults (18-35 years) and the elderly population (above 55 years) middle-aged adults are associated with higher financial literacy levels and a higher propensity to join the financially included groups (Potrich, Vieira and Kirch, 2015; Barugahara, 2021).
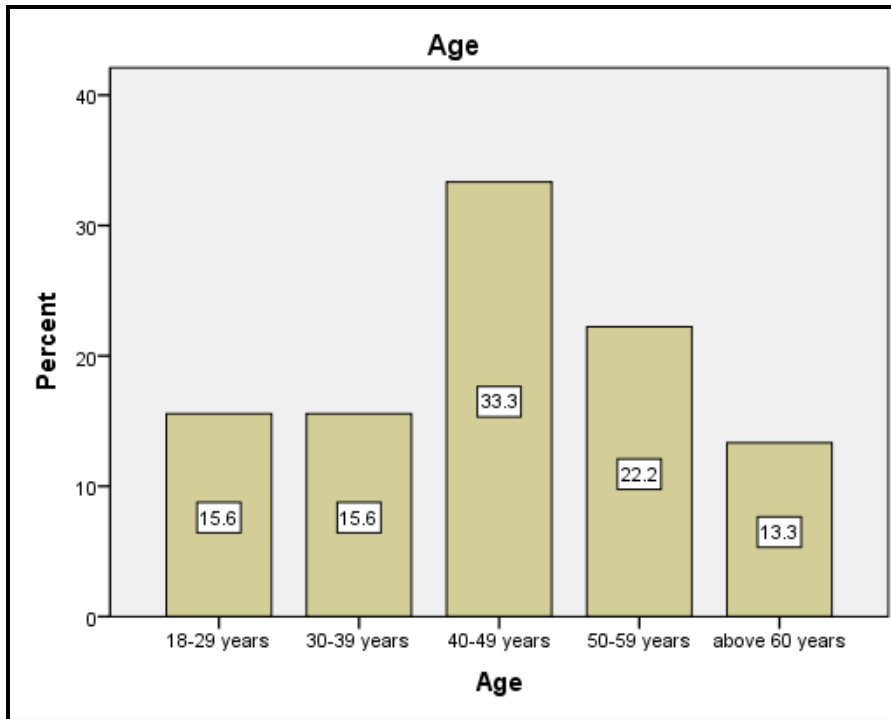
Figure 8: Age of Respondents

4.2.3 Educational Background

The highest level of educational qualifications for study respondents is displayed in Table 4. The study results show that the majority of respondents had a secondary level education (31.1%) followed by undergraduate qualification with 24.4%. The data also shows that 20% of the respondents had a postgraduate qualification, 14.4% had primary education, and 10% of the respondents were not formally educated. Researchers have demonstrated that the level of education from the secondary level exposes individuals to information and reduce the probability of financial exclusion (Ngoma, 2019).

Table 4: Highest Educational Qualification		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not formally educated	9	10.0	10.0	10.0
	Primary education	13	14.4	14.4	24.4
	Secondary education	28	31.1	31.1	55.6
	Undergraduate qualification	22	24.4	24.4	80.0
	Postgraduate qualification	18	20.0	20.0	100.0
	Total	90	100.0	100.0	

4.2.4 Occupation

In this study, it was considered important to identify the occupation of the respondents. An analysis of the responses in Figure 10 indicated that the majority of respondents were in the category of communal farmers (28.9%), followed by the category of vendors (26.7%). The other groups constituting the respondents include pensioners (17.8%), and students (11.1%). These groups represent the financially vulnerable segments of the economy in Zimbabwe (Manjengwa, Matema and Tirivanhu, 2016; Reserve Bank of Zimbabwe, 2016).
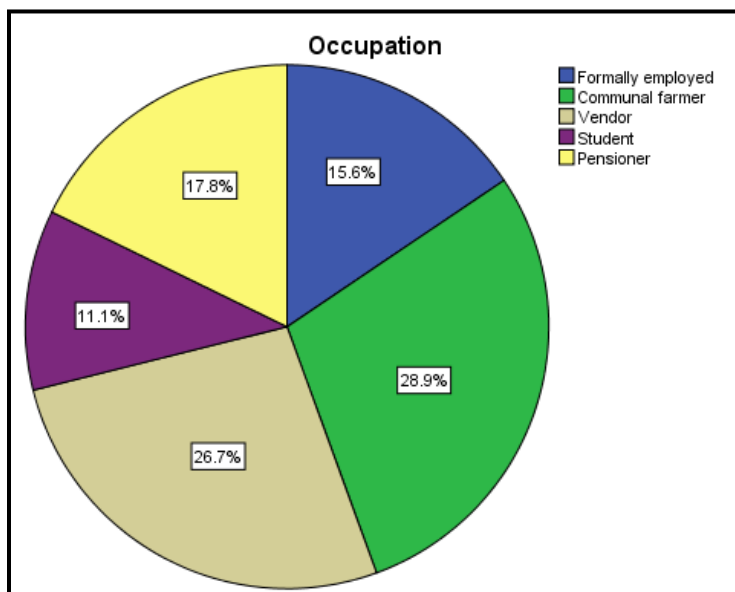
Figure 9:Occupation of respondents

4.2.5 Average Monthly Income

Table 5 illustrates the average monthly income of respondents. The data indicates that the average monthly income for the majority of respondents is in the range of ZWL2000-ZWL3500 (33.3%), followed by those earning below ZWL2000 (26.7%), and ZWL3501-ZWL5000 (17.8%). The data also indicates that 13.3% of the respondents do not have reliable monthly income, and those earning approximately above ZWL5000 represent the smallest group constituting 8.9%. The Zimbabwe National Statistics Agency (2021) show that the Total Consumption Poverty Line (TCPL) for one personstood at $5,187.00 in February 2021. The TCPL represents the total minimum income required by an individual for them not to be considered poor. With most breadwinners having families going beyond five people, most ordinary people in the country are living in poverty.

Table 5: Average Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unreliable monthly income	12	13.3	13.3	13.3
	Below ZWL2000	24	26.7	26.7	40.0
	ZWL2000-ZWL3500	30	33.3	33.3	73.3
	ZWL3501-ZWL5000	16	17.8	17.8	91.1
	ZWL5001-ZWL10000	8	8.9	8.9	100.0
	Total	90	100.0	100.0	

4.2.6 Demographic Profiles of Interview Participants

As indicated earlier, semi-structured interviews were successfully conducted with 23 participants drawn from all 13 commercial banks in Zimbabwe. As illustrated in Table 6, the interview participants comprised marketing directors, branch managers, retail banking personnel, e-banking personnel and front-line banking employees. Interview responses were used to compare and corroborate information collected from questionnaire responses.

Table 6: Composition of Interview participants

Category	Count
E-banking personnel	6
Retail banking personnel	6
Branch manager	5
Marketing director	3
Frontline banking employees	3

4.3 Forms of Digital Banking

The first sub-objective sought to determine forms of digital financial services implemented by commercial banks in Zimbabwe to foster financial inclusion amid the COVID-19 pandemic. Both questionnaire respondents and interview participants were asked to respond to a set of questions to address this first sub-objective.

4.3.1 Bank Account Ownership

The respondents were asked to indicate if they owned a bank account. The purpose was to obtain insight into the number of respondents who were using formal banking services. Based on Figure 12 below, 75.6% of respondents indicated they owned a formal bank account, while 24.4% of respondents indicated they did not own a bank account. In a financial inclusion survey for Zimbabwe conducted in 2017, it was estimated that 59% of the respondents had an account. However, a more recent report by the Reserve Bank of Zimbabwe (2020)on the financial inclusion journey from 2016 to 2020 indicate that bank account ownership increased by over 78% from 3,995,959 accounts in 2016 to 7,138,016 accounts in 2019. This indicates that financial inclusion indicators have been improving over the years in the backdrop of several initiatives that have been implemented by the central bank and the financial sector that comprise commercial banks (Reserve Bank of Zimbabwe, 2020). Notwithstanding the positive impact of initiatives implemented before, the continued liquidity challenges and persistent shortage of cash have also been key drivers that have pushed ordinary people to open formal banking accounts to facilitate formal banking transactions (Diza, Munyanyi and Gumbo, 2017; Mavaza, 2019).
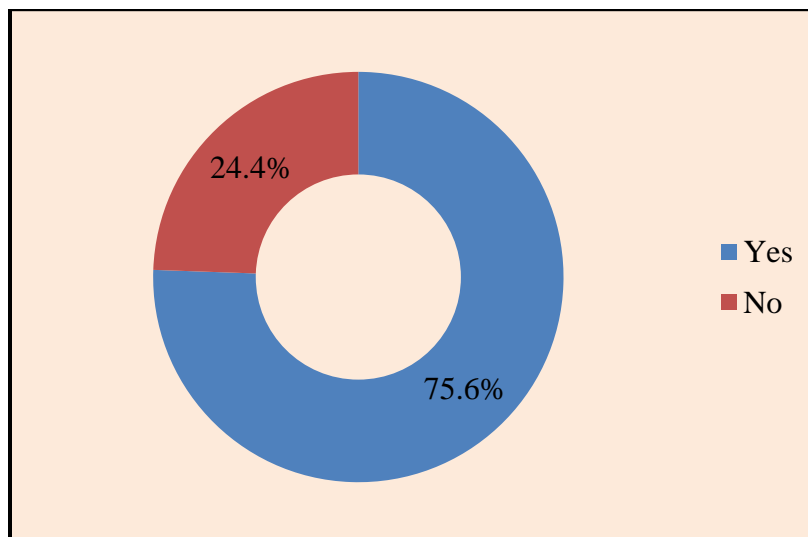
Figure 10: Account Ownership

4.3.2 Digital banking platformsdeployed by commercial banks

Interview participants were asked to indicate the forms of digital banking they had deployed to facilitate access to financial services during the COVID-19 pandemic and a summary of

responses is illustrated in Figure 6. Responses from participants indicated that all 13 commercial banks have leveraged on technology to deploy several self-service channels that include mobile banking, mobile banking applications, ATM/POS cards, and Internet banking.

Table 7: Digital access points offered by commercial banks (Interview Participants)

Digital banking platforms	Agri-Bank	BancABC	CBZ	Ecobank	FBC	First Capital	Metbank	Nedbank	NMB	Stanbic	Standard Chartered	Steward	ZB
Mobile banking	√	√	√	√	√	√	√	√	√	√	√	√	√
ATM/POS Cards	√	√	√	√	√	√	√	√	√	√	√	√	√
Online banking	√	√	√	√	√	√	√	√	√	√	√	√	√
Financial Access Points													
Automated Teller Machines	√	√	√	√	√	√	√	√	√	√	√	√	√
POS Machines	√	√	√	√	√	√	√	√	√	√	√	√	√
Agency Banking	√	√	√	√	√	√	√	√	√	√	√	√	√

Based on interview responses, the digital banking channels provided by commercial banks facilitate a broad range of banking services/transactions such as:

- balance enquiry,
- real-time bill payments,
- Zipit- instant interbank transfers,
- External transfers (RTGS)
- Insurance policy quotations
- Online account opening
- Online card replacement request
- wallet to bank transfers and bank to wallet transfers,
- viewing and downloading account statements,

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- school fees payments,

- airtime purchase for one's self and others, among others.

Responses also showed that all the 13 commercial banks that were studied provide various digital finance access points which include automated teller machines (ATMs), POS Machines and Agent/Agency banking. The results from interview participants demonstrate heavy adoption of digital banking technology by all commercial banks in Zimbabwe, an observation made by Chirume (2018) as well as Shambira (2020).

4.3.3 Digital banking products accessible to respondents

A question was asked to investigate the digital banking products that were accessible to questionnaire respondents amid COVID-19 and results are exhibited in Table 8.

Table 8: Item Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mobile banking	90	1	5	3.44	1.439
ATM/Bank Cards	90	1	5	3.27	1.356
Eletronic Transfer (ZIPIT/RTGs)	90	1	5	2.98	1.382
ATM Machines	90	1	5	1.89	1.203
Internet/Online Banking	90	1	5	1.81	1.381
Valid N (listwise)	90				
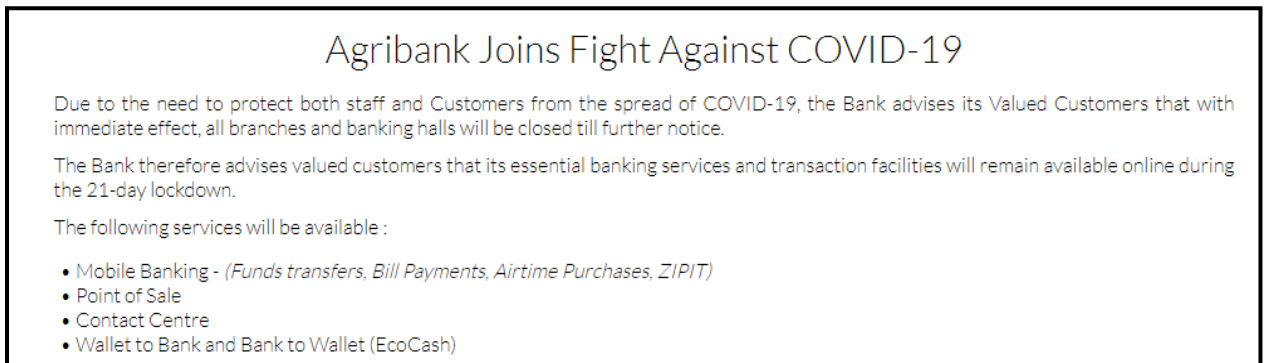
Table 8 indicates that a moderate number of respondents consider mobile banking and ATM/banking cardsaccessible with a mean score of 3.44 and 3.27 respectively. A low number of respondents consider electronic transfer (ZIPIT/RTGs) accessible with a mean score of 2.98, whereas a very low number of respondents find ATMs and Internet banking accessible during the COVID-19 pandemic.Therefore, a larger percentage of respondents in this study finds mobile banking and ATM Cards more accessible during the COVID-19 pandemic as compared to other digital banking products such as electronic transfer, ATMs and Internet banking.

The study went further to ask interview participants whether there had been any increased shift towards digital banking by commercial banks as a result of COVID-19 mitigation measures. All 23 interview responses highlighted that due to the outbreak of COVID-19, commercial banksencouraged their clients to make use of digital banking platforms. The interview participants clarified that at the peak of the national lockdown in March 2020, several bank branches were temporarily closed and clients were encouraged to utilise digital platforms instead of physically visiting banking halls as part of mechanisms to fight the COVID-19 infections. Some of the examples of statements by interview participants and bank notices extracted from selected websites are indicated below:

"Due to the outbreak of COVID-19 pandemic, the bank has been promoting the use of electronic forms of communication and digital banking platforms" (Participant01)

"Most of our banking services and business activities have been migrated to online platforms" (Participant15)

"My observation is that COVID-19 is speeding up the pace of digitalisation of financial services to cushion against the business impact of the pandemic" (Participant20)

Figure 11: Screenshot from Agribank website

The Covid-19 pandemic is still upon us and lately the country has experienced a resurgence of new infections which have prompted the announcement of a 30-day national lockdown effective 5 January 2021.

CBZ Bank would like to its valued clients that your safety and well-being as well as that of our staff is our top priority,

We have taken the following measures to mitigate against the risk associated with Covid-19.

We encourage all our clients to make use of our Digital platforms which include:

- **CBZ Touch**-our game changing integrated mobile app from CBZ Holdings where banking, insurance and wealth management converge and transform financial services into a lifestyle- CBZ Touch is also available through USSD code *230# if you don't have a smartphone or have run out of data.

- **CBZ Internet Banking**-our dynamic online banking facility that gives you unprecedented control over your finances (www.cbz.co.zw)

- **Card based online Transactions**-Clients can use their ATM card to swipe and pay online for local transactions, international payments can be made via our prepaid CBZ Visa Gold and Infinite Cards

Figure 12: Screenshot from CBZ Website

It can be observed from the above exhibits that due to the effects of the COVID-19 pandemic, commercial banks have accelerated their shift towards self-service channels.

4.3.4 Frequently used digital banking products

Respondents were asked to indicate which of the digital ways of banking they used most frequently in this COVID-19 pandemic and results are displayed in Table 9. The study results show that 35.3% of respondents used mobile banking/mobile money frequently, 29.3% of respondents used cards frequently, 12.2% respondents used electronic transfer services, 4.9% respondents used Internet banking platform, while 4.9% used none of the services. Thus, mobile banking is emerging as one of the low-cost digital banking platform most convenient to the poor and low-income population.

Table 9: Frequently used digital banking platforms

		Responses	
		N	Per cent
Frequently used digital banking platforms	Mobile banking and mobile wallets	58	35.3%
	Bank cards	48	29.2%
	Electronic Transfers	22	13.4%
	POS Machines	20	12.2%
	None	8	4.9%
	Online/Internet banking	8	4.9%
Total		164	100.0%

Most of the interview participants confirmed that they have seen the growth of mobile banking because it offers convenience, affordable transaction fees and facilitates access to a plethora of banking services on the go such as balance inquiry, mini statement, internal transfer, airtime purchase, bill payments, transfer to mobile wallets, and other account management services. A representative from FBC bank had this to say:

> *"We've seen an upsurge in terms of usage of mobile banking, internet banking, and mobile wallets in the market,"* (Participant03)

However, in this study Internet banking did not emerge as one of the highly used digital banking platforms as suggested by one of the interview participants.

4.4. Access to Financial Services Through Digital Banking

This second objective assessed how the forms of digital financial services are helping the poor and low-income people in terms of accessing financial services in the COVID 19 era. A set of questions were posed to questionnaire respondents and interview participants.

4.4.1 Measures to drive financial inclusion

The study asked interview participants about digital banking products designed for the low income and poor people in Zimbabwe and responses are illustrated in Table 10 and further summarised in Figure 15.

Table 10: Banking services to drive financial inclusion (Interview Participants)

Banking Services	Agribank	BancABC	CBZ Bank	Ecobank	FBC	First Capital	Metbank	Nedbank	NMB	Stanbic	Standard Chartered	Steward	ZB
Personal loans/Microfinance	MicroFinance Buisness Loans, Microfinance Salary based loans	Salary based loan/ proof of regular income	Microfinance loan for sole traders	Personal loans with no collateral	Microfinance, Salary based loans, Farming loans	Personal loans/ proof of regular income	Loans for SMEs	Salary based loans	School fees loan, personal loans	Salary based loan without collateral	Salary based loans	Kashagi Personal Loan, KaShagi School Fees Loans	Personal loans/ proof of regular income
Savings Accounts (Low cost accounts)	Individual Ordinary Savings Account, Pensioners Account, etc	Deposit Account for SMEs	SimpleSaver Account, Senior Citizens Account, Savings Account	Ecobank and Classic Savings Account	FBC Savings Account	Bonus savings Account. Group Savings Account	Students Saving Account	Women's CVP Savings Account, Personal Savings Account	Savings account	Pure Save Account, Dendere Isidleke	Savings Account	Ecocash save, iSave, Savings Account, Sole Trader Account	ZB E-Wallet
Insurance	-	-	Education Plan, Individual Pension Plan	Education and Life policies	Microinsurance, Health, Motor Insurance, etc	Funeral plan, Non-life assurance	-	Funeral cover, Life plan, vehicle insurance	Short term insurance policies	Funeral Plan, Motor Insurance	Life plan, vehicle insurance	-	Funeral Plan, Life Plan

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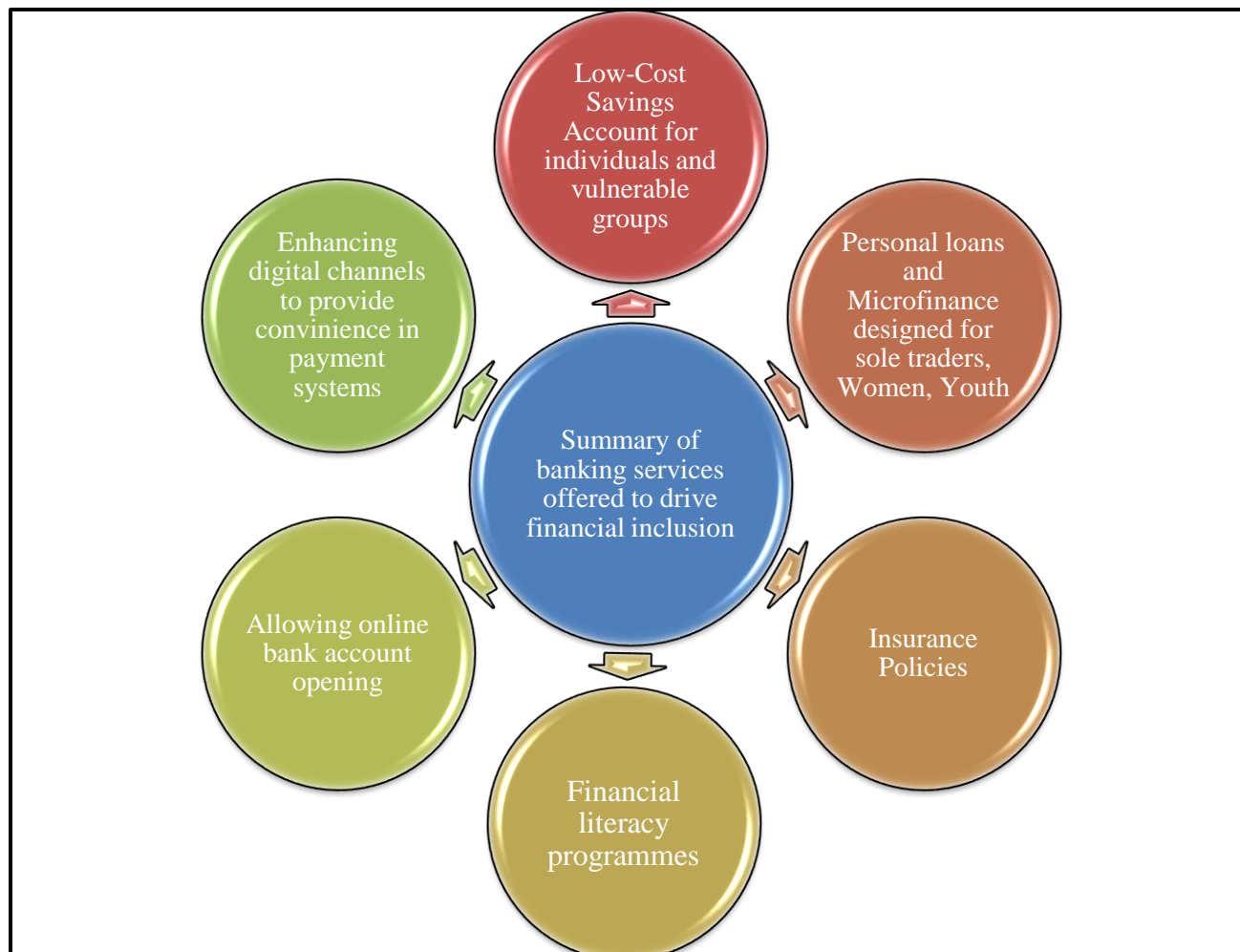
Figure 13: Digital banking services to drive financial inclusion (Compiled from participants)

Responses from interview participants indicated that commercial banks in Zimbabwe provide credit facilities to individuals in the form of salary-based loans which require no collateral but require proof of regular income, a requirement which may pose challenges for the poor with no reliable source of income. Some commercial banks such as FBC Bank, Agribank, CBZ Bank, and MetBank indicated that they provide microfinance to sole traders and the informal sector in addition to personal loans. Based on responses, Steward bank provides a loan facility tailor-made for the poor and low-income people in the name of Kashagi Personal loan. In terms of savings products, all the commercial banks indicated they provide various types of low –cost bank accounts designed for the poor and low income. Nine banks indicated that they provide insurance products in the form of funeral plans, education plans, vehicle insurance and life insurance. The

responses also revealed that all the commercial banks have made attempts to enhance their digital channels to bring more convenience to ordinary people and facilitate payment transactions, allow online bank account opening. Other banks like Metbank indicated that they provide financial literacy programmes to women, youth and sole traders to improve their management skills.

4.4.2 Use of digital banking platforms in accessing key financial inclusion services

As indicated in the literature review, financial inclusion is driven through the delivery of key financial services such as payment systems, sending and receiving funds, access to credit, insurance and savings (Reserve Bank of Zimbabwe, 2020). Respondents were asked to indicate the situations in which they find themselves using digital financial products in this COVID-19 era. Respondents specified their level of agreement using a five-point Likert scale; where Strongly Agree =5, Agree =4, Neutral=3, Disagree =2, and Strongly Disagree=1. This question had six items representing financial services required by ordinary people. SPSS was used to calculate Cronbach's alpha and assess the internal consistency of the Likert items and the results are shown below.

Reliability Analysis

Reliability Statistics

Cronbach's Alpha	N of Items
.828	6

In this case, α = .828, which indicates a high level of internal consistency for this question as the values were above the recommended minimum threshold of 0.7 (Saunders, Lewis and Thornhill, 2016). The next table provides the Item statistics based on mean scores.

Table 11: Item Statistics

Financial service	N	Min	Max	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Paying bills	90	1	5	4.44	.111	1.051
Sending and Receiving funds	90	1	5	4.18	.129	1.223
Buying	90	1	5	4.11	.149	1.410
Borrowing	90	1	5	2.13	.139	1.317
Insurance purposes	90	1	5	2.04	.145	1.373
Savings	90	1	5	1.93	.138	1.314
Valid N (listwise)	90					

Table 11 gives the means and standard deviations for each of the question items. The mean score was used to assess the degree of usage for each financial inclusion service by respondents. In this study, if the mean score is greater or equal to 4.00, the financial inclusion service is rated as highly used by the poor or low-income people. If the mean score is equal to or greater than 3.00 and less than 4.00, the item is rated as moderately used by the poor and low income. If the mean score is less than 3.00, the level of use is regarded as low. Thus based on the results in Table 4, 'paying bills' seems to have the highest average score of 4.44, followed by 'sending and receiving funds' with a mean score of 4.18, and 'buying' which received a mean score of 4.11. Items such as Borrowing, Insurance purposes and Savings seems to have low mean scores of 2.13, 2.04, and 1.93 respectively. A low standard deviation of less than 1.5 on all variables indicates that responses did not deviate much from the mean score. The results suggest that digital banking platforms in this study were used primarily for paying bills, sending and receiving money and buying/making purchases. The results further reveal that the usage of digital banking platforms in obtaining credit facilities, insurance and building savings is low.

Factor Analysis

The data from the above question was further subjected to exploratory factor analysis to identify the groups of factors that are interrelated. A principal components analysis was conducted using SPSS and results are demonstrated in the diagrams that follow.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.239	53.987	53.987	3.239	53.987	53.987	2.620	43.668	43.668
2	1.810	30.173	84.161	1.810	30.173	84.161	2.430	40.492	84.161
3	.335	5.580	89.740						
4	.306	5.100	94.841						
5	.247	4.113	98.954						
6	.063	1.046	100.000						

Extraction Method: Principal Component Analysis.

The diagram above indicates that only two components have an Eigenvalue of atleast 1. The scree plot below visualises the Eigenvalues.

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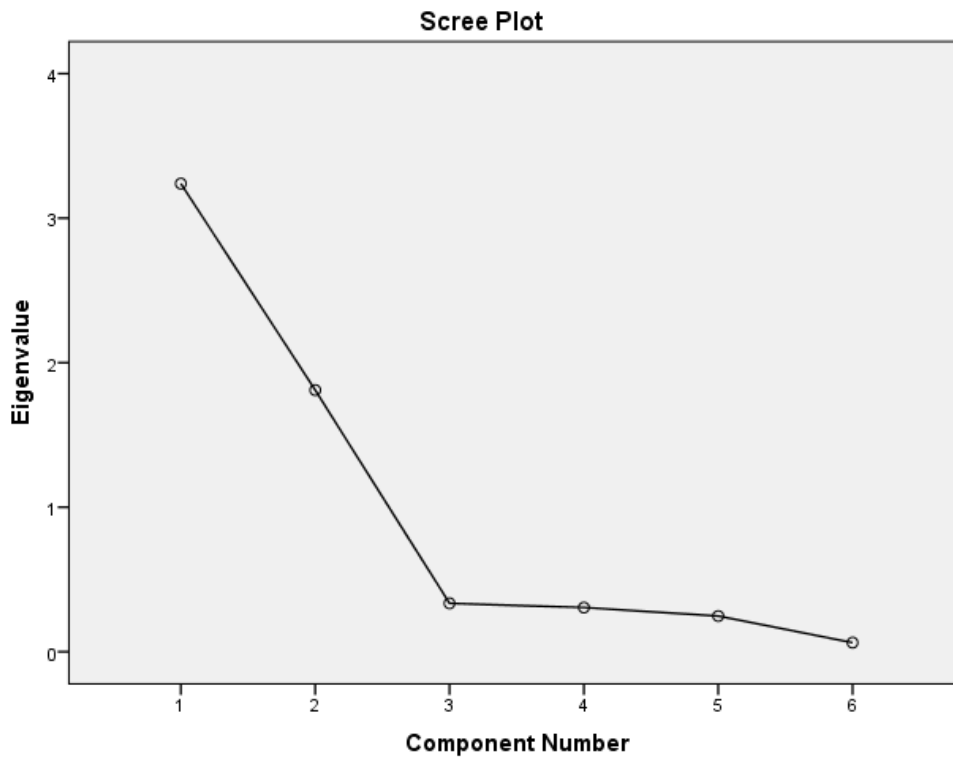
As indicated by the scree plot above, the first two components have Eigenvalues over 1. These are considered the strong components. There is a sharp drop between components 1-2 and components 3-6 strongly suggesting that two underlying components account for this question. The rotated component matrix below shows which components represent the underlying factors.

Rotated Component Matrix[a]

	Component	
	1	2
v1 Paying bills		.895
v2 Buying		.888
v3 Sending and Receiving funds		.872
v4 Borrowing	.855	
v5 Savings	.944	
v6 Insurance purposes	.970	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

The Rotated Component Matrix indicates that the first component is represented by the following variables:

Component 1

- v6-Insurance purposes
- v5-Savings
- v4-Borrowing
-

Variables for component relate to investment financial services that increase the economic resilience of the poor and low-income people. These include microfinance, insurance and savings tools for the poor and low-income people.The second component is represented by the following variables:

Component 2

- v1-Buying

- v2-Paying bills
- v3-Sending and receiving funds

Variables for component 2 relates to digital payment transactions that facilitate the movement of money through digital payment methods. These facilitate buying, bill payments and sending/receiving money. It can be interpreted that two categories of financial services namely digital payment systems and investment financial services are important to drive financial inclusion for the poor and low income. In terms of accessibility, digital payment systems were rated high by respondents, whereas investment opportunities received a low rating. Therefore, commercial banks in Zimbabwe need to put more focus on making investment opportunities more appropriate to be utilised by the poor and low-income people in Zimbabwe (Matunhu and Mago, 2013).

4.4.3 Financial services more accessible to respondents

The study went further to ask respondents to indicate which financial services offered by commercial banks are more accessible to them through digital platforms in this COVID-19 era. Respondents responded to the question by specifying their level of agreement using a five-point Likert scale; where Strongly Agree =5, Agree =4, Neutral=3, Disagree =2, and Strongly Disagree=1. The Likert question had 5 items. Cronbach's alpha was calculated to test the reliability of this question. Reliability statistics are displayed below.

Reliability Analysis

Reliability Statistics

Cronbach's Alpha	N of Items
.826	5

In this case, α = .826, which shows the questionnaire is reliable since it is above the minimum required threshold of 0.7 (Sandada, Simbarashe and Shamhuyenhanzva, 2016;

Saunders, Lewis and Thornhill, 2016). The next table provides the Item statistics based on mean scores.

Table 12: Item Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Remittance facilities more accessible	90	1	5	3.16	.166	1.579
Payment systems more accessible	90	1	5	4.03	.129	1.222
Saving products/services more accessible	90	1	5	2.44	.137	1.299
Insurance products/services more accessible	90	1	5	2.27	.149	1.413
Credit products/services more accessible	90	1	5	2.24	.145	1.376
Valid N (listwise)	90					

Source: SPSS Output

Based on the mean score, the majority of respondents positively rated payment systems as more accessible with a mean score of 4.03. Remittance facilities received a moderate number of responses who rated the item as more accessible (with a mean score of 3.16). A low number of people rated savings, insurance and credit facilities as more accessible through the digital banking platforms. There was a low level of diverging views across all variables. The results suggest that digital banking has made payment systems more accessible to the majority of responses but access to savings products, insurance and credit facilities remain low to the majority of poor and low-income people.

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Factor Analysis Results

SPSS was used to perform a principal components analysis and the results are interpreted in the next diagrams.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.061	61.220	61.220	3.061	61.220	61.220	2.681	53.620	53.620
2	1.094	21.874	83.094	1.094	21.874	83.094	1.474	29.474	83.094
3	.501	10.011	93.105						
4	.236	4.725	97.829						
5	.109	2.171	100.000						

Extraction Method: Principal Component Analysis.

The diagram above indicates that two components have an Eigenvalue of atleast 1. The scree plot below visualises the Eigenvalues.
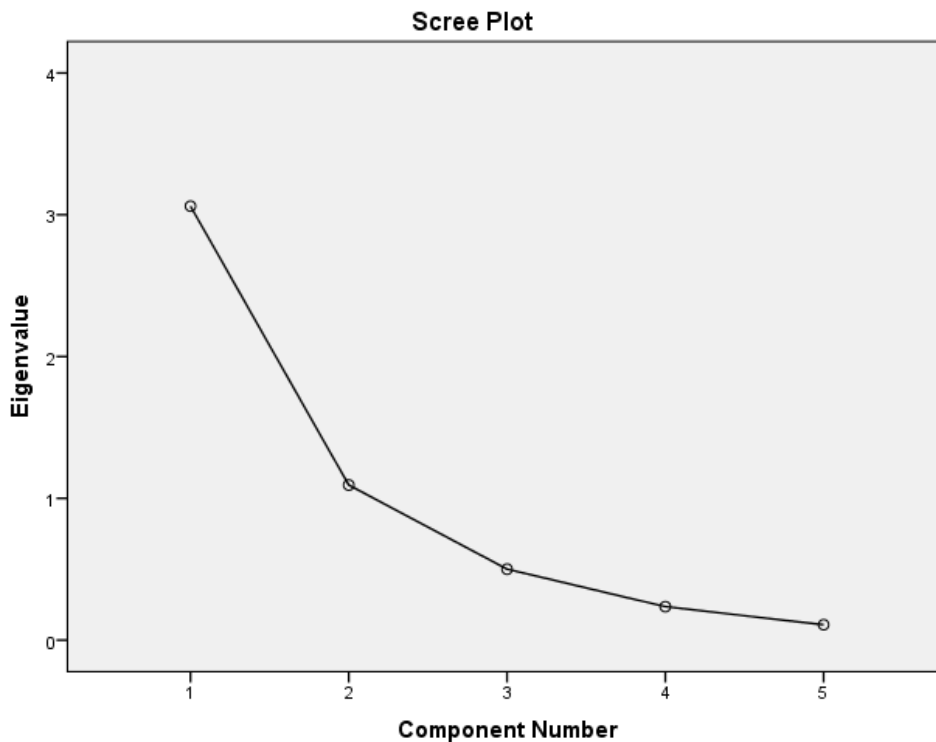
As shown by the scree plot above, two components have Eigenvalues over 1 and these are considered the strong components. There is a sharp drop between components 1-2 and components 3-5 strongly suggesting that two underlying components describe the accessibility of

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financial services by the poor and low-income people. The rotated component matrix below shows which components represent the underlying factors.

Rotated Component Matrix[a]		
	Component	
	1	2
Remittance facilities more accessible		.735
Payment systems more accessible		.911
Saving products/services more accessible	.884	
Insurance products/services more accessible	.913	
Credit products/services more accessible	.957	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

The Rotated Component Matrix indicates that the first component is represented by the following variables which are interrelated:

Component 1

- v6-Saving products/services more accessible
- v5-Insurance products/services more accessible
- v4-Credit products/services more accessible

All three variables represent banking services that provide investment opportunities to increase the economic resilience of the poor and low-income people. Therefore, Component 1 interpreted as investment products.The second component is represented by the following variables which are interrelated:

Component 2

- v1-Remittance facilities more accessible
- v2-Payment systems more accessible

The two variables constituting component 2 represent transaction processes that are required by the poor and low-income people. Therefore, component 2 is interpreted as transaction products. The majority of respondents rated transaction products more accessible whereas a low number of respondents rated investment products as more accessible. Therefore, commercial banks should explore more strategies to make investment products more accessible to the poor and low income to stimulate economic activity and increase their resilience (World Bank Group, 2018).

4.4.4 Avenues used to get information about digital financial services

Respondents were asked to indicate the avenues they used to obtain information about digital banking products and results are displayed in Figure 16. Based on the results, 24% of respondents used family members, 18% used radio adverts, 15% used friends, 12% used bank's website, 10% used social media, 10% used television advert, 7% used newspapers, 2% used none of the channels, while 2% used Outdoor advertising. Therefore, the study suggests respondents trust information obtained from family members and radio adverts. This is understandable given that the social nature of African societies is rooted in oral tradition which is underpinned by oral communication(Gwandu *et al.*, 2014).
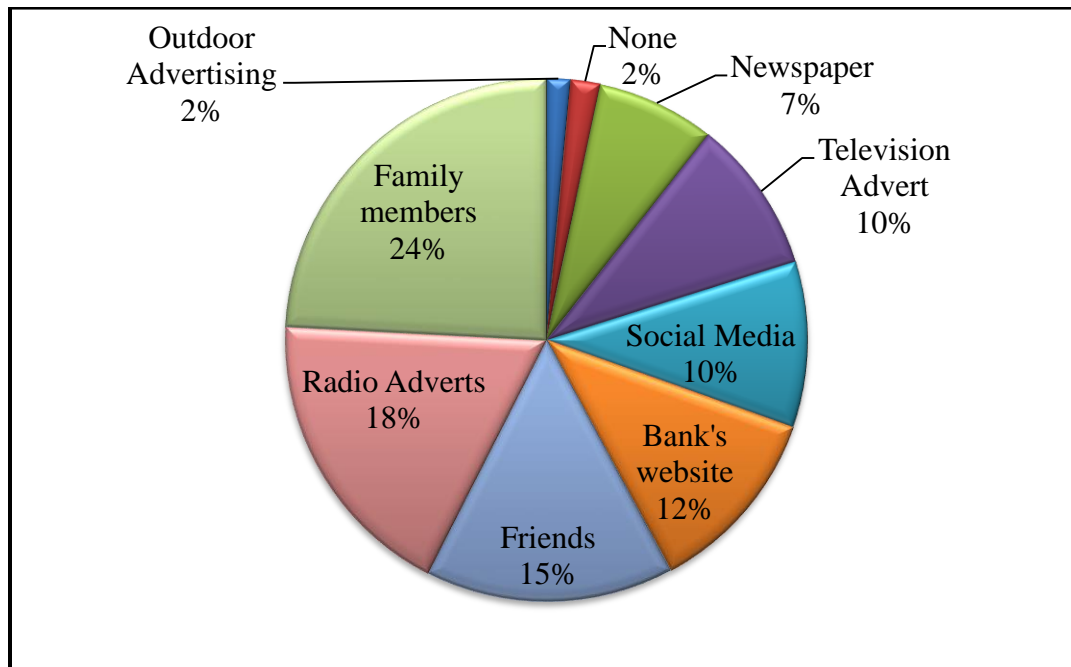
Figure 14: Sources of Information used by respondents

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The study further asked interview participants what methods they used to advertise their digital financial products and the responses are summarised in Figure 17.
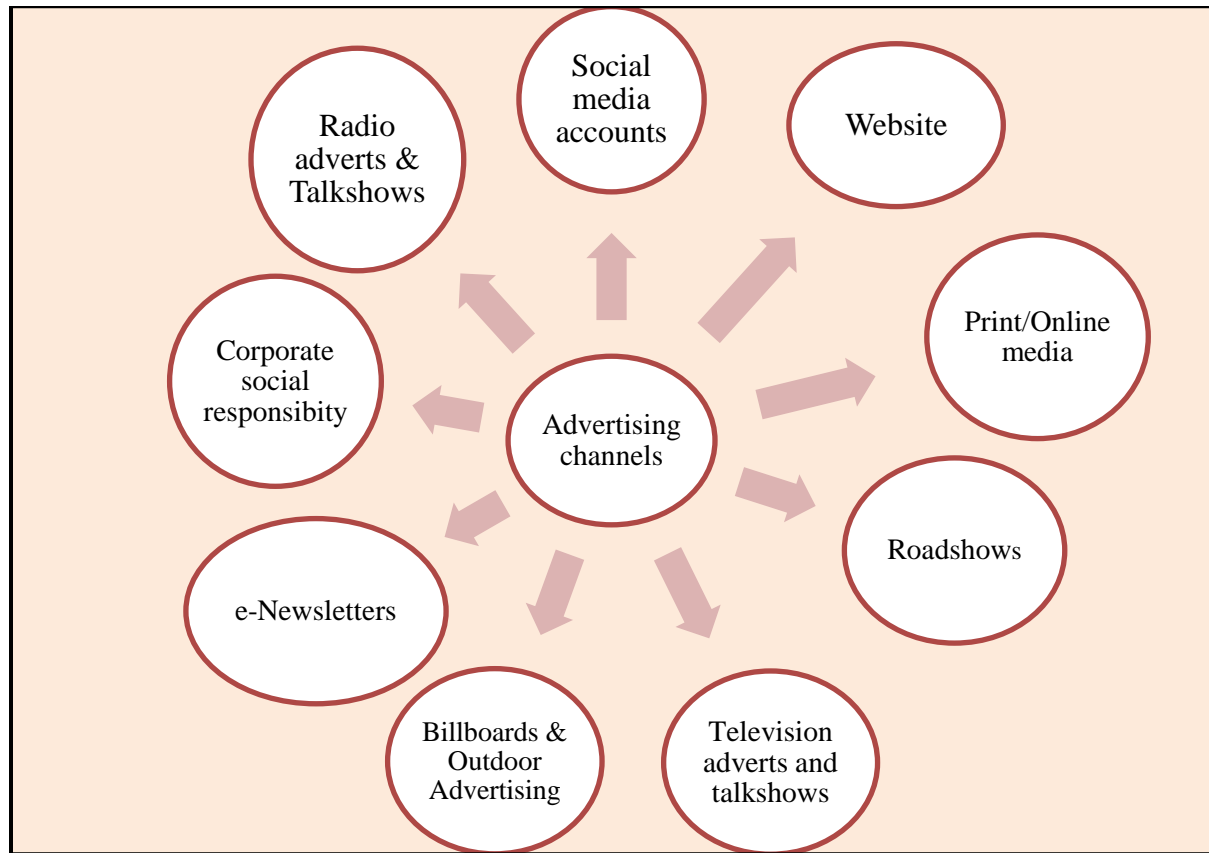
Figure 15: Advertising channels used by commercial banks

Participants from all the commercial banks indicated that their banking institutions utilised a variety of ways to advertise digital banking products. Responses revealed that Facebook and Twitter are the two popular social media tools used by all commercial banks. Live/ virtual chat is used by eight commercial banks, the Youtube channel is used by six commercial banks, whereas Linkedin is used by six commercial banks. Instagram is used by four commercial banks. Interview participants indicated that all the 13 commercial banks used the following channels to advertise their products:

- Bank's Website
- Print and Online media
- Radio channels

- Television channels

- Outdoor Advertising

- Corporate Social Responsibility (CSR)

- Electronic newsletters

- Press Releases

Some banks also indicated that they make use of brand ambassadors to sell their products. The results show that commercial banks utilise a combination of different channels to advertise their digital banking products. It can be seen that all commercial banks in Zimbabwe are making use of a plethora of channels to advertise their digital banking products and services. However, responses from questionnaire responses suggest that the poor and low-income people obtain banking information primarily through family members, followed by radio adverts and friends. This makes sense given that the majority of respondents in this study are communal farmers and vendors who rely much on oral communication and trusted sources of information. In support of Bonga and Mlambo (2016), this study suggests that commercial banks in Zimbabwe should repackage their information on their websites into a language easily understood and applied by those with low levels of education. A website content analysis revealed that all commercial banks have embraced the use of websites to deliver information about their products but the challenge is to make website content more accessible to the poor and low income who may not have adequate access to the Internet. The use of digital channels in communicating banking information should therefore be complemented by efforts to empower the target audience with the means to access that information.

4.5 Benefits and Challenges

The third objective sought to examine the major benefits and challenges of accessing and using digital financial services by the poor and low-income people in the COVD 19 era. A set of questions were posed to questionnaire respondents and interview participants.

4.5.1 Benefits of accessing digital financial products/services?

Respondents were asked to indicate their views on the benefits of accessing digital financial products/services by specifying their level of agreement using a five-point Likert scale; where Strongly Agree =5, Agree =4, Neutral=3, Disagree =2, and Strongly Disagree=1. The reliability analysis and item statistics are displayed in the following tables.

Reliability Analysis

Cronbach's Alpha	N of Items
.933	11

In this case, α = .933, which shows a high level of internal consistency for this question (Saunders, Lewis and Thornhill, 2016). The next table provides the Item statistics based on mean scores.

Table 13:Item Statistics

Descriptive Statistics						
	N	Min	Max	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Accessible anywhere anytime	90	1	5	4.27	.101	.958
Ability to make and receive payments instantly	90	1	5	4.22	.097	.921
Offer access to diverse range of financial products	90	1	5	4.16	.092	.873
Improve accessibility of financial services	90	1	5	4.13	.094	.889
Provide more product information	90	1	5	4.02	.099	.936
Alleviate cash shortages	90	1	5	3.91	.107	1.013
Provide affordable banking services	90	1	5	3.84	.089	.847
Provide secure banking	90	1	5	3.76	.103	.975
Improve the welfare of individuals and businesses	90	1	5	3.64	.105	.998
Lead to greater economic	90	1	5	3.49	.106	1.008

stability						
Encourage Savings	90	1	5	3.44	.144	1.367
Valid N (listwise)	90					

The results indicate that all the variables were positively rated as important benefits derived from accessing digital financial services indicated by average scores above 3.0. However, five factors namely accessible anywhere anytime, ability to make and receive payments instantly, access to a diverse range of financial products, improve the accessibility of financial services, and provide more product information received strong positive rating ranging from 4.27 to 4.02. The other benefits such as alleviate cash shortages, provide affordable banking services, provide secure banking, improve the welfare of individuals and businesses, lead to greater economic stability and encourage savings received moderate rating ranging from 3.99 to 3.44. The results suggest that digital financial services are accepted by the poor and low-income people primarily because they offer convenience, real-time transactions, a wide choice of services, make financial services more accessible and because they make product information readily available. Results indicate a relatively higher standard deviation on variables such as alleviate cash shortages, lead to economic stability and encourage savings suggesting that respondents did not have a common agreement on these three factors as benefits of accessing digital financial services.

Factor Analysis Results

The diagrams below present the SPSS Factor Analysis for the above question.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.934	63.038	63.038	6.934	63.038	63.038	5.063	46.024	46.024
2	2.078	18.892	81.930	2.078	18.892	81.930	3.950	35.906	81.930
3	.568	5.160	87.090						
4	.410	3.723	90.813						
5	.332	3.018	93.831						
6	.228	2.074	95.905						
7	.169	1.536	97.441						
8	.121	1.099	98.540						
9	.077	.697	99.237						
10	.047	.431	99.668						
11	.037	.332	100.000						

Extraction Method: Principal Component Analysis.

The Factor Analysis output indicates that two components have an Eigenvalue of atleast 1. The scree plot below visualises the Eigenvalues.
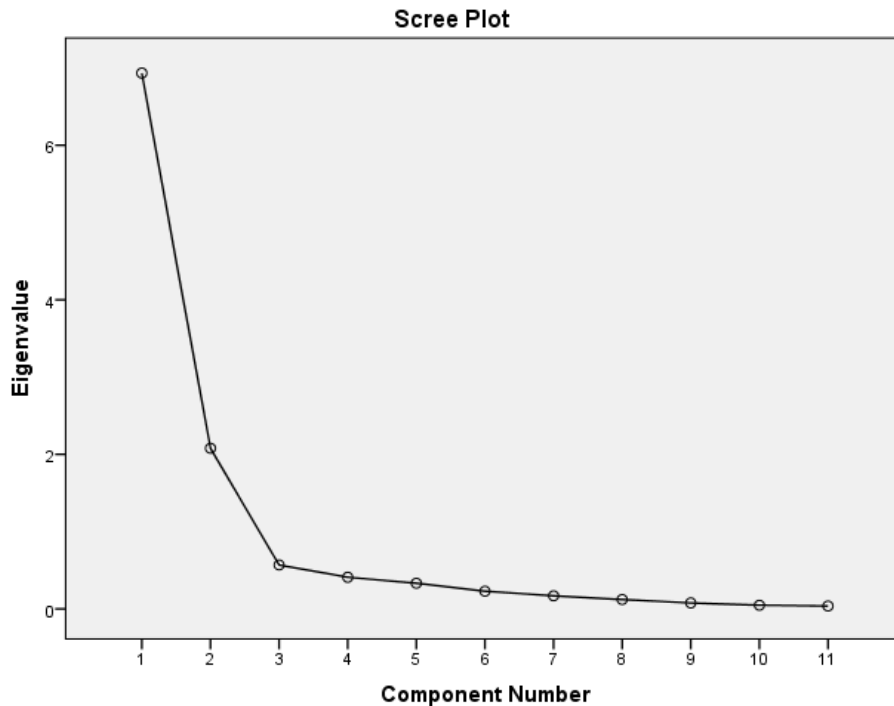
Scree Plot

As indicated by the scree plot above, two components have Eigenvalues over 1 and these are considered the strong underlying factors. The rotated component matrix below shows which components represent the underlying factors.

Rotated Component Matrix[a]		
	Component	
	1	2
Encourage Savings		.736
Improve accessibility of financial services	.933	
Offer access to a diverse range of financial products	.935	
Ability to make and receive payments instantly	.949	
Accessible anywhere anytime	.919	
Alleviate cash shortages		.752

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Provide more product information	.855	
Provide secure banking		.862
Lead to greater economic stability		.850
Provide affordable banking services	.648	
Improve the welfare of individuals and businesses		.893
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

The Rotated Component Matrix indicates that the first component is represented by the following variables which are interrelated:

Component 1

- Improve accessibility of financial services
- Offer access to a diverse range of financial products
- Ability to make and receive payments instantly
- Accessible anywhere anytime
- Product more product information
- Provide affordable banking services

It can be seen that these variables are related to the convenience that digital banking offers to the poor and low income. Therefore, Component 1 interpreted as a convenience.The second component is represented by the following variables which are interrelated:

Component 2

- Encourage savings
- Alleviate cash shortages
- Provide secure banking
- Provide affordable banking services
- Improve the welfare of individuals and businesses

The variables constituting component 2 can be viewed as relating to value addition that digital banking offers to the poor and low income. Therefore, component 2 is interpreted as value addition. It can be interpreted that the main benefits of digital banking are convenience and its ability to create added value for banking clients as compared to traditional banking.

To corroborate information from questionnaire respondents, interview participants were also asked to indicate if there are any benefits associated with increased access and usage of digital financial services by the poor and low-income population in Zimbabwe. Responses were analysed into themes and results are summarised in Table 14.

Table 14: Banker's views on benefits of access to digital financial services

Theme	Count	Example statements (from interview participants)
Improve the welfare of financially poor	15	*"Financial inclusion help to improve the wellbeing of the previously unbanked or financially excluded sections of society"* *"Studies have demonstrated that financial inclusion is directly linked to economic growth and employment. It helps to reduce extreme poverty"*
Financial stability	15	*"Greater financial inclusion contributes to financial sector stability as it creates a stable and more diversified retail deposit base"*
Cost-saving	20	*"Digital banking reduces households' transaction costs by eliminating the cost for travelling long distances. People have the ease of doing business on their mobile phones".* *"Digital financial services provide a means to have a better reach in some places where it would not be viable for us to set up bank branches"*

Socio-economic development	10	*"Access to financial services can help to improve individual and household welfare and spur small enterprise activity"*
		"Improved access to financial services contributes sustainable development and economic expansion"
Digital technologies offer a variety of features	10	*"Digital financial services offer powerful ways to boost financial access based on their key features such as affordability, ease of use, scalability, and convenience".*

The results show that several benefits are derived from increasing access to digital financial services for the poor and low-income groups. Responses show that benefits for commercial banks include improving the welfare of the financially poor, greater financial sector stability, cost savings, and it leads to socio-economic development. Moreover, digital financial services offer a variety of great features. It has been shown in previous studies that access to digital financial services has several benefits for the previous financially excluded, the financial sector, and the government/ economy in general (Ozili, 2018, 2019, 2020).

4.5.2 Challenges in accessing and using digital financial services

Respondents were further requested to indicate their level of agreement on the challenges of accessing digital financial products/services using a five-point Likert scale; where Strongly Agree =5, Agree =4, Neutral=3, Disagree =2, and Strongly Disagree=1. The Likert question had 15 items. Cronbach's alpha was calculated to test the reliability of this question. Reliability statistics are displayed below, while Table 15 presents the item statistics using mean scores.

Reliability Statistics

Cronbach's Alpha	N of Items
.917	15

In this case, α = .917, which shows a high level of internal consistency for this question (Gray, 2014; Sandada, Simbarashe and Shamhuyenhanzva, 2016). The next table provides the Item statistics based on mean scores.

Table 15: Item Statistics

Descriptive Statistics						
	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
High banking charges	90	3	5	4.87	.042	.402
Low financial income	90	3	5	4.76	.051	.481
Lack of trust	90	2	5	4.53	.073	.690
Inadequate financial literacy skills	90	3	5	4.44	.057	.543
Lack of technical support	90	2	5	4.31	.070	.664
Stringent bank account requirements	90	2	5	4.22	.077	.731
Poor internet/digital infrastructure	90	1	5	4.20	.082	.782
No access to the internet	90	1	5	4.13	.096	.914
Lack of appropriate devices/hardware	90	2	5	4.13	.088	.837
Lack of reliable electricity	90	2	5	4.11	.064	.608
Lack of awareness	90	1	5	4.09	.094	.895
Lack of willingness to utilise the financial products	90	2	5	4.04	.086	.820
Lack of a saving culture	90	2	5	4.00	.084	.793
Lack of internet security	90	2	5	3.96	.083	.792
System failures	90	1	5	3.71	.101	.963
Valid N (listwise)	90					

The data in Table 15 indicate that high banking charges are the biggest challenge to accessing and using digital financial services, with a mean score rating of 4.87. The results indicate that access to financial services by the majority of poor and low-income groups in Zimbabwe is hampered by high bank charges. High bank charges also include high mobile transaction charges and high interest rates (Reserve Bank of Zimbabwe, 2020). It has been suggested that the cost of conducting banking transactions in Zimbabwe is also high for the poor due to the 2% tax on electronic transactions (Intermediated Monetary Transfer Tax) imposed by the government in October 2018. The results of this study are in sync with several studies that found that banking is

very expensive for poor people in Zimbabwe because they find bank charges high in proportion to their volume of transactions(Laurine, 2012; Chivasa and Simbanegavi, 2016; Marime, 2016; Bizah, Gumbo and Magweva, 2017; Ngwenya, Pelser and Chivaura, 2018; Barugahara, 2021).

Respondents also cited low financial income, lack of trust in the banking system, inadequate digital literacy skills, lack of technical support, stringent bank account requirements, poor internet infrastructure, lack of Internet access, lack of appropriate devices, lack of reliable electricity, lack of awareness, lack of willingness to utilise financial products and lack of saving culture as strong factors influencing access to digital financial services, as indicated by mean scores ranging from 4.76 to 4.0. Respondents cited lack of internet security and system failures as having a moderate impact on accessing digital financial services, with mean scores of 3.96 and 3.71.

Factor Analysis Results

Results from the principal component analysis performed for the above question are displayed in the next diagrams.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.160	47.734	47.734	7.160	47.734	47.734	3.813	25.417	25.417
2	1.729	11.524	59.258	1.729	11.524	59.258	2.861	19.076	44.493
3	1.410	9.398	68.656	1.410	9.398	68.656	2.493	16.617	61.110
4	1.096	7.308	75.964	1.096	7.308	75.964	2.228	14.854	75.964
5	.857	5.711	81.675						
6	.625	4.168	85.843						
7	.486	3.239	89.081						
8	.471	3.141	92.223						
9	.327	2.178	94.401						
10	.294	1.962	96.364						
11	.189	1.261	97.625						
12	.158	1.054	98.679						
13	.110	.731	99.410						
14	.065	.437	99.847						
15	.023	.153	100.000						

Extraction Method: Principal Component Analysis.

The above diagram indicates that four components have an Eigenvalue of atleast 1. The scree plot below visualises the Eigenvalues.
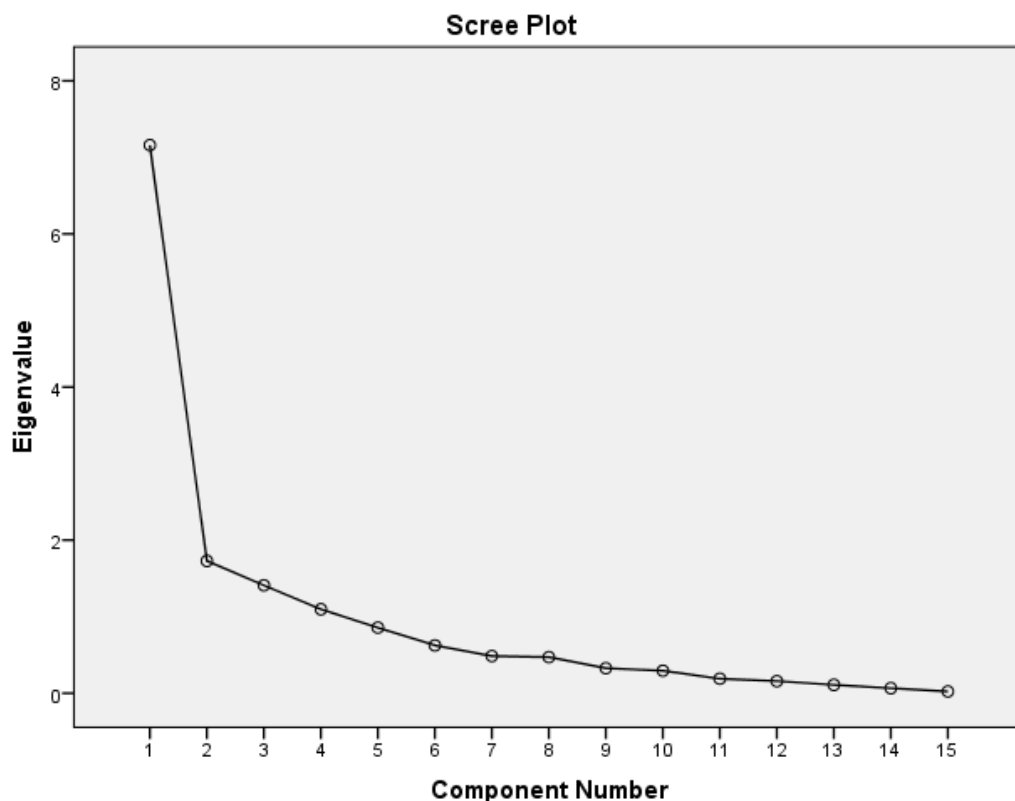
Scree Plot

As indicated by the scree plot above, four components have Eigenvalues over 1 and these are considered the strong underlying factors. The rotated component matrix below shows which components represent the underlying factors.

Rotated Component Matrix[a]				
	Component			
	1	2	3	4
No access to the internet	.728			
Lack of appropriate devices/hardware	.816			
Poor internet/digital infrastructure	.885			
Inadequate financial literacy skills				.727
Lack of awareness				.765
Low financial income			748	
High banking charges			.812	

	1	2	3	4
Lack of willingness to utilise the financial products				.718
Lack of technical support	.659			
Stringent bank account requirements			.586	
Lack of a saving culture				.817
Lack of internet security		.662		
Lack of reliable electricity	.632			
System failures		.849		
Lack of trust		.697		
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 6 iterations.				

Based on the Rotated Component Matrix, Underlying factor is no access to the internet, lack of appropriate devices/hardware, poor internet/digital infrastructure, lack of technical support, and lack of reliable electricity. These variables relate to digital infrastructure and technical support systems that enable the use of digital banking by the poor and low income. Therefore, component 1 is interpreted as digital infrastructure and technical support. Factor 2 comprise lack of internet security, system failures and lack of trust and these can be described as digital trust challenges. The third underlying factor is low financial income, high banking charges, and stringent bank account requirements. These variables relate to the high cost of accessing banking services for the poor. Therefore, underlying factor 3 can be interpreted as the high cost of banking services for the poor. Variable for component four are inadequate financial literacy skills, lack of awareness, lack of willingness to utilise the financial products, and lack of saving culture. These variables relate to financial literacy levels that enable the poor and low income to be aware and willing to utilise available financial services. Therefore, underlying factor 4 can be interpreted as financial literacy levels. Based on the interpretations of all the four components, challenges that militate against accessing digital financial services by the poor can be described by the following underlying factors:

- Inadequate digital infrastructure and technical support

- Digital trust challenges

- High cost of accessing banking services

- Low financial literacy levels

The results reaffirm the same constraints to financial inclusion in Zimbabwe cited in previous studies such as Munyanyi (2013); Marime (2016); Mavaza (2019); Reserve Bank of Zimbabwe (2016), 2020).

4.5.3 Association between gender and challenges to accessing digital financial services

The studyfurther used SPSS to measure the association between gender and challenges to accessing digital financial services using Pearson Chi-Square Analysis. Gender was selected among other demographic variables because it is identified as a key determinant of financial inclusion in several studies (Munyanyi, 2014; Sekantsi, 2019a; Better Than Cash Alliance, Women's World Banking and World Bank Group, 2020; Ozili, 2020). Table 16 presents the summary of findings.

Table 16:Summary Statistics (Pearson Chi-Square Analysis)

Factor	Variable	Pearson Chi-Square	p-value	Decision
Gender	No access to the internet	10.066	0.039	Association
	Lack of appropriate devices/hardware	7.144	0.068	Association
	Poor internet/digital infrastructure	8.866	0.065	Association
	Inadequate financial literacy skills	4.282	0.118	No Association
	Lack of awareness	14.593	0.06	Association
	Low financial income	5.570	0.062	Association
	High bank charges	2.687	0.261	No Association

Lack of willingness	6.498	0.090	Association
lack of technical support	5.283	0.152	No Association
Stringent bank account requirements	17.219	0.001	Association
lack of a saving culture	8.842	0.031	Association
Lack oftrust in digital platforms	14.458	0.002	Association
System failures	18.859	0.028	Association
Lack of internet security	8.142	0.043	Association
Lack of reliable electricity	18.701	0.000	Association

Based on Table 16, it can be concluded that there is a statistically significant association between gender and the following variables:

- No access to the internet (*More females than males are affected by no access to the Internet*).
- Lack of appropriate devices/hardware*(More femalesthan males are influenced by lack of appropriate devices/hardware).*
- Poor internet/digital infrastructure*(More females than males are affected by poor digital infrastructure).*
- Lack of awareness*(More femalesthan males are affected by lack of awareness).*
- Low financial income*(More females than males are affected by low financial income).*
- Lack of willingness*(More females than males are affected by lack of willingness).*
- Stringent bank account requirements*(Stringent bank account requirements affects more females than males)*
- lack of a saving culture*(Lack of saving culture affects more females than males)*
- Lack oftrust in digital platforms (*Lack of willingness affects more femalesthan males).*
- System failures (*More females than males are affected by system failures)*

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- Lack of Internet security (***More females than males are affected by Internet security***)

There is not enough evidence to conclude that gender is associated with the following variables:

- High bank charges
- lack technical support
- Inadequate financial literacy skills

The results from this study reaffirm the suggestion that women face more challenges to accessing and using digital financial services as compared to their male counterparts. The results are in agreement with several previous researchers who have reported that women still face challenges in accessing and using digital financial services (Munyanyi, 2014; Marime, 2016; Reserve Bank of Zimbabwe, 2016; Demirguc-Kunt, Klapper and Singer, 2017; Sekantsi, 2019a, 2019b). Thus in literature gender is identified as one of the key determinants of financial inclusion (Allen *et al.*, 2014; Chikalipah, 2017; Abel, Mutandwa and Roux, 2018; Barugahara, 2021).

4.5.4 Challenges to providing digital financial services

Interview participants were asked to identify challenges for providing digital financial services and responses are shown in Table 17. Information that was obtained from interview participants on the challenges faced by commercial banks in providing access to digital financial services indicated that the major constraints were persistent macroeconomic instability, high cost of providing financial products to the poor and low-income groups, lack of adequate funding, poor infrastructure, high rate of unemployment and informality, high level of digital financial illiteracy, and lack of collateral security on the part of low-income groups. In the Reserve Bank of Zimbabwe NFIS 2016-2020, a conducive economic environment and appropriate infrastructure are recognised as key enablers of financial inclusion in Zimbabwe, while financial literacy is identified as one of the pillars of financial inclusion, together with financial innovation, data availability and consumer protection. The results suggest the need to address the supply side factors which include the key enablers as well as pillars of financial inclusion (Reserve Bank of Zimbabwe, 2016).

Table 17:Major challenges to providing digital financial services to the poor and low-income groups

Major Challenge	Count	Explanation
Macroeconomic instability	21	Interview participants revealed that the persistently challenging economic environment create a difficult operating environment for commercial banks to roll out effective strategies for improving financial inclusion of the poor and low income. A difficult economic environment reduces economic activities and the appetite for borrowing.
Hight cost of providing financial products	20	Responses from interview participants indicated that due to shortage of foreign currency, the rising cost of production, fuel prices, utility charges, labour costs and cash shortages all contribute to the high cost of providing financial services to the financially excluded.
High level of financial illiteracy	20	Interview participants concurred that a greater percentage of the poor and low-income lack awareness of the available digital financial services. They also exhibit low financial literacy that limits their access to financial products and services.
High rate of unemployment	19	It was indicated by interview participants that high levels of unemployment contribute to low-income levels and low economic activity. This ultimately impacts the utilisation of financial services such as savings, insurance and microcredit.
Lack of adequate funding	18	Interview participants indicated that commercial banks lack adequate funding to deploy effective financial literacy programmes to effectively reach the poor and low-income groups.

Lack of collateral security	15	Responses revealed that some poor and low-income groups fail to take up microcredit facilities offered by commercial banks due to lack of appropriate collateral or proof of consistent source of income.
Poor infrastructure	15	Responses showed that provision of financial services to the poor and low income is greatly influenced by poor connectivity, limited availability of telecommunications infrastructure in some remote areas in the country, shortage of power and water, and poor road network

4.6 Necessary Reforms

The fourth sub-objective sought to consider the reforms needed to enhance financial inclusion through the use of digital financial services for the poor and low-income people in Zimbabwe in the COVD 19 era. Open-ended questions were asked for both questionnaire respondents and interview participants to get their views on strategies that commercial banks and the regulatory bodies can implement to strengthen access to financial services by the poor and low income.

4.6.1 Strategies for commercial banks

Responses from open-ended questionnaires and interview conversations were analysed and strategies to be implemented by commercial banks in Zimbabwe to further improve access to digital financial services by the poor are illustrated in Figure 18. Findings indicate that 62.8% suggested financial literacy programmes followed by 57.5% who suggested simplifying account opening, 51.3% suggested low-cost bank accounts, 49.6% suggested supporting infrastructure development, 36.3% recommended improving customer support and 29.2% mentioned using the agent banking model to reach remote areas. Other suggested measures that can be implemented by commercial banks are an adequate protection of consumers (26.5%), paying meaningful interests rates (25.7%) collaborating with Fintech (24.8%), effective stakeholder coordination (23.0%), budgeting for financial education (18.6%), creating interoperability (17.7%), and conducting periodic monitoring surveys (13.3%).
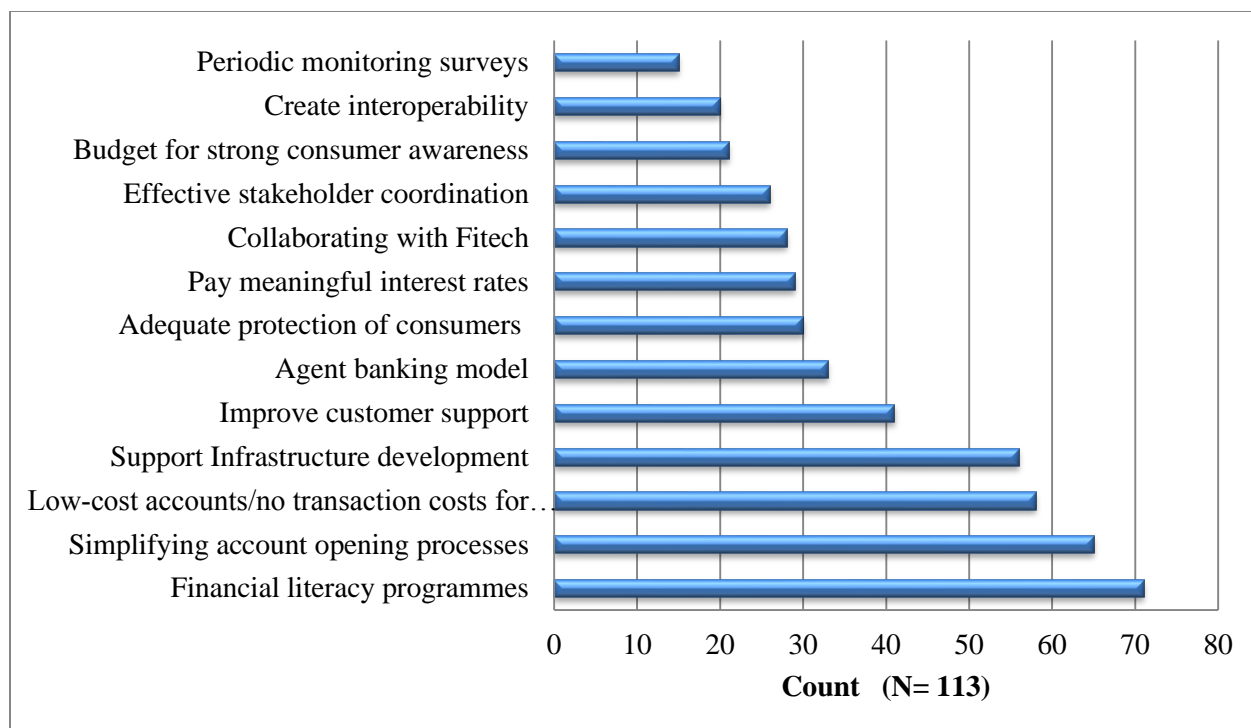
Figure 16: Strategies for commercial banks

The results suggest that commercial banks have a big role to play in strengthening access to digital financial services through partnering with various stakeholders to address the supply side and demand-side factors that influence access to digital financial services. This includes formulating a budget for financial education, deployment financial literacy programmes and campaigns through various media, partnering with the government to spearhead infrastructure development, improving customer technical support, intensifying Agency banking to reach the unbanked, promoting consumer protection through transparency, information dissemination and financial education, as well as paying meaningful interest rates (Marime, 2016; Mavaza, Halimani and Dzapasi, 2020; Reserve Bank of Zimbabwe, 2020). Another key strategy is to partner with Fitech in coming up with new financial innovations that further enhance access to financial services (Ozili, 2020; Sahay *et al.*, 2020; International Monetary Fund, 2021).

4.6.2 Financial Literacy Enhancement Strategies

The study also asked participants appropriate strategies for enhancing financial literacy and the results are displayed in Figure 19.

N=113
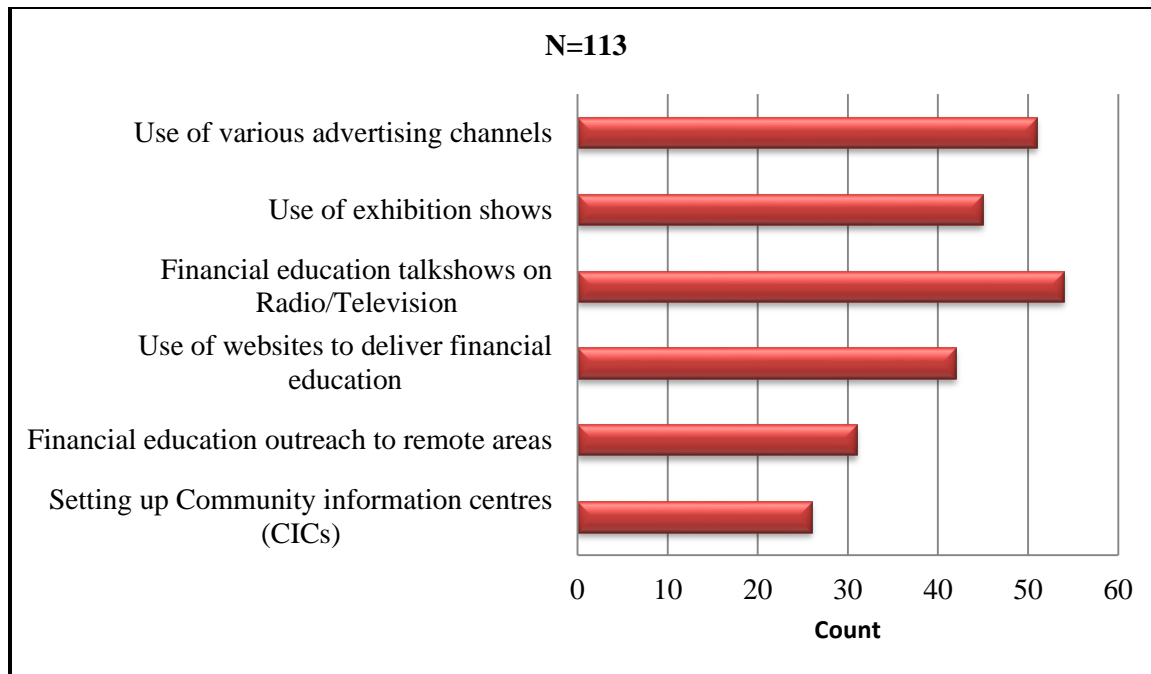
Figure 17: Financial Literacy Enhancement Strategies

Alongside removing structural barriers, financial literacy is recognised as one of the key strategies for achieving financial inclusion (Makina, Chiwunze and Ndari, 2014; Marime, 2016; Ozili, 2020). Kapadia (2019) defines "financial literacy as the ability to make informed decisions regarding developing a savings culture, utilizing loans and the use and management of money". Responses suggest that to address the lack of financial knowledge, commercial banks in Zimbabwe can deploy several strategies which include the use of various media to advertise digital banking products and services, rolling out financial education talkshows through radio and television channels, use of exhibition shows, use of bank's website, carrying out financial education outreaches to remote areas, and setting up community information centres. The goal of commercial banks in Zimbabwe should be to deliver financial education in a language that is well understood and accommodative to all levels of education and age groups. It has been noted that information on the majority of banks' websites is technical and may not be easily understood by ordinary people (Bonga and Mlambo, 2016), hence this study found that banks' websites are not commonly used as sources of information by the poor and low-income population.

4.6.3 Strategies for regulatory authorities/government

Research participants were requested to identify suitable strategies for regulatory authorities to increase access to financial inclusion and responses are displayed in Figure 20.
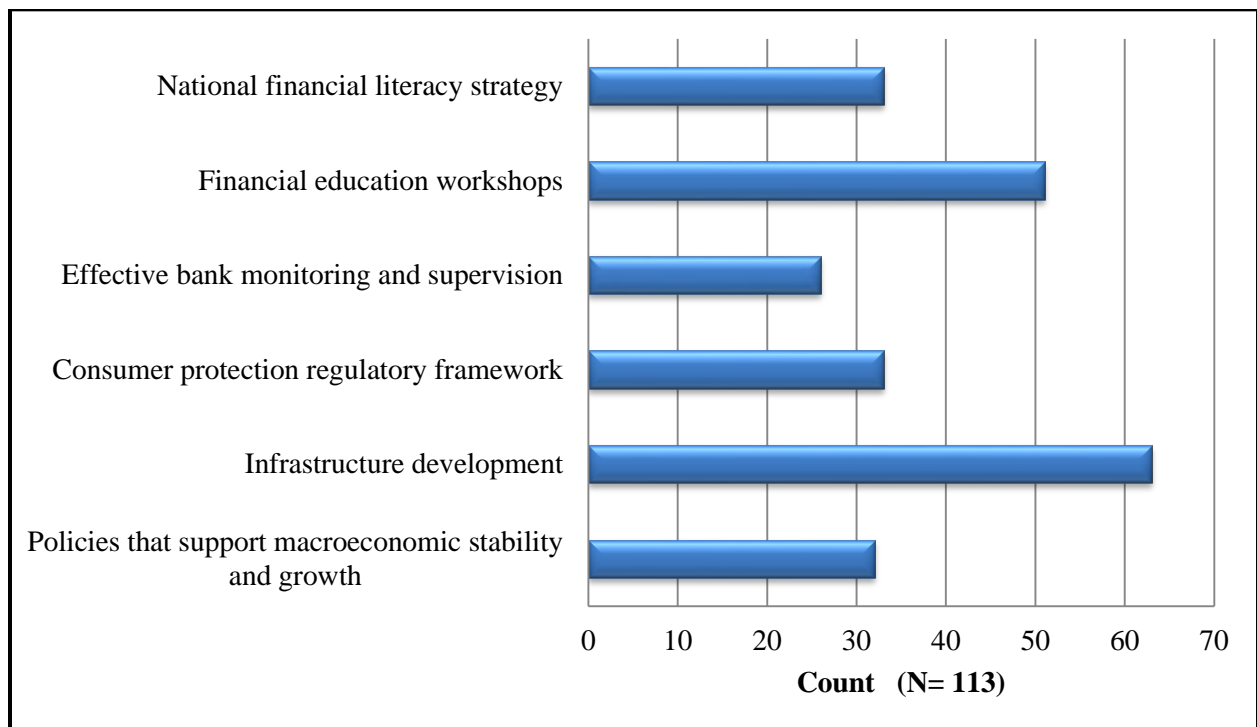
Figure 18: Strategies for regulatory authorities/government

As shown in Figure 15, responses revolved around infrastructure development, sound policies to stimulate macroeconomic stability, consumer protection regulatory framework, financial education workshops and formulation of a national financial literacy strategy. The suggestions seem logical as they speak to the major supply-side and demand-side factors for accessing digital financial services identified earlier on. The suggestions are also well supported in the literature (Makina, Chiwunze and Ndari, 2014; Bonga and Mlambo, 2016; Reserve Bank of Zimbabwe, 2020).

4.7 Discussion of Results

This section discusses the key issues that emerged from the analysis and interpretation of data. Issues that emerged for discussion are: heavy adoption of digital banking technology by Zimbabwe commercial banks, not all financial inclusion services are accessible to the poor and low-income groups, key benefits for driving access to digital financial services, challenges and solutions to accessing digital financial services by the poor and low-income groups.

4.7.1 Heavy adoption of digital banking technology by Zimbabwe commercial banks

The study found that there is heavy adoption of digital financial technology by all commercial banks in Zimbabwe. The heavy adoption of financial innovation in the Zimbabwe banking sector is attributed to the Reserve Bank of Zimbabwe's 2016-2020 National Financial Inclusion Strategy which emphasised financial innovation as one of the pillars of financial inclusion (Chirume, 2018). The data from interview participants and bank websites revealed a 100% adoption of mobile banking, online banking, ATMs, POS Machines and popular social media sites such as Twitter and Facebook. The outbreak of COVID-19 and the subsequent mitigation measures implemented in Zimbabwe to minimise the spread of the pandemic since March 2020 have only helped the commercial banks to strengthen their focus on encouraging clients to use the digital banking platforms. Digital banking platforms offered by commercial banks have the potential to enable commercial banks to deliver key financial inclusion services such as payment transactions, savings products, insurance services, remittances, and microcredit facilities. Among the various digital banking platforms offered by the commercial banks, mobile banking and mobile money seem to be the leading financial access device driving digital financial access because it offers more convenience and low-cost transactions. It was noted in the literature that Commercial banks in Zimbabwe have made significant efforts in partnering with major telecommunication network providers in Zimbabwe namely Econet, Telecel and Netone to facilitate bank to wallet and wallet to bank transactions. As already indicated in the literature review, mobile money is a catalyst for financial inclusion in developing countries like Zimbabwe (Laurine, 2012; Bara, 2013; Srivastava, 2015; Mutsonziwa and Maposa, 2016; Evans, 2018; Perlman, 2019; Safari and Chanceline, 2019; Matekenya, Moyo and Jeke, 2020). The dominance of mobile money as a key instrument driving financial inclusion in Africa has been predicted to continue post-COVID-19 era (Sahay *et al.*, 2020). There is a need for commercial banks to continue seeking innovations to drive financial inclusion to further include the poor and low-income groups. A good example of financial innovation suitable for the poor and low-income population is the FBC's Send-to Cell Service recently introduced in February 2021 to facilitate money transfer services across all networks. Thus, innovation around mobile banking and mobile money should be expected to continue accelerating financial inclusion in the country.

4.7.2 Digital banking increasing access to financial services but more still needs to be done

Through the literature review, it was established that digital banking offers a pathway to accessing financial services by providing a mechanism through whichpoor households can save, borrow, make payments and manage risks and receive remittances using digital tools (Chitokwindo, Mago and Hofisi, 2014; Makina, Chiwunze and Ndari, 2014). Results from this study suggest that at present the adoption of digital banking technology have primarily helped to increase access to digital payment systems, while access to investment-related financial products like borrowing, insurance and savings seem to be low among the poor and low-income groups. This study suggests that due to financial innovation and deployment of digital financial services by commercial banks in Zimbabwe, digital payment systems are currently the key instrument for financial inclusion for the poor and low-income groups in Zimbabwe. The results are partly in agreement with Sahay *et al.* (2020) who discovered the growth in usage of digital payment systems in Africa through mobile banking and Internet services.

However, financial inclusion entails access to a full range of financial services at reasonable costs for the poor and low income (Marime, 2016; Reserve Bank of Zimbabwe, 2016; Demirguc-Kunt, Klapper and Singer, 2017). To achieve more progress in the journey of financial inclusion, digital banking should ensure the poor and low-income groups in Zimbabwe gain increased access to all key financial inclusion services which include payment and transfer services, savings, access to microinsurance and credit. Results from this study suggested that majority of poor and low income are still facing major challenges hindering the full utilisation and accessibility of microcredit facilities, insurance and savings products. Microfinance is a key component of financial inclusion that focuses on the provision of financial services to low-income households and SMEs to help them start and grow their enterprises, while insurance products help poor households to manage risks. Moreover, savings products benefit poor households by allowing them to build savings and working capital (Reserve Bank of Zimbabwe, 2020). The study, therefore, points to the need for financial innovation and products that eliminate major barriers hindering the usage and accessibility of savings products, insurance and microfinance facilities by the poor and low-income groups in Zimbabwe. Results from this study confirmed that the poor and low-income people, as well as financial service providers, acknowledge the existence of benefits that can be derived from increasing access to digital

financial services for the poor and low-income groups in Zimbabwe. The next section discusses the key benefits identified in this study.

4.7.3 Key benefits for accessing and using digital financial services

The study confirmed that there are benefits derived from promoting access to digital financial services by the poor and low-income groups in Zimbabwe. In agreement with Ozili (2018), study results revealed that access to digital financial services benefits the individuals in the society, the financial service providers and the economy in general. From the user perspective, the major benefits of digital banking are convenience and the value-added services it provides. By accessing digital financial services, the poor and low-income benefit from the features of digital banking products which include being accessible anywhere anytime, the ability to facilitate real-time payments, providing access to a diverse range of financial products, improving accessibility of financial services, and provide more product information. As indicated in the literature review (Chitokwindo, Mago and Hofisi, 2014; Srivastava, 2015; Maswaure and Choga, 2016; Tampuri and Yusheng, 2019; Machasio, 2020), there is no doubt that several benefits are derived from access to digital financial services by the poor and low-income groups. Interview results in this study elaborated that providing access to digital financial services to the poor and low-income result in financial sector stability, improve the welfare of individuals in society, boost social-economic development, promote sustainable growth and help to reduce the cost of reaching the previously financially excluded.

A good understanding of benefits derived from accessing digital financial services is critical for the beneficiaries, the financial service providers and the policymakers. When all stakeholders to financial inclusion appreciate the benefits they can derive from the use of digital finance services, they all become motivated to promote the usage of such services. This study, therefore, adds more evidence on the importance of increasing access to digital financial services to the poor and low-income population. However, results from the study helped to unearth some of the key challenges influencing access to digital financial services by the poor and low-income people in Zimbabwe. The next section looks at these issues.

4.7.4 Challenges to accessing digital financial services by the poor and low income

The study noted that challenges to accessing digital financial services can be categorised into four major categories namely high cost of accessing banking services, low financial literacy levels, inadequate digital infrastructure and technical support and digital trust challenges. These factors are also identified in previous studies (Chirume, 2018; Evans, 2018; International Monetary Fund, 2021). From the banking perspective, it emerged from the study that commercial banks are constrained by persistent macro-economic instability, high cost of providing financial products, lack of resources, and poor infrastructure. Evidence from prior researchers has also shown that many commercial banks in Zimbabwe are not operating to the maximum as a result of macroeconomic factors that have caused the country to operate in a volatile environment (Laurine, 2012; Bonga and Mlambo, 2016). It has been noted that the country is currently not attracting foreign direct investment and is struggling against high inflation pressures and liquidity challenges rooted in excessive growth in money supply (Damiyano, Muchabaiwa and Mushanyuri, 2012; Confederation of Zimbabwe Industries, 2018). The banking industry has not been spared by the major unfavourable macroeconomic factors affecting the whole Zimbabwean economy. The major macro-level factors include foreign currency shortage, exchange rate issues, lack of confidence in the economy driving away local and foreign direct investment, high cost of doing business, policy inconsistency and corruption (Confederation of Zimbabwe Industries, 2018). Also, commercial banks are constrained by the poor infrastructure which results in high operational costs and expensive utility bills (Makina, Chiwunze and Ndari, 2014). Although it has been reported that there is high mobile penetration in Zimbabwe (95%), Internet usage is still low, so as computer ownership, access to electricity and telecommunication network (Moyo-Nyede and Ndoma, 2020). Supply-side challenges are worsened by the lack of adequate financial resources by commercial banks to roll out full financial education programmes to reach the remote parts of the country (Reserve Bank of Zimbabwe, 2020). Therefore it is not possible to talk about delivering effective financial inclusion services to the poor and low income without addressing the macroeconomic issues and supply-side factors that affect the cost of providing financial inclusion services to the poor and low income people.

Based on the responses and cited literature, several impediments to accessing digital financial services exist on the demand side and these include but not limited to: high bank charges, low-income levels, lack of trust in the banking system, inadequate digital literacy skills, lack of

technical support, stringent bank account requirements, lack of appropriate devices, lack of awareness, lack of willingness to utilise financial products and lack of saving culture as strong factors influencing access to digital financial services. Other factors are security fears and system failures. Several prior researchers have long provided insight into the various challenges impacting financial inclusion and access to digital financial services both in Zimbabwe and other similar developing countries. This study did not deviate much from factors identified in previous works (Chitokwindo, Mago and Hofisi, 2014; Makina, Chiwunze and Ndari, 2014; Diza, Munyanyi and Gumbo, 2017; Nuryakin *et al.*, 2017; Sekantsi, 2019a; Chinoda, 2020).

The study further noted a statistically significant association between gender and several variables suggesting that women face more challenges in accessing digital financial services than their male counterparts. The study confirms previous findings that women are more financially excluded than their male counterparts (Munyanyi, 2014; Sekantsi, 2019a; Better Than Cash Alliance, Women's World Banking and World Bank Group, 2020). The interpretation of the results is that more focus should be directed towards eliminating challenges that hinder women from accessing digital financial services. Women are identified in Zimbabwe as one of the financially vulnerable groups together with the Youth, SMEs, and rural communities. This study, therefore, suggests the need to identify strategies that increase access to digital financial services for women who form part of the poor and low-income groups in Zimbabwe.

4.7.5 Addressing challenges to accessing digital financial services

The primary objective of this study was to examine the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era. The study ascertained the existence of challenges for the poor and low-income groups in Zimbabwe in accessing digital financial services offered by commercial banks in Zimbabwe. The study has demonstrated that the challenges emanate from the supply side and the demand side. To address these challenges, the study suggests a matrix of macro-level and bank-level strategies as summarised in Table 18.

Table 18: Matrix of Strategies to strengthen financial inclusion

Challenges	Policy Solution/Strategy
Macro-level interventions	
Macroeconomic instability, high rate of unemployment, low financial income	The government of Zimbabwe should pursue policies that build investor confidence in the economy to attract foreign direct investment, stimulate sustainable economic recovery, growth and development that impacts all economic sectors of the country including banking. This is supported in previous findings such as Confederation of Zimbabwe Industries (2018).
Poor infrastructure (roads, electricity, ICTs, Internet, hardware and telecommunications).	In agreement with Makina, Chiwunze and Ndari (2014), this study suggests that the government should play a leading role in spearheading infrastructural development which is fundamental in providing digital banking platforms and the growth of financial inclusion. There is a need to improve availability, affordability, connectivity and accessibility of digital infrastructure to increase access to digital banking services. The government should provide incentives to the private sector players to attract more investment in infrastructural development.
Hight cost of providing financial products	As supported by the Reserve Bank of Zimbabwe (2020) the government should create an enabling environment for commercial banks to operate at a low cost by facilitating appropriate infrastructure and sound economic policies.
Consumer protection, digital trust challenges and security concerns	The Reserve Bank of Zimbabwe should promote consumer protection by promoting good governance in the banking sector, transparency and protection of the interests of

	consumers. Banking supervision needs to be strengthened to ensure commercial banks craft digital banking products that address the needs of the poor and low-income population.
Low financial literacy levels	The Reserve Bank of Zimbabwe should spearhead the formulation of a National Financial Literacy Strategy which incorporates monitoring and evaluation surveys, awareness campaigns, capacity building and stakeholder coordination in rolling out financial education through the use of various media outlets. The use of community information centres or community libraries can also assist in reaching out to the financially excluded (Bonga and Mlambo, 2016; Reserve Bank of Zimbabwe, 2020). Commercial banks should budget for financial literacy programmes, and roll out collaborative initiatives that allow them to deliver financial education more systematically and comprehensively. Partnerships are key in pooling resources together and leverage on existing resources and training channels.
Bank-level strategies	
High cost of accessing banking services	Commercial banks should continue to pursue zero-cost or low transaction cost bank accounts targeting the poorest and low-income population. There is a need for commercial banks to continue partnering with Fintech companies in Zimbabwe to further explore new ways of delivering low-cost digital banking products and services. Fintech promises to drive financial inclusion by maximising mobile banking and mobile money solutions that help to reduce transaction costs (Sahay *et al.*,

	2020).
Cumbersome account opening requirements and procedures for compliance	Digital banking technology should be utilised to simplify Know-Your-Client (KYC) compliance processes for opening bank accounts, loan application and insurance policies.
Customer support	Commercial banks need to make customer support available when it is needed. Technical support can be delivered through real human assistance complemented by digital technology tools such as virtual assistant, WhatsApp chatbots and other various channels.
Low financial income	Commercial banks should promote the uptake of micro-credit facilities by the poor and low income to stimulate economic activity by removing the need for collateral security and proof of reliable source of income. An increase in economic activity subsequently leads to greater utilisation of banking products (Mavaza, 2019).
Low saving culture, and unwillingness to utilise digital financial products	Financial education is key in improving awareness among the poor and low income. Financial literacy is known for increasing financial knowledge and access to financial services (Ozili, 2018).
Collaboration	This study suggests the need to promote increased collaboration among commercial banks and other key players in driving financial inclusion. Cooperation among banks and key stakeholders in the financial sector is also recommended in previous studies (Makina, Chiwunze and Ndari, 2014; Reserve Bank of Zimbabwe, 2016; Nuryakin *et al.*, 2017).
Women face more challenges in accessing digital financial services	Commercial banks should deploy more financial inclusion services uniquely designed in light of the challenges faced by women in accessing digital financial services.

It can be seen that both the government and commercial banks of Zimbabwe have a role to play in accelerating financial inclusion by providing accessible digital banking services to the poor and low-income groups in Zimbabwe. Drawing from submissions by questionnaire respondents and interview participants, the study made attempts to analyse and identify different strategies that can be applied at the macro-level and bank-level, in line with previous studies on financial inclusion.

4.8 Chapter Summary

The primary objective of this study was to examine the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era. This chapter presented the findings and discussion of results. Data was obtained through the use of semi-structured questionnaires and semi-structured interviews. A total of 90 questionnaires were returned, whereas interview conversations were successfully held with 23 participants. SPSS was used to analyse quantitative responses, whereas thematic analysis was used to analyse qualitative responses. An integrative mixed-methods strategy was used to report findings whereby data from questionnaires were reported side by side with data from interviews. The study noted the heavy adoption of several ways of digital banking by all commercial banks in Zimbabwe. Mobile banking and mobile money emerged as the most used digital banking platform owing to its enormous advantages it provides to the poor and low-income population. The study ascertained that the various digital banking platforms deployed by all commercial banks in Zimbabwe have facilitated increased access to payment and money transfer systems by the poor and low income, but access to other key financial inclusion services such as borrowing, insurance and savings remains low for the poor and low-income groups in Zimbabwe. The study confirmed that increasing access to digital financial services brings several benefits to the financial sector, the general economy and the poor and low-income people. High banking charges emerged as the highly-rated challenge limiting access to digital banking services by the poor and low-income population. However, several other challenges exist that militate against access to digital financial services, and these emanate from the supply side and demand side. It was noted that there is an association between gender and several factors that limit access to digital financial services, hence the need for strategies to improve access to digital financial services for women.

Basing on suggestions submitted by respondents and interview participants, the study suggested a matrix of macro-level and micro-level strategies that can be implemented to enhance financial inclusion through the use of digital banking. The next chapter focus on the conclusions and recommendations.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the present study, which investigated the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era.The chapter provides a summary of how the study's research objectives were addressed. It summarises the key findings and provideconclusions to the specific research questions highlighted in the first chapter of this research study. The chapter concludes with a submission of the key recommendations derived from the study results.

5.2 Summary

This study investigated the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era. This is against the background that despite the huge efforts made by the government and the financial sector to deal with the challenge of financial exclusion, many people in Zimbabwe remain financially excluded.Most financially excluded people, include the adult poor and low-income households. Access to financial services is identified as a key tool for achieving financial inclusion for the poor and low-income households in developing countries like Zimbabwe. While before the outbreak of COVID-19 positive progress was made in driving financial inclusion, the effect of the pandemic created a new impetus to drive financial inclusion through digital banking products and services. Thus, this study sought to answer the primary research question: What are the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the COVID 19 era?. To address this primary question, a mixed-methods approach underpinned by a pragmatic research philosophy was used. A mixed methods research methodology was used, which allowed for the integration of quantitative and qualitative research methods. In this study, data was collected through the use of semi-structured questionnaires and semi-structured interviews. Analysis of data was done through the use of SPSS and thematic analysis. A concurrent mixed method was applied to report both quantitative and qualitative data simultaneously. It emerged that financial innovation through mobile banking and mobile money is a key mechanism for driving financial inclusion. Although heavy adoption of digital banking

technology by all commercial banks in Zimbabwe has made payment systems more accessible to the poor and low-income households, accessibility to other key financial inclusion services like microfinance, insurance and savings remains low to many poor and low-income groups. The study ascertained that several benefits can be derived from increasing access to digital financial services, yet key challenges militating against access to digital financial services include high banking charges, unstable economic environment, poor infrastructure and inadequate financial literacy. Therefore, the study suggested the implementation of macro-level and bank-level interventions that focus on addressing the highlighted challenges.

5.2 Conclusions

This section presents the conclusions on the findings that were gathered from the questionnaire respondents as well as interview participants. The conclusions are presented based on the study's sub-research questions:

5.2.1 Forms of digital financial services have been implemented by commercial banks in Zimbabwe to foster financial inclusion in the COVD 19 era?

The study concluded that the forms of digital financial services implemented by commercial banks were mobile banking, online/Internet banking,electronic money transfer systems (ZIPIT and RTGs), ATM and POS Machines, plastic money (credit cards and debits cards). Data gathered from interview participants confirmed that all 13 commercial banks in Zimbabwe have heavily adopted various forms of digital banking which subsequently provide access to a wide range of self-service based transactions which include but not limited to the following:

- balance enquiry,
- real-time bill payments,
- Zipit- instant interbank transfers,
- External transfers (RTGS)
- Insurance policy quotations
- Online account opening
- Online card replacement request
- wallet to bank transfers and bank to wallet transfers,
- viewing and downloading account statements,
- school fees payments,

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- airtime purchase for one's self and others, among others.

The study found that the advent of COVID-19 forced commercial banks in Zimbabwe to shift more towards the enhancement and utilisation of digital banking platforms due to the mitigation measures employed in the country to minimise the spread of the pandemic. It was also observed that mobile banking is the most popular type of digital banking platform for the poor and low-income groups in Zimbabwe. Some banks have further explored new ways of providing more convenient mobile banking services such as Send to Cell Service launched by FBC this year. It can be concluded that commercial banks in Zimbabwe have implemented a wide range of digital banking services to foster financial inclusion amid the COVID-19 pandemic.

5.2.2 Forms of digital financial services helping the adult poor and low-income people to access financial services in the COVID-19 era

The study concluded that the forms of digital financial services were helping the adult poor and low-income people to access digital payment systems but more still needs to be done in relation to increase access and usage of microfinance, insurance and savings products. Data obtained from the respondents and interview participants suggested that the digital banking services offered by commercial banks in Zimbabwe have helped to improve access to payment and money transfer services. It was also confirmed through a literature review that financial inclusion in many African countries has been driven mainly by access to payment systems. However, the study found that financial inclusion entails other key services such as microfinance, insurance and savings products. Microfinance is a key component of financial inclusion that help low-income households and SMEs to start and grow their small businesses, while insurance products help poor households to manage risks. Furthermore, savings products benefit poor households by allowing them to build savings and working capital.The study concluded that access and use of three key financial services namely microfinance, insurance and savings products the remains problematic despite increased access to payment and money transfer services.

5.2.3 Benefits and challenges of accessing and using digital financial services by the adult poor and low-income people in the COVID-19 era

The study concluded that several benefits are derived from increasing access to digital financial services by the poor and low-income groups in Zimbabwe. Study results revealed that access to digital financial services benefits the individuals in the society, the financial service providers

and the economy in general. From the user perspective, by accessing digital financial services, the poor and low-income enjoy the benefits of convenience and value addition. Convenience entails improved access to financial services, instant payments, access to a diverse range of financial products, easy access to financial services, and access to more product information.From the banker's perspective, access to digital financial services by the poor and low-income groups result in financial sector stability, improve the welfare of individuals in society, boost social-economic development, promote sustainable growth and help to reduce the cost of reaching the previous financially excluded. Therefore, the study concluded that access to and use of digital financial services is associated with several benefits at the macro and micro-level.

The study further concluded that access to digital financial services by the poor and low income is hampered by four major categories of factors namely high cost of accessing banking services, low level of financial literacy, inadequate digital infrastructure, and digital trust challenges. From the banker's perspective, the provision of digital banking is constrained by challenges which include persistent macro-economic instability, high cost of providing financial products, lack of resources, and poor infrastructure.

5.2.4 Reforms are needed to enhance financial inclusion through the use of digital financial services in Zimbabwe during and post-COVID-era

The study concluded that there are some reforms needed to enhance financial inclusion through the use of digital financial services in Zimbabwe during and post-COVID-era. The study ascertained the need to implement several strategies at the macro-level and bank level. Data gathered from respondents and interview participants indicated the need to implement the following policy strategies:

- Economic policies that build a good climate for investment to attract foreign direct investment and stimulate sustainable economic stability, growth and development.
- A framework supporting the growth of Fintech companies in Zimbabwe who can partner with commercial banks in Zimbabwe to explore more ways of providing financial products to the poor and low-income groups through low-cost technology and more affordable financial products.

- Formulation of a national financial literacy strategy that provides a framework for nationwide coordination of financial education for the poor and low income.

- A framework for consumer protection that promotes good governance in the banking sector, build trust in the banking sector, improve transparency and increase bank monitoring and supervision.

- Simplify Know-Your-Client (KYC) compliance processes for opening bank accounts, loan application and insurance policies.

- Designing more gender-sensitive digital banking products targeting to increase access to financial services by women

- A new framework for promoting the uptake of microfinance through lowering interests rates, and revising requirements to accommodate the poor and low-income households

5.3 Research Proposition

The research proposition was that COVID-19 provided an opportunity for commercial banks in Zimbabwe to embrace and maximise the use of digital financial services as a necessary strategy to advance financial inclusion in Zimbabwe. Based on study findings, it was concluded that due to the outbreak of the pandemic, all commercial banks in Zimbabwe utilised the opportunity to enhance and deploy more digital banking platforms to increase access to financial services. The study ascertained heavy adoption of digital banking technology by all commercial banks in Zimbabwe, but there is a need to enhance access to a full range of digital financial services by the poor and low-income households in Zimbabwe.

5.4 Recommendations

Based on the study findings, the researcher suggests the following recommendations with policy and practical implications:

5.4.1 Commercial banks

- Commercial banks must strengthen their partnership with Fintech companies in Zimbabwe to further explore new ways of delivering low-cost digital banking products and services.

- Commercial banks should budget for comprehensive financial literacy programmes that reach out to financially excluded

- There must be strong collaboration in the financial sector to implement a coordinated effort in driving financial inclusion for the poor and low-income groups in Zimbabwe
- Commercial banks in Zimbabwe must promote the uptake of microfinance through lowering interests rates, and crafting a framework that accommodates the poor and low-income households
- Commercial banks in Zimbabwe should use digital banking solutions to simplify Know-Your-Client (KYC) processes to streamline account opening and loan application procedures.
- Commercial banks in Zimbabwe should design gender-sensitive digital banking products to promote access to financial services by women

5.4.2 Regulatory Authorities

- The government must craft sound policies that help to build investor confidence in the country and attract foreign direct investment that can stimulate sustainable economic recovery and growth
- The Reserve Bank of Zimbabwe must formulate a national financial literacy strategy to coordinate financial education for the poor and low income in the country.
- The Reserve Bank of Zimbabwe must formulate increase banking supervision to ensure commercial banks in Zimbabwe are complying with consumer protection laws and practices.
- The government should provide incentives to the private sector players to attract more investment in infrastructural development.

5.4.3 Further Research

This study used a small sample population focusing on the poor and low income in general. Further studies are required using a larger sample population focusing on specific types of vulnerable groups such as women, senior citizens, youth, small scale farmers, sole traders and SMEs.

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Appendix A: Questionnaire for financially excluded

Questionnaire for financially excluded

Introduction

My name is Victor T. Mudzamiri. I am carrying out academic research examining the most appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the wake of the COVID 19 pandemic. This study is being conducted in partial fulfilment of the Master's Degree in Business Administration at the University of Zimbabwe. This questionnaire seeks to collect data based on the study research questions. The results of this study will be used by relevant stakeholders in the banking sector to improve access and usage of digital banking services by the most financially vulnerable groups. The information sought will be treated with strict confidentiality and will be used for academic purpose only. I kindly invite you to participate in this study by completing this questionnaire which will take approximately 30 minutes of your time. You are not required to put your name on this questionnaire. Answer all the questions as indicated by either filling in the blank or ticking the applicable options.

For any further clarification, do not hesitate to contact me on my mobile and WhatsApp number:

NB: In this study digital banking refers to delivering banking services over the internet or through electronic means. It's also referred to as e-banking, virtual banking or online banking

Instructions: You are required to indicate an appropriate response by putting a tick where applicable.

Section A: Demographic Data

1. Gender   **Male** ☐   ☐

115

2. Age

Age Category	Tick
18- 29 years	
30-39 years	
40-49 years	
50-59 years	
Above 60 years	

3. Indicate your highest qualification

Qualification	Tick
Not formally educated	
Primary education	
Secondary education	
Undergraduate qualification	
Postgraduate qualification	

4. What is your occupation?..

5. Roughly how much do you earn per month?..

Section B: Forms of Digital Banking

6. Do you own a bank account? Yes ☐   No ☐

7. Has the COVID-19 pandemic worsened your financial situation in any way?

   Yes ☐

   No ☐

8. Which of the following digital banking products are accessible to you in this COVID-19 pandemic?

Digital banking product	**Tick**
None	
Plastic Money/Bank cards	
Internet banking	
Mobile banking	
Electronic Transfer (RTGs)	

9. Which of the digital ways of banking do you use most frequently in this COVID-19 pandemic?

Financial Product	Tick
None	
Plastic Money/Bank cards	
Internet banking	
Mobile banking	
Electronic Transfer (RTGs)	
Point of Service Machines	

Section C: Access to financial services through digital banking products

10. In which situations do you mostly use digital financial products in this COVID-19 era?

Digital banking product	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Paying bills					
Buying					
Sending and Receiving Funds					

Borrowing/ Obtaining loans

Savings

Insurance purposes

11. Indicate which of the following financial services offered by commercial banks are more accessibleto you through digital platforms in this COVID-19 era?

Financial services	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Remittance facilities more accessible					
Digital Payment systems more accessible					
Savings products/services more accessible					
Insurance products/services more accessible					
Credit products/services more accessible					

12. Through which avenues do you get information and knowledge on the available digital banking products

Avenue	Tick
Bank's Website	
Newspaper	

Radio Advert

Television Advert

Social Media

Friends

Outdoor Advertising

None

Section D: Benefits and Challenges

13. What do you think are the benefits of accessing digital financial products/services?

Perceived benefits	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Encourage Savings					
Improvement in the accessibility of financial services					
Offer convenient access to diverse range of financial products and services					
Ability to make and receive payments instantly					
Accessible anywhere anytime					
Alleviate cash shortages					
Users can easily find more product information					

Ability to personalise interfaces

Provide secure banking

lead to greater economic stability

Provide affordable banking services to poor individuals

Improve the welfare of individuals and businesses

14. Are there any challenges you experience in accessing and using digital financial services offered by commercial banks in Zimbabwe?

Perceived Challenges	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
No access to the internet					
Lack of appropriate devices/hardware					
Poor internet/digital infrastructure					
Inadequate digital literacy skills					
Lack of awareness of available digital financial products					
Low financial income					
High charges					
Lack of willingness to utilise the financial products					
lack of technical support					
stringent bank account					

requirements

lack of a saving culture

lack of internet security

Lack of reliable electricity

System failures

Lack of trust in digital financial transactions

Section E: Necessary Reforms

15. What do you think commercial banks in Zimbabwe can do to increase access and usage of digital financial products by the low income and poor people in Zimbabwe
    ....

16. What do you think the government can do to improve access to digital financial services offered by commercial banks in Zimbabwe

....

Appendix B: Interview Guide for banking personnel

Interview Guide for banking personnel from commercial banks in Zimbabwe

My name is Victor T.Mudzamiri and am conducting a study examining appropriate ways to accelerate financial inclusion through digital banking services in Zimbabwe in the wake of the COVID 19 pandemic. This study is being conducted in partial fulfilment of the Master's Degree in Business Administration at the University of Zimbabwe. This interview seeks to collect data and I have selected you to take part in this interview because I believe you are positioned to provide relevant information. The results of this study will be used by relevant stakeholders in the banking sector to improve access and usage of digital banking services by the most financially vulnerable groups. The information sought will be treated with strict confidentiality and will be used for academic purpose only.Your participation is strictly voluntary and you are free to withdraw at any time. No incentive is offered for taking part in this interview. The interview will take approximately forty-five minutes of your time. Thank you for participating and for your time.

Section A: Demographic Data

17. Bank Name/Organisation……………………
18. Position in the bank…………………………….

Section B: Forms of Digital Banking

19. Has there been any increased shift towards digital banking with regards to your banking institution as a result of COVID-19 mitigation measures?

20. What form of digital banking products/services have you developed or promoted to facilitate access to financial services during the COVID-19 pandemic?

Section C: Access to financial services

21. In what ways are your digital banking products designed for the low income and poor people in Zimbabwe?

22. What avenues have you used to increase awareness and knowledge of these digital banking products/services to the majority of people?

Section D Benefits and Challenges

23. Are there any benefits you perceive are associated with increased access and usage of digital financial services by the poor and low-income population in Zimbabwe?

24. What challenges do you face in trying to improve access and usage of digital financial services by the poor and low-income population?

Section E: Necessary Reforms

25. What new actions are needed to drive financial inclusion further through digital banking?

26. What appropriate strategies can be used by commercial banks in Zimbabwe toaddress digital financial literacy among the poor and low-income population?
   ....

27. What necessary reforms do you think should be implemented to create an enabling environment for improving access to digital financial services by the poor and low-income population?

………………………………………………………………………………………………