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DIGITAL BANKING STRATEGY AND FINANCIAL PERFORMANCE OF BANKS IN ZIMBABWE.

By

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DEDICATION

I dedicate this work to my wife Mary Mtetwa, my mother Mirirai Gladys Mtetwa and kids Akudzweishe and Mahanah Mtetwa for their support before, during and after its preparation: you have been a pillar of support in every aspect of my life. Words can never be enough to thank you for your efforts in making sure I excel in my studies and beyond. May God bless you.

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ABSTRACT

The main objective of the study was to investigate on the extent of digitalisation among Zimbabwean Banks, the drivers of digitalisation, the challenges faced by banks in adopting and operating digitalised systems and the relationship between digitalisation and performance of the banks. The study adopted a cross sectional survey research design and both qualitative and quantitative research methods were employed to ensure a comprehensive data collection. The study population comprised of a sample of 95 employees of commercial banks. A multistage sampling approach was adopted which included purposive sampling and stratified random sampling methods to select the respondents from the total population. The study used mainly the questionnaire technique and interviews to assess the views of the respondents. The study found out that digitalisation has been adopted to a greater extent by most commercial banks in Zimbabwe. Most Zimbabwean banks now offer a platform for personalised computer banking and digital banking methods such as internet banking, mobile banking services and virtual banking. The study also found out that innovation, globalisation and development of Fintech banking methods and competition among banks are the major drivers for banks digitalisation in Zimbabwe.The study also found that the most prevalent challenges in the banks' adopting and use of digitalisation methods include factors such as high risk of cybercrimes, threats from non-bank disruptors, lack of expertise to lead digitalisation initiatives and cost of adopting digital technologies and that there exists a significant positive relationship between digitalisation and revenue, profit, market share and return on assets of banks. The study serves as a wakeup call for organisations to strengthen their digital banking methods as modern-day customers have become keen of technology and always up to date with latest technologies that brings banking convenience to their homes. The study recommends that commercial banks should always be on the lookout for new technologies and digital banking methods. Improving these will have a great impact on their performance as these technologies bring in efficiency and convenience to customers which ultimately leads to customer satisfaction and therefore revenue and market share growth of the companies.

Key Words: Digitalization, Performance, Commercial Banks

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ATM	Automated Teller Machine
RTGS	Real Time Gross Settlement
PC	Personal Computer
SMS	Short Message Services
POS	Point of Sale
ZESA	Zimbabwe Electricity Supply Authority
RBZ	Reserve Bank of Zimbabwe
KYC	Know Your Customer
CBZ	Commercial Bank of Zimbabwe
ICT	Information and Communication Technology

CHAPTER 1

INTRODUCTION

1.1 Introduction

This research investigates the impact of digital banking on the financial performance of banks in Zimbabwe. Over the recent years, digital banking has transformed the manner banks offer services, allowing individual and corporate customers to view transactions, download statements and transact online without visiting banking halls (Boniface & Ambrose, 2015). The improvements in technology have contributed positively to the distribution channels for banks and these financial institutions have revisited their distribution strategies by closing branches in remote and loss-making regions, and resorting to deployment of digital banking services. In Zimbabwe, commercial banks are reorganizing and restructuring their distribution networks by closing branches in less profitable or loss-making areas, leaving agents to offer banking services such as collecting cash deposits (Reserve Bank of Zimbabwe (RBZ), 2017). Moreover, banking institutions have been embarking on digital banking strategies to enhance their competitiveness and profitability. The question that remains is that "Are the banks making enough returns to justify their investment in digital technology?" The goal of this study is therefore to assess the impact of digital banking on financial performance in the banking sector in Zimbabwe. Prior studies were mainly on one aspect of the digital strategy like internet banking or mobile banking and other researchers focused on financial inclusion. However, this study looks holistically on the digital strategy and focuses on four elements namely, mobile banking investment, online banking investment, agency banking investment and card business investment. The study further establishes the challenges faced by banks in adopting and operating digitalised systems. √

1.2 Background to the Study

Almost half of the world population now uses mobile devices for communication and during the period of 2008 to 2012 a billion subscribers were added leaving the world mobile subscriber base at 3.2 billion users (Mbawa, 2013). Zimbabwe has

been no exception to the impact of this wave of mobile banking innovation as the period 2006 to 2013 has seen most banking institutions offering mobile banking as a delivery channel for banking services (Mbawa, 2013). Some of the notable innovative services and products include mobile money, electronic platforms (such as Zimswitch, Payserv, Paynow money), switching services, cryptocurrencies (RBZ, 2020).

Digital banking is the use of the internet, mobile phones, and any other electronic mediums as a delivery channel for banking services, which includes all the traditional services such as balance enquiry, statement printing, transfer of funds to other accounts, bills payment and new banking services such as electronic bill presentment and payment without necessarily visiting a bank (Wadesango & Magaya, 2020). According to Sibanda (2014), digital banking is the digitization (or moving online) of all the traditional banking activities and programs that historically were only available to customers when physically inside of a bank branch, which include activities like, money deposits, withdrawals, and transfers, checking/savings account management, bill payment and account services. Gassmann (2014) defines digitization as the ability to turn existing products or services into digital variants, and thus offer advantages over tangible products, e.g. easier and faster distribution. In short, the utilization of digital resources and IT technologies by using resources that were created by digitization.

According to Yoo (2010), over time, progress in information technology made computers, online interaction, and interconnectedness commonplace. The modern-day understanding of digitalization shifted away from simply working with a computer to a consensus that digital technologies transform how businesses interact in both business-to-business and business-to-customer settings (Loonam, 2018). Changing customer behaviour, increasing expectations, omnichannel experience and the digitization of business and society, in general, have brought along what some people call the digital arms race in banking (Muchabaya, 2018). Mutandagayi (2018), the group CEO for ZB Financial Holdings argued that to achieve the full benefit from technology engagement into greater efficiency and respond to the evolving customer demand, their group was to continue digitalising

its operations with a need for significant investment in this area in the next five years.

According to Mwangi, (2007) As of 31 December 2018, the Bankers Association of Zimbabwe reported that the Zimbabwean banking sector is composed of merchant banks, commercial banks, building societies and the savings bank. All these combined amounted to 25 banks as of October 2018 and are governed by the Reserve Bank of Zimbabwe under the banking Act. These banks have made remarkable progress in the digital arena that has not gone unnoticed and has earned them widespread recognition and have adopted internet banking, ATMs, mobile banking, agency banking and payment cards as technological ways to provide its banking through an integrated channel, these includes a physical bank branches and delivery channels (Mwangi, 2007). These distribution channels are part of delivery channels that are used either distinctly or in combination to form the general delivery channel strategy.

However, implementing alternative banking channels by banks have faced various hindrance which put in question the impacts of these in improving financial performance (Maungu, 2015). There are various challenges hindered which include security concerns, customers' confidence, system failures, card cloning on the rise, transaction errors and rampant cases of network failures. While the implementation of these digital banking strategies is expected to bring efficiency and improvements in the operations of the organisation, it has been noted that with the adoption of this alternative banking channel, banking halls have continued to be congested and banks have since retrenched some of their staff citing viability challenges. These challenges and trends in banking system putsput more questions on the impact of these channels on the financial performance of the banks (Mukuvari, 2019). Evolving from this backdrop, this study aims to look into the relationship between digitalisation and performance of financial institution. √

1.3 Statement of the Problem

The past ten years have seen the use and demand of digital banking increasing as more banks understand and appreciate that electronic based banking provides advantages of low costs, and high return (Akhisar et al., 2015). Banks in

Zimbabwe have adopted internet banking, ATMs, mobile banking, agency banking and payment cards as technological way. The purpose of digital banking is to improve the profitability or return on assets and enhance the quality of assets (Gutu, 2014). For example, online banking and other electronic banking services reduce operational costs on banks that tolerate physical overhead expenditures (Nyoni, 2020). Studies carried out in developed countries (Mehmood et al., 2015; Soh et al., 2014) indicated that electronic banking reduces operational costs and hence lead to greater profits for banks. While banks have been implementing digital banking strategies, various studies have been conducted concerning the connection between digital banking and its effect on financial performance. Surprisingly, studies on this subject matter provided ambiguous outcomes. Mixed results have been found across the globe and positive relationship was observed in some studies such as studies by Aduda and Kingoo (2012), Bagudu et al. (2017), Mehmood et al. (2015), Akhisa et al. (2015), Maduku (2014) and Mazana et al (2016). Studies which observed positive results revealed that banks which offer extensive digital banking services tend to perform better than the ones that lag behind (Mazana et al., 2016). While some studies found digital banking to be positively related to financial performance, others studies have found digital banking to be negatively related to financial performance at different significant levels and differing theories and these include studies by Desta (2016) and Wadesango et al. (2017). Drehmann and Nikolaou (2013) further indicated that the acceptance of Digital Banking is yet to meet the industrial hopes. Sabi (2014), stressed out not enough is known about perception and evaluation of a corporate's performance as a result of digital banking. It is against this background that this study attempts to investigate the the relationship between digitalisation and financial performance of banks in Zimbabwe.

1.4 Research Objectives

The objectives of the study were to:

1.4.1 Establish the extent of digitalisation among Zimbabwean Banks.

1.4.2 Explore the drivers of digitalisation for Banks in Zimbabwe.

1.4.3 Establish the challenges faced by banks in adopting and operating digitalised systems

1.4.4 Determine the relationship between digitalisation and performance of banks.

1.5 Research Questions

The research is premised upon the following research questions:

1.5.1 To what extent has digitalization been adopted by Zimbabwean banks?

1.5.2 What are the drivers of digitalisation for Banks in Zimbabwe?

1.5.3 What are the challenges being faced by banks in adopting and operation digitalised systems?

1.5.4 What is the relationship between digitalisation and financial performance of banks in Zimbabwe?√

1.6 Hypotheses

The hypotheses for the research is stated as follows:

H0: There is a positive relationship between digitalisation and financial performance of Zimbabwean banks.

H1: There is no positive relationship between digitalisation and financial performance of Zimbabwean banks.√

1.7 Significance of the Study

The results of the study will have a positive impact on banks by providing additional knowledge in relation to the digitalisation to scholars, policy makers, banks and other financial institutions.

1.7.1 Researchers and Scholars

The study aims to add to what other researchers have already found and identify the gaps in study. The findings, therefore, are of great importance as scholars and future researchers in this area will have a basis for using this study as a reference in their studies.

1.7.2 Banks

The banks will stand to benefit immensely from the study in that they will have access to academic research on the impact of their investment in a digital strategy. Due to the recent Corona virus pandemic most banks have been forced to develop digital channels to cater for onboarding and servicing of their clients from their homes (contact less banking). This research will assess whether those investments yield profits for banks. This research will benefit the banking sector as it aims to have recommendations on the impact of digitalization and eradication of brick and mortar to business performance.

1.7.3 Business advisors

This study will be of use to business advisors who are advising in the line of banks and other financial institutions. Since the study will analyse the effects of digital strategy on the financial performance of banks.

1.7.4 Other Financial Institutions

This study will be of wonderful use to not only the banks but also to other financial institutions because they operate in the same industry and may enjoy the same benefits from going digital as the banks.

1.7.5 The Government and Policy Makers

This study will assist the Reserve Bank of Zimbabwe in numerous ways especially on its endeavour to produce a Fintech strategy for the whole banking sector. It will spell out the positive impact of going digital by banks. The study contains invaluable information that will help the policy makers to set rules governing electronic funds transfers, mobile banking, internet banking and agency banking operations. Further such information on the benefits of the digital banking strategy and its challenges enables the RBZ to make rules and regulations that would promote innovativeness in the banking industry.

1.8 Delimitation of the Study

The study investigated the 22 licensed banks and 6 Deposit taking microfinance banks that are regulated by the Reserve bank of Zimbabwe and made use of the published financial statements that are in the custody of the Reserve Bank of Zimbabwe and Bank website. Secondary data was obtained from the Reserve bank of Zimbabwe as well as the banks' websites. The variables of digital banking to be considered in this study are mobile banking investment, agency banking investment, online banking investment and card business investment. On the other hand, the financial performance of banks was taken as return on assets, return on equity, net operating profit margin.

1.9 Chapter Summary

This chapter gave a background of digitalisation and performance of financial institutions. The basis of this study was formed by a presentation of the statement of the problem, research objectives, research questions, the research hypothesis, the significance of the study and the structure of the dissertation. The following chapter presents a review of the literature.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of the relevant literature on the relationship between digitalisation and performance. It comprises of the theoretical and empirical literature reviews and also reveals various ways of digitalisation. This chapter also provides a conceptual framework and rounds up by the synthesis of the study gap.√

2.2 Theoretical Literature

Digital banking literature consists of several theories which include Transactions Cost Innovation (TCI) Theory, Innovation diffusion theory (IDT) and Resource based view (RBV) theory.

2.2.1 The technology Acceptance Model (TAM)

The TAM was designed by Davis (1989) to examine the acceptance and usage of technologies. This concept is centred on analyzing users' adoption behaviour according to external and internal factors in technology. TAM is utilized to describe the way the client receives or decrease the usage of a technology predicated on "perceived ease of use" and "perceived usefulness" of a technology (Safeena et al., 2014). Perceived usefulness and perceived ease of use that are the principal factors of TAM have an immediate influence on electronic banking adoption (Suping &Yizheng, 2010). These interactions could be illustrated as shown in Figure 2.1 below:

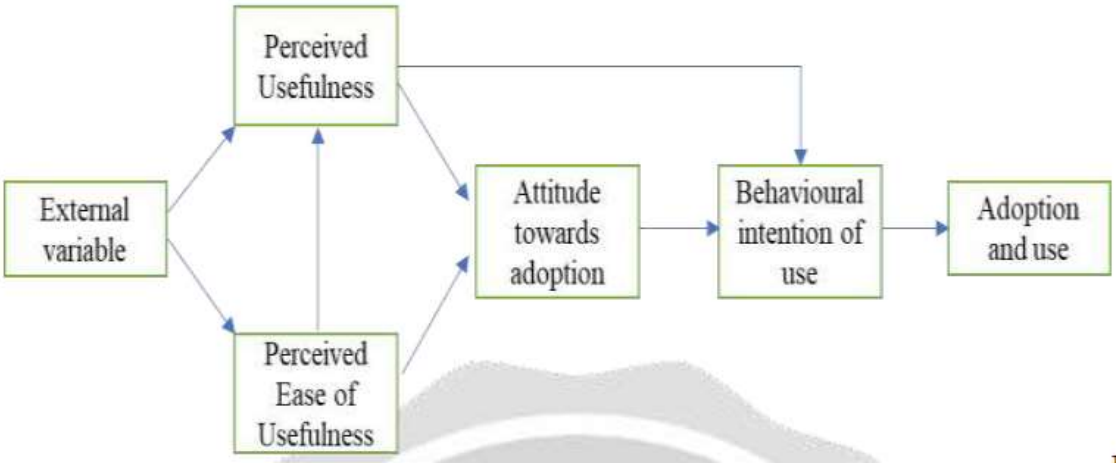


Figure 2.1: The TAM Model Source: Adopted from Davis et al., (1989).

2.2.2 The Unified Theory of Acceptance

A more comprehensive set of factors is obtained from Venkatesh et al. (2012) UTAUT as a unified view of user adoption. These factors are seen as having a direct effect on Internet banking adoption and are likewise used as fundamental antecedents to untie internet banking adoption in the developing world (Yuen, 2013). Although UTAUT is still a relatively new model and has not been as widely used as TAM, it has gradually drawn researchers' attention and has been recently applied to exploring the users' acceptance of online banking (Yuen, 2013; Alalwan et al., 2014; Martins et al., 2014). √

2.2.3 The Transactions Cost Innovation (TCI)

This theory pioneered by Niehans (2006) advocated that the dominant factor of financial innovation is the reduction of transaction cost, and in fact, financial innovation is the response of the advance in technology which caused the transaction cost to reduce. The reduction of transaction cost can stimulate financial innovation and improvement of financial service. It states that financial innovation reduces transaction costs (Kombe & Wafula, 2015). Online banking may further lower transaction costs as it provides also off-site access to the firm's internal database and other relevant sources of information. Consequently, reduction of operation costs through digital banking may influence growth in profitability for the bank (Kombe & Wafula, 2015).

2.2.4 The RBV theory

The RBV theory is also imperative to this study for its idea that firms with more resources are more likely to be more innovative in digital banking channels to deliver quality services to customers thus, leading in increased profits in the long run.

2.2.5 Schumpeter Theory of Innovations

The argument centred around Research and Development engineering. Schumpeter (1934) emphasized the role of entrepreneurship and the seeking out of opportunities for novel value generating activities which would expand and transform the circular flow of income. Muia (2017) supported the theory by saying at any point in time, there is something new being innovated in the economy and the financial sector is not exempted. Therefore, the developments happening in technology also impacts the banking sector. The theory advocates for innovations in the digital banking space and therefore the need for the study to investigate whether the innovations are yielding positive financial results to commercial banks in Zimbabwe or it is just a fallacy as alluded to by DeYoung earlier on.

2.2.6 Constraint-induced Financial Innovation Theory

Sibler (1983) argues that the entities have a purpose of maximizing their profits and this is the main factor contributing to innovations. However, the author notes that there are inherent restrictions to towards profit maximization. These includes policies governing the sector and internal factors including the style of management adopted by the organizations. This theory is relevant to this study since the author narrows down to innovations in the banking sector.

According to Sibler (1983), the banking sector is strictly regulated and thus has restrictions towards innovations and thus may limit innovations. The presence of these restrictions is twofold: reduce the banks' abilities to venture into new innovations and may reduce the efficiency of the banking institutions and it is for this reason that commercial banks will always, constantly act to keep them off. The theory thus is important in that it helps shed light on the reasons that make banks venture into financial innovations.

2.2.7 Transactional Cost Economics

Transaction cost theory (Williamson 1979, 1986) posits that the optimum organizational structure is one that achieves economic efficiency by minimizing the costs of exchange.

The idea behind the transaction cost theory is that businesses are in business to reduce transaction costs. Therefore, the theory gives birth to the idea of embarking on the digital strategy by banks when they try to find the best way to reduce overheads of running a brick-and-mortar banking model. However, other scholars argue that the digital model brings its own form of cost such as the cost of running a call centre which will deal with customer queries. The theory is among the major theories underpinning investment in digital banking.

2.2.8 Innovation diffusion theory

Mahajan and Peterson (1985) defined innovation as any idea, object or practice that is perceived as new by members of the social system and defined the diffusion of innovation as the process by which the innovation is communicated through certain channels over time among members of social systems. Diffusion of innovation theory attempts to explain and describe the mechanisms of how new inventions in this case digital banking is adopted and becomes successful (Edwin, 2014). Kombe and Wafula (2015) stated that not all innovations are adopted and even if they are good it may take a long time for an innovation to be adopted.

2.2.9 The concept of Digitalisation

Bloomberg (2018) states that digitalisation is the process of moving from analogue to digital forms. Digitalisation in the banking sector is converting handwritten/type written text into digital form for example in the banking sector manual transactions into internet banking and use of all online platforms. It is the enabling, improving, and transforming business operations and business functions, models, processes by leveraging digital technologies and a broader use and context of digitalised data, turned into intelligence and actionable knowledge (Brennen, 2013).

This information is then not only used to offer products and services to the customers, but also to develop new services and products and to improve the digital platforms for a better customer experience (Mwatsika, 2016). Lehtinen and Storbacka (2012) identified three factors that can help identify digitalisation on the bank's relationship with customers viz: business strategy, digital strategy, and customer relationship management. Business strategy is the means in which the business unit position itself on the market. According to Porter (1987) this factor is relevant for the study as this is the first line of the frontier towards the customers for, they need the digitalised systems. The digital strategy mainly focuses on the digital development and it is through the digital strategy that the bank utilises these developments. In this strategy the Zimbabwean banks have continuously developed digital means for their customers. Customer Relationship Management is focused on gathering and analysing information regarding customers (Mwangi, 2018). This factor gives room to understand how the banks are digitalising their systems on their customer relationships. When the relationship between these factors is well aligned with each other, then according to the contingency theory the bank should be able to collect, analyse, and develop services and products according to their customers changing needs and wants (Fry & Smith, 2007).

The digital strategy helps the organisation become more digitally oriented through the digital transformation of the organisation's infrastructure and the value chain (Berman, 2012). For Customer Relationship Module to gather and analyse the information properly, there is a need for an up-to-date information technology structure within the organisation to detect changes in customer behaviour (Berman, 2012).

2.3 Drivers for Digital Banking in Zimbabwe

The banking landscape world over has over the recent years been evolving with a shift from traditional banking to modern banking. Traditional banking methods entailed end-to-end banking systems that were time consuming and inconvenient and there has been a substantial decline in the sources of funds that banks rely on particularly the public demand deposits (Mwangi, 2018). Banks world over have been redesigning their business models to remain competitive, enhance satisfaction of their customers and improve customer experience. Mwangi (2018)

further maintains that modern customers expect three things in terms of service: convenience, speed and flexibility and successful organizations are those that keep pace with their customers' needs and demands. This has resulted in banks investing in digital methods. √

The growth of digitalisation has therefore influenced the performance of banks mainly in terms of financial profitability. With such a possibility of growth in profits, banks have been triggered to adopt new banking models. Such banking models have placed more focus on technology with the intention to have a better financial position and to remain competitive. According to Mwatsika (2016), technological innovations have also been bolstered by economic forces in the banking industries. These innovations have resulted in the development of new products by banks as competition has also increased in the banking industries. In the present day, banking models have embraced digitalization and such digitalisation has allowed simplified banking processes.

Banks have adopted digitalisation as a way of catering for the needs of both external and internal customers as well as both the internal and external and internal environments of banks (Mwangi, 2018). In terms of the external environment, customers have been enhanced of their customer experience and in terms of the internal environment, employees and banks' staff have had their work processes simplified through various digitalisation models. Therefore, the internal environment has been provided with efficient and effective operating models which have the capacity to simplify work process that are complex within a brief period of time. Digitalisation has been adopted by banks in the form of automation, mobile banking, personalised tools for managing finances as well as internet and virtual banking (Cytonn, 2017). According to Nyangosi (2008), many banks in Zimbabwe have adopted the use of digital tools such as online banking, mobile banking as well as other forms of electronic banking services as ways of reaching out to their customers as well as providing customers with enhanced accessibility and financial services that are affordable taking into consideration most of the unbanked population.

The introduction and adoption of Automated Teller Machines (ATMs) which can be categorised as telecommunications devices has provided customers with a

mode of financial transactions in a public place where they do not interact with bank staff (Mwangi, 2018). Through ATMs cash withdrawals, balance enquiry and generating account statements can be performed with much ease and within very little time therefore saving customers' time by not having to queue for these services in a banking hall.

2.3.1 Innovation

Webster (2010) stated that an invention is always confused as an innovation, but an invention can be a device, contrivance or a process which is a result after a certain study or experiment which is something that never existed. But innovation is something new, a change that has been made to an existing product, field, or idea.

Innovations represent creativity and should never be confused by creation since this can be termed as the act of making, inventing, or producing something through an experiment or investigation (Drucker, 2016).

Zimwara (2020) points that the Reserve Bank of Zimbabwe have welcomed the innovative ideas that have been brought up by emerging financial technologies and have since joined embracing new innovations and adoption of digital money. The RBZ governor John Mangudya revealed the need for banks when the presented the monetary policy for the year 2020. Sanderson (2015) stated that the act of creating and developing new financial instruments, markets, processes, institutions, technologies, and business models which might be new to the market or development of an existing idea. Innovation have made banks to stand on their toes otherwise they can be relegated to the corporate dustbin through lack of innovation. Banks should be able to read market trends and be able to innovate to gain a long-term business existence. Adoption to new demands on the market is the drive to innovations.

According to Mwangi, A.W. (2018) Innovation has allowed banks to digitalise their systems. The banking sector for them to continue being relevant in the long run have innovated which have led to digitalisation. Banc ABC through innovation have digitalised by having a digital branch which allows its customers to have almost all banking facilities while on a video chat platform. The major

driver to digitalisation has been innovation and each bank will be flat out to be superior to its competitors.

2.3.2 Government Regulations

Government Regulations cannot be defined without defining regulations which are issued by the government departments in carrying out legislation as enacted by the government through parliament. Mwangi, A.W. (2018) postulated Regulations can be termed as a rule of order having the force of law, as determined by the superior and competent authority, relating to the actions of those under the authority's control. Zimbabwean banks are governed by the Reserve bank of Zimbabwe which is the central bank of Zimbabwe (RBZ, 2019).

The role of the Reserve Bank is the creation and enact the monetary policies (RBZ, 2019). It regulates the amount of money that is in circulation and it is the solo producer of Zimbabwe's bank notes and coins. It promotes financial stability as one of its core functions. It also has a Supervision Division which is responsible for the registration of new banking institutions, the conduct of risk based on-site examinations and the conduct of off-site surveillance. Mwangi, A.W. (2018) highlighted that during 2017 during the time of cash crisis Vice President Chiwenga in a press statement announced the promotion of plastic money to all sectors. Government regulations has been a driver to digitalisation for banks through the means of the monetary policy and new regulations as presented by the RBZ governor and Minister of Finance.

2.3.3 Globalisation

Globalization can be defined as a social, cultural, political, and legal phenomenon which leads to greater interaction among various populations in the world (Mwatsika, 2016). Zimbabwe with its goal to be the breadbasket for Africa has the goal to globalise. Organisations have the goal to participate in the global market. The need to globalise has led to digitalisation of financial institutions. Adoption of the master cards and visa cards in trying to be in global markets have led to digitalisation indirectly. During the dollarization era people were able to use online system to pay for products online.

2.3.4 Customers

Customers are businesses and individuals that consume or purchase another organisation's goods and services. Customers are the ones that drive an organisation's revenues, business rely on them and they offer products that suit their needs (Bloomenthal, 2020). Due to the nature of the 21st century clients whose needs are always changing has led to globalisation. Customers now demand new digitalised products, convenience, services such as internet services and clients want to enjoy banking in the comfort of their homes. With the aim to retain customers' banks have digitalised their products which has improved customer experience, reduction in costs for both banks and customers using ATMS, cashless transactions.

Zimbabwean banks have developed digital products that is mobile banking applications, banking websites, social handles for handling customer queries, ATMs, POS machines due to remaining competitive. Banks in maintaining these customers have not been resting due to the customers and in the end, this drives to digitalisation. Digitalisation has a transformative function and impacts on everything. Digitalisation takes full control of customer experience and management of all the customer needs considering the new and existing and moulding a business model accordingly. Customers are the ones who drive the trend of digitalisation and they look for organisations who offer them their needs and wants to the desired standard (Kotler, 2012). Customers are also a major component in the drive to digitalisation as most digitalisation is customer oriented.

2.3.5 Competition

Financial institutions competition can be defined as the struggle of consumers of banking services that are being offered by other participants, in the banking sector there is real competition as the small banks are offering other services better than the existing industry champions (Mwania & Muganda, 2011). Jones (2016) reviewed that banks must be agile in working to remain competitive. The need to develop new products and digitalised products have led to organisation left with the need to digitalise.

The change in patterns in the banking sector has given banks financial stability and the digitalisation of financial institutions gives a competitive advantage by offering financial services in an improved way (Binuyo & Aregbeshola, 2014). Through creation of digital solutions, it gives a competitive edge in the business world and moreover a digital plan helps in revived process, customer convenience and improved quality. The banking industry in Zimbabwe has unparralled competition in fighting for new business as there has been as rise in new entrants in the market (www.rbz.co.zw). Organisations have been leading in developing new digitalised products and to stay abreast over competition. And some are just market followers in avoiding losing customers.

Standard Chartered Zimbabwe, has been the most leading in eradicating manual RTGS transactions, by adoption a paperless branch and others followed (RBZ, 2019). Steward Bank has initiated agency banking and WhatsApp banking and others then followed. ZB Financial Holding initiated mobile banking and mobile wallets and followed by other banks. They also invented the low-cost account and other banks then followed the initiative therefore competition became the drive to digitalisation.

2.3.6 Need for Cost Reduction

Reduction in cost is best understood as decrease in the unit cost of goods and services that are provided by an organisation but without compromising the standards of quality and suitability to its end users which is achieved with changed ways of production and improved methods (CIMA, 2011). It is mainly achieved by finding ways to remove unwarranted expenses form a business and leading to increase in profits but not affecting the impact on products and service quality. Haider (2018) defined reduction in cost as an approach which is positively planned and reduces expenses. It is achieved by continuous analysis of expenses, functions in fact all the factors that affect production. √

Banks work flat out to meet customer expectations, but they now find means to do that in a way which reduces expenses and for them to continue to be profitable. 21st century customers have very high expectations on the speed and ease of doing business. Banks have reduced costs but, in a way, digitalising the processes. The banks had the back office and support functions but using technology these are

being slowed being eradicated. Direction in this kind of technologies is being implemented and as a way which saves cost.

Banks in reducing costs have retrenched employees in trying to digitalise systems to reduce costs thus cost reduction being a driver to digitalisation. Zimbabwean banks have retrenched a lot of people due to adopting digital means. Standard Chartered has closed most of its branches and operating 5 main branches and have limited themselves to digitalised means (The Herald, January 5, 2020).

2.3.7 Performance Improvement

Performance improvement is the measurement of the outcome for an organisation through its procedures, processes which are then modified in a way to increase productions, efficiency, and the increase in the effectiveness of the process (Shoko, Gumbo & Magweva, 2017). Performance can take the form of an organisation change which requires management and the body that governs an organisation's processes to put in place a programme which measures the current level of an organisation's performance and produce more strategies which modifies the organisation behaviour and infrastructure to be put in place to produce higher input. This involves the improvement in product lines, clientele base and channels for profitability (Gakure & Ngumi, 2013).

Digital banking has brought too numerous innovations in the banking sector. The major part played by technology in the banking sector has brought efficiency improvement. In pursuing performance improvement organisations have promoted clients to access information using self-service basis without involvement of employees and this has simplified the work to be done by employees and time they spend executing their jobs. Performance management plays the key role in tackling the current regulatory challenges. The major factor that has determined digitalisation is the need for financial institutions to perform very well.

Performance improvement for financial institutions which comes in form of increase in profitability, increase in customers, better customer retention methods, managing to stay afloat in the business and being a market lead among other reasons. Human resources being the major component of expenses to any

organisation, in the bid to cut costs many organisations have retrenched its employees. CBZ and ZB Financial Holdings have announced restructuring in the year 2019 and CBZ have retrenched some of its employees in improving performance.

2.4 Financial performance

According to Al-Hussein et al. (2009), financial performance, which is part of organisational performance is explained as the degree to which financial objectives are being or has been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure a firm's overall financial health over a given period and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Harelimana, 2017). For a commercial bank to remain competitive there is need to develop and adopt new products and technology. Such products include use of technology i.e., internet banking and mobile phone banking (McKay & Pickens, 2010).

2.4.1 Bank Financial performance indicators

The most used and recommended measure for financial performance analysis include profitability, liquidity and solvency (Wadesango et al., 2017). To measure the profitability of banks, there are variety of ratios used such as Return on Asset, Return on Equity and Net Interest Margin (Harelimana, 2017). The useful profitability ratios and measures are the return on assets (ROA), return on equity (ROE), and the operating profit margin in addition on the net revenues (Wadesango & Magaya, 2020).√

2.4.1.2 Return on Asset

This measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Harelimana, 2017).

2.4.1.2 Net profit margin

The corporate finance institute defines net profit margin is a profitability ratio that expresses the profit from business operations as a percentage of revenue or net sales. Net Profit Margin (also known as "Profit Margin" or "Net Profit Margin Ratio") is a financial ratio used to calculate the percentage of profit a company produces from its total revenue. It measures the amount of net profit a company obtains per dollar of revenue gained. The net profit margin is equal to net profit (also known as net income) divided by total revenue, expressed as a percentage (corporatefinanceinstitute.com).

2.5 Forms of Digital Banking

Alternative banking channels encompass mobile banking, internet banking, telephone banking, ATM cards, agency banking (Mukuvari, 2019). Digital banking therefore includes all forms of banking activities that are performed using the internet or other electronic means.

According to Panida and Sunsern (2012) online banking or e-banking refers to systems that enable bank customers to get access to their accounts and general information on bank products and services using bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations. According to Root III (2017), Online Banking can be described as a method of banking that uses the Internet to conduct transactions. Root III (2017) further posits that online banking could also be referred to as electronic banking and as such, there are different concepts of online banking. The first concept is signing up. For one to begin any online banking activity, he or she must sign up with the bank to provide for these services (Ali, 2018).

Ombati et al (2011) on the other hand defines electronic banking as an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. The term is also used to refer to ATMs, telephone banking, use of plastic money, mobile phone banking and electronic funds transfers (Kiragu, 2017). E-banking or Internet Banking or online banking also involves transacting the virtual banking or financial functions online in a protected and secure manner using an e-commerce application or

platform to deliver or access banking products and services (Ali, Malik & Imam, 2012). Transactions done over an ATM, point of sale or wireless intrabank and interbank transfers are part of e-banking (Mugabe, 2013).√

2.5.1 Mobile Banking

According to Bloombery (2012) mobile banking involves conducting banking activities using the phone. Mobile banking comprises the provision of banking services via the use of mobile phones devices. Mobile banking is an alternate channel where the users interact with the bank using mobile devises and computers that are connected to the internet of use contracted services provide channel (Mukuvari, 2019).

Meute (2010) mentions that mobile banking consists of three inter-related concepts: mobile accounting, mobile brokerage, and mobile financial information services. This type of banking is now popularly being done using cell phones and is now known as SMS banking. In Zimbabwe, the facility is gaining more momentum with customers being able to pay their bills through SMS banking. Many banks in Zimbabwe are offering this service as most of their customers have easy access to the service through their cellular phones. Financial institutions have since named their different mobile banking platforms in differentiating their digitalised systems. Z B Financial Holdings have their E-wallet, Stewart bank with their Chimbudzi banking and many others.

As part of mobile banking, most banks in Zimbabwe have developed mobile applications. CBZ touch has developed an integrated mobile banking application which they call CBZ touch that provides banking, wealth management converge, insurance and transformation of financial services into customers' lifestyle (www.cbz.com). ZB Financial Holdings for example, has also developed their ZB Mobile Banking Application which provides the same which also provides convenience to its clients, which helps them manage their funds and to move around the clock. Steward bank also has developed the square 2.0 mobile application which provides convenience to its clients. It offers customers paperless and branchless banking regardless of where they are as long as there is internet access.

2.5.2 Personal Computer (Pc) Banking

Stegman (2002) defined PC banking as online banking that enables consumers to execute bank transactions from PC if they have internet connection. Through PC banking ventures, financial institutions offer the consumers a digitalised platform that allows consumers to perform financial transactions from his or her home computer. The customer then logs on the website with through internet connectivity. Most banks through PC banking currently allow customers to obtain account balances and credit card statements, pay bills, and transfer funds between accounts. PC banking is related to internet banking, but most corporates have PC banking especially those coming from companies of an informal nature.

2.5.3 Internet Banking

According to Frederickson (2002) banking on the Internet is not the same as banking online using PC banking. Internet banking, sometimes called online banking, is an outgrowth of PC banking (Egland et al., 2008). Internet banking is a method which uses the internet as the delivery channel by which to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages, and purchasing financial instruments and certificates of deposit (Kiragu, 2017). The World Bank (2018) defines a "true internet bank as one that provides account balances and some transactional capabilities to retail customers over the World Wide Web(www). To date, more banks have established an advertising presence on the internet-primarily in the form of informational or interactive web sites, for example www.zb.co.zw. √

A typical Internet bank site specifies the types of transactions offered and provides information about account security.

2.5.4 Cross-Border E-Banking

Cross border e-banking, according to (Chindudzi et al, 2017), is defined as the provision of transactional on-line banking products or services by a bank in one country to residents of another country. ZB Financial Holding have a department called Diaspora banking which only concentrates on diasporians transactions.

Stewart bank went popular when they started offering mortgages through this platform. These are more digitalised platforms.

2.5.5 Virtual Banking

According to Bradley and Stewart (2003), this refers to banking entirely using the Internet. Banks that offer such service are known as virtual banks and are banks without bricks. Many virtual banks do not accept deposits via the bank premise, but the customer must either deposit the cheque by mail or transfer from another account. Banks that operate using the Internet only, when compared to traditional banks that also involve the use of manual systems, have lower costs of operating as well as lower transactional costs. They are also able to able to offer low cost checking and high yield certificates of deposit. However, the major disadvantage of virtual banks according to (Bankrate, 2007) revolves around ATMs.

2.5.6 Point of Sale Machines

Sorensen (2018) defined a (POS) Point of Sale machine as a face-to-face payment platform in which customers use to make payments. It is a process of things that enable processes of customers facing transactions efficiently and the streamlining of all business processes with your sales. These setup offers based on the functionality depending on the need and use of technology, the kind of payment methods accepted, the need to print receipts, the way of recording sales and organisation of end-of-day transactions, and customer product systems that are in place for the products of the organisation.

Most Zimbabwean banks during the cash crunch adopted use of the POS machines (RBZ, 2016). Banks heavily invested in this kind of payment platform due to the cash crisis in Zimbabwe. They distributed these to retails, schools, informal traders, churches, government institutions to ease the cash crisis. Even in very remote areas the availability of POS machines has eased the way of doing business and the need for cash.

2.5.7 Visa Cards/Master Cards

Julia (2019) defined a Visa card as any form of payment card which uses a Visa network and apart from that it must be branded by Visa Inc. Visa has been accepted by many businesses to the extent that in the world it is accepted in more than 200 countries and it is a viable processing network (Kagan, 2019). A visa card has a visa symbol, and it is giving a card holder the privilege to buy goods, services and cash from a visa merchant/ acquirer, and all these transactions are processed through the visa network. Visa itself are not the issuers of the debit and credits cards but they partner with financial institutions mostly banks.

A virtual card is a card that can be used to make payments which is branded by Visa but can only be authenticated through the visa network. Most banks, before they engaged financial institutions for partnerships that allows them to issue visa cards, they used to issue credit cards, debit cards and gift cards. These visa cards no matter that they are issued by financial institutions they are branded by a Visa symbol. Master card is almost similar to the visa card in that it is an electronic payment card, but it is different in that it uses the Mastercard network when it is processing transactions communications. They are branded by a Master Card logo. They are found in three forms namely prepaid, credit and debit cards. Master card is a world known card payment processor. They also partner with financial institutions which then issue out to their clients. They also partner with merchants and currently it offers a network of more than 28 million acceptance locations over the world. Based on the merchant agreements they have no control on charge policies that affect consumers.

Most Zimbabwean banks have since adopted use of the cards especially foreign owned banks like Standard Chartered, Barclays, Banc ABC and Ned Bank. Even the local banks have since adopted these in their systems especially CBZ and FBC. ZB Financial holdings have been struggling into meeting the requirements after they have been removed from the sanctions list in 2018 but it is in their pipeline (RBZ, 2019).

2.5.8 WhatsApp Banking

Most banks have since adopted this platform for balance enquiries, statements requests, RTGS and internal transactions and other basic facilities that can be accessed online (Dutta, 2018).

ZB Financial Holdings have created ZB WhatsApp Banking Platform which is customer friendly and one of the easiest platforms to use which allows its clients to have their day-to-day banking facilities on their WhatsApp chat application. WhatsApp which has grown all over the world and banks have innovated this idea creating the most convenient service that allows you to do banking in the comfort of your home.

Steward Bank introduced a WhatsApp banking platform in 2018 which is like that of ZB Bank. The Steward bank WhatsApp banking platform allows its customers to use various banking services and is partially used in Zimbabwe. This reaches to all clients no matter the location and have proved to be convenient as clients do access them in the comfort of their homes.

2.5.9 Agency Banking

Agency banking refers to bank partnerships with nonbanks, typically retail commercial outlets, ranging from lottery kiosks, pharmacies, post offices, construction goods stores, and so forth, to provide distribution outlets for financial services (Santu, Mawanza & Muredzi, 2017). The agent is involved in carrying out certain specified transactions for the customer on behalf of the bank (Santu et al, 2017).

Agency banks offer normal banking services such deposits, withdrawals, disbursements and repayments of loans, salary payments, and pension pay-outs, transfer of funds and issuing of bank statements. CGAP (2006) note that, in addition, the agency network allows banks to reach new customers, who can open new accounts, perform credit, and debit card applications and cheque book requests.

According to Crowdforce (2018) agency banking also include banks increasing their accessibility using agents in rural populations and where there are no

branches. It can be termed branchless banking. Agents banking mainly aims at providing banking services to the unbanked. Agents will be given certain rights to access the banking system by having digital wallets or a value account on online platforms. Agents access these accounts on behalf of clients but the agent being governed the bank's policies and regulations and the RBZ guidelines.

Locally agency banking has allowed customers to use the agency banking for various purposes like deposits, withdrawals, school fees payments and issuing of low-cost cards. It can be used in delivering financial services as highlighted mainly to the unbanked using mobile phones, POS machines and other technology used for processing real time transactions.

Most Zimbabwean banks have since spread-out agents in supporting the reach to the unbanked. The system supports various types of transactions as paperless top up, prepaid electricity tokens, account balance enquiries, merchant queries, cash withdrawals, cash deposits, transfers, bill payments, payment of fines and utility fees, issuing of low-cost cards.

Due to the security issues agents are also governed by the RBZ which issues policies to protect customers. Banks do offer problems which meet the RBZ requirements. Banks issues ATM cards which have magnetic chips or use of pin to facilitate transactions to allow a transaction to go through. This gives convenience to clients than always being in the banks having to stand in queues. To agents who are already operating other businesses it gives a more clientele base.

ZB Financial Holding operates across the country mobile and fixed agents. The mobile agents operate using their mobile phones and it is mainly used for paperless airtime top up and prepaid ZESA tokens. For those with fixed locations, their agents do internet banking and perform point of sale transactions, DSTV subscriptions, School fees payments and issuing of Debit cards. ZB Bank has managed to distribute mini agents at all universities in Zimbabwe in a way to digitalise their operations. Steward Bank has managed to manage more agency in locations and outskirts than any other bank.

2.6 The Relationship Between Digital Banking and Financial Performance

It is anticipated that banks offering digital will have some profitability edge over their competitors. E-banking provides more avenues for income generation, because they generate income from additional non-interest sources. Introduction of e-banking services and products, which are accessible and convenient, has made it possible for banks to attract prospective customers thus allowing them to boost their market share. Value is added by providing better quality services and products to the client (Ciciretti et al., 2008). This leads to high levels of satisfaction and client retention rate. The other major benefit from e-banking innovation is fee-based income (Dew, 2012). Joining a certain ATM network will also create customer awareness of that bank and influence the market share (Iftekhar, Schmiedel & Song, 2012).

This section discusses the nexus between digital banking methods and their impact on financial performance. The digital banking methods discussed are mobile banking, online banking, agency banking and card issuing and acquiring.

In Addition to revenue enhancement ?? may enable banks by letting them reduce expenses on buildings, resource, and equipment. This contributes to costs associated with maintaining branches. Jayawardhena and Foley (2000) assert that the cost savings come through joint effects of reduction and greater use of workforce, more economical use of space and operational savings that help increase the profit margin by a sudden large number. Banks with high costs of keeping branch network are therefore motivated to adopt Internet banking from the possibility of future cost savings (Furst et al., 2002). Processing offers a route for a bank to provide services and reduces transaction costs and lower charges. The Internet supplies a possible competitive advantage for both banks and also this edge can be found in the regions of cost reduction and even much more satisfaction of consumer demands (Bradley & Stewart, 2013). Encouraging consumers to use the web for banking transactions could lead to substantial operating costs savings, and thus increasing the gain margin (Sathye, 2013). The World Wide Web is the most affordable distribution station for standardized banking operations, including account management and capital transfer (Polasik & Wisniewski, 2013).

2.6.1 Mobile banking and financial performance

Mobile banking has been known to improve financial performance of banks through increasing sales volume and transactions volume. Through mobile banking, operational efficiency is improved, and losses are minimized that are caused by delays in attending to customer orders. Mobile banking enables clients to send and receive electronic money wherever they have cell coverage and brings convenience to customers leading to customers' satisfaction. The current situation in Zimbabwe of cash crisis results in almost 80% of transaction performed through mobile banking and this result in increased deposits and more customers and this led to increased access to customer deposits, transaction and commissions resulting in improved performance.

Money transfer across accounts through mobile banking also helps to improve financial performance. Mobile banking allows for funds transfer between accounts resulting in increased transactions through the bank, leading to high liquidity for the bank which is used to make profit. Moreover, balance inquiry facilities offered by mobile banking enhances the convenience of the customers therefore customer loyalty and improving customer base which results in bank expansion and also on its activities which the banks can use to generate revenues leading to hyper profits (Muchabaya, 2019).

The payment of utility bills through mobile banking influences financial performances as the partnership of utility operators such as ZETDC, DSTV and ZINARA brings commission fees to the organisation (bank) which increases its revenues (Muchabaya, 2019).√

In the study of internet banking and mobile banking performance of banks in Zimbabwe it was resolved that the adoption of this channel will enhance performance of banking industry due to more deposits that will be attracted, increased number of transactions, convenience and reduced transaction cost. This will result in improved performance (Olivia, 2012).

Muyoka (2014) conducted a study to determine the effects of mobile banking on the financial performance of banks in Kenya. The study found out that a significant relationship exists between financial performance and mobile banking.

Juma (2012) also carried out a study which placed more focus on the relationship between banks' growth and mobile banking and the study found out that there exists a correlation between adoption of ICTs and the growth of banks and those banks that had adopted the use of ICTs had a larger market share growth when compared to those that had not adopted the use of ICTs.

Mobile banking results in improved efficiency through reduction in manual tasks and process time. Moreover, reduction in ques results in branch productivity. This enriches reduction in processing and turnaround time, enabling greater efficiency in service delivery and increasing output. More so, consumer dissatisfaction with division banking due to long-term and inadequate customer support is removed, and this contributes to increased market share for electronic monies (Karjaluoto, Mattila & Pento, 2012)√

2.6.2 Agency banking and performance

According to Ferdous, Mosharrafa and Farzana (2015) agency banking brings convenience to customers and therefore results in customer satisfaction. Traditional banking required customers to visit physical banking halls and queue to receive services from banks, this affects the performance of the bank since it takes time(Mukuvari, 2019). Mwende, Bichanga and Mosoti (2015) mention that banks sought to move near to their customers by developing agents within local towns and locations. Agency banking has promoted greater accessibility to formal banking services and is a cheaper alternative to traditional branch-based banking. Therefore, agency banking has been a key driver for performance in banks. A study by CBK (2014), noted a substantial increase in retail deposits in commercial banks who adopted agency banking. A study by Kithuka (2012), noted that agency banking has managed to reduce queues in the banking ?? considerably, more accounts being opened by the targeted populace and financial services made accessible to the unbanked and remote areas, these agents have significantly impacted on the performance of banks. In addition, agency banking allows banks to reduce expenses on buildings, resources, and equipment. This contributes to cost minimisation associated with maintaining branches (Chindudzi et al, 2020). Banks also save on employment costs, looking for more bank premises and other

costs that come with establishing banking systems, processes and services (Karimi, 2018).

A study by Chokuda-Santu, Mawanza and Muredzi (2017) noted that most banks had adopted agency banking and closed most of their branches and left agents to offer their services to the customers which has resulted in cost minimisation. However, Santu et al (2017) mentioned drawbacks associated with agency banking and posits that the giving away of transacting rights to a third party exposes the bank to system hacking attempts. Moreover, agents can also flout bank policies and procedures without being noticed. The deployment of bank point of sale terminals to third parties has also exposed customers to card cloning fraudsters. Robberies have also been reported in cases where the bank provides agents with float support and the use of retail agents has increased the risk that customers are unable to understand their rights and claims when aggrieved (Santu et al, 2017). √

2.6.3 Online Banking and performance

According to Chindudzi et al (2017), banks have also adopted online banking which refers to the system whereby banking services are delivered via the internet. Mwangi (2018) posits that in terms of performance of banks because of online banking, there has been efficiency improvement, savings of costs, quick and faster banking processes as well as reliable and secure banking methods for both the external and internal stakeholders. A study conducted by Soh et al. (2014) indicated that online banking reduces operational costs and hence lead to greater profits for banks. Another study conducted by Akhisa et al. (2015) found positive relationship between technological innovations and bank performance in both developed and developing countries. Studies conducted in Africa especially in Zimbabwe (Mazana et al., 2016), Nigeria (Bagudu et al., 2017), Zambia (Lusaya & Kalumba, 2018) and South Africa (Maduku, 2014), indicate that banks which have adopted online banking have improved their performance through improved productivity and efficiency. √

Online banking systems provide attributes for banks to deploy and design products for market segments that are varying. The product bundling capabilities of this

solution offers a wide assortment of possibilities for banks to make products with advanced features and this empowers banks to innovate and expand their suite of products. Online banking system's capability to provide comprehensive information about customers' financial profiles and buying behaviour which also offer detailed comprehension of customers enables customizing of advertising and products and gives an opportunity for cross-selling (Shah and Clarke, 2009). The end result is improved bank performance as it is able to meet each customer's needs (Chindudzi et al, 2020).

2.6.4 Card services and financial performance

Card services such as visa cards/master cards, adopted to a larger extent by almost all banks in Zimbabwe, improves financial performance of banks through transaction fees. Through card services, banks are provided with more avenues for income generation, where they generate income from additional non-interest sources. Introducing card services and products, which are accessible and convenient, has made it possible for banks to attract prospective customers thus allowing them to boost their market share (Akhisar et al., 2015). According to Dew (2012), the other major benefit from card services is fee-based income. For example, through card services customers are able to use ATMs such as those offering ZIMSWITCH platforms, and a bank can generate income from other banks' customers that use its ATM machines or from third parties that cooperate with it.

2.7 The Challenges Being Faced by Banks in adopting Digitalised Systems

Baffour (2015) in his research of analyzing the acceding and candidate countries (ACCs) adoption of e-banking, classified e-banking adoption factors in two areas which are ICT factors and Banking factors. The ICT factors include the ability of customers in utilizing internet and other related technologies, internet, concerns related to privacy and security, penetration rates, and attitudes towards technology. Banking factors involve trust in banking industry, Digital banking culture, banking culture, and Digital banking drive. Baffour (2015) also points out that lack of online penetration and personal computers is a barrier for growth in digital banking both in developing and developed markets. Cost of access to services is a

primary issue for internet penetration, and the personal computer in Eastern and Central Europe countries. Conversely, there has been a lack of confidence in the banking industry because of previous unstable periods in certain countries (Baffour, 2015). This study also concentrates on identifying the factors affecting the adoption of digital banking in commercial banks in Zimbabwe. The research framework for this study is based upon the expansion of the decomposed theory of planned behaviour (Tan & Teo, 2000)

2.7.1 Changing Technology

Technology upgrades can be defined as the changes to existing innovations. As for the past years there has been development of mobile phones which have integrated to smart phones to Android and Apple tablets. These changes determine the type of digitalised products to be offered. Changing technology upgrades affect the overall strategies of banks in adoption of digital banking methods as there are always new technologies coming out frequently (Nyoni, 2020). Before a bank would have moved from say the use of 3G services, there would have been a release of 4G, 5G etc. This results in fast pace of customers who would be demanding the latest technologies.

2.7.2 Threat from Cyber Crime

There is great risk of cybercrime for most of bank applications. Hackers and fraudsters are on the lookout to disrupt these technologies for their own benefit and there is therefore need for high information communication technology and the absence of this results in the digital systems becoming susceptible to attack by fraudsters. There is also threat of losing valuable data about customers due to system malfunctioning or through cybercrimes. This may put the banks at risks of legal suits from customers resulting in loss of income and reputational damage (DFS, 2018).

2.7.13 Perceived Ease of Use (PEOU)

This refers to the degree to which an individual believes that using a specific system could be without any attempt of bodily and psychological effort (Davis,

1993 cited in Kamutuezu, 2016). As provided by (Singh & Agnihotri, 2015), PEOU is an important element which affects approval of information system. Kamutuezu (2016) who commented about the association between PEOU and perceived usefulness (PU) indicates that "in a causal perspective that, regression results imply that simplicity of use might be an antecedent of viability, instead of parallel, lead determinant of use". This suggests that if banking systems are simple to use; they're more inclined to be approved by the users. Whether an online support is difficult to work with, the customer is more inclined to give the service up and choose another manner of doing transactions which will be simpler. Haneen et al. (2014) investigated the factors that influence the E-Banking adoption of customers who have net access in Jordan. The research found that compatibility, PEOU, safety and PU positively impact digital banking adoption. PEOU was found as an important element for digital banking adoption.√

2.8 Empirical Studies

There are several studies that have been carried out on the impact of digital banking on profitability of banks and other financial institutions around the globe.

International Studies

Jagtap (2018) conducted a study to establish the impact of digital banking on performance in the banking sector of India. The study found out that the banking landscape in India is evolving and has given customers as new wave of managing their finance. The study noted that there has been transformation from social to mobile capabilities in India as banks have been restructuring their business models to provide better customer satisfaction and experience and remain competitive. In a similar study to that of Jagtap (2018), Manisha (2018) posits that because of digitalisation, banks in India have been delivering top quality services and that banks have witnessed a reduction in costs through reduced labour costs.

Mbama (2018) conducted a study on Digital Banking, Customer Experience and Financial Performance from a UK Bank Managers' perceptions. The findings suggest important attributes for consideration to improve digital banking customer experience and financial performance are employee-customer interaction, service personalisation, value proposition, quality service offering and digital banking

experience, which have useful implications for improving digital banking design and interactive marketing.√

Africa

Nyango, (2015) also carried out a research on internet banking in Rwanda using the bank of Kigali as a case study. The study was meant to find out the benefits that internet banking brought about to the financial performance of commercial banks in Rwanda. The researcher was trying to come up with solutions on the problems of paying cheques between banks and also to reduce the time customers spend in queues in trying to access banking services. The study used a mixed approach of both quantitative and qualitative research methods and some descriptive research also. The results from the study showed that electronic banking systems such as ATMs, EFTs, internet banking and mobile banking have a positive effect on bank performance. The study also noted that electronic banking contributes positively to the performance of commercial banks despite the challenges faced in its operation such as system malfunctioning and network problems.√

Kato et al (2014) carried out a study on the effects of mobile banking on bank performances in Kenya using population of banks in Kakamenga town. The researchers used questionnaires and correlational analysis to define the relationship of the variables. The results showed a positive correlation between mobile banking and financial performances of the banks. The study found out that innovations through digital banking mitigates costs and allows the insertion of the many apparent customers. The study found out that banks needs to improve their mobile banking products and services in order to improve their financial and technical performances.√

Kombe and Wafula (2015) conducted a study on the effects of internet banking on the financial performance of commercial banks in Kenya. Adopting a descriptive survey design using a population of the Kenya Central Bank, Treasury Office and commercial banks, the researchers used questionnaires to gather the data. The research found out that transactional time reduction and service quality and convenience improves profitability and technical performances of the banks.√

Kithaka (2011) carried out a study on the effects of mobile banking on financial performances of commercial banks in Kenya. The study used a cross-sectional descriptive survey based on banks listed on the Nairobi Securities Exchange (NSE) and found out that there are some mobile banking variables which have a behaviour on the performance of the banks, like assets quality, adequacy ratio and bank penetration rate. The study showed that mobile banking positively and significantly affects the performances of the banks. Therefore, the more the banks innovate and improve their mobile banking offerings, the higher the profitability and the technical growth. Similarly, Muyoka (2014) conducted a study to determine the effects of mobile banking on the financial performance of banks in Kenya. The study found out that a significant relationship co-existed between financial performance and mobile banking. √

Juma (2012) also carried out a study which placed more focus on the relationship between banks' growth and mobile banking and the study found out that there exists a correlation between adoption of ICTs and the growth of banks and those banks that had adopted the use of ICTs had a larger market share growth when compared to those that had not adopted the use of ICTs.√

Zimbabwe

A study by Sigola and Ndlovu (2016) on Risk of E-banking as a case of Commercial Banking in Zimbabwe 2013 analysed the benefits and risks of electronic banking for commercial banking in Zimbabwe. In their research they identified 5 critical factors which are use of e-banking for cutting costs, to enhance consumer loyalty, to improve profitability, to offer customer convenience and competitive marketing. In a similar study, Ndlovu et al (2013) also identified major benefits of E-banking which were mainly convenience to customers, cost reduction and improved customer loyalty. Their research concluded that if E-banking is to be successful in Zimbabwe the services must be carefully integrated into the traditional system so as to avoid causing unnecessary disruptions to any services offered by the banks. There is also a cost for implementing e-banking which is a bit higher for the banks.√

Bizah, Gumbo and Magwera (2017) conducted a study on "Agency banking as a driver of financial inclusion in Zimbabwe". The study highlighted that agency

banking is a powerful instrument that Zimbabwean banks can employ to drive financial inclusion because of its convenience and cost effectiveness (Bizah et al, 2017). Dzimaka (2016), in line with the study of Bizah et al (2017) also mentioned that agency banking can be employed as a driver propeller of financial inclusion in Zimbabwe.√

Bimha (2018) conducted a study on the impact of electronic banking on the supervisory and regulatory system in Zimbabwe. The study found out that most of the surveyed customers were still insecure in operating digital banking facilities as most of them pointed out that there is little coverage by the legal fraternity as to the legal processes to follow for occurrence of fraudulent transactions. Most of the customers feared that there could be no sufficient monitoring by the Reserve Bank of Zimbabwe on the scope of electronic banking in Zimbabwe.√

Santu, Mawanza and Muredzi (2017) conducted a study to determine if the agency banking model has managed to resolve the gap of bringing banking services closer to the people at more affordable costs and accessibility challenges associated with traditional banking. The study employed a descriptive research design and the sample consisted of five commercial banks that were operating agency banking actively in Zimbabwe. The study found out that all the sampled banks were engaged in agent banking operations had achieved significant expansion in geographic coverage which in turn has led to a notable increase in the customer base (Santu et al, 2017). The study also established the major challenges that these banks were facing in operating agency banking and these included reputational risk, consumer protection and legal risk and the agents also on the other hand had challenges such as liquidity risk, operational risk, and credit risk (Santu et al, 2017). √

However, despite these wide varied studies, in Zimbabwe, only a handful of studies have aimed at examining the impact of digital banking on the performance of banks, with the majority of these studies focusing on mobile money and financial performance of Zimbabwean banks which has since probed the researcher into finding out and have a more detailed research on digital banking and financial performance, with a focus on agency banking and card services, areas which have been mostly ignored in literature.

2.9 Conceptual framework

The conceptual framework shows the relationship between the dependent and independent variables of the study. In this study, the dependent variable is financial performance (ROA, ROE and Net Profit Margin). Components of digital banking which include the Mobile Banking, online banking, agency banking and card issuing and acquiring services are the independent variables in this study. The conceptual framework is presented diagrammatically in Figure 2.2 below.√

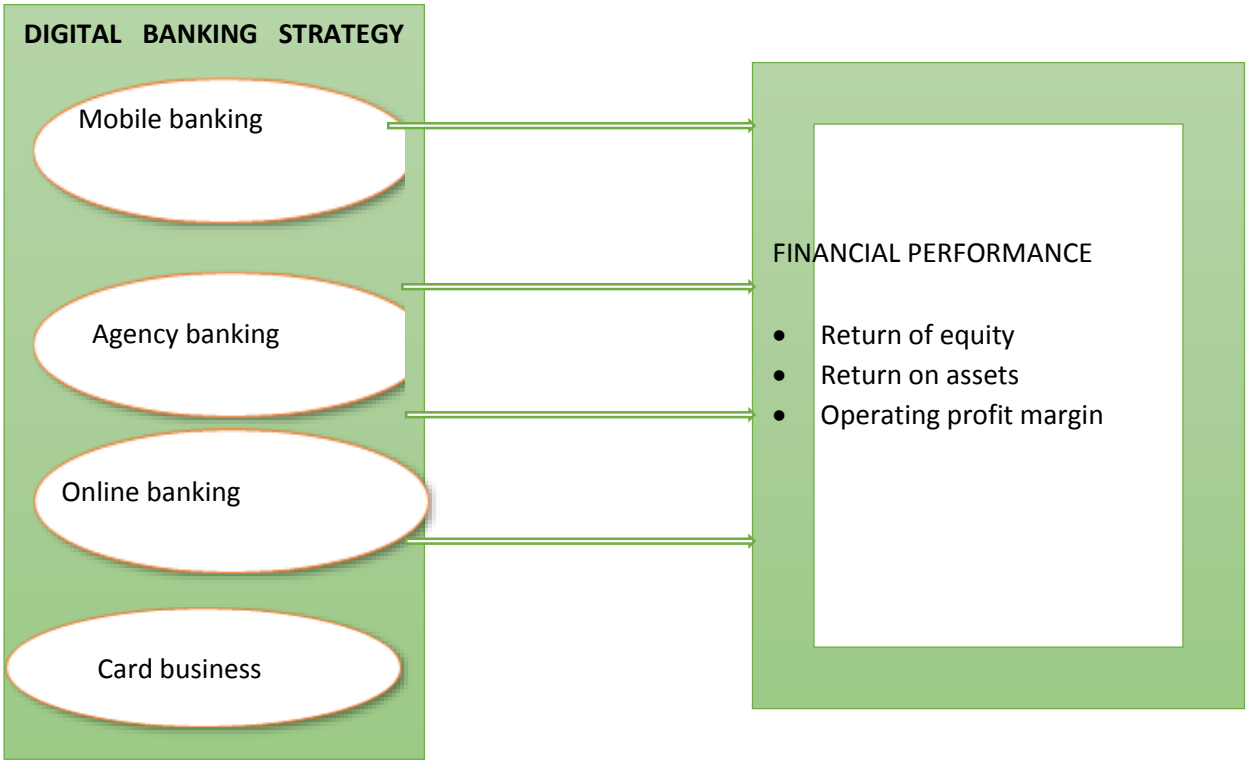


Figure 2.2: Conceptual Framework Source: Author's own compilation

2.10 Chapter Summary

This chapter has presented the literature review covering the theoretical framework as well as the empirical literature review. A review of prior studies on digital banking and financial performance was also presented. A review of related literature by other authors gave an overview of the topic understudy with particular reference to the objectives and theories of digitalisation and organisation performance. Digital banking methods and strategies in the banking sector were also reviewed and the relationship or nexus between digital banking and financial performance was also

analysed in this chapter. The chapter also provided a conceptual framework showing the variables of the study, where the dependant variable was financial performance being proxied by ROE, ROA and net profit margin while the independent variables were mobile banking, online banking, agency banking and card services. The next chapter presents the research methodology.√

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the study methodology and presents the research design adopted, the population and its composition, the sources of data, the sampling technique adopted, the research instruments, data analysis techniques, ethical issues as well as reliability and validity of the research instruments.

3.2 Recap of the problem statement

There has been a growing use of digital banking in the banking industry as banks seek to move in line with changing technologies. Digital banking has been assumed to bring more benefits such as cost reduction, low costs, and high return through transaction fees. In Zimbabwe, most banks have adopted digital banking strategies such as internet banking, ATMs, mobile banking, agency banking and payment cards system. While banks have been implementing digital banking strategies, there has been mixed feelings over their impact on the financial performance of an organisation, with some studies observing a positive relationship between digital banking services and financial performance and on the other hand, others studies have found digital banking to be negatively related to financial performance at different significant levels and differing theories and these include studies by Desta (2016) and Wadesango et al. (2017). It is against this background that this study attempts to investigate the relationship between digitalisation and financial performance of banks in Zimbabwe. The study also aims to explore the drivers of digitalisation for banks in Zimbabwe as well as establishing the challenges faced by banks in adopting and operating digitalised systems

3.3 Research philosophy

According to Blaxter et al (2006) a research philosophy is a belief about the way in which data should be gathered, analysed and used about a phenomenon. Saunders and Thornhill (2009) are of the view that a research philosophy could be positivism,

realism, interpretivism, subjectivism and pragmatism. This study took both the constructivism and the positivist camps, interoperating the two methods so as to achieve the research objectives. Popper, (1972) postulated that the positivist paradigm provides an objective reality against which researchers can compare their claims and ascertain truth by positing a reality in separation of subject and object. The constructivism paradigm is described by Hatch and Cunliffe (2006) as anti-positivist and as post-positivist by Blaikie (1993) because it is affirmed that a fundamental difference exists between social and natural sciences subject matters. The positivism paradigm, is based on values of reason, validity and truth, including a focus on facts gathered through direct observation, experience and empirically measured through the adoption of quantitative methods as explained by various researchers (Saunders, Lewis & Thornhill, 2007).

3.4 Research Approach

There are two research approaches which are the inductive and deductive approaches (Saunders, Lewis & Thornhill, 2009). Saunders et al (2009) further posits that the deductive approach involves developing a theory of hypothesis, and thus is also known as a "testing a theory". In a deductive approach, the research strategy involves testing a formulated theory. In an inductive approach, the researcher rather "builds a theory". The inductive approach does not involve formulation of hypotheses.

In this study, a deductive approach was adopted in where a research hypothesis was developed and tested. A hypothesis was formulated to test the relationship between digital banking and financial performance. Moreover, the study also utilised more quantitative data and the use of existing theories formed the basis for the adoption of a deductive approach.

3.5 Research Design

According to Burns and Grove (2009), when conducting a study, a research design serves as a blueprint that provides the researcher with maximum control over factors that may interfere with the validity of the findings. Research design is the overall plan for connecting the conceptual research problems to the pertinent (and achievable)

empirical research (Wyk, 2001). Colloquially a research design is an action plan for getting from another point to another in a research (Yin 2003). √

This study adopted an explanatory research design. Kowalczyk, (2015) defined explanatory research as an attempt to connect ideas to understand cause and effect so that researchers can explain what is going on. Thus, explanatory research looks at how things come together and interact and are conducted to study cause-and effect relationships and to explain why things are as they are through establishing a causal relationship between two (or more) variables. This design allowed the researcher to draw on theory and models (regression models), which have been used in the past to explain why things happen. This design was appropriate for this study because it described what was happening at the present moment and this was in alignment with the study objective of investigating the impact of digital banking strategies on the financial performance of banks. Moreover, the nature of the study's research questions, which are best answered by questionnaires, interviews and through developing a hypothesis called for an explanatory study. In this study, a hypothesis was tested to evaluate how the identified digital banking strategies contributed to financial performance of banks.√

3.6 Research strategy

In conducting this study, a cross sectional survey research strategy was adopted. The research was focused on 22 banks being commercials banks, building society, merchant banks, the people savings bank and 6 deposit taking microfinance banks that are regulated by the Reserve bank of Zimbabwe. The survey research provided a clear and accurate picture of the problem. This then enabled the researcher to have a wide view of the issue of digitalisation of banks from various respondents. A survey strategy is a strategy that involves the use of questionnaires, corporate data or structured interviews and collects data that is usually quantitative but can be qualitative or both to suggest reasons for relationships between variables. This study also collected both qualitative and quantitative data.√

3.7 Data Collection Methods

3.7.1 Secondary data collection

According to Wegner (2010), secondary sources are data sources where the data that is collected and processed is not for the purpose of the existing need. Saunders (2012) further states that secondary data is data collected by another person other than the one who is going to make use of it. In conducting this study secondary data was obtained from corporate reports on financial performance such as financial statements, revenue and fees reports which were obtainable from the banks' websites.√

3.7.2 Primary data collection

Primary data is the data that is collected for a specific assignment, usually original in nature and directly related to the problem under study (Mugenda & Mugenda, 2003). Primary data collection methods include questionnaires, surveys, interviews, focus groups, experiments and observation. In conducting this study, the researcher used questionnaires and interviews as the primary data sources. The use of primary data was beneficial in this study because it provided more reliable information since it was captured from the original source. √

3.7.3 Questionnaire/ (Interview guide) development

3.7.3.1 Questionnaire

According to Kothari (2011), a questionnaire is a research instrument that contains recorded questions, guided or semi structured where participants respond directly on the questionnaire form itself with no interference of the interviewer. In this study the researcher distributed a total of 95 questionnaires to the selected sample of respondents who were given a maximum of seven days to fill the questionnaires. The questionnaires were randomly distributed to branch supervisors, branch managers, personal bankers, tellers and the back-office operators, transaction controllers, agents and clerks from the selected branches.

This study made use of questionnaires because through questionnaires participants are given the liberty to be honest in their responses and in addition they are a good research instruments as they also remain anonymous and respondents are not held liable for their opinions and responses. Moreover, through the use of questionnaires participants are given adequate time to think through the questions and in some cases the participants can have their lines of thought guided by the researcher. In addition, they are a low cost research instrument and thus saved the researcher's costs.

3.7.3.2 Interviews

In addition to the use of questionnaires, the researcher also used interviews. Through the use of interviews there was room for the interviewer to clarify some facts or information to the participants. Each interview session conducted took at least fifteen (15) minutes. The researcher also opted for the use of interviews because interviews allowed the respondents' perceptions to be voiced out. Moreover, interviews provided a platform of clarification on ambiguous questions or answers therefore enabling the collection of relative and useful data. The researcher was also able to detect issues of concern through impromptu speeches by the interviewee as well as emotion or attitude towards certain questions. By continuously probing the respondents it was able to get information on intricate matters where such information could not be obtained through the use of questionnaires.√

3.7.4 Methodology Used

In this study there was use of qualitative and quantitative data and both primary and secondary data and thus a mixed approach was used. As a mixed approach, it combines both numeric information and text information (Creswell, 2014). The study used both analysis of statistics and qualitative understandings to answer the research questions and also testing of hypothesis through quantitative data and then developed a richer theoretical perspective through qualitative approach. Qualitative data was collected to answer objective 1, 2 and 3 on the extent of digitalisation among Zimbabwean banks, on the drivers of digitalisation for Banks in Zimbabwe and on the challenges faced by banks in adopting and operating

digitalised systems. The fourth objective (Objective 4) which sought to examine the relationship between digitalisation and financial performance was best answered using quantitative data which was collected on return on assets, return of equity and operating profit margin. It is against this background that this study adopted both the qualitative and quantitative methodologies (mixed methods research). According to Creswell (2014) the use of a combination of qualitative and quantitative data improves an evaluation by ensuring that the limitations of one type of data are balanced by the strengths of another. A mixed methodology was also used as a way to gain a variety of information and thereby increasing the reliability and validity of findings.√

3.7.5 Pilot testing

The study conducted a pre-test of the research instruments where a sample of questionnaires was sent to 5 respondents before conducting a full study. Since some of the research instruments were administered online, and some interviews conducted via online platforms, a pilot study was a requirement to test the applicability of the research instruments and to identify the possible challenges to be faced for devising of any rectifications. A pilot study was also conducted to detect or identify potential flaws, errors or any ambiguity of the research instruments. By conducting a pre-test, it was possible to identify errors and ambiguous questions on the questionnaire and ambiguous instructions, determining the adequacy of the time limit on the research questionnaires as well as the measurability of the research variables. The researcher amended the questionnaire based on the pilot study results to ensure its effectiveness. √

3.8 Population and sampling techniques

3.8.1 Population

Population is defined by Creswell (2014) as all the elements used by a researcher in making some inferences during a study. According to Vonk (2016), target population refers to the total number of individuals that are relevant to a study. The population included the staff members from different banks which have been previous categorized as commercials banks, building society, merchant banks and

the people's savings bank as well as deposit taking microfinance banks who included branch supervisors, branch managers, personal bankers, tellers and the back-office operators, transaction controllers, agents and clerks. The target population for this study is shown in table 3.1 below.

Table 3.1 Target Population

Respondent Class	**Population**
Frontline staff members	50
Supervisors	50
Managers	25
Total	**125**

3.8.2 Sample Size

Tomer (2012) defines sample size as the number of individual units of data that is collected in a survey which is also important in determining the reliability of the findings of any study. The sample size for this study was calculated using a formula by Yamani Taro where the sample size is determined as a function of the total population and the maximum acceptable margin of error (also known as the sampling error). The formula used to determine sample size is shown mathematically below:

$$n = \frac{N}{1 + N_e^2}$$

Where:

n= sample size

N = target population (125)

e = maximum acceptable margin of error (5%)

Sample size calculation

$$n = \frac{125}{1 + 125(0.05)^2}$$

n = 95

The calculation of the sample size yielded 95 respondents who were then included for participation in the survey.

The total sample size represents a greater proportion on each class of respondents based on a 5% margin of error. Saunders and Thornhill (2009) posits that a 70% confidence level provides a possibility of a great study outcome since the target population provides a true representation of the total population.

3.8.3 Sampling method

According to Sharma (2017), sampling is as a procedure that the researcher employs in systematically selecting a relatively small number of representative items or individuals (subset) from a pre-defined population to serve as subjects (data source) for observation or experimentation according to the objectives of the study. In this study a multistage sampling approach was adopted which included purposive sampling and stratified random sampling methods to select the respondents from the total population. Purposive sampling selects respondents from the total population based on the knowledge, relationships, and expertise of the respondents regarding a research area (Freedman *et al*., 2007). In using this technique, the researcher took a consideration of the respondent's knowledge about banking operations and considered employees from various banks. After respondents were purposively sampled, they were then put into strata of frontline staff members, supervisors, and managers. Wegner (2003) stated that stratified random sampling is the commonly used probability sampling method as it reduces sampling error which is prevalent with simple random sampling. Purposive sampling is a cost-effective method that saved the researcher's time and cost as the researcher avoided studying the whole population which was going to be time consuming.

3.9 Questionnaire administration/Conducting interviews

The researcher selected a sample of 95 respondents from the target population. The researcher explained the purpose of the study to the respondents, guarantee their confidentiality and ensure that they understand that their participation is

voluntary and the researcher then distributed 95 questionnaires to the selected sample and asked them to fill-in the questionnaires. The researcher followed up through emails and telephone calls and all interviews were conducted through zoom, skype and telephone.

3.10 Methods of data analysis

In this study, descriptive statistics was used and the Statistical Package for Social Sciences (SPSS) was used to perform statistical analysis of the data from the questionnaires and presenting it into graphs. Descriptive statistics were useful in computing measures of variability and measures of central tendencies. Descriptive statistics of mean, frequency and percentages were used to analyse the data. In qualitative data analysis content analysis was also used.

The objectives on establishing the extent of digitalisation among Zimbabwean Banks, exploring the drivers of digitalisation for Banks in Zimbabwe and on establishing the challenges faced by banks in adopting and operating digitalised systems were answered using questionnaires and interviews.

To determine the relationship between digitalisation and performance of banks, the study sought to achieve this objective by using quantitative techniques namely the Pearson correlation and Regression analysis.√

3.10.1 Correlation

Correlation analysis examines the strength and direction of the variables under study. The study utilized Internet Banking Channels (IBC), Mobile Banking Services/Mobile Purchases (MBS/MP), Card Services Communication (CS) and Agency Banking (AB). Pearson correlation was performed to provide an indication of the correlation between two variables.

3.10.2 Regression

The researcher crafted a model specification based on the description of the relationship between the dependent and independent variables of the study. The

Correlation and Regression analysis were based on the model specification below as:

Y= f (Explanatory variables) + error term

Where Y = Dependent Variable "Financial Performance"

X = Independent Variables "Digital Banking" √

Thus the regression equation for the hypothesis testing adopted in this study was as follows:

$Y= \beta 0 + \beta 1X1+\beta 2X2 + \beta 3X3+ \beta 4X4 +e$

Where:

Y= Organisational performance represented by Net Profit, Return on Assets and Return on Equity

β0=Constant

e = Error term

X1= Mobile Banking Services/Mobile Purchases

X2= Agency Banking

X3= Internet Banking Channels

X4= Card Services

3.10.3 Data Presentation

According to Guilford (2013) for data from research to be meaningful it should be presented in formats that are usable and that gives room for better interpretation and analysis. This study used tables, bar graphs and pie charts in the presentation of the data. Tables are good presentation tools which can present large amounts of data which if not presented well can be very confusing unwieldy to be described in the textual format and therefore graphs help readers understand and interpret the data in a more meaningful way (Bavdekar, 2015).√

3.11 Validity and reliability

Validity is defined by Brynard and Hanekom (2006) as the ability of the instrument to measure what it is supposed to measure. Validity measures the

soundness of the interpretation of scores from a test and in this study developing the questionnaire was based on the respective objectives. The researcher also avoided and eliminated long, technical and ambiguous questions to avoid confusing the participants.

Reliability, according to Brynard and Hanekom (2006) is the consistency and correctness of measures taken in data collection and analysis. Eachus (2002), on the other hand maintains that reliability refers to the ability of an instrument to produce similar results if such phenomena is measured at different intervals using the same data. In this study to ensure reliability a test-retest was done where questionnaires were administered to a sample of the selected respondents.

In order to enhance validity and reliability the researcher also used data triangulation which was defined by Robson (2002) as the use of multiple research techniques. The study also used methodological triangulation which was also defined by Robson (2002) as the use of both qualitative and quantitative research approaches (Robson, 2002).√

3.12 Ethical Considerations

In carrying out their research, researchers should always be aware that, they are entering their participants' private spaces (Silverman (2000). According to Creswell, (2003) researchers should duly respect the informants' rights, needs, values and desires and should uphold participants' privacy, confidentiality, dignity, rights, and anonymity by adhering to strict research ethics guidelines. The researcher took into account the following ethical issues:

Informed consent-Prior to commencement, the researcher informed the participants of the purpose and nature, as well as the extent of the research. In conducting a study, it is important to clearly state the purpose of the research and to this regard the researcher informed the participants and advised them that their participation to the study was voluntary and that the study was purely for academic purposes.

Harm and risk - The researcher, as stated by Trochim (2000) guaranteed that no participant would be put in a situation where they might be harmed physically or psychologically as a result of their participation,

Privacy, confidentiality, and anonymity-the researcher ensured that confidentiality and anonymity of the participants would be maintained and that no participants name or information that reveals their identity will be shared. It was clarified to the participants that their participation to the study was absolutely voluntary and more importantly that the research was only for academic purposes.√

3.13 Limitations

The major limitations the researcher faced were to administer research instruments during the study (within the pandemic of Covid-19) and thus relied on sending and receiving responses online and some of the respondents had challenges in sending back responses online. The researcher faced challenges such as reluctance by some employees in providing information possibly due to fear of competition. To overcome this, the researcher informed all participants that the study was for academic purposes only and thus no participants could be harmed because of their participation. Because most of the staff were not reporting for duty, who formed part of the respondents, the researcher faced challenges in accessing some of the reports showing the financial performance levels.√

3.14 Chapter Summary

This chapter has presented the methodology adopted in conducting the research and provided in detail the research design, the target population and its composition, sample design ad sample size, data analysis tools, as well as reliability and validity of the research instruments. The next chapter provides for the data analysis and a discussion and interpretation of the research findings.√

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the study findings and provides an analysis and interpretation of the results. The analysis is made in relation to the study objectives as outlined in chapter one of this study. This chapter is therefore divided into main sections where the first section looks at the demographic information of the respondents in terms of the response rate, gender, age, qualifications of the respondents and department enrolled while the second section presents findings on each of the four objectives of the study.√

4.2 Data Presentation and Analysis

4.2.1 Questionnaire Response Rate

Table 4.1 Questionnaire Response rate

Instrument	Sent	Returned	Success Rate %
Questionnaires	95	68	72

A total of 95 questionnaires were distributed to the selected respondents and 68 were completed and returned thus recording a 72% success rate.

4.2.2 Interview response rate

Table 4.2 Interview Response rate

	Scheduled	Conducted	Success rate %
Interviews	10	5	50

A total of ten interviews were scheduled but only five were successfully conducted giving a 50% success rate.√

4.2.3 Gender of Respondents

The study also reviewed the demographic information of the respondents and took a consideration of the gender of respondents and the results are presented in Table 4.3 below.

Table 4.3: Gender of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	37	54	54	54
	Male	31	46	46	100.0
	Total	68	100.0	100.0	

Of the total respondents 54% were female while 46% were male respondents. While there was a gender imbalance, the results of the study would not be affected as the representation was reflective of the study population which consisted of more females than males.

4.2.4 Age of Respondents

The study also reviewed the age of respondents as part of the demographic and the results are shown in Table 4.4 below.

Table 4.4: Age of Respondents

Age Range		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18<years≤30	8	12	12	12
	31<years≤40	23	34	34	46
	41<years≤50	21	31	31	76
	51<years≤65	13	19	19	96
	65 years and above	3	4	4	100
	Total	68	100	100	

The results show that 12 % of the respondents were between 18-30 years of age, 34% were between the age of 31-40, 31% were between the age of 41-50, 19% were between the age of 51-65 while 4% were 65 years old and above. The results can be interpreted that all age groups were represented amongst the selected population and that all respondents were old enough to interpret the research questions.√

4.2.5 Respondents' Category

The study also reviewed the respondents' category to identify if they belonged to the employees' (bankers) or customers group. The survey findings are shown in table 4.5 below.

Table 4.5 Respondents' Category

Employee Category		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Frontline staff	32	47	47	47
	Supervisors	23	34	34	81
	Managers	13	19	19	100
	Total	68	100	100	

Forty-seven percent of the respondents were frontline employees,34% were supervisors while 19% of the respondents were managers. The findings reveal that the researcher got a wide range of views from a broad spectrum of employees and because all respondents were within the organisations, they were better placed to answer issues relating to digitalisation of their respective banks.√

4.2.6 Respondents' Level of Education

As part of the demographic information the researcher took a consideration of the education level of the respondents which was deemed necessary to conclude on the respondents' ability to interpret research questions. The results are shown in table 4.6 below.

Table 4.6: Level of education of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary level	7	10	10	10
	Secondary Level	6	9	9	19
	Diploma	31	45	45	64
	Degree and Above	24	36	36	100.0
Total		68	100.0	100.0	

From the findings presented in table 4.6 above diploma holders constituted the highest number of respondents (45%), followed by degree holders (36%) and primary and secondary level education holders constituted 10% and 9% respectively. The respondents had basic education and could be able to address the research requirements and the researcher could also draw meaningful conclusions and the data could be relied upon since it was being gathered from basic-education qualified respondents.

4.2.7 Period in Employment

The researcher also established the period in employment of the respondents. The researcher felt that the time spent by the respondents under the employment of the respective banks was crucial as in most cases the more years a person is employed by the company the more they are well versed with the organisation activities.

Figure 4.1 below shows the results.

The findings as shown in figure 4.1 above indicate that the majority of respondents had been in the company employ for a period between 6-10 years (41%), while those who have been with the company for 2-5 years constituted 38% and those who have been with the company for 11-20 years constituted 12%. Only 1% of the respondents had been with the company for more than 20 years. The findings indicate that the respondents had been with the organization for a considerable period and hence their participation in the study would yield reliable results.√

4.2.9 Reliability Statistics

The Reliability statistics of the data used in this study are presented in table 4.7 below:

Table 4.7 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.762	0.756	68

The respondents were given a scale of 1-5 indicating how they view a given variable of the research instruments. Reliability analysis was done on the 68 items of this study. An acceptable value is one that is above 0.7 which indicates that the respondents were indeed consistent with the information they provided. The information analysed revealed a Cronbach alpha of 0.762 which is slightly above the acceptable mark thus indicating consistency in ratings. Muhunyo (2018) in support of this contends that a Cronbach Alpha of above 0.70 indicates that the research instruments employed by the study are reliable.√

4.4 Extent of digitalisation among Zimbabwean banks

The study sought to establish the extent to which Zimbabwean banks had adopted digital banking systems. Table 4.8 below shows the results.

Table 4.8 Extent of digitalisation among Zimbabwean banks

Banks Digitalisation	**(1) SA**	**(2) A**	**(3) N**	**(4) D**	**(5) SD**	**Mean**	**Std Dev**
Personal Computer (Pc) Banking	28%	57%	6%	4%	5%	3.79	0.81
Mobile Banking	16%	51%	12%	9%	12%	2.13	0.67
Internet Banking	10%	63%	11%	5%	13%	2.13	0.68
Cross-Border E-Banking	12%	50%	10%	50%	24%	4.67	0.49
Virtual Banking	20%	47%	11%	9%	13%	2.13	0.68
Point of Sale Machines	12%	68%	6%	3%	11%	2.12	0.71
Visa Cards/Master Cards	2%	66%	22%	12%	0%	2.23	0.62
WhatsApp Banking	9%	51%	17%	11%	12%	4.45	0.67
Agency Banking	9%	65%	16%	11%	0%	3.23	0.714

The findings, as shown in Table 4.3 highlights that most respondents agreed that personal computer banking has been adopted to a large extent (57% agreed and 28% strongly agreed). Most Zimbabwean banks now offer a platform for personalised computer banking where account holders can log on to their personal computers and perform a wide range of transactions. Banks also administer various card-based payments across the economic divide (Kaseke, Charira & Muzondo, 2012).

The findings also show that most respondents agreed that mobile banking services have been adopted by all the surveyed banks in Zimbabwe, with most clients having access to check on their accounts via mobile phones and cell phones (51% agreed and 16% strongly agreed). Customers have been able to transact over their cell phones as opposed to being in the banking hall to process RTGS transactions. A study by Kaseke and Charira (2012) noted that an increasing number of depositors switched to online banking. Kaseke and Charira (2012) further mentioned that Banks have also created better communication with customers if they enter into partnership with all mobile network providers (MNOs).

The findings also showed that internet banking has been adopted to a large extent by banks in Zimbabwe with study results showing that 63% of the respondents agreed while 10% strongly agreed.11% of the respondents however remained

neutral. Most respondents agreed that all banks surveyed have been using internet baking services for a period of more than 5 years. Internet banking services offered by the banks include online platforms to view one's account, to make transfers, to pay for bills and to check balance or account statement.

Fifty-percent (50%) of the respondents did not agree that most banks have adopted cross border E Banking while 24% strongly disagreed. However, Virtual banking, the same way with online banking has been adopted by banks to a large extent in Zimbabwe as noted in the interview responses. While it is a new phenomenon in Zimbabwe, most banks have adopted the use of virtual banking methods. Most banks have acquired the relevant information and communication technologies to allow customers to access and perform bank transactions without going to the banking hall. A study by Kaseke and Charira (2012) also observed that the adoption of Virtual Banking Solution by commercial banks was achieved with varied success levels for all the set objectives and that the concept of Virtual Banking has been accepted by a significant number of the banks customers. Kaseke et al (2012) further mentioned that Presently, the mobile operator led business models of Virtual Banking have taken the centre stage in Zimbabwe. The services under virtual banking include Balance checking in the account, Mini-statements and checking of account history, PIN provision, Change of PIN and reminder over the Internet, Alerts on account activity or passing of set thresholds, monitoring of term deposits, Access to card statements, Status on Cheque, stop payment on Cheque, Ordering Cheque books and Mutual funds / equity statements (Kaseke et al, 2012).

The study findings also detailed that point of sale machines have been adopted to a large extent in Zimbabwe with 68% of the respondents agreeing to that notion while 12% strongly agreed. All surveyed banks have point of sale machines which are operational at every branch. The findings are also consistent with those by Dube, Chitura & Runyowa (2009) as cited in Kaseke, Charira and Muzondo (2012) who mentioned that the installation of Automated Teller Machines (ATMs) by Standard Chartered Bank Zimbabwe Ltd and the Central African Building Society (CABS) in the early 1990s signalled the beginning of the use of electronic

banking in Zimbabwe. By 2000 nearly every financial institution was operating an ATM machine (Kaseke et al, 2012).

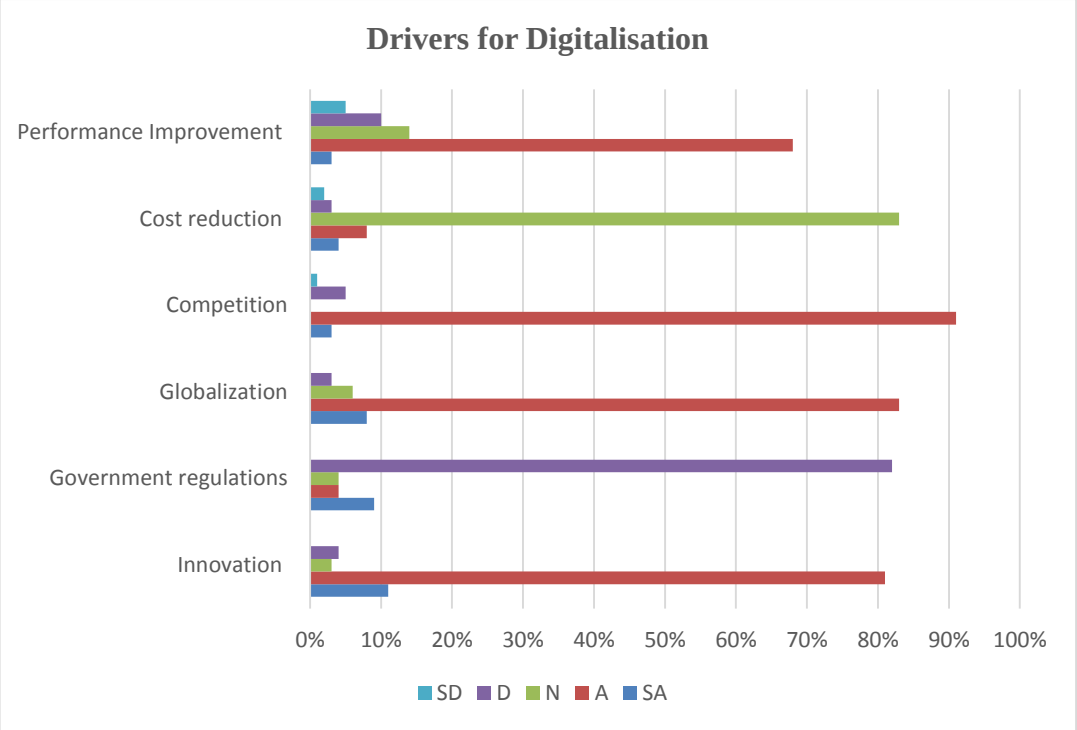
The findings from the study also revealed that visa cards/master cards have been adopted to a larger extent by almost all banks in Zimbabwe, with responses of 66% suggesting that all the surveyed banks have credit and master cards for their customers.

The study results also showed that 65% of the respondents agreed that agency banking has been adopted by banks in Zimbabwe. Most banks have adopted this business model that enables banks to provide financial services through nonbank Agents, such as retail outlets, post offices, pharmacies, service stations, Universities and colleges promoting financial inclusion in areas where there are no banks. This has however been for mainly agents with requisites such as Agent Account and Satisfactory security (secure premises). A study by Chokuda-Santu, Mawanza and Muredzi (2017) also noted that most banks had adopted agency banking and closed most of their branches and left agents to offer its services to the customers which is consistent with the findings of this study.√

4.5 Drivers for digitalisation for banks in Zimbabwe.

The study sought to establish the major drivers behind digitalisation for banks in Zimbabwe. The findings are presented in Figure 4.2 below.

Figure 4.2: Drivers of digitalisation among Zimbabwean banks



The study findings on banks digitalisation in Zimbabwe as a result of globalisation are consistent with the report by Tapambgwa (2018) on Stanbic Bank's digitisation where he posited that Stanbic bank was following a digitalisation model that has been adopted by many financial and non-financial institutions in other parts of the world but very few in Southern Africa. The findings of the study are also in line with a report by RBZ (2019) which mentioned that the world has experienced a proliferation of technology and innovations that have significantly altered the digital landscape and the way which economic agents offer services and products. In terms of performance as a driver, a study by RBZ (2019) mentioned that the financial sector in Zimbabwe is leveraging on technological innovations to improve efficiency, lower the cost of financing and improve convenience, speed of service delivery and quality of information provided to users of these services thus improving performance.

Most respondents, however, did not agree that government regulations are a major driver behind the digitalisation of banks (82% of the respondents disagreed), while there was mixed feelings on whether cost reduction was also a major driver behind the digitalisation of banks in Zimbabwe (83% remained neutral). However, a study by Hastie (2019) mentioned that regulators such as the RBZ are now actively encouraging banks to work with a greater variety of fintech providers to achieve

optimised journeys for customers, which is contrary to what most respondents believed in terms of the role of regulators in digitalisation in Zimbabwe.

Although respondents did not agree that government regulations have been a major driver in digitalisation of banks, DLA (2019) mentioned that in a press statement by the Reserve Bank of Zimbabwe (RBZ) on measures to deal with cash shortages while simultaneously stabilizing the economy issued in 2016 (the RBZ Statement), the RBZ directed, inter alia, that retailers, wholesalers, businesses, local authorities, utilities, schools, universities, colleges, service stations, informal sectors and other service providers install and make use of point of sale (POS) machines. The purpose of this directive was to reduce the demand for cash in the economy. The directive also applied to government departments, local authorities and public entities that provide services to the public on a cash basis. Banks and other payment service providers were also directed, under the RBZ Statement, to ensure that appropriate electronic payment systems such as card, POS, mobile and internet were made available to all businesses. It was also emphasized that all banks and payment service providers should actively participate in public awareness campaigns to encourage members of the public to adopt cashless means of transacting. Therefore, such government regulations have been instrumental in driving banks digitalisation in Zimbabwe as all banks have been forced to adopt internet and online as well as mobile banking services.√

The success of fintech in Zimbabwe has become so pronounced that over 70 percent of retail payments in Zimbabwe are made through digital payment platforms. In order to keep up with the rapidly changing financial landscape, banks in Zimbabwe have partnered with fintech companies to offer digitalized payment services and solutions.

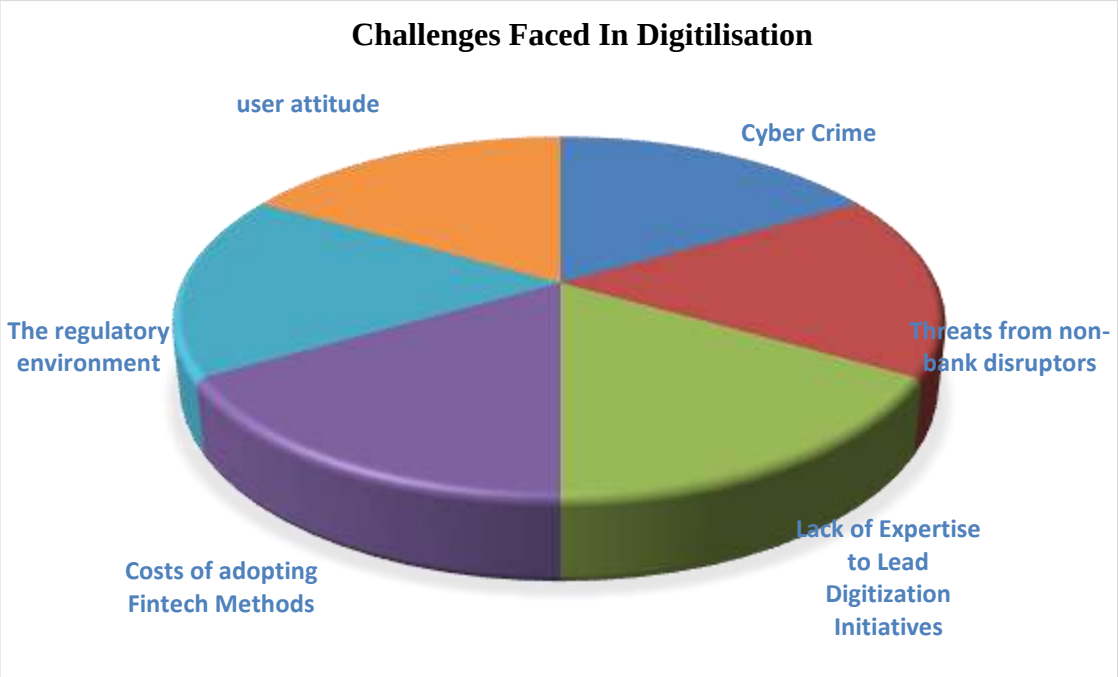
A large proportion of respondents also agreed that competition behind banks has forced them to adopt fintech and digital banking methods (91%). A report by Stanbic bank (2020) mentioned that new banking technologies continues to bring ease of banking to customers, which helps them counter the competition from other banks. A report by POSB (2019) mentioned that various banks were at different levels of digitalisation, with MNO linked bank Steward bank seemingly

taking a lead in the movement, notably on the innovation aspect and thus competition amongst the various banks was a major push factor for banks to adopt digital banking methods and customers would prefer banks that offer convenient banking methods.

4.6 Challenges being faced by banks in digitalisation.

The study sought to establish the challenges being faced by banks in adopting and operating digitalised systems. The findings shown in Figure 4.3 below shows that most respondents cited that the most prevalent challenges in the banks' adopting and use of digitalisation methods include factors such as high risk of cybercrimes, threats from non-bank disruptors, lack of expertise to lead digitalisation initiatives and cost of adopting digital technologies. Banks find it difficult to integrate digital technologies as most of them are borrowed from the global world and thus lack of expertise in developing these methods has dire negative effects on the functioning of the digital methods.

Figure 4.3: Challenges being faced by banks in digitalisation.



Source: Author's own compilation (2020)

The respondents pointed that there is high risk in the operation of digital methods such as the use of visa cards and master cards which are usually affected by criminals who undertake cad cloning to steal customers' monies from their accounts.

Like any other business operating in an environment banks also suffer from the regulatory environment as for example when RBZ decided that there must be use of plastic money, many banks were not prepared to adopt the digital methods instantly but had to be forced to operate the digital way because of cash shortages. This resulted in many challenges in the operation of the banks due to the number of users they serve.

Majority of respondents also pointed out that the associated costs for regularizing digital operations are resultantly high. These costs include costs of acquiring Fintech equipment and technologies.

Users' attitude towards use of digital platforms was also mentioned as one of the factors affecting the adoption of digital methods of banking. From the interviews, respondents cited that most of the rural population are yet to grasp the concept of internet banking and are reluctant to adopt such methods as they still frequent the baking halls when performing bank transactions. Respondents also cited that cost of data and internet required to perform some of the digital methods of banking by customers remains high and data costs have remained high in Zimbabwe.

The findings from this study are in line with findings by White (2020) who mentioned that security issues remain a major challenge in the operation of digital banking systems and mentioned that hackers are always on the look to give financial institutions a run for their money. Therefore, some customers are not willing to take any chances. White (2020) further mentions that although many people are embracing digital banking, there is still a good portion of people who do not trust it. Also, some people are not convinced about digital banking unless they have proof that a bank exists in brick and mortar form. This makes it hard for digital banking to become completely digitized.

4.7 Relationship between digitalisation and performance of banks

To establish the relationship between digitalisation and performance of banks, Pearson Correlation and regression analysis was conducted.

4.7.1 Regression Analysis

Multiple linear regression analysis was conducted to determine the relationship between dependent variable which is firm performance as proxied by revenue, net profit, return on assets and market share and the independent variables as proxied by Mobile Banking/ Mobile Purchases, Agency Banking Services, Internet Banking and Card Services.

The regression equation was:

$$lnFP_t = \beta_0 + \beta_1 lnMB_t + \beta_2 lnAB_t + \beta_3 lnOB_t + \beta_4 lnCS_t + \varepsilon_t \quad (1)$$

The model was further decomposed into an expanded form as follows:

$$lnNP_t = \beta_0 + \beta_1 lnMB_t + \beta_2 lnAB_t + \beta_3 lnOB_t + \beta_4 lnCS_t + \varepsilon_t \quad (2)$$

$$lnROA_t = \beta_0 + \beta_1 lnMB_t + \beta_2 lnAB_t + \beta_3 lnOB_t + \beta_4 lnCS_t + \varepsilon_t \quad (3)$$

$$lnROE_t = \beta_0 + \beta_1 lnMB_t + \beta_2 lnAB_t + \beta_3 lnOB_t + \beta_4 lnCS_t + \varepsilon_t \quad (4)$$

Where: NP= Net Profit
ROA= Return of Assets
ROE= Return on Equity

4.7.1.1 Regression Equation with Net Profit as the Dependent Variable

The study sought to examine the regression analysis of the regressors for the firm performance (Net Profit) relationship with the independent variables which were used in the study. Table 4.9 revealed the findings of the regressors

Table 4.9: Descriptive Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.981a	0.657	0.725	0.31200

a. Predictors: (Constant), Mobile Banking Channels, Agency Banking, Internet Banking and Card Services.

b. Dependent Variable: Performance (Net profit margin).

The findings show that performance was adequately explained by the predictor variable; Net Profit. R square of 0.657 supported the findings. This implies that the predictor variables can explain 65.7% of the performance of banks in terms of Net profit margin and implies that 34.3% of performance can be explained by other factors not captured by this study.√

4.7.1.2 Regression of Coefficients

The results of the descriptive statistics and regression analysis are shown in table 4.10 below:

Table 4.10 Regression of Coefficients

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.152	1.312		1.493	0.0810
	Mobile Banking	0.796	0.744	0.966	7.105	0
	Agency Banking	0.689	0.103	0.003	3.126	0.001
	Online Banking	0.563	0.093	0.107	3.355	0.625
	Card Services	0.569	0.423	0.201	2.113	0.001
a Dependent Variable: Performance (Net profit margin)						

NP = 2.152 + 0.796X1+0.689X2+0.563X3+0.569X4

Where Y is the Performance and β0, β1, β2 and β3 are the regression coefficients and X1, X2 and X3 is Mobile banking, Agency Banking, Internet Banking and Card services.

Mobile Banking influences significantly on performance (profit) as presented by t value of 7.105 with significance of 0,000 (0,000 < 0,005). Mobile banking increases fees income of the organisation, therefore increasing the revenue and bottom line. Through mobile banking, operational efficiency is improved, and

losses are minimized that are caused by delays in catering to customer orders. Mobile banking enables clients to send and receive electronic money wherever they have cell coverage and brings convenience to customers leading to customers' satisfaction. As a result of mobile banking, funds transfer between accounts is allowed, resulting in increased transactions through the bank, leading to high liquidity of the bank which the bank uses to make profit.√

Agency banking influences significantly on performance (profit) as indicated by a t value of 3.126 with significance of 0,001 (0,000 <0,005). Through agency banking, the banks are able to reach out to a high number of customers and therefore increases in revenue, which ultimately leads to improved profit.

Internet banking influences significantly on performance (profit) as shown by the results with a t value of 3,355 with significance of 0,425 (0,425 > 0,005). Internet banking improves revenue through the volume of transactions and users can access their accounts in the comfort of their homes. The payment of utility bills through internet banking influences financial performances as the partnership of utility operators such as ZETDC, DSTV and ZINARA brings commission fees to the organisation (bank) which increases its revenues (Muchabaya, 2019).√

Card Services impact significantly on performance (profit) as shown by the results with a t value of 2,113 with significance of 0,001 (0,001 > 0,005). Through card services customers are able to use ATMs such as those offering ZIMSWITCH platforms, and a bank can generate income from other banks' customers that use its ATM machines or from third parties that cooperate with it.

This implies that a unit improvement in Mobile Banking influences financial performance, while all other factors held constant results in 0.796 increase in performance (revenue, profit, market share and return on assets), a unit improvement in Agency banking with other factors ceteris paribus leads to 0.689 increase in performance, a unit increase in internet banking leads to 0.563 increase in performance (revenue, profit, market share and return on assets) and a unit increase in card services leads to 0.569 increase in performance (revenue, profit, market share and return on assets).

4.7.1.3 Regression Equation with Return on Assets as the Dependent Variable

The study examined the regression analysis of the regressors for the firm performance (Return on Assets) relationship with the independent variables which were used in the study. Table 4.11 revealed the findings of the regressors:

Table 4.11: Descriptive Statistics of the data used in the study: Model Summary:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.952a	0.901	0.952	0.32500

a. Predictors: (constant), Mobile Banking Channels, Agency Banking, Internet Banking and Card Services.
b. Dependent variable: Return on Assets

Table 4.11 above shows the model summary of regression analysis. The coefficient of determination (R-square) displays how the Return on assets varied Mobile Banking Channels, Agency Banking, Internet Banking and Card Services. R square value indicates that 90% variance on return on assets among digitalization as explained by the independent regressors. Table 4.12 revealed the results of the coefficients of the regression:

Table 4.12: Coefficient Results

Model	**Unstandardized Coefficient**		**Standardized Coefficient**	**T**	**Sig**
	B	**Standard Error**	**Beta**	**5.318**	
(Constant)	2.135	0.525		1.802	0.075
Mobile Banking	0.643	0.096	0.859	1.821	0.128
Agency banking	0.432	0.093	0.550	0.032	0.002
Online Banking	0.256	0.110	0.812	1.602	0.001
Card Services	0.054	0.085	0.125	0.633	0.529

a. Dependent Variable: Return on Assets

From the results presented in table 4.16, the following regression equation was established:

ROA =2.135 + 0.643(MB) + 0.432(AB) + 0.256(OB) +0.054(CS)

From the regression equation above, holding all factors constant (Mobile Banking Channels, Agency Banking, Internet Banking and Card Services), the factors affecting the firm financial performance (return on assets) will be 2.135. Mobile banking and online banking had the strongest relationship with ROA with t values of 18.21 and 1.602 respectively meaning a unit increase in mobile banking and a unit increase in online/ internet banking will enhance the revenue of the firm thereby improving the return on assets of the organizations by 0.643 and 0.432 respectively. The findings mean that transactional time reduction and service quality and convenience improves profitability and technical performances of the banks. Online banking system's capability to provide comprehensive information about customers' financial profiles and buying behaviour which also offer detailed comprehension of customers enables customizing of advertising and products and gives an opportunity for cross-selling (Shah and Clarke, 2009).√

A study by Kithuka (2012), noted that agency banking reduces queues in the banking halls considerably, more accounts being opened by the targeted populace and financial services made accessible to the unbanked and remote areas, these agents have significantly impacted on the performance of banks. In addition, agency banking allows banks to reduce expenses on buildings, resources, and equipment. This contributes to costs minimisation associated with maintaining branches (Chindudzi et al, 2020).√

4.7.1.4 Regression Equation with Return on Equity as the Dependent Variable

The study sought to examine the regression analysis of the regressors for the firm performance (Return on Equity) relationship with the independent variables which were used in the study. Table 4.13 revealed the findings of the regressors:

Table 4.13: Descriptive Statistics of the data used in the study: Model Summary:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832a	0.567	0.573	0.4213

a. Predictors: (constant), Mobile Banking Channels, Agency Banking, Internet Banking and Card Services.

b. Dependent variable: Return on Equity

Table 4.13 above shows the model summary of regression analysis. R square, also called the coefficient of determination, shows how the net profit varied with Mobile Banking Channels, Agency Banking, Internet Banking and Card Services. R square value indicates that 56.7% variance on return on equity among digitalization strategies is explained by the independent regressors. Table 4.14 revealed the results of the coefficients of the regression:

Table 4.14: Coefficient Results

Model	**Unstandardized Coefficient**		**Standardized Coefficient**	**T**	**Sig**
	B	**Standard Error**	**Beta**	**5.318**	
(Constant)	1.759	0.514		1.802	0.075
Mobile Banking	0.532	0.016	0.623	1.582	0.128
Agency banking	0.323	0.093	0.328	0.102	0.004
Online Banking	0.563	0.123	0.549	2.602	0.002
Card Services	0.236	0.035	0.138	0.633	0.001

a. Dependent Variable: Return on Equity

From the results presented in table 4.19, the following regression equation was established:

ROE =1.759 + 0.532(MB) + 0.323(AB) + 0.563(OB) + 0.236(CS)

From the regression equation above, holding all factors constant (Mobile Banking Channels, Agency Banking, Internet Banking and Card Services), the factors affecting the firm financial performance (Return on Equity) will be 1.759. Mobile

Banking and Online banking had the strongest positive relationship with ROE with a regression coefficient of 0.623 and 0.549 respectively meaning a unit increase in mobile banking and internet/mobile banking will increase Return on equity of the organization by 0.532 and 0.563 respectively. There is also a positive correlation between card services and agency banking and Return on equity with regression coefficients of 0.138 and 0.328 respectively. In terms of mobile banking, the reduction in manual tasks improves process times and results in improved efficiency. This improves the turnaround time, enabling improved service delivery improved output. More so, consumer dissatisfaction with division banking due to long-term and inadequate customer support is removed, and this contributes to increased market share for electronic monies (Karjaluoto, Mattila & Pento, 2012).√

A higher usage of electronic retail payment instruments seems to stimulate banking business leading to better banking performance dominated by fee income (Svova, 2019). According to Nyangosi (2006), internet bankers are the most profitable and wealthiest to bank and therefore internet banking improves performance significantly. A study by Pooja and Singh (2009) conducted in India showed that the adoption of internet in banks resulted in more incomes and profits and therefore internet banking improves revenue.√

4.8 Discussion

The regression results indicate that a significant positive relationship exists digitalisation and profit, return on assets and return on equity of banks.

By charging transaction costs on all online channels banks increases their revenues, which ultimately increase their profits and return on assets. By also using digital internet banking, there is high volume of transactions movement, which increases income of banks. Card service brings convenience to users and therefore can perform transactions in shops, and anywhere where their cards are accepted. This also improve the revenue of the banks through fees.

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Documentary analysis and inspection of ZB Banks financials revealed that the Net revenue for the bank improved by 21%, from $69 million in 2017 to $83.5m in 2018. This was underpinned by improved performance in net income from internet and mobile banking channels (ZB Bank Annual Financials, 2018). The financials also showed that Net income from transaction fees recorded a 29.1% improvement in 2018 (ZB Bank Annual Financials, 2018).√

A higher usage of electronic retail payment instruments seems to stimulate banking business leading to better banking performance dominated by fee income (Svova, 2019). According to Nyangosi (2006), internet bankers are the most profitable and wealthiest to bank and therefore internet banking improves performance significantly. A study by Pooja and Singh (2009) conducted in India showed that the adoption of internet in banks resulted in more incomes and profits and therefore internet banking improves revenue.

A study conducted by Soh et al. (2014) indicated that online banking reduces operational costs and hence lead to greater profits for banks. Mazana et al. (2016) also found out that banks which have adopted online banking have improved their performance through improved productivity and efficiency. In addition, online banking systems allows banks to design and deploy products for market segments that are varying (Chindudzi et al, 2020).√

Card services such as visa cards/master cards, improves financial performance of banks through transaction fees. Through card services, banks are provided with more avenues for income generation, where they generate income from additional non-interest sources. Introduction of card services and products, which are accessible and convenient, has made it possible for banks to attract prospective customers thus allowing them to boost their market share (Akhisar et al., 2015). According to Dew (2012), the other major benefit from card services is fee-based income. For example, through card services customers are able to use ATMs such as those offering ZIMSWITCH platforms, and a bank can generate income from other banks' customers that use its ATM machines or from third parties that cooperate with it.

Through mobile banking, operational efficiency is improved, and losses are minimized that are caused by delays in catering to customer orders. Mobile

banking enables clients to send and receive electronic money wherever they have cell coverage and brings convenience to customers leading to customers' satisfaction. As a result of mobile banking, funds transfer between accounts is allowed, resulting in increased transactions through the bank, leading to high liquidity of the bank which the bank uses to make profit. Moreover, balance inquiry facilities offered by mobile banking enhances the fees as it comes at a cost which banks use to generate revenues leading to hyper profits (Muchabaya, 2019).

A study by Muyoka (2014) on the effects of mobile banking on the financial performance of banks in Kenya found out that a significant relationship between financial performance and mobile banking. In terms of mobile banking, the reduction in manual tasks improves process times and results in improved efficiency. This improves the turnaround time, enabling improved service delivery improved output. More so, consumer dissatisfaction with division banking due to long-term and inadequate customer support is removed, and this contributes to increased market share for electronic monies (Karjaluoto, Mattila & Pento, 2012).

A study by Ferdous, Mosharrafa and Farzana (2015) mentioned that through agency banking convenience to customers is enhanced which results in customer satisfaction. Mwende, Bichanga and Mosoti (2015) mentions that as banks sought to move near to its customers by developing agents within local towns and locations agency banking has promoted greater accessibility to formal banking services and is a cheaper alternative to traditional branch-based banking. Therefore, agency banking has been a key driver for performance in banks. A study by CBK (2014), noted a substantial increase in retail deposits in commercial banks who adopted agency banking.

A study by Chokuda-Santu, Mawanza and Muredzi (2017) noted that most banks had adopted agency banking and closed most of their branches and left agents to offer its services to the customers which has resulted in cost minimisation. However, Santu et al (2017) mentioned drawbacks associated with agency banking and posits that the giving away of transacting rights to a third party exposes the bank to system hacking attempts.

From these findings where all the elements of digitalisation were positively related to performance. The study interprets that digitalisation has a significant impact on

the performance of banks. This means the null hypothesis **(H0)** which states **there is a positive relationship between digital banking and performance of Zimbabwean banks** is accepted. **(H1)** which states that **there is no positive relationship between digital banking and performance of Zimbabwean banks** is therefore rejected.√

4.9 Chapter Summary

This chapter has presented the findings and provided an analysis and interpretation of results. The chapter has also provided a discussion and comparison of with other previous researchers' findings. The next chapter provides a summary of the study, conclusions, recommendations and suggestions for areas that needs further study√.

CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions, implications and recommendations of this study.

5.2 Summary of the study

The main objectives of the study were to investigate on the extent of digitalisation among Zimbabwean Banks, the drivers of digitalisation, the challenges faced by banks in adopting and operating digitalised systems and the relationship between digitalisation and performance of the banks. To achieve this objective, the study population comprised of employees of commercial banks. The study adopted a cross sectional survey research design and both qualitative and quantitative research methods were employed to ensure a comprehensive data collection. The study used mainly the questionnaire technique and both qualitative and quantitative analysis techniques were adopted. Questionnaires were administered and supported by interviews to assess the views of the respondents. Interviews were used to compliment on the shortcomings of questionnaires to ensure that adequate data was collected. The study's challenges included time and financial resources, but the researcher had to flex the available time and resources in order to achieve the objective needs of the study.√

The following were the research findings:

Objective 1: To establish the extent of digitalisation among Zimbabwean Banks

The study found out that digitalisation has been adopted to a greater extent by most commercial banks in Zimbabwe. The findings highlight personal computer banking has been adopted to a large extent, that mobile banking services have been adopted by all the surveyed banks in Zimbabwe, that internet banking has been adopted to a large extent by banks in Zimbabwe, that visa cards/master cards have been adopted to a larger extent by almost all banks in Zimbabwe and that agency

banking has been adopted by banks in Zimbabwe. Most banks have adopted this business model that enables banks to provide financial services through nonbank Agents, such as retail outlets, post offices, pharmacies, service stations, Universities and colleges promoting financial inclusion in areas where there are no banks. √

Objective 2: To explore the drivers of digitalisation for Banks in Zimbabwe.

The study found out that innovation, globalisation and development of Fintech banking methods and competition among banks are the major drivers for banks digitalisation in Zimbabwe. Because of the need to get a large market share by offering convenience banking, most banks are on the lookout for latest technologies to enhance convenience banking as they compete together in the industry. Thus customer satisfaction is also a major driver behind banks adoption of digital banking tools.

Objective 3: To establish the challenges faced by banks in adopting and operating digitalised systems

The study established that the most prevalent challenges in the banks' adopting and use of digitalisation methods include factors such as high risk of cybercrimes, threats from non-bank disruptors, lack of expertise to lead digitalisation initiatives and cost of adopting digital technologies. Majority of respondents also pointed out that the associated costs for regularizing digital operations are resultantly high. These costs include costs of acquiring Fintech equipment and technologies. Users' attitude towards use of digital platforms was also mentioned as one of the factors affecting the adoption of digital methods of banking.√

Objective 4: To determine the relationship between digitalisation and performance of banks.

The study established that there exists a significant positive relationship between digitalisation and profit, return on assets and return on equity of banks. The study concludes that Mobile Banking, Agency banking, Internet Banking and card services all influences significantly on performance (revenue, return on assets and return on equity). √

5.3 Conclusions

The study made the following conclusions

Objective 1: To establish the extent of digitalisation among Zimbabwean Banks

The study found out that digitalisation has been adopted to a greater extent by most commercial banks in Zimbabwe. The study concludes that there has been high adoption of digitalization by commercial banks in Zimbabwe. This has seen most banks offering digital banking methods such as internet banking, mobile banking services and virtual banking. Customers have been able to transact over their cell phones as opposed to being in the banking hall to process RTGS transactions. A study by Kaseke and Charira (2012) noted that an increasing number of depositors switched to online banking. Kaseke et al (2012) further mentioned that Presently, the mobile operator led business models of Virtual Banking have taken the centre stage in Zimbabwe.

Objective 2: To explore the drivers of digitalisation for Banks in Zimbabwe.

The study found out that innovation, globalisation and development of Fintech banking methods and competition among banks are the major drivers for banks digitalisation in Zimbabwe drivers of digitalisation for Banks in Zimbabwe. The study concludes that the high levels of digitalization by banks has been a result of their need to compete with global firms and advancement in technologies. The world of technology has moved to more use of internet which has eliminated most manual systems, hence the need for banks to remain abreast with changes.

Objective 3: To establish the challenges faced by banks in adopting and operating digitalised systems

The study established that the most prevalent challenges in the banks' adopting and use of digitalisation methods include factors such as high risk of cybercrimes, threats from non-bank disruptors, lack of expertise to lead digitalisation initiatives and cost of adopting digital technologies. The study concludes that banks face challenges in the adoption of internet banking and should always aim to eradicate these challenges and devote more funds to continuous training of staff in other

more technologically advanced countries to improve expertise in developing digital banking tools.√

Objective 4: To determine the relationship between digitalisation and performance of banks.

The study established that there exists a significant positive relationship between digitalisation and profit, return on assets and return on equity of banks. The study concludes that Mobile Banking, Agency banking, Internet Banking and card services all influences significantly on performance (revenue, return on assets and return on equity). The study concludes that a significant positive relationship between digitalization and organisational performance. The study concludes that Mobile Banking, Agency banking, Internet Banking and card services all influences significantly on performance (profit, return on assets and return on equity). The study concludes that banks should continuously upgrade their digital banking tools as they have a positive impact on increasing their revenues through transaction charges.√

5.4 Implications

The study has benefited management of commercial banks, ICT and FINTECH professionals and customer relationship management practitioners by providing insights on how digitalization influences the performance of organisations. To this effect, this study serves as a wakeup call for organisations to strengthen their digital banking methods as modern day customers have become technologically keen and always up to date with latest technologies that brings banking convenience to their homes.

5.5 Recommendations

5.5.1 Based on the study findings and conclusions, the researcher recommends that commercial banks should always be on the lookout of new technologies and digital banking methods. Improving these will have a great impact on their performance as these technologies bring in efficiency and convenience to customers which ultimately leads to customer satisfaction and therefore revenue and market share growth of the companies.√

5.5.2 While globalisation and competition may have been the major drivers for adoption of digital methods, organisations need to place customers at heart and consider customer satisfaction as the major driver for developing new technologies. To this end banks must always do customer surveys to identify and establish what their customers expect from them in terms of service delivery. This will allow the banks to develop and tailor make new technologies to meet customer requirements.

5.5.3 The researcher also recommends that commercial banks should allocate budgets and devote more resources to ensure that they eradicate the challenges inhibiting the successful and efficient use of digitalization methods and to reduce high risk of cybercrimes and eradicate lack of expertise to lead digitalization initiatives through training and retraining of staff.√

5.5.4 Moreover, banks must understand the implications of digitalization on their overall performance as this will help them to understand the value they lose by not adopting current digital technologies. Financial and management reporting of banks should separate the benefits derived from digitalization against other bank revenues. This will spur the banks' efforts to be techno savvy√.

5.6 Suggestions for further research

This study covered only the banking sector and ignored other financial institutions such as insurance companies and microfinance houses. A comprehensive study on a comparative basis of all companies in the financial institutions industry should be done to ascertain the varying digital methods adopted. The sample size and the number of actual respondents were limited to only employees of banks. Further studies incorporating customers must be conducted to ascertain their views on digitalization of banks in Zimbabwe. Further research should also be conducted to assess challenges faced by customers of these banks in utilizing the digital banking methods offered by the banks and also to establish the relationship between digital banking methods and customer satisfaction in Zimbabwe.√

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APPENDICES

QUESTIONNAIRE

Dear: Respondent

My name is Thabani Mtetwa. I am a student at the University of Zimbabwe and currently undertaking a study to investigate the impact of digital banking on the financial performance of banks. This research is being conducted in partial fulfilment of a Master of Business Administration Degree. Your responses will be held confidentially and used for academic purposes only. Your participation in this study is greatly appreciated. Should you have any other questions, please feel free to contact the researcher on the contact details below;

Thabani Mtetwa

+ 263 77 338 8879

Email: tmtetwa@ndorobank.com

SECTION A: DEMOGRAPHIC INFORMATION

Fill in the blanks or tick in where necessary

Section A: Demographic data

1. What is your gender?

   Male ☐ Female ☐

2. Which of the following is your age group?

18-30	

31-40	
41-50	
51-65	
65 and above	

3. What is your work status?
   Front line staff ☐ supervisor ☐ Manager ☐

4. How long have you been working in the company?
a) Less than 1 year ☐ b) 2 to 5 years ☐ 6 to 10 years ☐

d) 11-20 years ☐ e) 20 or more years ☐

5. Level of education of respondents

   Primary ☐
   Secondary ☐
   Diploma ☐
   Degree and Above ☐

SECTION B

Extent of digitalization among Zimbabwean Banks

6. The following are some of digitalised systems applied by financial
   Kindly indicate the extent to which your organisation has implemented the following systems on a scale of 1-5

   5= very large extent 3=to some extent 4=large extent 2=smaller extent 1=no extent

BANKS DIGITALISATION	**5**	**4**	**3**	**2**	**1**
Personal Computer (Pc) Banking					
Mobile Banking					
Internet Banking					
Cross-Border E-Banking					
Virtual Banking					
Point Of Sale Machines					
Visa Cards/Master Cards					

WhatsApp Banking					
Agency Banking					
Mobile Banking Applications					

Any other digital banking strategies adopted by your bank?.....

.....

DRIVERS FOR DIGITALISATION FOR BANKS IN ZIMBABWE

7. Which of the following are drivers of digitalization? Tick where appropriate.

Driver of customer retention	**Strongly Agree**	**Agree**	**Neutral**	**Agree**	**Strongly agree**
Innovation					
Government regulations					
Globalization					
Customers					
Competition					
Cost reduction					
Performance Improvement					

Any other drivers for digital banking?.....

.....

THE CHALLENGES BEING FACED BY BANKS IN ADOPTING AND OPERATION DIGITALISED SYSTEMS

8. The following are some of challenges being faced by banks in adopting and operating digitalised systems
   Kindly indicate the extent to which your department or branch has been affected by the following challenges on a scale of 1-5
   5= very large extent 3=to some extent 4=large extent 2=smaller extent 1=no extent

Challenge	**5**	**4**	**3**	**2**	**1**
Cyber Crime					
Threats from non-bank disruptors					
Users' attitude					

Lack of Expertise to Lead Digitization Initiatives					
Lack of Overall Digitization Strategy					
Costs of adopting Fintech Methods					
The regulatory environment					

Any other challenges in the implementation and adoption of digital banking?

.....

IMPACT OF DIGITALISATION ON PERFORMANCE

9. Kindly indicate if digitalisation has an impact on organizational performance

	Strongly Agree	**Agree**	**Neutral**	**Agree**	**Strongly agree**
Digital banking leads to improved profitability					
Digital banking contributes to an increase in market share					
Company performance improved as a result of digitalised systems					
The company has enjoyed certain competitive advantages which have led to an improved performance as a result of digitalised systems					
Digital banking has brought efficiency on staff execution of duties hence improvement in the service quality					
Digital banking has improved efficiency and convenience to customers					

10. With your experience what advice would you give to the banking sector concerning digitalisation and performance of financial institutions

……

……

……

……

Thank you for your co-operation

APPENDIX 2: INTERVIEW QUESTIONS

1. How well do think that Zimbabwean banks have adopted digital banking?

2. What are the major drivers of digital banking for banks in Zimbabwe?

3. What drives digital banking in your organisation?

4. Are you facing any challenges in adopting and operating digital banking systems?

5. Does digital banking bring any form of efficiency to your department?

6. Does implementation of digital banking contribute to the profitability of the bank?

THANK YOU