THE IMPACT OF DIGITAL BANKING ON THE FINANCIAL INCLUSION OF RURAL CUSTOMERS: A CASE STUDY OF THE GA-MOTHAPO COMMUNITY

by

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ABSTRACT

Financial inclusion has become an important factor in reducing challenges such as inequality in the world. Digital banking has been identified as contributing towards promoting financial inclusion and ensuring that even those in remote areas have access to basic financial services and products. However, challenges such as unemployment, inadequate infrastructure, data affordability, and digital illiteracy present a significant challenge in realising financial inclusion.

The aim of this study was to investigate how rural customers have used digital banking to access financial services and products. The research will contribute towards future policy, strategy, and innovation given the imperative for policymakers, regulators and financial institutions to achieve financial inclusion of the greater population. The research was guided by the theoretical foundation of the technology acceptance model (TAM) and also adopted the financial inclusion theoretical framework.

The researcher employed a mixed methods approach using thematic analysis. Semi-structured interviews were conducted to collect primary data. The findings revealed that the rural customers of Ga-Mothapo mainly use cellphone and internet banking and, through digital banking have been able to access basic financial services and products that meet their needs. However, even though they found digital banking to be useful, they felt the charges were high. These findings may be used by banks in South Africa to evaluate their fee structure for basic products and services that are tailored for underserved customer. For instance, TymeBank aims to achieve financially inclusion of rural customers by providing a product that has low transaction fees and no monthly bank charges. This digital retail bank further aims to encourage adoption and usage through its retail partnership distribution network, banking fee structure, and simple and transparent pricing. The research provides new insights into the role of digital banking in enhancing the financial inclusion of rural customers. The research also reveals the frameworks, strategies, and challenges that policymakers should explore to enhance financial inclusion for rural customers.

APPROVAL

This research has been examined and approved as meeting the required standards of scholarship for potential fulfilment of the requirements for the degree of Master of Business Administration.

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DECLARATION OF ORIGINAL WORK

I, **Khanyisile Maswanganyi,** declare that this report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the Master of Business Administration degree at Regenesys Business School, Sandton, South Africa. It has not been submitted before for any degree or examination at any other university or educational institution.

.... 28/02/2023

Khanyisile Maswanganyi Date

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ACRONYMS & ABBREVIATIONS

AFI	Alliance for Financial Inclusion
ATM	Automated teller machine
BASA	Banking Association of South Africa
CAQDAS	Computer-assisted qualitative data analysis software
FIC	Financial Intelligence Centre Act (FIC Act)
Fintech	Financial technology
FPS	Faster payment system
FSC	Financial Sector Charter
FSCA	Financial Sector Conduct Authority
IDP	Integrated Development Plan
IFWG	Intergovernmental Fintech Working Group
NDP	National Development Plan
NPCI	National Payments Corporation of India
SASSA	South African Social Security Agency
SARB	South African Reserve Bank
SDGs	Sustainable development goals
SMMEs	Small, medium and micro enterprises
Stats SA	Statistics South Africa
TAM	Technology acceptance model
TCF	Treating Customers Fairly
TFG	The Foschini Group
UN	United Nations
UPI	Unified Payments Interface
USSD	Unstructured supplementary service data

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CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This study explored how digital banking has been used as a tool for access to financial services by rural customers of the Ga-Mothapo community in Limpopo Province. Traditionally, customers were expected to travel to physical bank branches for banking services, such as cash deposits and withdrawals, money transfers, performing financial transactions, and receiving their account statements. This traditional method disadvantaged those rural consumers who were compelled to take expensive and long journeys to reach physical banks, which were established in geographically remote urban areas.

Today, technology has made products and services more accessible to the end consumer, thus changing how customers interact with the suppliers of these products and services. Access to technology has introduced the potential to address social inequalities facing many nations (Aruleba & Jere, 2022). In the financial sector, digital banking narrows the gap between rural and urban customers (de Pablos, 2018). In South Africa, the obstacle facing rural customers is that they are located in geographically remote areas where no physical bank branches exist. Therefore, digital banking offers a more affordable way to access formal financial services (Ramnath, 2018). This points to the importance of researching the impact of digital banking as a means of financial inclusion of rural customers, to investigate ways that banks can improve strategies for rural customers to not only adopt digital banking but to also make use of it in a way that benefits them.

1.2 BACKGROUND TO THE RESEARCH

Traditionally, customers were required to visit the physical bank branch for basic banking services, such as cash deposits and withdrawals, money transfers, performing financial activities, and receiving their account statements (Ghandi & Gupta, 2020). This disadvantaged rural consumers who were compelled to endure expensive and long journeys to reach physical bank branches located in geographically remote urban areas (FSCA, 2021). Louis and Chartier (2017) stated that vulnerable communities in countries such as South Africa have been marginalised from the country's formal economy owing to limited or no access to financial services. This has affected their ability to participate fully in economic activities, consequently giving rise to income inequality in the population (Omar & Inaba, 2020).

Over the years, addressing financial inclusion has become a priority for many countries. The United Nations (UN) lists financial inclusion as a crucial objective for UN member countries to tackle the sustainable development goals (SDGs) of hunger elimination, wealth or employment creation, and poverty eradication (Christine, 2017, as cited in Achugamonu et al., 2020). The National Treasury of South Africa (2020) stated that financial inclusion is an important element in addressing inequality and improving the quality of life of low-income consumers. Three dimensions measure financial inclusion: the use of banking services, access to banking services, and the penetration of banking (Ratnawati, 2020).

To reach a wider range of customers, banks and financial technology (fintech) companies started offering digital financial services that would contribute to the financial inclusion of those who were financially excluded and the underserved population (Lauer & Lyman, 2015). Fully digital banks such as TymeBank entered the banking market intending to serve low-income rural customers by offering low-cost transaction accounts (Jenik, 2022). By being accessible and affordable for the underserved population, TymeBank has become widely popular amongst rural customers (Jenik, 2022).

Recognising the importance of financial inclusion, the South African government has committed to improving it (Mhlanga et al., 2021). The National Development Plan (NDP) Vision 2030 forecasts that the banked population will have increased to approximately 90% by 2030 (Mhlanga, 2020). Digital innovation, such as digital banking, has changed how financial services are supplied and can reach the financially excluded population and rural consumers, eliminating the need for physical bank branches (Shipalana, 2019).

1.3 STATEMENT OF THE PROBLEM

Financial inclusion is the availability of inexpensive financial services to impoverished and excluded populations. Financial inclusion has rapidly become a worldwide concern and is a priority for global institutions such as the UN, the World Bank, and the Alliance for Financial Inclusion. Despite advances by such international bodies in promoting financial inclusion, it remains a source of concern for policymakers worldwide (Tissot & Gadanecz, 2017). At the macroeconomic level, financial inclusion has a long-term beneficial influence on growth, while reducing income inequality and poverty (Barajas et al., 2020).

Rural communities in South Africa are disproportionately impacted by financial exclusion. Rural South Africans want access to financial services for various reasons, including financial services businesses seeking help to build offices and offer services in certain locations. The rural population of South Africa lacks financial literacy skills, making it harder to comprehend and utilise financial services. Owing to poverty, rural South Africans may need help with saving or investing, which, if not attended to, may stifle economic growth. Financing is scarce, and rural entrepreneurs may need more funding to establish or expand their operations. Residents in rural areas, particularly those living far from financial service providers, pay extra for financial activities, especially long-distance travellers. South Africa and other financial service providers have introduced several initiatives to boost rural financial inclusion. To make financial services more accessible to remote communities, the government has invested in roads and internet connections. Financial services companies provide financial literacy programmes to assist individuals living in rural areas in understanding and using financial services. Microfinance, also known as micro-lending, has evolved to meet the need for small loans in rural areas, especially among individuals who do not have bank accounts. To improve financial inclusion, a holistic strategy addressing the numerous issues rural South Africans face is required. Infrastructure, financial literacy, and financial services investments may reduce financial exclusion and improve rural economic growth.

According to Claasen (2022), despite the size of South Africa's banked population at 85%, clients in rural regions continue to need help to obtain banking goods and services owing to their geographic remoteness. The problem statement, therefore, is that low-income customers who reside in rural communities in South Africa struggle to access basic financial services and products because of distance, a lack of suitable financial inclusion frameworks, and the high cost of banking products and services.

1.4 AIM OF THE STUDY

Considering the research problem, the study aimed first to explore the role that digital banking plays in enhancing access to basic and useful financial services and products for the rural customers of Ga-Mothapo. Second, the study aimed to investigate how stakeholders, such as emerging digital banks, regulators, associations, and government, are contributing to enhancing financial inclusion for rural customers through their strategies and frameworks, as well as some of the challenges they face. The purpose was to provide recommendations to help banks and other financial service providers to formulate relevant strategies that would help promote financial inclusion for rural customers.

1.5 RESEARCH QUESTIONS

Given the outlined problem statement and the research objectives mentioned below, the research questions that were addressed by this study were:

1. How has digital banking impacted the financial inclusion of the Ga-Mothapo rural community?
2. What strategies have digital banking providers implemented to serve financially excluded customers?
3. What policy frameworks and strategies have been established by public sector financial regulators and institutions of South Africa to address financial inclusion?

1.6 RESEARCH OBJECTIVES

The study's general objective was to investigate the impact of digital banking on the financial inclusion of rural communities. The specific objectives of this study were:

1. To investigate the impact of digital banking on the financial inclusion of the Ga-Mothapo rural community.
2. To explore the strategies that digital banks have implemented to serve financially excluded customers.
3. To analyse the policy frameworks and strategies that public sector financial regulators and institutions of South Africa have established to address financial inclusion.

1.7 RESEARCH DESIGN

There are three types of research paradigms: positivism, critical theory, and interpretivism. For this study, the researcher used the interpretivism research paradigm. This paradigm was the most appropriate for the research because it acknowledges that methods used to study humans cannot be the same as those used to investigate physical phenomena (Alharahsheh, 2020). Therefore, by adopting the interpretivism paradigm, the researcher accepted the ontology that a single occurrence can have several interpretations, as opposed to a single truth that is decided by a method or measurement (Pham, 2018). The researcher sought to understand the lived experiences of the rural communities in using digital banking. By applying a methodology that is in line with the interpretivism paradigm, the researcher adopted an objective mindset to understand the phenomenon through the experiences of the participants and not those of the researcher.

Guided by research objectives, a case study design was used for the research. Case study design allows a researcher to focus on a specific area and acquire an in-depth knowledge of that area. Using a case study design gave the researcher a deeper understanding when focusing on the Ga-Mothapo rural community and its experiences with digital banking.

Because the research sought to explore and understand the impact of digital banking on the financial inclusion of rural customers, the researcher employed a qualitative research approach. This research approach was considered the most appropriate as it facilitates an understanding of certain situations based on participants' experiences and has fewer generalisations (Alharahsheh, 2020). By using a qualitative approach, the researcher could acquire a deeper understanding of the role that digital banking plays in rural customers' experiences with accessing financial services and products. As the research sought to address questions relating to "how" and "what", the qualitative method would allow the researcher to follow an exploratory and descriptive design to provide quality findings that would respond to the research questions and meet the research objectives.

Data was collected using semi-structured interviews. The researcher preferred this method of data collection because the questions were open-ended, which allowed for flexibility. The semi-structured method helped the researcher to identify patterns in the responses whilst still allowing for comparison of the answers given by the participants (Ruslin et al., 2022). Open-ended questions allowed the researcher to explore further through follow-up questions that would probe into the responses given (Alamri, 2018).

In addition, the researcher used the literature review to integrate and evaluate the data and information in line with the research questions, research objectives, and main themes (Cantero, 2019).

These semi-structured interviews for the organisations—TymeBank, Financial Sector Conduct Authority (FSCA), the Banking Association of South Africa (BASA), and National Treasury—were conducted through Zoom and Microsoft Teams. The interviews with the community of Ga-Mothapo were conducted face-to-face.

The researcher used thematic analysis to analyse the data because it allowed her to identify patterns in the data collected to give meaning to the data. The data is, therefore, presented in themes according to the research objectives and other themes that were identified during data analysis. The researcher used computer-assisted qualitative data analysis software (CAQDAS) to assist in the thematic analysis. ATLAS.ti version 8 was deemed the most appropriate CAQDAS analytical tool for analysing the data.

For the target population, the researcher targeted banking clients that included small, medium and micro enterprises (SMMEs), stokvels, ward committee leaders, and the traditional authority of the Ga-Mothapo, community. The population also included emerging low-cost digital banks and stakeholders in the financial sector, such as the National Treasury of South Africa, the FCSA, and BASA. To sample the target population, the researcher applied non-probability purposive sampling. This sampling method is often used for case study research designs and qualitative research studies (Taherdoost, 2016a). Therefore, the samples were drawn based on the target population’s knowledge and understanding of the topic.

To ensure validity, the researcher implemented various strategies, including using the appropriate methodology and instruments of data collection and analysis, staying true to phrasing, taking detailed notes during interviews, and using an audit trail. To ensure reliability, the researcher formulated the interview questions clearly, guided by the research objectives; asked participants the same interview questions according to the research objectives for which the results were intended; and recorded, transcribed and systematically analysed all the interviews.

The researcher applied for ethical clearance from the Regenesys Business School ethics committee. The researcher was granted ethical approval, after which she proceeded to collect data. The participants were always protected from harm. Before commencing with the interviews, the participants were requested to sign consent forms which detailed the objectives of the study and highlighted that the study was voluntary, that they would remain anonymous and that they could withdraw from the study at any time. In addition, the researcher avoided all forms of plagiarism by citing all the sources used in the research.

1.8 RATIONALE BEHIND THE STUDY

The study aimed to explore how digital banking has been used as a tool for access to financial services by rural customers of the Ga-Mathapo community. Being a rural community in a remote area, the residents of Ga-Mothapo were previously faced with the challenge of accessing banking products and services. This meant that they had to travel long distances to access basic banking products and services. Through exploring their lived experiences with digital banking, the researcher was able to make recommendations on the role that banks can play to enhance financial inclusion for rural customers using digital banking. The study also investigated the role that low-cost emerging digital banks and the government are playing to increase financial inclusion.

1.9 SIGNIFICANCE OF THE STUDY

As mentioned in the research problem, financial inclusion is a matter of national and global importance. First, the significance of the study lies in the influence it will have on financial policies for the government in South Africa. The results and recommendations will contribute to the information that policymakers should consider when proposing and implementing policies on financial inclusion, especially for rural customers.

Second, it will contribute to the study field that associates financial inclusion and digital banking. Through its findings, more scholars will be able to gain information on the study field. Third, it will contribute to the strategy of those banks that support digital financial inclusion, especially those whose target market is the rural consumer. The recommendations will contribute to the body of knowledge on how to best digitally serve the rural customer. Last, the study will be significant in identifying tools or factors that can impact the financial inclusion of rural customers.

1.10 ASSUMPTIONS OF THE STUDY

The assumptions of a study are statements the researcher takes for granted or considers to be true without proof or evidence (Patidar, 2013). Simon (2011) stated that assumptions are, to a certain degree, out of the researcher's control, but without them, the study risks being irrelevant.

The first assumption of the study was that the rural community of Ga-Mothapo utilised digital banking as a way to access and perform transactions without needing to visit a physical bank. The interview guides were structured in such a way that would determine whether this assumption was true and whether digital banking had impacted on the financial inclusion of the Ga-Mothapo community.

The researcher also made the assumption that the respondents would understand the questions they were going to be asked. It was, therefore, the responsibility of the researcher to explain the purpose of the research to the respondents for context. The researcher explained to respondents that they were allowed to seek clarity when they did not understand a question and that the question would be explained to them in detail until there was a thorough understanding of the question.

The third assumption was that all the respondents, including the corporations, were honest about their knowledge and experiences when answering the questions. Therefore, the researcher reassured all the participants that their identities would be concealed, that their confidentiality would be protected, and that their responses were confidential and would be kept safe.

The researcher assumed that the sample size was appropriate for the study and was representative of the views and experiences of the wider community. The researcher employed purposive sampling to determine the sample size. In addition, the researcher would assume that the respondents represented the community at large if the research reached saturation.

1.11 DELIMITATIONS OF THE STUDY

As the study was limited to the community of Ga-Mothapo, it is possible that their experiences were not the same as the experiences of customers in other rural communities of South Africa. Furthermore, only TymeBank executives were interviewed, thus indicating that the study would only show the strategies implemented by one emerging low-cost digital bank.

1.12 THE THEORETICAL FOUNDATION

A theoretical foundation refers to the model used to explain the matter driving the research and includes an explanation of ideas related to a specific topic. It is formal and peer-reviewed, and is crucial as it forms a frame of reference for the investigation of the research (StatisticsSolutions, 2022; Watson, 2020).

The research based its theoretical foundation on the technology acceptance model (TAM), a framework proposed by Davis (1989). TAM contends that users will approve of a new technology if they have the intention to use the system, which is sequentially decided by the user's beliefs concerning the system (Davis, 1989). The model suggests that perceived ease of use and perceived usefulness determine the extent to which users welcome a specific technology (Chuttur, 2009). Alnemer (2022) defined perceived ease of use in a digital banking context as the user's impression of how easy digital banking tools or systems are to use. Perceived usefulness in a digital banking context, on the other hand, was defined as the user's feelings about whether making use of a banking system would enhance their efficiency (Alnemer, 2022).

TAM was considered the most appropriate theoretical foundation for the research, as many scholars have used it to test the adoption of different digital banking methods as a means of financial inclusion. In their study on the factors influencing the use of mobile money services and its impacts on financial inclusion, Njele and Phiri (2021) found that the acceptance of mobile money services by customers in Lusaka was influenced by perceived ease of use and perceived usefulness. Another study based in India found that the constructs of TAM, coupled with behavioural factors such as norms, trust, and self-efficacy, have a positive impact on the customer's intention to adopt digital banking (Kumar et al., 2020). Using the TAM model, Behl and Pal (2016) also found that perceptions about usefulness and ease of use played a role in the adoption of digital banking by rural consumers. This was supported by Manoharan and Shanmugam (2017), who in their study on mobile banking as an approach to financial inclusion found that perceived usefulness, perceived ease of use, perceived risk, and trust influenced the intentions of rural users to adopt digital banking (Manoharan & Shanmugam, 2017).

Therefore, this theoretical foundation, together with the framework, guided the research and the findings.

1.13 THEORETICAL FRAMEWORK

A theoretical framework provides the guiding principles upon which a researcher builds and supports their study (Grant & Osanloo, 2014). It helps the researcher structure their research and lay out how they plan to philosophically, epistemologically, methodologically, and analytically tackle the whole research and dissertation (Grant & Osanloo, 2014). A theoretical framework leans on a formal theory (Eisenhart, 1991, as cited in Grant & Osanloo, 2014).

The framework underpinning this study was financial inclusion. Financial inclusion refers to access to and the beneficial use of a variety of suitable financial services (Demirguc-Kunt et al., 2017). At its most basic level, financial inclusion begins with having a transaction bank account or account with another financial institution, or access through mobile money (Demirguc-Kunt et al., 2017). Financial inclusion is important for facilitating the trade of goods and services. It eases exchange, diversification, and risk handling, the fruitful allocation of capital, and encourages savings (Barajas et al., 2020). At a macroeconomic level, financial inclusion promotes long-term growth, income equality, and the reduction of poverty (Barajas et al., 2020). In South Africa, financial inclusion is important for addressing some of the historic imbalances that have hindered marginalised communities from taking part in the mainstream economy (National Treasury, 2020). It is a gateway to alleviating poverty and facilitating inclusive growth (Simatele & Maciko, 2022). At a macro level, financial inclusion is driven by digitalisation, technology, and usage. However, at a consumer level in South Africa, financial inclusion is driven by marital status, race, education, salary and income, and age (Mhlanga, 2020).

Policymakers in South Africa have highlighted the importance of financial inclusion. The NDP Vision 2030 for South Africa recognises financial inclusion as a vital instrument for fulfilling the objectives of eradicating poverty, inequality, and unemployment (Mhlanga, 2020). The South African government’s vision is for every citizen to have an equal opportunity to take part in the mainstream economy, which can be achieved through financial inclusion (FSCA, 2021). Financial inclusion is further promoted by the Financial Sector Charter (FSC, which acknowledges the importance of financial inclusion through access to financial services key point (Financial Sector Charter Council, 2017). The access to financial services key point measures the range to which financial institutions substantially expand beneficial access to basic and secure retail financial services to the identified target consumer (Financial Sector Charter Council, 2017). This key point acknowledges the unique disposition of financial institutions in developing South Africa (Financial Sector Charter Council, 2017) and the role they can play in enabling access to products and services, such as transferring money for day-to-day matters, savings products for amassing funds overtime, and investment accounts, amongst other products and services (BASA, 2021).

The study employed Ozili's systems theory of financial inclusion (Ozili, 2020). The theory states that "financial inclusion outcomes are achieved through the existing sub-systems (whether economic, social or financial systems) which financial inclusion rely on and as a result, greater financial inclusion will have a positive benefit for the systems it relies on" (Ozili, 2020). According to the systems theory, a significant change in a sub-system can notably affect anticipated financial inclusion outcomes. For example, if regulations were placed on financial service suppliers, their interests would then be aligned with those of customers who make use of basic financial services, which then urges financial service suppliers to provide affordable and quality financial services and products to customers, based on the rules in place (Ozili, 2020). The theory contends that financial inclusion will advance the performance of the sub-system it relies on, whilst the success and failure of the financial inclusion plan will be determined by the efficiency and effectiveness of the sub-system (Ozili, 2020). Therefore, according to the systems theory, in the end, the sub-systems that already exist in a country will ultimately benefit from financial inclusion (Ozili, 2020).

The three advantages of the systems theory of financial inclusion are:

- It acknowledges the role of the current economic, financial, and social structures that promote financial inclusion.
- It supplies a macro view of financial inclusion.
- It considers how financial inclusion outcomes are affected by the interaction between the sub-systems that financial inclusion depends on (Ozili, 2020).

1.14 CHAPTER OUTLINE

This dissertation comprises six chapters. The main issues discussed in each chapter are indicated as follows:

Chapter 1 sets the stage for the study. It outlines the research background by explaining the impact of digital banking on the financial inclusion of rural customers. The chapter provides the rationale for the study and contextualises the problem statement and significance of the study. The research questions and the objectives are presented. The theoretical framework is summarised to draw attention to the thinking behind the research. The research design involving the explanation of the data collection methods is described. Central terms required for following the argument in the study are explained. The chapter concludes with an overview of the chapters contained in the study.

Chapter 2 reviews the literature that is relevant to the study**.** It outlines the literature related to international and national perspectives on digital banking. The chapter also focuses on the concept of digital banking and its impact on rural customers, and the implementation of accessible banking by emerging banks is explored. The chapter concludes by discussing issues related to the government framework that addresses financial inclusion.

Chapter 3 examines the research design and methodology employed to investigate the impact of digital banking on the financial inclusion of rural customers. The chapter provides the case study of Ga-Mothapo, a rural setting outside the city of Polokwane. The rationale for using the approach is examined. The chapter also details the data collection methods employed in the study. The research instrument is discussed, and ethical considerations of data gathering are highlighted.

Chapter 4 presents and analyses the data based on the interviews conducted with the sampled group of participants.

Chapter 5 discusses the findings of the research. The findings were verified using literature control.

Chapter 6 summarises the findings of the study and makes concluding remarks. The conclusion is presented and checked against the literature using the objectives of the study. Policy recommendations aimed at accessing digital banking to rural customers are made.

1.15 CONCLUSION

South Africa has come a long way since the days when customers relied solely on having to visit a physical bank to perform their banking activities. Today, banking is available at the touch of a button. This prompts one to wonder, however, whether digital banking can benefit those who need it the most, given the difficulties they experience in accessing traditional banking facilities because of the remoteness of their geographic area.

This chapter highlighted the introduction and background of the study by presenting an overview of the challenges of access to digital banking for rural people. The purpose of the study was to explore the role that digital banking plays in increasing access to basic and useful financial services and products for the rural customers of Ga-Mothapo. The chapter also presented a brief background of global and national perspectives on digital banking and how it facilitates financial inclusion.

As discussed in this chapter, financial inclusion is a crucial element of addressing the sustainable development goals of hunger elimination, wealth or employment creation, and poverty eradication. Researching the tools that enable financial inclusion is, therefore, crucial to promoting it. Thus, this study aimed to explore how digital banking can be used as a tool for the financial inclusion of rural consumers in Ga-Mothapo. It investigated the role of low-cost banks, emerging banks, and the government in enhancing financial inclusion.

The findings emerging from this study may contribute to the formulation and implementation of policies by the South African government and the appointed authorities, and towards other studies on financial inclusion and digital banking.

The next chapter presents the literature review.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of a literature review is to review academic information published on a specific area relevant to the research topic (Ramdhani et al., 2014). A literature review allows the researcher to critique, reconceptualise, and expand on the body of knowledge that is already available, which helps to develop the research topic (Ramdhani et al., 2014).

This literature review established the gaps that exist for rural customers in using digital banking to gain access to and make use of quality financial products and services. The literature reviewed three low-cost banks aimed at low-income customers through low-cost and accessible banking. In reviewing their products and services, the literature shows that larger numbers of rural customers can be included in the economy by having access to appropriate financial services and products.

The review also examined the various frameworks that the public sector has developed to address the issue of financial exclusion in South Africa. Institutions such as the Financial Sector Conduct Authority (FSCA), the National Treasury of South Africa and the South African Reserve Bank (SARB) Prudential Authority play a significant role in ensuring that the bankable South African population has access to useful banking services and products. This begs the question: What are they doing to ensure that there is indeed financial inclusion?

2.2 DEFINITION OF FINANCIAL INCLUSION

Financial inclusion is defined as the process of ensuring that vulnerable groups in the population have access to affordable financial services and sufficient credit provided by mainstream financial services providers (Ramananda & Sankharaj, 2015). The three important factors of financial inclusion are access to financial literacy, access to inexpensive and prompt credit, and access to banking products and services (Ramananda & Sankharaj, 2015). Demirguc-Kunt et al. (2017) defined financial inclusion as the access to and effective use of suitable financial services by adults. At the most fundamental level, financial inclusion begins with having a banking account with a bank, a financial institution, or via mobile money (Demirguc-Kunt et al., 2017).

The World Bank defined financial inclusion as individuals and businesses having access to affordable and functional financial products and services that satisfy their needs, whether payments, savings, credit, transactions or insurance (World Bank, 2022).

According to the Alliance for Financial Inclusion (AFI), countries should have concise definitions of what financial inclusion means in relation to their national context (AFI, 2017). A working group guideline by the AFI explored how nations with national financial inclusion strategies defined financial inclusion:

The AFI (2017) highlighted that Burundi defines financial inclusion as *"Permanent access by the adult population to a set of financial products and services (i) offered by formal and sustainable financial institutions, governed by adequate regulations, (ii) that are diversified, affordable and adapted to the needs of the population, and (iii) used by the latter for the purpose of contributing to the improvement of the conditions of their socioeconomic life"* (AFI, 2017).

In the Philippines it is defined as the access to a wide range of financial products and services by everyone (AFI, 2017). In Nigeria, financial inclusion is defined as easy access to a wide range of affordable financial services that satisfy the needs of Nigerian adults (AFI, 2017).

In South Africa, financial inclusion is defined in the Financial Sector Regulations Act as all persons having access to convenient, just, and affordable financial products and services (FSCA, 2021). The National Treasury defines it as the supply and usage of monitored, affordable, and satisfactory financial services by the parts of society where financial services are needed but not delivered or inadequately so (FSCA, 2021).

2.3 IMPORTANCE OF FINANCIAL INCLUSION

Financial inclusion has a vital role in helping to meet the sustainable development goals (SDGs) of the United Nations (UN): reduce poverty, improve income inequality, and afford the bankable population access to affordable financial products and services. Financial inclusion has been found to be a catalyst for growth in several developing nations around the world (Fungacova & Weill, 2014). By providing accessible financial services, the economic power of vulnerable and low-income segments of the population will be dispersed amongst more of the population as opposed to it being concentrated amongst a few individuals in the population, therefore reducing the consequences of economic shock that vulnerable segments could encounter (Garg & Agarwal, 2014). Tissot & Gadanecz (2017) stated that financial inclusion has become an issue of global importance and on the agenda of many policymakers because of its impact on economic growth and poverty reduction. Sha'ban et al. (2019) supports this view, arguing that financial inclusion is important for the development of a nation as it decreases poverty, lowers income inequality and improves consumption.

Financial inclusion has a positive and notable influence on financial development (Rasheed et al, 2016). The financial development of a nation matters because it facilitates trade in goods and services and ensures that capital is put to productive use (Barajas et al., 2020). Financial inclusion also facilitates localised development for rural communities, as access to financial services and products such as loans, insurance and credit allows them to participate in meaningful economic activity (Oji, 2015). Furthermore, access to the right and affordable financial services and products improves income and the living standards of consumers in villages (Kaligis et al., 2018).

In Asia, a study by the Asian Development Bank (2017) showed a positive correlation between greater financial inclusion and reduced poverty and income inequality. A study conducted in Nigeria found that financial inclusion was vital for the country to experience inclusive growth, (Migap et al., 2015). This could be achieved by using mobile banking, the internet, and micro financial institutions (Migap et al., 2015). Ajide (2014) also found that that financial inclusion plays an important role in reducing poverty amongst rural communities in Nigeria.

From a South African perspective, financial inclusion is crucial for economic development and addressing the inequality gap (National Treasury, 2020). The National Development Plan (NDP) Vision 2030, states that financial inclusion is an important factor in addressing inequality, unemployment, and poverty by providing suitable work and giving the population sustainable livelihoods (Louis & Chartier, 2017, as cited in Mhlanga et al, 2021).

2.4 THE IMPACT OF DIGITAL BANKING ON RURAL CUSTOMERS

2.4.1 Global perspective

The impact of digital banking on financial inclusion is not unique to South Africa. The literature review revealed that many countries in the world have the same challenges. A summary of the case studies is outlined below.

2.4.1.1 India

Recognising the importance of financial inclusion, India has taken the necessary steps to help in ensuring its progression. A study conducted on the impact of digital banking on rural India found that rural customers adopt digital banking because it is easy, and the transaction charges are low (Ramachanduran, 2018). The same study also found that reasons such as lack of good internet and banking websites that are not user friendly are amongst the reasons rural customers in India don't adopt digital banking (Ramachanduran, 2018). In 2016, The National Payments Corporation of India (NPCI) developed the Unified Payments Interface (UPI) to facilitate digital payments (Mahesh & Bhat, 2021). UPI is a real time system that is user friendly and allows interbank transactions to promote greater digital payment adoption in India (NPCI, 2020). The core attribute of UPI is to promote easy and secure fund transfers between bank accounts (NPCI, 2020). The system supports peer-to-peer and peer-to-merchant requests for payment (NPCI, 2020).

2.4.1.2 China

Rural finance in China is relatively weak as traditional financial services are based mainly at physical financial institutions and supplied by rural credit organisations (Duoguang et al., 2020). In less developed areas of China, digital banking systems such as financial technology (fintech) create business opportunities, advance social equality, help to eliminate poverty and reduce income inequality (Hua & Huang, 2020). Improved financial access through fintech and digital banking is connecting the rural customers of China to the formal financial system (Hasan et al., 2020).

Between 2012 and 2013, The Central Bank of China established mobile payment projects and platforms in 20 rural provinces around China. Through the mobile payment platform, rural customers in provinces such as the Ali District of Tibet were able to achieve soaring numbers of wireless payments (Duoguang et al., 2020). In

2015, through a collaboration between agricultural insurance companies, digital financial system companies and banks, rural farmers were compensated for the loss of crops caused by Typhoon Cuckoo (Duoguang et al., 2020)

2.4.1.3 Lesotho

A study conducted on financial inclusion in Lesotho found that mobile money was preferred by a majority of rural customers as opposed to traditional banking owing to limited access to physical banks and the onerous process of opening a banking account (Jonathan, 2020). This was supported by Sekantsi and Motelle (2016), who found that there is positive relationship between financial inclusion and mobile money in Lesotho.

2.4.2 National Perspective - South Africa

A study conducted on factors influencing internet banking adoption in South African rural areas revealed that perceived compatibility, trialability, awareness and security were important influencers of internet adoption, whilst security and the complex nature of the internet were hindering factors in internet adoption (Ramavhona & Mokwena, 2016). The results of a study by Slazus and Bick (2022) revealed that the positive adoption of fintech in South Africa was influenced by utility, socio-economic influencers, mobile devices and youth. Furthermore, South African consumers adopt mobile banking as it is convenient and allows them to access their banking at any time with minimal effort, time, and consultation fees (Chigada & Hirschfelder, 2017, as cited in van Niekerk & Phaladi, 2021).

In their study Slazus & Bick (2022) discussed how perceived usefulness, when combined with perceived ease of use, was an enabling factor. This was supported by Nkoyi et al. (2019), who found that the attitude of rural customers towards digital banking is influenced by perceived ease of use and perceived usefulness and predicted prolonged usage by rural customers. South Africans were more likely to adopt digital banking if it made their lives simpler, satisfied a specific need, saved them time and allowed them to access services at any time. Therefore, for banking customers to adopt digital banking, they must find it useful (Koenaite et al., 2020). Ramnath (2018) found that awareness, usefulness, cost, trust, complexity, and perceived advantage influence the adoption of digital banking by rural customers in South Africa.

Factors such as perceived risk and accompanied costs inhibit the adoption of digital banking by South African rural customers (Slazus & Bick, 2022). Moreover, lack of awareness amongst rural customers of digital banking and the benefits it offers is an issue that banks need to address to penetrate unbanked rural customers. At a macro level, rural customers are faced with issues of technology, politics and socio-economics (Aruleba & Jere, 2022). Rahulani (2022) stated that in some parts of South Africa, digital financial inclusion is inhibited by factors such as the failure of digital systems, expensive technologies, and connectivity, which is exacerbated by a lack of dependable network infrastructure. Chitimira and Ncube (2020) found that the financial inclusion of low-income and poor earners in South Africa was impeded by macro level challenges such as unemployment, financial illiteracy, costly banking fees, poor legislative frameworks, and a lack of trust of the banking system. When it comes to the challenge of unemployment, Wokabi and Fatoki (2019) found that unemployment hinders financial inclusion because those with an inconsistent income and unsecured jobs are less likely to partake in the financial system. Wentzel et al (2016) supported this view through their own findings, which stated that rural customers in South Africa are mostly financially excluded due and lack a primary source of income because they are unemployed. A news article by Wasserman (2019) found that adults who reside in rural areas in South Africa struggle to find employment. Wasserman's article showed that 43.3% of adults in rural areas had not been employed in four to five periods (Wasserman, 2019). However, the supply side could turn this around by taking into consideration that financial inclusion can reduce unemployment. Adesanya (2021) stated that strategies for financial inclusion, such as agency banking, can reduce unemployment because agents will be needed to facilitate the banking. Furthermore, access to sufficient credit, which is also a form of financial inclusion, can help customers start new businesses or grow their businesses, thus creating employment opportunities (Adesanya, 2021).

The South African financial sector has limited customers in remittances. The financial sector currently has a fractured remittance system that forces customers to receive remittances through a system chosen by the sender or to have access to a limited system network in their areas (SARB, 2018). Therefore, SARB, as part of The National Payment System Framework and Strategy: Vision 2025 has listed interoperability as of one its nine goals (SARB, 2018). Through interoperability, South African consumers will be able to send and receive money through the most affordable and appropriate remittance system available (SARB, 2018).

This has, however, not stopped South African consumers from adopting digital banking. A study by Finscope on South African consumers found that cellphone banking was the most widely used digital banking method, followed by banking apps, while the least preferred banking method was internet banking (FinMark Trust, 2022). The impact that these have had is through usage by South African consumers. Finscope found that cell phone banking was mostly used by South African consumers to buy products such as airtime and data, whilst banking apps were preferred for making payments (FSCA, 2022). Activities such as buying airtime was identified as more likely to happen weekly (FSCA, 2022). A study by Louw and Nieuwenhuizen (2020) on the digital strategies of the five traditional banks (FNB, Standard Bank, ABSA, Nedbank and Capitec) found that all five provide unstructured supplementary service data (USSD), which is useful for those customers who are not in possession of smartphones. However, to access banking through USSD, customers need airtime to make use of cellphone banking (Capitec; FNB; TymeBank; Nedbank). However, the five banks investigated by the authors (Capitec, TymeBank ….) provide zero-rated banking apps that do not need data and can be downloaded on supported smartphones (Louw & Nieuwenhuizen, 2020). All five banks have ensured that they have an online presence (websites). Louw and Nieuwenhuizen (2020) maintained that once users locate a bank’s website, they are more likely to conduct online banking.

According to a report by FCSA (2022), cell phone banking was preferred by consumers for transferring money from one bank account to another and preferred when transferring money from consumers with bank accounts to those with no bank accounts. The report showed that South African consumers preferred to send money using the Shoprite Money Market, followed by cellphone banking, internet banking, and banking apps. Shoprite Money Market also took the top spot for the most preferred method of receiving money (FSCA, 2022). This was followed by an automated teller machine (ATM) instant cash; internet banking; cellphone money; and banking apps. (FSCA, 2022),

2.4.2.1 Ga-Mothapo

Ga-Mothapo is a rural settlement in the Capricorn District of Limpopo and situated 28 km east of the city of Polokwane (Sengwayo et al., 2012). The village is one of the

14 Traditional Authorities that form part of the Polokwane local municipality (Capricorn District Municipality, 2022). The vast majority (99%) of the population of Ga-Mothapo are Black African, of which 96.4% are Sepedi speaking (Stats SA, 2011). Half of the Ga-Mothapo community is of working age, of which 27.1% are between the ages of 20 and 49 years (Stats SA, 2011). According to the Statistics SA 2011 census, 71.5% of the population had never been married whilst 20.9% was married (Stats SA, 2011). Furthermore, 34.7% of the population had only some secondary education, whilst only 8.7% of the population had a higher education. At the time the census was taken, 81.9% of the population had no access to the internet, 12.7% had access through their phones, and 1.4% had access from work (Stats SA, 2011).

In response to the increase in unemployment, inequality and poverty, the Polokwane local municipality formulated a local economic development strategy towards 2024 that would help eliminate these social and economic issues. As part of their goals, the municipality stated that it wanted to reduce the unemployment rate, increase the GVA growth rate, enhance the ease of doing business, encourage economic inclusion and social cohesion, and improve the region’s development coordination potential (City of Polokwane, 2022). The financial inclusion of rural customers in the municipality can contribute towards the advancement of these goals. The Polokwane municipality, in its Integrated Development Plan (IDP, 2022), highlighted the fact that historic spatial planning has created a massive divide between the urban and rural population, as the rural population has to travel long distances to access services, and there is difference in the level of services between rich and poor areas. Polokwane’s local municipality is currently implementing a fifth generation IDP that is placing the focus on the NDP’s Vision 2030, and on furthering spatial integration, growth, inclusion, and access (City of Polokwane, 2022).

2.5 IMPACT OF DIGITAL BANKING ON FINANCIAL INCLUSION

As previously mentioned, financial inclusion plays a role in meeting the UN’s SDGs, which nations should aim to support, not only to meet the SDGs, but also to promote economic growth in their nations. One of the tools identified to impact financial inclusion is digital banking. Digital banking is the digitisation of traditional banking, which allows customers to access banking products and services through online or digital platforms (Haralayya, 2021). Digital banking is a catalyst for financial inclusion in that it enables customers to perform activities such as money deposits, withdrawals, transfers, paying bills, managing their accounts and portfolios, managing loans, applying for financial products, and accessing investments (Haralayya, 2021). This is supported by Rahulani (2022), who stated that digital financial services are a catalyst for digital financial inclusion. The United Nations Conference on Trade and Development (2021) stated that digital financial services include solutions such as online payments, digital biometric identification, interbank transfers, and e-fund transfers (UN Conference on Trade and Development, 2021). Digital financial services such as digital banking have lessened the physical and economic barriers that hindered financial access for the population living in remote and rural areas (UN Conference on Trade and Development, 2021). The COVID-19 pandemic contributed to the promotion of expanding the benefits of digital financial services, because there was a need for reduced physical contact in physical branches (Pazarbasioglu et al., 2020). Therefore, digital financial services allow customer to make remote payments and transactions, pay bills and pay for goods and services, all from their homes with little need for physical contact (Pazarbasioglu, et al., 2020). Digital financial inclusion ensures inclusion for people who have been disadvantaged by location and income (Mhlanga, 2020).

A study by Bharadwaj and Suri (2020), which examined Kenya’s most widely used digital banking service, M-Shawari, found that digital banking has the potential to be an important source of financial inclusion. Garcia and Hermino (2021) asserted that digital banking and financial inclusion are related, as both their variables are highly correlated. Therefore, digital banking could be used as a strategic tool for financial inclusion to reach those in remote areas of Peru. Senou et al. (2019) stated that digital technology and the consequent use of digital financial services are key to financial inclusion in West African economic and monetary countries. The global growth of financial and digital technology has allowed underserved people in nations to gain access to financial inclusion through more efficient and affordable digital financial services and products (Tay et al., 2022). Durai and Stella (2019) concluded that because usability, convenience, accurate timing and simple interbanking have a positive impact on digital banking, digital banking too has a positive impact on financial inclusion. In the case of commercial banks in Kenya, Kithinji (2017) identified a significant impact on financial inclusion through their digital strategies, which were aimed at ensuring sustainability and reaching the unbanked people of Kenya. This was evident through the increase in the number of bank accounts, deposit value, and the customer base. amongst other factors (Kithinji, 2017). In the case of a Tanzanian Bank, Mwalwiba (2020) found that digital banking improved access to banking services through internet banking, agency banking and the Chap Chap Instant account.

The Asian Development Bank (2017) stated that digital finance, through its influence on the banking value chain, can supply resolutions to the key obstacles to financial inclusion. The study further concluded that such digitally driven financial inclusion initiatives could improve the GDP of markets such as Indonesia and the Philippines by 2%–3%, and Cambodia by 6% (Asian Development Bank, 2017). However, given the imperative for the supply side to plays its part, regulators, policymakers and banks must create an enabling environment (Asian Development Bank, 2017). In the context of South Africa, Rahulani (2022) pointed out that factors such as technology and distribution networks, policy and regulation, open ecosystems, and data play a major role in enabling digital financial inclusion. This is supported by Simatele and Maciko (2022), who stated that the opportunity for rural customers to use financial technology is also obstructed by supply factors such as inadequate infrastructure and the absence of appropriate regulations.

Shen et al. (2020) indicated that policymakers in China need to enhance customer financial literacy and encourage the use of digital financial products to enhance financial inclusion in China. George and Paul (2020) support this in the context of India, by stating that policymakers should encourage digital finance, which will, in turn, encourage financial inclusion, which will result in economic growth.

Demand and supply factors play a significant role in the impact of digital banking on financial inclusion. The positive relationship between digital finances and financial inclusion is built on the premise that those who have been financially excluded own or have access to a mobile phone (World Bank, 2014, as cited in Ozili, 2018). According to Ozili (2018), the relationship between financial inclusion and digital banking could be negative for low-income and indigenous consumers, as they could face resistance owing to lack of trust, unaffordable digital financial services and lack of financial literacy. In a study on role the of mobile money on financial inclusion in the SADC region, Fanta et al. (2016) found that one of the barriers to the adoption of mobile money was a lack of information and that financial education programmes would play a big role in improving the attitudes of excluded consumers towards adopting and understanding mobile money. The National Treasury of South Africa (2020), in its financial inclusion policy, appear to agree, stating that a notable portion of the South African population has a lack of or limited knowledge of financial services and products.

Aziz and Naima (2021) also found that although digital banking has made life easier and reduced the challenge of physical access to financial services for rural customers, their utilisation is low because of a lack of connectivity, limited social awareness, and low financial literacy. D’Souza (2018) stated that in India, even though digital banking can enhance financial inclusion, it should be considered a short-term strategy. The supply side should focus on addressing behavioural and/or psychological factors, such as perceived risk, lack of knowledge of its benefits and stagnant habits that affect the customers (D'Souza, 2018). D’Souza (2018) recommended that to promote digital banking as a tool for financial inclusion, the supply side should provide digital literacy for consumers in India and either subsidise or waive the cost of digital banking. According to Khera et al. (2021) digital literacy can encourage customers to take up digital financial services in a responsible way Ray et al. (2022) supported this view, maintaining that digital skills in the context of digital financial inclusion enables customers to use financial services more effectively. Essentially, digital financial literacy enhances financial inclusion and increases awareness to facilitate usage of digital financial services (Tony & Desai, 2020).

2.6 THE IMPACT OF DIGITAL BANKING ON FINANCIAL INCLUSION OF RURAL CUSTOMERS

Digital banking can play a major role in the financial inclusion of rural customers, as it removes the barriers of access. Through access, other parts of the rural economy can develop.

Sun and Zhu (2022) found that digital inclusive finance is important for promoting rural high-quality development in China. They stated that development is enabled through economic efficiency, urban and rural constructions, the coordination of communities’ livelihoods, and creative development potential. Another study based on financial inclusion in China revealed that digital financial inclusion lowers rural household vulnerability to poverty (Chen et al., 2022). The study found that digital banking encourages the entrepreneurial behaviour of rural households, which reduced their risk of poverty (Chen et al., 2022). A study on a rural community in Namibia ascertained that digital banking had enabled financial inclusion of rural communities who were able to perform digital financial services such as withdrawing money on a weekly basis through digital banking (Arora et al., 2021). Ge et al. (2022) found that digital financial inclusion is important and impacts on the promotion of the rural tertiary sector. The authors highlighted that digital financial inclusion encourages the development of a healthy rural financial environment, which plays a role in developing the rural tertiary sector in China's rural areas (Ge et al., 2022). Another study on China found that digital financial inclusion encourages the rise of rural residents' income, which is reflected through the regional development, education level and financial development (Li & Ma, 2021). Ozili (2018) stated that digital finance has the potential to impact vulnerable customers by providing affordable, convenient and secure banking. It can further move them from cash-based transacting to more risk limited digital platforms (Ozili, 2018). Through digital finance, customers who are in geographically remote areas no longer need to travel or struggle with a poor transport network and other socio-economic issues (Widarwati et al., 2022).

However, in attempting to enhance financial inclusion for rural customers, roleplayers have been faced with several challenges. Adequate infrastructure is important in ensuring access and usage of digital financial systems by households (Lyons et al., 2017). A study by Arora et al. (2021) found that, in attempting to use digital banking, rural customers are faced with the problem of access to efficient networks and mobile phones. This is supported by Serbeh et al. (2021), who argued that the relevance of mobile money in the financial inclusion of rural customers in Ghana is inconsistent owing to financial illiteracy of many rural customers, exposure to poor service delivery, and of unstable network connections, which negatively impacts on their potential to be financially included. In a study conducted on India, Ponnuraj and Nagabhushanam (2017) determined that digital banking has the potential to impact on financial inclusion of rural customers. However, supply side factors, such as high transaction costs, inconvenience, and inflexible and generic products, affected that potential. In South Africa, issues of exclusion are exacerbated by the high cost of data. Despite the compulsory data price reduction instructions imposed on network providers in South Africa, data prices remain high, with South Africa ranking at 33 out of 46 African countries (Chinembiri, 2020). The high cost of data has meant that many South Africans cannot afford to go online or make use of internet services (Chinembiri, 2020).

Bodlani (2021) also found that in South Africa, the spatial mismatch is one factor that impacts on the ability of residents from places such as undeveloped provinces and vulnerable communities to be financially included through access to basic financial services provided by financial institutions. This is supported by Simatele and Maciko (2022) who found that on the supply side, factors such as proximity, affordability and price exclusion affected the financial inclusion of rural consumers in South Africa. According to Simatele and Maciko (2022), demand-side factors, such as employment, income, financial literacy and risk, and trust perception, also had an impact on the financial inclusion of rural customers in South Africa.

Financial literacy is an important element in the fight for financial inclusion because a consumer's knowledge regarding the different financial services available impacts on their access (Hasan et al., 2021). Simatele and Maciko (2022) gave an example in their study, stating that most of their participants did not understand how bank charges worked and did not understand that there was more to lending criteria than income alone, which indicates a low level of financial literacy. Financial literacy is crucial for the enhancement of financial inclusion and rural development (Gautam et al., 2022). Financial literacy has already been identified as a challenge; adding digital banking to the equation introduces and additional challenge of digital literacy, which needs to be wholly addressed (Gong & Hollins-Kirk, 2022). Simatele and Macicko (2022) agreed that the use of digital banking has increased the need for financial literacy. Organisations such as the Banking Association of South Africa (BASA) have identified financial literacy as a challenge and implemented several initiatives to address it. The first is BASA's Starsaver initiative, which aims to teach children to save money in collaboration with financial professionals that deliver savings lessons (BASA, n.d.). The second initiative BASA supports is the Johannesburg Stock Exchange (JSE) National Financial Literacy Day, which aims to educate the youth on the functions of the JSE and dispel any myths surrounding the stock market. BASA also supports the South African Banking Risk Information Centre (SABRIC) by informing consumers of how to avoid becoming victims of banking crimes (BASA, 2021). The FSCA added that consumer financial education is key to improving the usage of bank accounts (FSCA, 2021).

The goals of financially educating consumers in South Africa are:

- To ensure that consumers fully understand the essence, risks and advantages of the different products and services in the market and adopt products and services that suit their needs.
- For consumers to be able to compare the financial services and products for them to make informed decisions.
- For consumers to understand their rights when dealing with financial institutions (FSCA, 2021).

2.7 THE IMPLEMENTATION OF ACCESSIBLE BANKING BY EMERGING BANKS

Rural communities in South Africa have long struggled to gain access to basic financial services and products because of various factors including inaccessible financial institutions, the high cost of financial products and services, poverty, unemployment and financial illiteracy (Chitimira & Magau, 2021). Therefore, rural communities in South Africa rely on innovative technology established by banking institutions, such as internet banking, mobile banking, and online banking, to help them to access financial products and services (Chitimira & Magau, 2021).

The past few years have seen the emergence of low-cost, digitally-focused banks in South Africa. These banks have been established with the aim of serving low-income customers by providing affordable and accessible banking. Amongst these banks are Capitec Bank, TymeBank and Bank Zero. In 2019, when TymeBank and Discovery Bank were launched, the banking sector saw a price war as legacy banks felt threatened (Groenewald, 2019). That year, Capitec decreased the monthly fee on its Global One account; Nedbank launched its Unlock.Me account, a zero-fee digital product targeted at banking customers younger than 25; Standard Bank rolled out their MyMo account with a monthly fee of less than five rand; and First National Bank (FNB) decreased the monthly fees on their Easy Pay As-You-Use, Easy Account Smart Option, and the Gold Fusion accounts (Moyo, 2019). Therefore, to compete with emerging banks, various banks in South Africa have been implementing low-cost and accessible banking.

2.7.1 Capitec Bank Limited

Capitec entered the market in the year 2000 and broke through the one million customer mark in 2007. By 2017, it had more than ten million customers and around 800 branches countrywide (Vermeulen, 2018). Capitec entered the sector in rural areas by serving underserved customers (Vermeulen, 2018). After establishing itself in rural areas, Capitec began to enter cities and started setting up branches in areas, such as taxi ranks and bus stations, where a majority were low-income customers (Vermeulen, 2018).

When Capitec first entered the market, it too disrupted the banking market, as legacy banks began to offer low-cost accounts to compete with the newcomer (Makhaya & Nhundu, 2015). According to Makhaya and Nhundu (2015), Capitec impacted the market positively in three main ways: access to financial services and products for the unbanked population; low-cost banking charges for its clients; and reduced banking charges for its competitors' clients as they reacted to Capitec's entry into the market.

Capitec can offer low-cost and accessible banking because it is not burdened by legacy IT systems. It was able to customise its IT infrastructure to suit the needs of its target market (Makhaya & Nhundu, 2015). Capitec built its strategy based on an innovative and technology-driven banking model, providing simple and cost-effective financial solutions for the unbanked in South Africa (de Lange, 2013). Capitec's value proposition and success is guided by four fundamentals of simplicity, affordability, accessibility, and personalised experience. Its simplicity is characterised by transparent pricing, with just one banking product offering for all its retail banking clients, irrespective of their income. In addition, it uses technology to engage and serve its customers (Capitec Bank, 2021).

Regarding affordability, Capitec states that it operates a low-cost business that allows it to price its transactions and credit at a low cost (Capitec Bank, 2021). Furthermore, Capitec encourages its clients to take advantage of its affordable services, such as going cashless, digital banking, and its self-service offering (Capitec Bank, 2021). It states that it tries to save its customers' money by providing digital banking at no monthly subscription fee (Capitec Bank, 2022b). Capitec aims to be accessible to customers by being an omni-channel bank and providing both branch banking and motivating its clients to use its digital banking offering (Capitec Bank, 2021). Capitec states that it creates a personalised experience by building relationships with its customers and helping them take charge of their banking decisions (Capitec Bank, 2021).

Capitec's main purpose is to be accessible and serve underserved segments of the population. According to Nkaelang et al. (2012), Capitec pioneered mobile payments in South Africa as it aimed to cater for the unbanked through partnerships with retailers like Shoprite Checkers and Pick n Pay. In 2006, Capitec bank, in partnership with these retailers, started offering money market transfer services that did not require the recipients to have a bank account (Nkaelang et al., 2012). This was a game changer in the banking sector as the other banks soon followed suit with mobile payments services of their own. Capitec continues to offer these money market services, with its clients also being able to withdraw money using their debit cards at the till point of these big retailers (Capitec Bank, 2022a).

Coetzee (2018) stated that Capitec continues to be disruptive as its strategy differs from that of the other big banks. Capitec is intentionally increasing its bank branches, and unlike its competitors has one account for all its users and no loyalty programmes. In response to fintech, Capitec is encouraging virtual money management by offering expanded internet and mobile banking benefits (Coetzee, 2018). Capitec offers services such as unstructured supplementary service data (USSD), mobile banking services and internet banking (Chigada & Hirschfelder, 2017, as cited in van Niekerk & Phaladi, 2021). Via these digital services, customers can transfer money remotely, make payments, buy prepaid data and airtime, buy electricity, perform credit facility transfers, stop lost cards, update daily card limits, view and download bank account statements, add beneficiaries, add recurring or future-dated payments and view their transaction and payment history (Capitec Bank, 2022b).

Capitec contends that it is South Africa's largest digital bank and has been able to achieve this status by implementing new strategies such as remote client onboarding, which allows clients to open a bank account from anywhere. In addition, Capitec set in motion a virtual bank card that allows customers to make online purchases; it developed biometric eSignature services for customers to sign documents digitally; and it launched the "scan to pay" method for its clients to use as a payment method (Capitec Bank, 2021b). Capitec saw the socio-challenges faced by consumers as an opportunity enhance its digital offering (Capitec Bank, 2021a). These digital strategies are what make it more accessible to its clients and its main target market, which is low-income customers, some of whom are based in geographically remote areas.

Capitec's strategy as a non-traditional bank works in its favour. Antoni et al. (2018), in a study conducted on factors that influence customers switching to non-traditional banks such as Capitec, found a definite relationship between lower banking fees and switching behaviour, a definite relationship between products offered and switching behaviour, and a definite relationship between client involvement and switching behaviour (Antoni et al., 2018).

2.7.2 TymeBank

TymeBank was founded in 2012 and operated as a fintech company that provided domestic digital payment services in South Africa (TymeGlobal, 2022b). It obtained their retail banking license in 2017 and launched to the public in 2019 (BusinessTech, 2018; TymeGlobal, date??). TymeBank had acquired three million clients by March 2021, a success that was attributed to onboarding between 3 000 and 5 000 clients daily (TymeBank, 2021a). Its value proposition is based on simplicity, transparency, and affordability (TymeBank, 2022b). TymeBanks' main objective is to provide easy access to the underbanked and unbanked population of South Africa and action it takes using its distribution model (Jenik, 2022).

As part of its fully digital model, TymeBank does not have any physical branches; its distribution network is established on its partnership with big retailers, Pick n Pay and Boxer supermarkets (Jenik, 2022). Because Boxer Supermarket is strategically placed in rural, peri-urban, and low-income urban areas with the intention of serving lower- to middle-income customers, TymeBank has been able to access these customers (Battersby & Peyton, 2014). TymeBank's distribution network has helped it reach places that are underserved by traditional banks (Jenik, 2022). Because of its accessibility and affordability, TymeBank has managed to onboard many rural customers (Jenik, 2022).

More recently, TymeBank formed a strategic partnership with retail group The Foschini Group (TFG), which will see TymeBank's financial solutions in TFG stores and on digital channels for the advantage of TFG's more than 26 million consumers in South Africa (TymeBank, 2021b). Jet stores, which caters for low-income customers, was used as the flagship brand for the unveiling of TymeBank in TFG stores (Mashego, 2021). TymeBank's other distribution models include low-cost digital models, such as online and mobile banking.

Through the TymeBank Everyday account, customers have access to the following tools and services: a GoalSave tool that allows customers to earn up to 8% interest a year; double Pick n Pay Smart Shopper points; the ability to buy electricity, airtime and data at no extra charge; a SendMoney tool that allows them to send money to anyone with a South African mobile number; free cash withdrawals at Pick n Pay and Boxer till points; a free banking app; free internet banking; digital money transfers; digital beneficiary payments; local online purchases; and free 12 months bank statements from the banking app; and online banking, amongst other products and services (TymeBank, 2022a).

The growth in digital banking and development of digital competitors, such as TymeBank, has changed South Africa's banking landscape. Groenewald (2019) identified three areas in which digital banks like TymeBank have caused disruption in South Africa. First, digital banks have made banking more inclusive as customers are not required to visit physical banks to perform their banking activities. Second, because digital banks have lower operating costs as opposed to legacy banks, they can charge lower banking fees. Third, these banks have introduced new touchpoints for their customers, as customers are able to withdraw and deposit money at their retailer (Groenewald, 2019). Research conducted by Jenik (2022) agrees with the above as its findings support the hypothesis that digital banks have the power to enhance financial inclusion through their cheap products and services and their distribution network reach.

TymeBank was designed to increase financial inclusion in South Africa. A study conducted on the impact of digital banking on deepening financial inclusion with TymeBank as a case study found that, TymeBank serves a higher number of low-income customers than traditional South African banks, most of which form a part of the financially excluded segment and live in rural areas (Jenik, 2022). The study also found that TymeBank offers products that are useful for low-income customers, who value the low cost of the services and products it provides (Jenik, 2022). Tymebank has had a positive impact on the lives of its customers, as many have pointed to the fact that they spend less on banking fees, that they now have access to financial services and are able to transact digitally, and that they are now able to save money (Jenik, 2022). Another study conducted on inclusive digital banking globally discusses how digital banks in South Africa (TymeBank), India (Kotak 811), and Philippines (UnionBank) share characteristics by being customer-centric, better priced, having innovative distribution networks, onboarding customers in a hybrid way, focusing on essential products, and using technology to leverage their capabilities (Jenik, 2022).

TymeBank states that its success in South Africa is driven by various factors, the first being its innovative retail distribution model, coupled with its digitised distribution network for simple customer onboarding (TymeGlobal, 2022). It has placed kiosks in the stores of its retail partners, which allow customers to onboard. A majority of TymeBank's customers (85%) are onboarded using these kiosks, which have biometric systems and issue customers with their debit cards in less than five minutes (Jenik et al., 2020). Customers are also able to remotely onboard themselves using the TymeBank website or the mobile app using facial recognition, and then finalise the process by collecting their debit card at a Tyme kiosk at a retail partner store (Financial Mail, 2020).

Second, it provides one product for each of its product lines in a simple, transparent and gamified way (Tyme Global, 2022). Jenik et al. (2020) stated that TymeBank's EasyDay account has no account opening fees; no monthly charges; and no minimum balance requirements. It has a cost advantage that is a result of its cloud-based technology and cost-efficient models. This allows it to keep its fees lower than those of competition (Jenik et al., 2020). TymeBank's customers were found to pay roughly 60% of what African Bank's customers pay. African Bank was found to be the second most affordable bank after TymeBank (Jenik et al., 2020). When compared to Capitec, the authors found that when they combined the cost, TymeBank customers pay for sending money, cash withdrawals, cash deposits and payments, it came up to about 60% of the fees paid by Capitec customers (Jenik et al., 2020).

Lastly, it still has the human interaction element through its Tyme ambassadors who build relationships with the customers to close the digital divide (TymeGlobal, 2022). The ambassadors are located in the retail stores where their kiosks are to assist customers through their onboarding journey and promote TymeBank (Jenik et al., 2020). Banks such as TymeBank have made banking more accessible for low-income customers and those located in remote areas because these customers need systems that are useful, cost effective and give them access to banking services that they continue to use remotely (Conby, 2022). This enhances access and reduces travel challenges that customers in remote areas face (Conby, 2022).

2.7.3 Old Mutual Bank (BidVest Bank)

Old Mutual, in collaboration with Bidvest Bank, offers a transactional account through Old Mutual (BusinessTech, 2018). The retail banking segment is classified under the mass and foundation cluster and provides easy financial services and products to low-income and lower middle income retail customers (Old Mutual, 2021). The Old Mutual Money Account gives clients both a swiping account and a savings account in one (Old Mutual, 2022). Those who are not clients of the bank are able to open an account remotely online, in a quick and easy way or visit an old mutual branch (Old Mutual, 2022). For those that are customers, the Money Account benefits customers by offering them a unit trust savings account, simple transfers between their swipe and savings accounts, the ability to send money to anyone with a South African cell phone number, clients further have access to online banking and mobile banking where they can perform transactions such as buying airtime, electricity, depositing money, accessing bank statements and making payments (Old Mutual, 2022). The account is charged at R4.95 a month (Old Mutual, 2022).

2.7.4 Bank Zero

Bank Zero was officially launched to the public in 2021(Buthelezi, 2021). Bank Zero is a fully digital bank and is a mutual bank that functions without capital stock. It is owned by its members who are a part of a common fund (Business Tech, 2021). Because the bank is fully digital, customers can open a bank account using the bank’s app, which has a biometric system and takes a few minutes to open (Malinga, 2021).

The bank’s selling point is that it provides a zero-banking fee, where transactions associated with the bank are not charged (BusinessTech, 2021). It has no monthly banking fees, no minimum balance requirements, zero fees for banking statements, zero fees for prepaid products, no fees for electronic fund transfers, zero fees for debit orders, and it charges zero fees for Bank Zero to Bank Zero payments (Bank Zero, n.d).

However, customers are charged for third party transactions such as ATM withdrawals and payments at retailers (BusinessTech, 2021). Apart from not charging banking fees, Bank Zero boasts several security features as part of its value proposition. These include authorising online purchases, using the mobile app, a distinctive card patent, authorisation for debit orders, connected banking, and giving customers full control of their accounts using the mobile app (BusinessTech, 2021). However, in recent times, Bank Zero customers were requesting a feature that would allow them to deposit cash into their accounts, as customers were only able to receive money through electronic fund transfers from another account (MyBroadband, 2022).

2.7.5 Financial technology (fintech)

Fintech is a short term for “financial technology” and is defined as companies that combine financial services with innovative technology to provide users with financial services and products (Dorfleitner et al., 2017). Fintech is attractive to users because it offers banking services and products that are more user-friendly, automated and efficient (Dorfleitner et al, 2017). In essence, Fintech is about disrupting the financial industry and providing fast solutions to consumers’ ever-changing needs and behaviour without all the red tape. It provides payments and remittances, lending, insurance and risk, and savings and investments, amongst other services. Fintech is beneficial for the enhancement of efficiency in the financial sector and expanding financial inclusion countrywide (in South Africa), helping consumers with their long-term financial planning goals and unforeseen emergencies (Intergovernmental Fintech Working Group, 2020).

The South African government has advanced the fight for inclusion and collaborated with other entities to form the Intergovernmental Fintech Working Group (IFWG), with the objective of making South Africa a leading fintech hub in Africa (IFWG, 2020). The aim of the IFWG is to promote financial inclusion, competition, and digital skills, and to boost economic growth through innovation (IFWG, 2020). One way that the IFWG is promoting innovation is through the regulatory sandbox (RSB). The RSB was launched in 2020 with the aim of providing a regulated and live platform for financial sector innovators to securely trial new financial products or services they want to bring to the market against the current regulation. This would all take place under the supervision of the IFWG and with advice from the pertinent regulators (IFWG, 2022). The testing provides an improved understanding of the risk and benefits associated with new market innovations and facilitates more well-informed decisions concerning policy positions and regulatory frameworks (IFWG, 2022).

According to a report conducted by Deloitte Africa (2019) for Mastercard, South Africa's economic players are realising the importance of continued payment modernisation because of the national goals set out by the South African Reserve Bank's Vision 2025 (SARB, 2018). One of the main priorities of Vision 2025 is financial inclusion, mainly in the form of digital inclusion. As much as 80% of the South African population is banked, while a minority is unbanked, and cash based. Several barriers towards financial inclusion exist, such as affordability and access to banks, but these are factors that can be tackled by digital banking as banking services are extended to the unbanked population (van Niekerk & Phaladi, 2021). According to Van Niekerk and Phaladi (2021), digital financial services have improved and continue to improve with respect to achieving financial inclusion in South Africa (van Niekerk & Phaladi, 2021, p. 6). Maumbe (2006) concurred that South Africa's success in the financial services sector will depend on how it uses the latest digital products to penetrate untapped markets in underprivileged communities and reduce the financial and digital divide in financial service delivery. A study by Nkoyi et al. (2019) found that the intention to use digital banking in the long term was influenced by perceived ease of use and perceived usefulness. The study also found that the attitude towards digital banking strongly predicts continued usage amongst rural banking customers in South Africa (Nkoyi et al., 2019).

Most banks in South Africa have mobile payment platforms that allow their clients to send money to anyone with a South African mobile number. For example, FNB clients can send an e-wallet, while ABSA clients can send a cash send. By adopting digital platforms and using technology as an enabler, the poorest in the economy can gain access to the benefits of economic development (Deloitte Africa, 2019). However, other players have entered this market and their customers are not required to have a bank account to send and receive money. Mobile payments, such as Spot Money, uKheshe, Mukuru, and Telkom Pay, allow users to send and receive money, buy airtime, pay for accounts such as DSTV, buy prepaid electricity and have a digital wallet (Akabor, 2022). Mukuru, Spot Money, and Telkom Pay have gone on to introduce virtual and physical cards that allow users to shop online and in store (Akabor, 2022). Fintech companies understand how difficult it has been for customers to use financial services provided by banks and have therefore offered them an alternative that is easier and seamless (Buckley & Webster, 2016). Khera et al. (2020) stated that in the case of Zimbabwe, South Africa and Nigeria, progress made in terms of financial inclusion can be attributed to the fintechs. In South Africa, the fintech ecosystem is driven by the following factors: 52% of consumers still use cash for transactions, 33% cash out their deposits almost immediately, 31% of the population is unbanked; 21% of the population uses the internet to access their finances; 54% of internet use; 81% smartphone penetration; 86% of the population had 4G/LTE coverage; R1.5 bn in venture capital has been invested in South Africa, with only 6.4% going towards fintech; 54% financial literacy index; 59 innovation hubs, accelerators, and collaboration offices; 34% GDP contributed by small, medium and micro enterprises (SMMEs) (IFWG, 2020).

2.7.6 Financial systems for inclusion in other countries

In 2020, The Central Bank of Brazil launched an instant payment scheme called Pix, which became the new way that Brazilian citizens processed their payments and financial transfers (Reserve Bank of India, 2021). Pix had a few features that made it attractive, including making funds immediately available to the beneficiary, always being available, multiple case use, convenience, safety and low cost (Reserve Bank of India, 2021).

Russia established the National Payment System Development Strategy for 2021–2023. The aim of the strategy was to harness an environment that provided both rural and urban customers with a payment service that is convenient, accessible, and safe, which would make the payment sector more competitive and improve the payment infrastructure (Reserve Bank of India, 2021). Through this strategy, a collaboration between the Central Bank of Russia and The National Payment Card System saw the establishment of The Faster Payment System (FPS) (Reserve Bank of India, 2021). The launch of FPS has allowed more consumers to have access to financial services by being able to make instant interbank transfers, paying for goods and services, and applying QR codes (Reserve Bank of India, 2021).

The Reserve Bank of India launched the Payment Infrastructure Development Fund to motivate the deployment of points of sale infrastructure in centres that were classified as tier-3 and tier-6 and in the north-eastern states of India (Reserve Bank of India, 2021). The Indian government stated that it is important to promote digital payment systems in the country, especially to include underserved areas in economic activity (Reserve Bank of India, 2021).

2.8 POLICY FRAMEWORKS BY SOUTH AFRICAN PUBLIC SECTOR TO ADDRESS FINANCIAL INCLUSION

South Africa has an advanced financial sector and through the various policies and actions taken, more people have become banked over the years (Abrahams, 2017). The NDP Vision 2030 states that financial inclusion is an important factor in addressing inequality, unemployment, and poverty by providing decent work and affording the population sustainable livelihoods (Louis & Chartier 2017, as cited in Mhlanga, et al., 2021). The government has acknowledged the importance of financial inclusion in the NDP's Vision 2030 and has stated that it forms part of the tools that will help alleviate poverty, increase employment, and provide a sustainable livelihood for the population (Mhlanga et al., 2021; National Treasury, 2020). The vision as set by the NDP aims to see every citizen participating equally in the mainstream economy, especially through the financial sector which plays a major role in developing that part of society (FSCA, 2021). The NDP set out to achieve 90% financial inclusion by 2030. This initiative set by government has been effective as South Africa already had a financial inclusion rate of 87% by 2015 and 89% by 2017 (Abrahams, 2017). However, Ikdal et al. (2017) pointed out that the methods in place to measure financial inclusion are either too academic or too basic, as they fail to consider the full range of basic financial services and fails to measure usage and sustainability, focusing instead on adoption (Ikdal et al., 2017). Forty two percent of a bank's customers withdraw all their money as soon as they receive it in their accounts, and do not make use of their bank accounts, but rather use it as a replacement for cash distribution (National Treasury, 2020).

The formulation of the Financial Sector Charter (FSC) code is noteworthy in that it has committed to "*actively promoting a transformed, vibrant, and globally competitive financial sector that reflects the demographics of South Africa, and contributes to the establishment of an equitable society by effectively providing accessible financial services to black people and by directing investment into targeted sectors of the economy*" (BASA, 2021). Amongst its key points, the FSC recognises the importance of access to retail financial services as fundamental to economic development in South

Africa (BASA, 2021). Commitments by the FSC have improved financial inclusion in South Africa, as proven by the meaningful impact made by transactional accounts such as the Mzansi account initiative (National Treasury, 2020). This initiative was implemented by the big four banks (Standard Bank, First National Bank, ABSA and Nedbank)2004 to each introduce a low-cost transactional account that would make banking services more accessible and reach underserved communities (FinMark Trust, 2009). The percentage of banked adults increased from 46% to 63% between 2004 and 2008—about six million Mzansi accounts were opened during that period (Hanouch, 2012). As part of their findings, Kostov et al. (2014) found that the Mzansi account as a pre-entry account appealed to customers who wanted to use it as a way of receiving money. Even though there was no evidence of the Mzansi initiative increasing access to finance through diversification, the analysis suggests it may be the case (Kostov et al., 2014). More recently, the Banking Association of South Africa (BASA, 2022), found that banks in South Africa provided access to transaction sites to 88% of low-income households in South Africa. The banks further supplied 20 million products that enhanced financial inclusion (BASA, 2022).

In 2010, the Financial Services Board, now referred to as the Financial Sector Conduct Authority (FSCA) established the Treating Customers Fairly (TCF) regulatory framework, which required financial services companies to ensure fair treatment of their clients throughout the product lifecycle, from the design to the marketing, advice, purchase and after-sales stages (National Treasury, 2020). The core outcomes of TCF are:

- The promotion of banking products and services aimed at the needs of identified customers.
- For the fair treatment of all customers to be the core of the bank's corporate culture.
- For customers to be given clear and concise information and kept up to date prior to, during and after the point of sale.
- For customers to be supplied with products and services that they have been led to expect, and of an acceptable grade.
- To offer satisfactory advice that considers customers' circumstances (PricewaterhouseCoopers, 2011).

In line with the TCF framework, the Financial Intelligence Centre Act (FICA) was strengthened through the introduction of a risk-based approach to consumer due diligence (National Treasury, 2020). The approach leaves room for a more flexible application of consumer due diligence measures to certain segments of financial products, and to customers who may, in some circumstances, struggle to meet the tight identification and verification requirements (National Treasury, 2020). This due diligence process can support financial inclusion in that more people will have access to financial products and services free of red tape.

In 2011, the South African government announced a move to the Twin Peaks model of financial regulation, which would see two regulators in the financial sector (National Treasury, 2020). The Prudential Authority was established to focus on prudential supervision, whilst the FSCA focuses on market conduct (National Treasury, 2020). Both these institutions are expected to support and promote financial inclusion in their respective obligations. The Prudential Authority regulates financial institutions and market infrastructure to encourage and strengthen their security and stability and reinforce financial stability (SARB 2020). As part of their regulatory mandate for 2018–2021, one of their priorities was to support financial inclusion along with financial technology (fintech) (SARB Prudential Authority, 2021). The Prudential Authority is currently working on refining and developing the regulatory and administrative approach for co-operative banks and mutual banks, co-operative financial institutions, as well as to implant the regulatory framework for micro insurers to aid financial inclusion (SARB Prudential Authority, 2021). In the 2021–2024 regulatory mandate, the Prudential Authority contends that it has started developing a strategy to support financial inclusion in all prudentially regulated financial institutions (SARB Prudential Authority, 2021).

The FSCA, on the other hand, has a financial inclusion strategy that aims to improve access to, usage, and quality of financial services for individuals and small, medium and micro enterprises (SMMEs), to aid financial inclusion in South Africa (FSCA, 2021). The FSCA stated that, as a regulator, it is in the best position to create an enabling environment in which financial institutions are positioned to supply financial products and services that are satisfactory, attainable, and fitting to customers' needs, with priority being given to the underserved (FSCA, 2021). The FSCA's financial inclusion strategy is based the following strategic pillars:

- From the demand side, the FSCA aims to advance financial inclusion via financial education, gathering and observing data on financial inclusion to track progress (FSCA, 2021).
- On the supply side, the FSCA aims to help technological innovations that will empower financial inclusion. It will also support micro financial service providers who offer simple and affordable financial products and services for low-income customers (FSCA, 2021). It further encourages creating an enabling environment in which customers are provided with products and services that are simple, affordable, similar in transparent pricing, and have useful disclosure, branding and marketing (FSCA, 2021).
- On the regulatory environment front, the FCSA aims to develop a regulatory and supervisory framework that encourages financial inclusion and, moreover, collaborates with other stakeholders and takes part in broad-ranging financial inclusion initiatives (FSCA, 2021). An enabling regulatory environment is one in which customers are protected and innovation is encouraged (FSCA, 2021).

The government furthered financial inclusion by diversifying the way in which recipients of the social grant could receive their grant. The South African Social Security Agency (SASSA), moved away from the single service provider method, and implemented a hybrid model that allows SASSA grant recipients to receive their grants through Postbank, selected retailers such as Shoprite, or their respective banks in their bank accounts (FinMark Trust, 2020). However, once again, adoption has not resulted in usage, as over 40% of grant recipients withdraw their money as soon as it is deposited (FSCA, 2021).

The frameworks and regulations implemented above are mostly guided by the National Treasury’s draft policy on an inclusive financial sector for all citizens. The objectives of the policy are:

- To encourage better and continual access to, and use of, satisfactory and inexpensive financial services and products.
- To guarantee that enhanced financial inclusion provides visible socio-economic benefits which will improve the quality of life of South Africans, especially low-income customers.

- To advance the facilitation of and aid for financial inclusion policies and strategies.
- To modify the financial sector to support the distribution of financial services to low-income customers and SMMEs.
- To enhance the cooperation of stakeholders with the focus on advancing financial inclusion.
- To enhance the evaluation and monitoring of financial inclusion (National Treasury, 2020).

The policy focuses on three pillars. The first pillar is based on deepening financial inclusion for individuals. It is built on the premise of enhancing the favourable use of financial services by those recently included, to improve payment infrastructure for greater use of new ways of payment, and the adoption of savings, insurance, and productive credit (National Treasury, 2020).

The second pillar focuses on improving access to financial services for SMMEs. This encompasses enhancing the credit structures in place for SMMEs, strengthening the payment systems in place, and incentivising the supply of asset insurance (National Treasury, 2020).

The third pillar focuses on leveraging a more diversified provider and distribution base. It will be established on the basis of supporting and strengthening cooperatives as competition, building a more equal regulatory platform to lower compliance costs, empowering agents in financial service delivery, and encouraging fintech disruptors (National Treasury, 2020).

The government recognises that to successfully implement the policy cooperation is needed between the different government departments and agencies, financial institutions, regulators, and other bodies to make the policy a success. To make this possible, the National Treasury has suggested two bodies: a sub-working working group for all public institutions on financial inclusion, and a financial inclusion forum for other sectors and non-governmental collaborators to involve policymakers and regulators on strategic matters (National Treasury, 2020).

Shipalana (2019) stated that the National Treasury needs to play a bigger role in financial inclusion through the evolution of a financial inclusion strategy that will be implemented nationally to enhance South Africa’s financial inclusion objectives. Shipalana (2019) emphasised the need for a more harmonised collaboration between the public and private sector regarding financial education, as there are too many financial education initiatives that need to be organised to make an impact on financial literacy.

Apart from financial education initiatives, policy frameworks will play a major role in enhancing financial inclusion for rural customers. The Alliance for Financial Inclusion (AFI, 2022) stated that policies and regulations are the primary tool at the disposal of policymakers regarding enhancing financial inclusion for rural customers. Policymakers need to take into account that these policies and frameworks should consider the marginalised population, while also enabling innovation (AFI, 2022). Therefore, South Africa’s policymakers will have to strike a balance between supporting innovation and considering the marginalised population, such as rural consumers.

2.9 CONCLUSION

The researcher identified a gap in the literature regarding the impact of digital banking on rural customers in South Africa. Literature examining the role played by digital banking in enhancing financial inclusion for rural customers in South Africa is relatively superficial. Much of the literature draws from counterpart countries such as China and India. These countries, together with South Africa, form part of BRICS (Brazil, Russia, India, China and South Africa), which play a vital role in promoting financial stability.

Most of the literature focuses on factors influencing the adoption of digital banking by rural customers in South Africa. Therefore, this study will contribute to filling the gap in the literature by delving deeper and into discussions around the impact of digital banking on the financial inclusion of rural customers in South Africa.

While the adoption of banking appears to be rising steadily, as shown in the literature reviewed, adoption does not necessarily lead to usage. The increasing a trend for customers accessing banking accounts does not always translate to using them. This points to the need to research whether digital banking has the potential to change this.

The FSCA stated that its strategy is based on ensuring that it improves access to, usage and quality of financial services for individuals and SMMEs. This has also been supported by the National Treasury who has expressed a desire to advance financial inclusion to beyond just adoption. Therefore, it is about more than simply having a bank account; it is about whether that bank account is useful and appropriate for rural customers. The researcher identified a gap in literature on the tools that impact adoption and usage, especially in an age where access has been made easier. By researching the impact of digital banking on financial inclusion of rural customers, the researcher will be able to make appropriate recommendations on the use of digital banking as a tool for financial inclusion in South Africa.

The next chapter will focus on the research design and methodology applied in this study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter will discuss the elements of the research design and methodology. It will provide the blueprint of the study to ensure that the research evidence collected is valid and the findings are non-biased. The research methodology section discusses the logical approach the researcher followed to answer the research questions.

3.2 RESEARCH PARADIGM AND ORIENTATION

The term ‘paradigm’ has multiple meanings, but ultimately it can be defined as the way in which the researcher views the world. This frames the topic and influences how the researcher interprets and thinks of the topic (Hughes, 2010, as cited in Kamal, 2019). A paradigm is also a set of beliefs that lead to actions (Guda, 1990, as cited in Kamal, 2019). The three research paradigms are positivism, critical theory, and interpretivism.

3.2.1 Positivism

Positivism deduces that reality exists outside of the influence of humans (Rehman & Alharthi, 2016). Reality is not controlled by human senses, and it is governed by rigid laws (Rehman & Alharthi, 2016). Therefore, the ontology of positivism is realism (Rehman & Alharthi, 2016). Positivists believe that the same cause-effect relationship occurrence that exists in the natural world also applies to the social world, because for them, reality is free from context and researchers who work at different times and locations will come to the same conclusion about a given situation (Rehman & Alharthi, 2016). The epistemological stance of positivists is objectivism, which contends that researchers enter as objective observers to survey a situation that exists separately from them, and they do not disrupt what is being observed (Rehman & Alharthi, 2016). Their methodology depends on experimentation, whereby a hypothesis is put forward about the relations between phenomena (Rehman & Alharthi, 2016). The data analysis approach is deductive in that the hypothesis is suggested first, after which it will be confirmed or rejected, depending on the results (Rehman & Alharthi, 2016).

3.2.2 Critical theory

Critical theory is formulated from ideas by theorists of the Frankfurt School (Asghar, 2013). Critical theory, in contrast to other theories, opposes the status quo and seeks to provide substitute knowledge or construct an improved social order (Asghar, 2013). It deals mainly with matters of power relations in society and the interplay of race, class, gender, education, economy, and other social factors that further the social system (Asghar, 2013). Its ontology is based on historical realism (Rehman & Alharthi, 2016). The belief is that while reality does exist, it has been defined by cultural, political, ethnic, gender and religious characteristics, which collaborate with each other to formulate a social system (Rehman & Alharthi, 2016). The epistemology of this paradigm is subjective, as it surmises that no object can be studied without being influenced by the researcher (Rehman & Alharthi, 2016).

3.2.3 Interpretivism

Interpretivists contend that reality has multiple layers and is complex. They maintain that the ultimate truth does not necessarily exist and that subjectivity to reality is ever-changing (Bunnis & Kelly, 2010, as cited in Kamal, 2019). Interpretivism examines the evolution of subjective definitions and understandings of an individual's experience regarding a certain topic based on their background (Kamal, 2019). The researcher adopted the interpretivism research paradigm for this reason—to determine whether digital banking has impacted the lives of rural communities through researching the lived experiences of rural communities.

The ontology of this theory is anti-foundationalist. It rejects the adoption of any indefinite, constant standard through which the truth can be invariably known (Rehman & Alharthi, 2016). Instead, interpretivists regard as true multiple realities that have been socially constructed (Rehman & Alharthi, 2016). They believe that truth and reality cannot be discovered, but rather are created and that it is impossible to know reality as it is because it is arbitrated by our senses (Rehman & Alharthi, 2016).

Like the ontology, the epistemology of interpretivism states that reality is subjective (Kamal, 2019). Therefore, throughout the research, multiple realities that exist are constructed between the participants and the researcher. The researcher discovers various interpretations of the world as they are constructed by the lived experiences of the participants.

Interpretivist methodology has an objective to explore and understand a situation inductively (Dammak, 2015). The interpretive methodology states that phenomena should be understood through the participant's experiences and not that of the researcher (Rehman & Alharthi, 2016). Therefore, through data collection based on the experiences of the participants, the researcher was able to determine whether digital banking has impacted on the financial inclusion of rural customers.

3.2.4 Research design

The research design is a description of how the researcher plans to investigate the research problem (Bouchrika, 2023). It is a plan to answer the research questions and outlines the strategy to be followed to collect, analyse, interpret, and report on the data from the research study (Bouchrika, 2023).

This study used a case study research design. A case study is a detailed investigation of a certain event, situation, social population, or organisation (Schoch, 2020). The case could be of an individual, a small group, a community or even a nation (Schoch, 2020). The focus of a case study is to find factors that define a certain entity or population, with an in-depth account of occurrences that rely on real-life cases why using various data collection methods (Njie & Asimiran, 2014). A case study was appropriate for this study for a variety of reasons. First, the questions of "what" and "how" were being raised. Second, the researcher would have limited control over the events. Third, the focus was on a present-time topic taking place in a real-life scenario (Yin, 2009).

The benefit of a case study design is that it focuses the research within specific confines; it gives the researcher a chance to collect various types of data, such as interviews, surveys, and documents based on the case. The outcome is based on a deep understanding of the specified unit, which will help the reader to learn from the specific case (Schoch, 2020). By using a case study design, the findings provided an in-depth understanding of the impact of digital banking on the Ga-Mothapo community. The recommendations from the findings would help, not only the Ga-Mothapo community, but also other rural communities in and around the Polokwane municipal jurisdiction.

3.3 RESEARCH APPROACH

3.3.1 Qualitative approach

The researcher employed a qualitative research approach because of its effectiveness when trying to unpack the dynamics that influence human behaviour and perceptions in their social settings (Davies, 2007). Qualitative research is the collection and analysis of non-numerical data to acknowledge ideas, beliefs, or experiences (Bhandari, 2022a). The qualitative method of research includes an interpretative and naturalistic approach to the topic being studied (Aspers & Corte, 2019). Through the qualitative method, researchers study subjects in their organic settings, trying to make sense of or explain situations regarding what they mean to people (Aspers & Corte, 2019). Qualitative research involves consolidating an assortment of pieces of empirical information, such as case studies, interviews, personal experience, observations, and other materials (Aspers & Corte, 2019). Its focus is mostly based on the “why” as opposed to the “what” of social situations and relies on the candid experiences of the participants (University of Texas Arlington, 2023).

For this study, the qualitative research approach was deemed the most appropriate method to address the research questions, which focused on “how” and “what”. Therefore, an exploratory and descriptive design helped the researcher to answer the questions and meet the research objectives. This approach allowed the researcher to explore insights and meanings on the impact of digital banking on the financial inclusion of rural customers. Using the qualitative method gives the research an in-depth interpretative meaning based on the data collected. This helped in acquiring a deeper understanding of the role of digital banking in enhancing access to financial services for rural customers, the strategies of the emerging digital bank, and the frameworks and challenges of stakeholders in the financial sector. The qualitative approach helped the researcher to explore the target population’s interpretations, experiences, and frameworks regarding the impact of digital banking on the financial inclusion of rural customers.

3.3.2 Research approach to data collection

3.3.2.1 Interviews

The researcher conducted qualitative interviews. The interview process is a data collection technique involving the researcher verbally asking respondents questions about the topic (Wilson et al., 2000). Interviews can be used to gather detailed data from the research respondents and give the researcher an expert opinion on the topic when talking to participants who are most knowledgeable about the research objectives (University of Moratuwa Sri Lanka, n.d.). Unstructured interviews allow participants to speak freely about anything they wish (Wilson et al., 2000). Structured interviews, on the other hand, limit participants' responses to directly answering the question posed to them. Alternatively, in semi-structured interviews, the interviewer uses open-ended questions (Wilson et al., 2000).

The researcher conducted teleconference interviews with the participants from the National Treasury, Financial Sector Conduct Authority (FSCA), the Banking Association of South Africa (BASA), and TymeBank. However, interviews with Ga-Mothapo participants were conducted face-to-face. The interviews with the participants took an average of 45 minutes. The interviewer used an interview guide to ensure the interview experience was the same for all participants (see Appendix 3).

3.3.2.2 Literature review

To strengthen the validity of the conclusions drawn from the study, the researcher conducted a literature review, which is a discussion of knowledge available on a certain topic (Cantero, 2019). The intention of a literature review is to integrate and evaluate the data and information in line with the research questions, research objectives, and main themes (Cantero, 2019). Therefore, instead of reinforcing an argument, or only compiling a list of summarised studies, the literature review integrates and evaluates the ideas of other scholars on the research topic (Cantero, 2019). The literature review also demonstrates the researcher's ability to perform research and to gather knowledge on the chosen topic (Cantero, 2019). Furthermore, a literature review exposes the reader to the most common theories on the topic, assessments and contrasts in these studies, and any gaps that may be identified in the literature (Cantero, 2019).

The researcher made use of books, journal articles, newspaper articles, reports, policy documents, unpublished dissertations/theses, national census data from Stats SA and other sources. Chapter 2 of this study is dedicated to the literature review, focusing on the background of financial inclusion and exclusion from a national and global context. The policy position of the South African government, through the National Treasury and its entities, such as the FSCA, is presented in the literature review.

3.3.3 Data analysis

Data analysis is the presentation, description, and interpretation of the data collected systematically to determine patterns of correlation in the data (Flick, 2013). Data analysis involves making sense of what the data collected says about the problem statement of the research.

The researcher used thematic analysis to analyse the data collected. Thematic analysis is the procedure followed to methodically identify, categorise and give insight into the patterns across the data collected (Braun & Clark, 2006). The researcher chose to use the thematic analysis because it allowed her to focus on the meaning of the data set collected, and to identify and make sense of common interpretations and experiences as presented by the data (Braun & Clark, 2006). Thematic analysis allowed the researcher to examine the views of the different participants in a practical way that helped her zero in on similarities and differences and produce findings.

The data was analysed in the form of codes and grouped into themes according to the research objectives and other themes that were identified when analysing the data. The researcher analysed data collected from the participants, finding common features in the form of themes and patterns. The researcher looked at the responses from key informants to find patterns for respondents' reactions, dominant views, contrasts, and justifications for their opinions.

The researcher then used these narratives to establish a picture of the context for each theme. The analysis followed Braun and Clark's (2006) six steps to undertake a thematic analysis: 1) becoming familiar with the data; 2) generating initial codes; 3) searching for themes; 4) reviewing themes; 5) defining and naming themes; and 6) producing the report.

The study further employed computer-assisted qualitative data analysis software (CAQDAS) for thematic analysis. ATLAS.ti version 8 was considered the most appropriate CAQDAS analytical tool for data analysis.

3.4 THE QUALITATIVE METHOD STRAND IN RESEARCH APPROACH

3.4.1 Coverage of the study

The study covered the community of Ga-Mothapo, a rural settlement located in the Capricorn District in Limpopo (Sengwayo et al., 2012). The village is one of the 14 Traditional Authorities that forms a part of the Polokwane Local Municipality (Capricorn District Municipality, 2022) (See Figure 3.1).

Figure 3.1: Map of Ga-Mothapo

Source: Google Maps

According to the 2011 census by Statistics South Africa (Stats SA), Ga-Mothapo has a population of 1 604, with a total of 442 households. A large majority are Sepedi speakers; 50.5% of the population is of working age, whilst 11.9% is regarded as elderly (Stats SA, 2011). About 35% of the population has some secondary education, and less than 10% of the population has a higher education level (Stats SA, 2011). Looking at the economy, 14.7% of the population has no household income, whilst about 30.8% have an average household monthly income of between R9 601 and R19 600. The vast majority (99%) of the population of Ga-Mothapo is Black African, 96.4% of whom are Sepedi speaking (Stats SA, 2011). Half of the Ga-Mothapo community is of working age, of which 27.1% are aged 20–49 years (Stats SA, 2011). According to the Statistics SA 2011 census, 71.5% of the population has never been married whilst 20.9% were married (Stats SA, 2011). At the time the census was taken, 81.9% of the population had no access to the internet, 12.7% had access through their phones, and 1.4% had access from work (Stats SA, 2011).

3.4.2 Target population

The target population is the group of people or things for which the findings of research are generalised (Fraser et al., 2018). The target population includes all the individuals who have suitable characteristics to be a part of the study (Fraser et al., 2018). For the purposes of this study, the population comprised the following: bank clients in rural communities, bank executives, National Treasury, banking sector regulatory bodies. The target of population of Ga-Mothapo was drawn from 100 SMMEs, stokvels, ward committee leaders, and the traditional authority.

More of the target population was drawn from TymeBank South Africa's corporate office, which has 550 employees. At the National Treasury, the researcher drew from a target population of 1 167) employees. At the FSCA, the target population was drawn from 667 employees. The target population at BASA was 67 employees.

3.4.3 Sampling methods

A sampling procedure is the process of drawing a subset from the target population to participate in the research (Taherdoost, 2016a). Because time and resources are too limited to analyse the entire population, applying a sampling method helps a researcher to identify a subset of the population to represent the views of the target population (Taherdoost, 2016a). Sampling is important for research because it is not usually practical for a researcher to collect data from all cases in the population. Therefore, in drawing a smaller sample, the researcher is not limited by high costs, time, and the difficulties of dealing with large population sizes (Qualitrics, 2020).

There are two types of sampling methods: probability sampling and non-probability sampling. With probability sampling, cases are chosen at random and every case in the population has an equal opportunity to be chosen for the sample (Taherdoost, 2016a). Non-probability sampling, on the other hand, involves the researcher choosing the sample deliberately as per their research objectives and knowledge (Qualtrics, 2020). Taherdoost (2016a) stated that non-probability sampling is often used when a case study research design and qualitative research method have been adopted. The researcher used non-probability purposive sampling for this study.

The researcher chose purposive sampling based on the knowledge and understanding that cases within the population had regarding the research question and were thus suitable for meeting the research objectives (Taherdoost, 2016a). The units were selected based on the researcher's judgement. Not everyone in Ga-Mothapo, the financial sector, or the public sector had the requisite knowledge of the matter being investigated. Therefore, the researcher intentionally selected the sample from the community based on the researcher's opinion of their suitability to take part in the study (Sarantakos, 2005). Applying purposive sampling was considered most effective, as the limited number of participants served as the main source of data owing to the nature of the research design and its objectives (Dudovsky, 2018).

3.4.4 Sample size

The sample size is the number of participants chosen from the target population to take part in the study from which the data was put together (Kaur, 2017). The total sample size used for this research was 19 participants, divided as illustrated in Table 3.1.

Table 3.1: Respondents for this study

Classification	**Sample Size**
Ga-Mothapo community members	15
TymeBank Executive	1
National Treasury Officers	1
Financial Sector Conduct Authority	1
Banking Association of South Africa	1
Total Sample Size	19

As no single rule exists regarding the appropriate sample size for a study, it is determined based on the topic being studied and how the findings will be used (Boddy, 2016). In terms of scope of the research, the researcher deemed this sample size appropriate because she was researching the current state of affairs with the intention of contributing to studies and strategies that already existed. Looking at the characteristics of the target population, the diversity of the population was accounted for to reach the main objectives of the research. The rural community of Ga-Mothapo made up the greatest proportion of the sample, as the study was based on rural customers, and the recommendations would be based on their lived experiences. The researcher ensured that the majority of the public institutions that played a role in the financial services sector were represented by at least one participant, and the bank was represented by one participant. The sample size was also determined by the researcher's time and resources. As the researcher conducted this research based on the timeline set by the school, she faced certain time constraints. The researcher also collected the data by herself, which was time-consuming. Furthermore, as the research was not funded, the researcher used her own limited funds.

3.4.5 Instrument for data collection

The researcher used two main instruments for collecting data: semi -structured interviews and the literature. As discussed earlier, interviewing is a data collection instrument used where information is exchanged through questions and answers (Pressbooks, 2020). The questions were designed to gather information from participants on the topics that informed the researcher's research questions and objectives (Pressbooks, 2020). The researcher used semi-structured interviews in which a discussion took place between the researcher and the participant, which was guided by an interview protocol and complemented by follow-up questions, inquiry, and remarks (DeJonckheere & Vaughn, 2019). The researcher chose semi-structured interviews because the method uses a combination of closed and open-ended questions that can be supplemented by follow-up "why" or "how" questions. This was important for the study because the researcher had to gather data based on the participants' experiences, attitudes, and beliefs regarding the topic The nature of the questions was such that it was important to have an effective discussion to address them and closed-ended questions would not be suitable. Therefore, the semi-structured interviews allowed the interviewer and the participants to discuss the topic and questions in more detail. The researcher also opted for this method of questioning because several areas needed to be discussed to reach the conclusion.

The open-ended questions allowed for flexibility. By using questions with minimal structure, the researcher could identify patterns from the in-depth responses that the respondents provided. The flexibility of the instrument allowed the researcher to explore the participants' thoughts and opinions related to the research. This enhanced the accuracy of the data because of the option to explain and shed light on questions or answers (Alamri, 2018). The third advantage is that semi-structured interviews can be recorded (Alamri, 2018). The researcher used a recording device during the interviews to collect the data, which enhanced the validity and reliability of the study.

The second source of data collection tool for this study was secondary data through a literature review. The study reviewed the literature for critical engagement with recent and relevant literature in the field of study (Babbie & Mouton, 2010). The literature reviewed comprised diverse sources, such as articles in accredited journals, unpublished dissertations, internet searches, newspaper clippings, books, research papers from conference proceedings, and official government policy documents. The literature supplemented the data collected from the interviews for the discussion chapter.

3.4.6 Validity, reliability and trustworthiness

3.4.6.1 Validity

Validity concerns how well the data that has been gathered addresses the area of research (Taherdoost, 2016b). To achieve validity, the researcher ensured that the methodology, the instruments of data collection, and the analysis tools were appropriate for the study. Moreover, the researcher remained true to the phrasing used by the participants during the analysis process. This was complemented by taking detailed notes to help the researcher reflect on and acknowledge the information provided. The researcher also created an audit trail by keeping a record of all the research-related undertakings, including all the primary interviews, journal information, recordings of the interviews, and the researcher's diary. The researcher applied a member-checking strategy for keeping in contact with the research participants during the data collection and analysis stage to corroborate specific interpretations and themes emerging from the data analysis. This controlled the influence of the researcher's bias or assumptions, as well as the interpretations and analysis of the results.

3.4.6.2 Reliability

Drost (2011) defined reliability as "the extent to which measurements are repeatable-when different persons perform the measurements on different occasions, under different conditions, with supposedly alternative instruments which measure the same thing". To ensure reliability, the questions were formulated unambiguously, clearly and sensibly. Questionnaires were based on the problem statement and were guided by the research objective and problem. The same interview questions were administered to participants according to the objective. Participants were not paid for their participation, thus ensuring that their responses were based on their honest opinions.

During the interview process, the researcher recorded all the interviews, which were transcribed and then systematically analysed to produce the analysis and results.

The findings were compared to the research questions to determine the study's reliability. Data was checked with the theory to eliminate mistakes and to ensure all themes and sub-themes were well developed.

3.4.6.3 Trustworthiness

Trustworthiness refers to the researcher's claim to have used appropriate, adequate and replicable methods, and to have correctly reported the findings (Hill, 2012). A trustworthy study is the one which is confirmable, credible, transferable and dependable (Hammond and Wellington, 2013), all of which the researcher applied, as discussed below.

i. Credibility

To attain credibility, the researcher employed research questions, data collection techniques, a literature review, and data analysis to build a valid argument and recommendations. During the interview sessions, the researcher spoke less and allowed respondents to express themselves without disturbances. The interviews were recorded, and the audio recordings were stored safely. The incorporation of the respondents' verbatim accounts guaranteed the credibility of the study. In addition, the exact recordings were retained to provide a clear audit trail and ensure that the explanations of the data were transparent (Cope, 2014). To ensure credibility, the researcher adopted Kusi's (2012) steps, as follows:

- Used language that was easy for respondents to understand.
- Guarded against speculation during interviews, to allow for information to flow freely.
- Followed the supervisor's guidance during data collection and analysis.

ii. Transferability

According to Singh (2013), transferability refers to the extent to which the outcomes of qualitative research can be transferred to other situations. The researcher had a duty to ensure that the outcomes of this study could be transferred to other situations. The generalisation of an investigation makes a study relevant in other contexts and settings (Nowell et al., 2017). The data will be transferable to studies conducted in the future.

To ensure the reader understands the consistency of the study, the researcher explained each of the research steps.

iii. Dependability

Dependability refers to the researcher accounting for developments that occur within the surroundings of the research (Singh, 2013). The supervisor assured the quality control by reviewing and assessing the transcripts and the data analysis steps as a way of triangulation. Because the researcher did not diminish the data collected, the findings accurately depict the respondents' views. The researcher made sure that the research process was identifiable, objective, and well documented (Nowell et al., 2017). The researcher took full accountability and kept an account of all the processes followed in conducting the study.

iv. Confirmability

According to Trochim (2006), confirmability is the ability of the results to be supported or confirmed by others. The researcher ensured that the findings would be relevant to other studies in similar environments or settings. Shenton (2004) contended that steps should be taken to validate that the findings are the consequence of the participants' lived experiences and perspectives. The researcher listened and observed impartially, to avoid polluting the findings with bias. Stating the potential sources of bias ensured greater critical assessment of the research findings and conclusions (Smit & Noble, 2014). It is the duty of the researcher to be objective and impartial to ensure that the findings represent the respondents' authentic views. Moreover, the researcher had outlined the research procedure that showed how data collection and analysis were executed. The role of the researcher was to transcribe the data, confirm precision and authenticity, outline how findings were obtained from the data to make interpretations and reach the conclusion (Cope, 2014). The interpretations of the findings were checked against the literature.

3.4.7 Administration of research instruments

The administration of research instruments refers to how interviews are conducted. As mentioned earlier, the researcher used interviews as a way of collecting primary data from the participants. As the corporate participants, such as a TymeBank, FSCA, BASA and National Treasury, were based in Gauteng, the researcher conducted the interviews through Zoom or Microsoft Teams. The interviews with participants in the community of Ga-Mothapo were conducted face-to-face.

3.5 ETHICAL CONSIDERATIONS

A researcher is required to follow certain guidelines to ensure that respondents' rights are protected, that the research is valid, and that its integrity is maintained (Bhandari, 2022b).

The researcher followed the proper guidelines as prescribed by the school. She started by compiling a research proposal for approval by the Regenesys Business School research committee. Once approved, the researcher started the mini-dissertation.

After completing the first three chapters of the mini-dissertation, the researcher applied for ethical clearance, which was granted by the Regenesys Business School ethics committee. The researcher could then proceed with data collection (see Appendix 1).

During the interviews, the researcher ensured that all participants were protected from harm by conducting the interviews in a safe environment selected by the participant. Interviews that took place via telephone or Zoom calls were conducted in a private room free from interruptions. Before the start of the interview, the researcher asked participants to sign an informed consent form (Appendix 2). The researcher informed participants of the objectives of the study and its main purpose. The researcher guaranteed the anonymity of participants and the protection of their identities. The participants were reassured that their participation was entirely voluntary, and that they were entitled to withdraw their participation at any point.

The researcher emphasised that participants would receive no financial reward for their participation in the research. They were also informed that their interviews would be recorded for data analysis purposes. Once the participants had signed their consent form or sent it through to the researcher, the researcher commenced with the interviews.

The researcher avoided all forms of plagiarism, by ensuring that all the work cited was credible and that the data and findings were valid. The dissertation was run through Turnitin to check for any plagiarism. The APA (v. 7) method of referencing was used to cite sources. With these guarantees, the overall risk to participants was very low.

3.6 CONCLUSION

This chapter presented the research methodology and design that were used to answer the research questions logically and to guide the research to meet the research objectives. Because the research aimed to understand and explore the impact of digital banking on rural customers, the researcher found that the qualitative approach would be the best way to achieve this. The researcher applied a case study design to present a detailed study based on the Ga-Mothapo rural community in the Polokwane local municipality, Limpopo Province. The case study would help the researcher to define digital banking as a means of financial inclusion by giving details of the community's lived experiences. In line with the case study design, the researcher chose to use non-probability purposive sampling to draw subsets of the populations. Primary data collected from semi-structured interviews and secondary data from the literature review allowed the researcher to present the results. By using the methodologies and designs discussed in this chapter, the researcher could conduct the research, complete with results, recommendations and a conclusion that would contribute to academia and policymaking. The next chapter will present the data analysis from the data that was collected.

CHAPTER 4: DATA ANALYSIS

4.1 INTRODUCTION

This chapter starts by presenting the biographic and demographic information of the respondents who took part in the Zoom interviews. It presents the characteristics, products, and services the digital banking systems could provide to rural communities. This is followed by results of the impact of digital banking, an exploration of its implementation on the cost of digital banking, financial services needs and wants, and a policy framework for implementing digital banking in rural communities.

Table 4.1: Participants responses as per page number

Responses from:	**Page number of responses:**
All respondents	P.59 – P.64
	P.77
Ga-Mothapo community	P.64 – P.69
	P.71 – P.72
Emerging digital bank	P.70 – P.71
Financial sector stakeholders: • FSCA • BASA • National Treasury of South Africa	P.72 – P.80

4.2 RESPONDENTS' DEMOGRAPHIC INFORMATION

The demographic information of the respondents in the study is presented in Table 4.2 below. None of the respondents were aged 18 years or below, whilst 62% of the respondents were aged 19–25 years, 8% were aged 26–30 years, and 31% were aged 31 years and above. The study analysed the genders of the overall participants and found that 54% were male and 46% were female. When analysing the participants' qualifications, the results reveal that 31% went to school from Grade 8 to Grade 12, 15% held a diploma, and 15% had an undergraduate degree or higher. According to the results, 54% of the participants were single, whilst 46% were married. The racial profile showed that 100% of the participants were Black.

Table 4.2: Biographical information of respondents

Items	Categories	Frequency (n)	Percentage (%)
Age	≥ 18 years old	0	0
	19–25 years old	8	62
	26–30 years old	1	8
	≤ 31 years old	4	31
Gender	Male	7	54
	Female	6	46
Province	Limpopo	7	54
	Gauteng	6	46
District Municipality	Capricorn	7	54
	City of Tshwane	3	23
	City of Johannesburg	3	23
Qualifications	Grade 8–12	4	31
	Diploma	2	15
	Undergraduate degree or higher	2	15
Marital status	Single	7	54
	Married	6	46
Banking experience	Black	13	100

Figures 4.1–4.7 depict the information provided in Table 4.2.

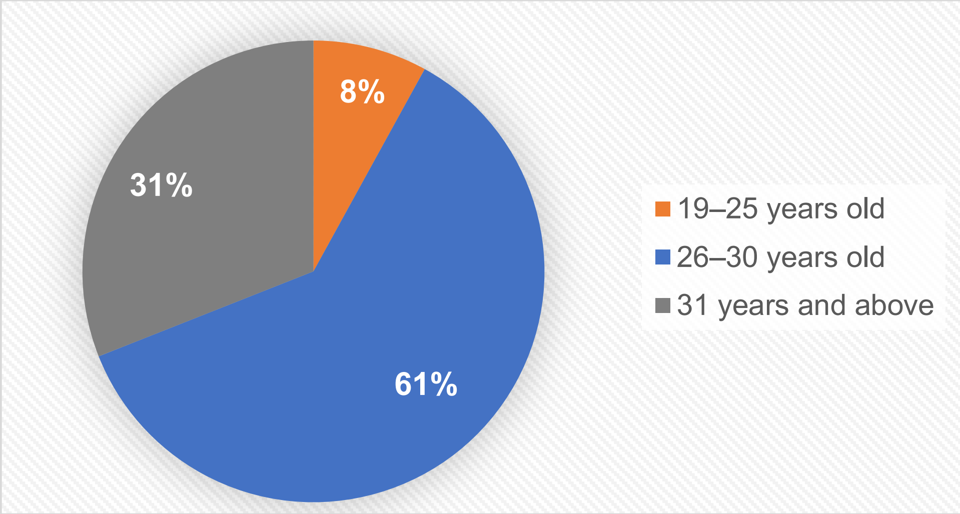

Figure 4.1: Age of respondents

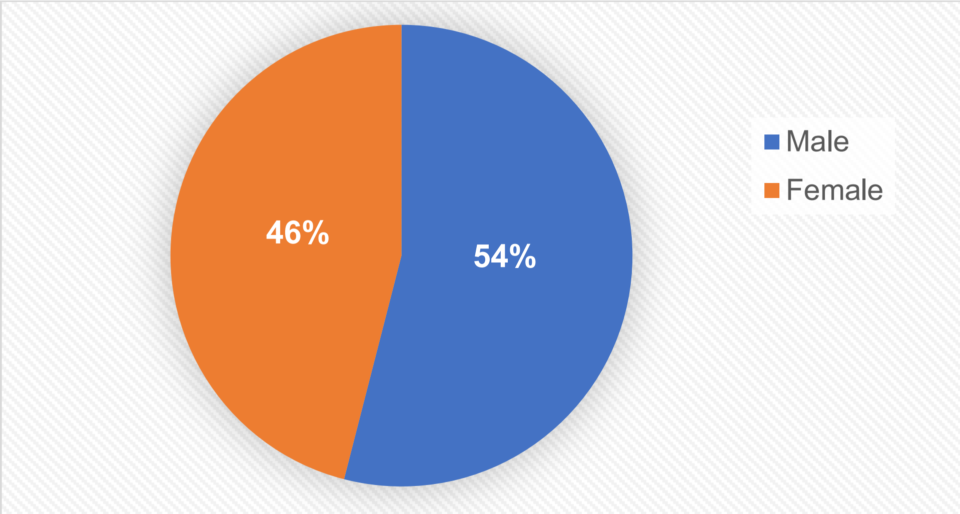

Figure 4.2: Gender of respondents

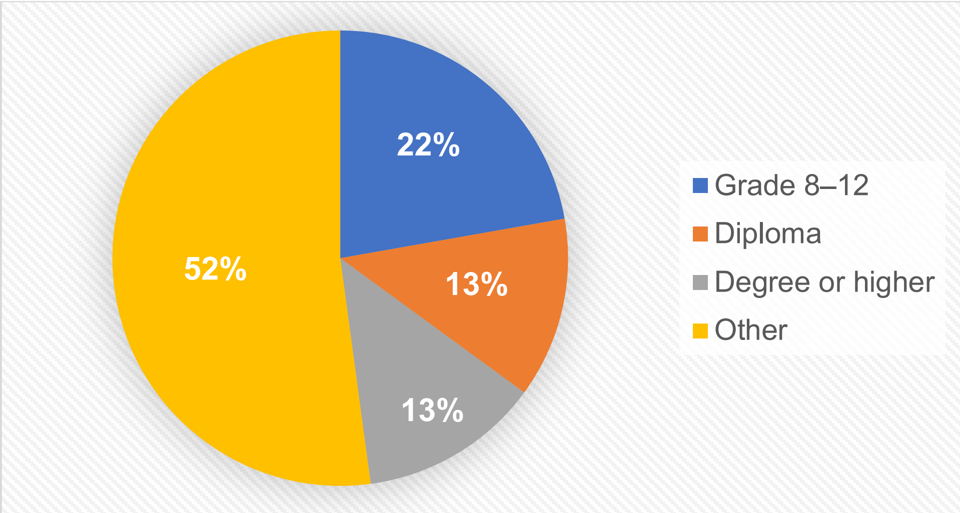

Figure 4.3: Level of education of respondents

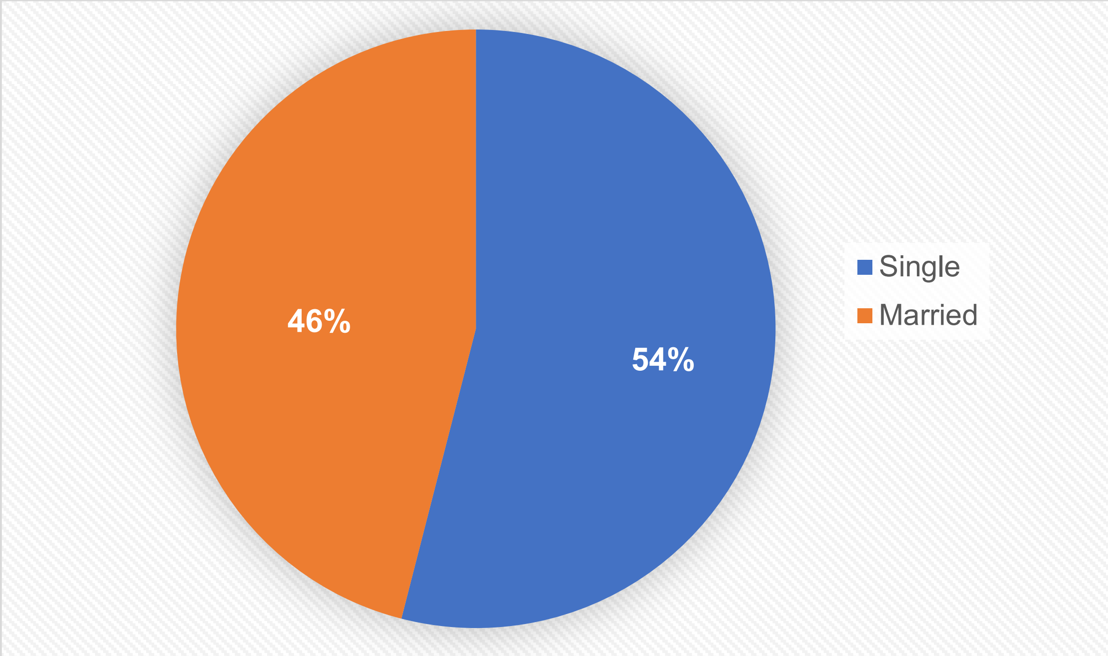

Figure 4.4: Marital status of respondents

Figures 4.5 and 4.6 illustrate the percentage of respondents per province and district municipality. The results showed that 54% of respondents were from Limpopo, and 46% were from Gauteng. When analysing the overall district municipalities, 54% came from the Capricorn District, 23% were from the City of Tshwane, and 23% were from the City of Johannesburg.

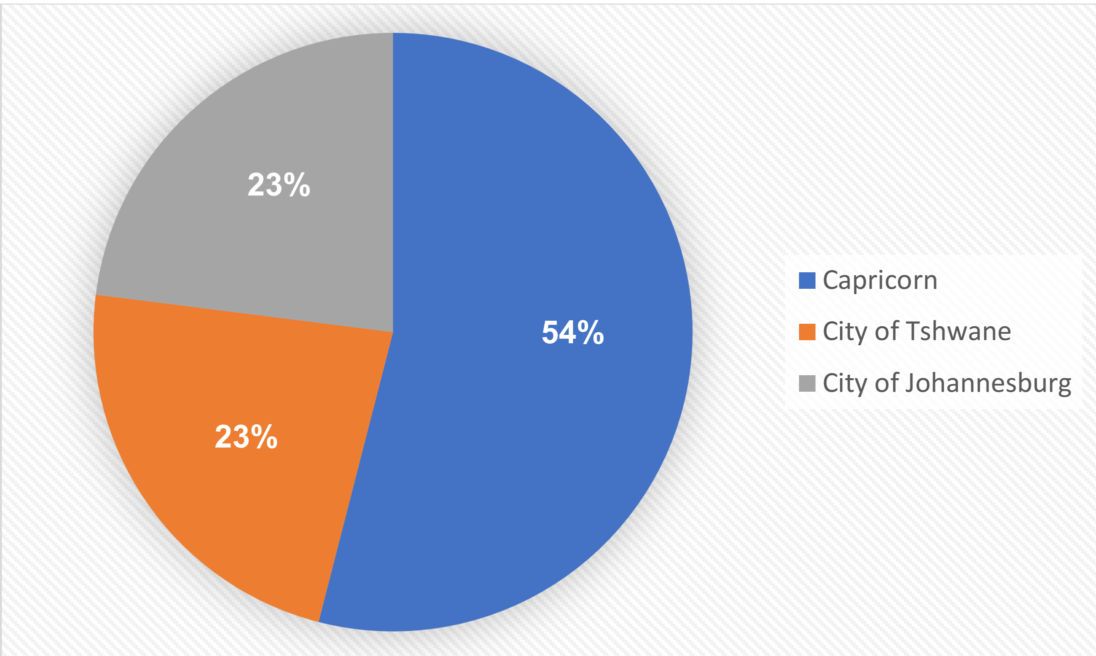

Figure 4.5: Municipal district of respondents

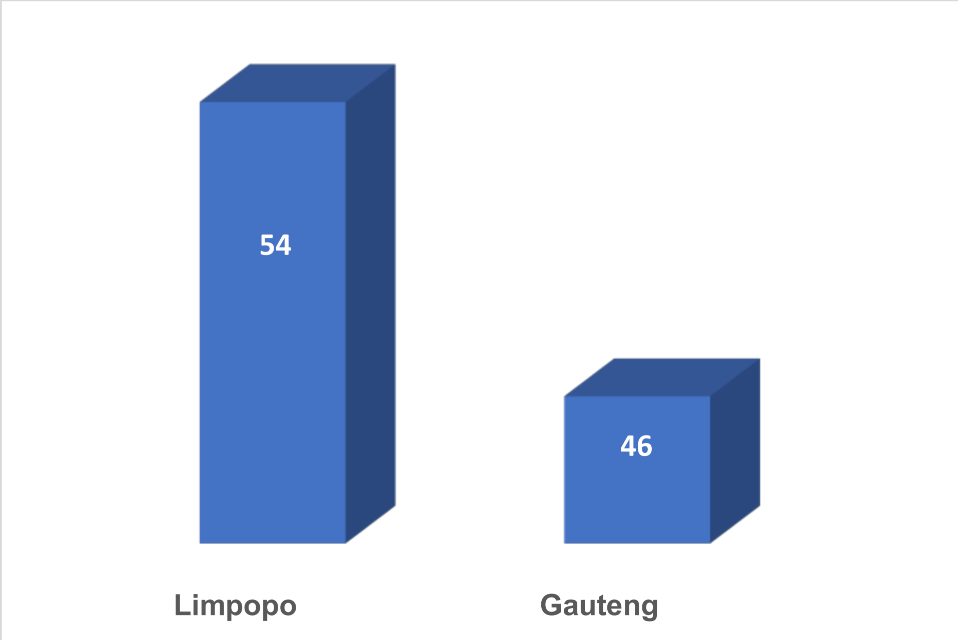

Figure 4.6: Provincial representation of respondents

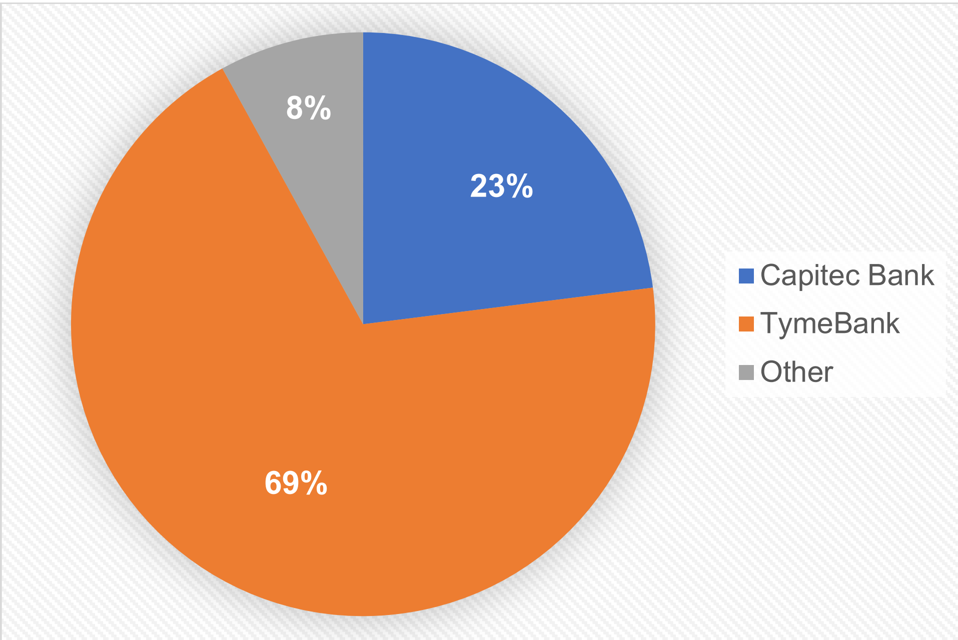

Figure 4.7: Demographic information of respondents per bank

Table 4.3, which presents the respondents' demographic information, shows that 23% of participants banked with Capitec, 69% banked with TymeBank, none of the participants banked with Old Mutual Bank, none banked with Standard Bank, and 8% banked with one of the other banks. In terms of the participants' banking experience, the results reveal that 15% of respondents had been with their bank for two years or less, 15% had been with their bank for 3–5 years, and 70% have been with their bank for five years or more.

Table 4.3: Demographic information of the respondents of the study.

Items	Categories	Frequency (n)	Percentage (%)
Province	Limpopo	7	54
	Gauteng	6	46
District municipality	Capricorn	7	54
	City of Tshwane	3	23
	City of Johannesburg	3	23
Banks	Capitec bank limited	3	23
	TymeBank	9	69
	Old mutual bank	0	0
	Standard bank	0	0
	Other	1	8
Banking experience	≥2 years	2	15
	3-5 years	2	15
	≤5 years	9	70

4.3 CHARACTERISTICS, PRODUCTS, AND SERVICES OF DIGITAL BANKING IN RURAL COMMUNITIES

Table 4.4 presents the characteristics, products, and services of digital banking in rural communities, which revealed four themes. The results for the first theme, which is the digital banking offering used by respondents, showed that 31% used cellphone banking, 39% used internet banking, and 31% used both cellphone banking and internet banking.

The second theme represents the products and services the respondents accessed using digital banking. The results show that 38% of the respondents accessed banking statements, 8% stated that digital banking was inaccessible, 54% wanted reduced banking costs, 100% bought electricity, and 85% used it to transfer money.

From the third theme—digital banking usefulness—the results reveal that 100% of respondents found digital banking useful, 38% stated that it made their life easier and 100% stated that it was user-friendly.

The final theme relates to the costs of digital banking and shows that 31% of the respondents found the costs low, 23% thought the costs were reasonable, and 92% found the costs high.

Table 4.4: The characteristics, products, and services of digital banking in rural communities

Theme	Sub-theme	Features of digital banking	
		Frequency (n)	Percentage (%)
Digital banking offering	Cell banking	4	31
	Internet banking	5	39
	Cell banking and internet banking	4	31
Products and services using the digital banking	Access to statements	5	38
	Inaccessibility of digital banking	1	8
	Reduction of banking cost	7	54
	Buying electricity	13	100
	Transfer of money	11	85
Digital banking usefulness	Useful in rural communities	13	100
	It makes life easier.	5	38
	It is user-friendly.	13	100
Digital banking reduces or increase cost of living.	Low cost	4	31
	Reasonable	3	23
	High cost	12	92

4.4 IMPACT OF DIGITAL BANKING ON RURAL COMMUNITIES

Figure 4.8 presents the impact of digital banking in the rural communities in Ga-Mothapo, whilst Figure 4.9 presents the advantages of digital banking in the same community.

Most respondents appeared to be of the view that digital banking makes access to their banking statements much easier, as opposed to going to a physical bank. The results from the analysis revealed that the participants have credited digital banking with enabling them to buy prepaid products, such as airtime, mobile data, and electricity. From a banking services perspective, the participants concurred that, through digital banking, they have been able to access banking services such as paying beneficiaries, making payments, and transferring money. In addition, digital banking has enabled some participants to open bank accounts and apply for products such as credit cards and home loans remotely using internet banking or the banking app, without needing to visit a physical bank. The participants agreed that banking has become more accessible and useful for them through digital banking, as they can now bank from anywhere, anytime.

The results from the analysis revealed the advantages that digital banking has had for some participants. Most agreed that digital banking is more convenient as they can do more without needing to visit a physical bank. They can draw or download statements, make payments, increase their daily limits, and access their beneficiaries. As mentioned above, they have the advantage of being able to bank from anywhere and anytime. Through digital banking, participants also agreed that they no longer saw the need to go to a physical store or complex to buy prepaid products, as they could now just make these purchases through their digital banking.

Some participants conceded that their banking is no longer limited to using a bank card or walking into a bank; they can now access their banking or funds using digital banking methods, such as the mobile banking app. Moreover, the results showed that most participants were more inclined to save money because they use digital banking.

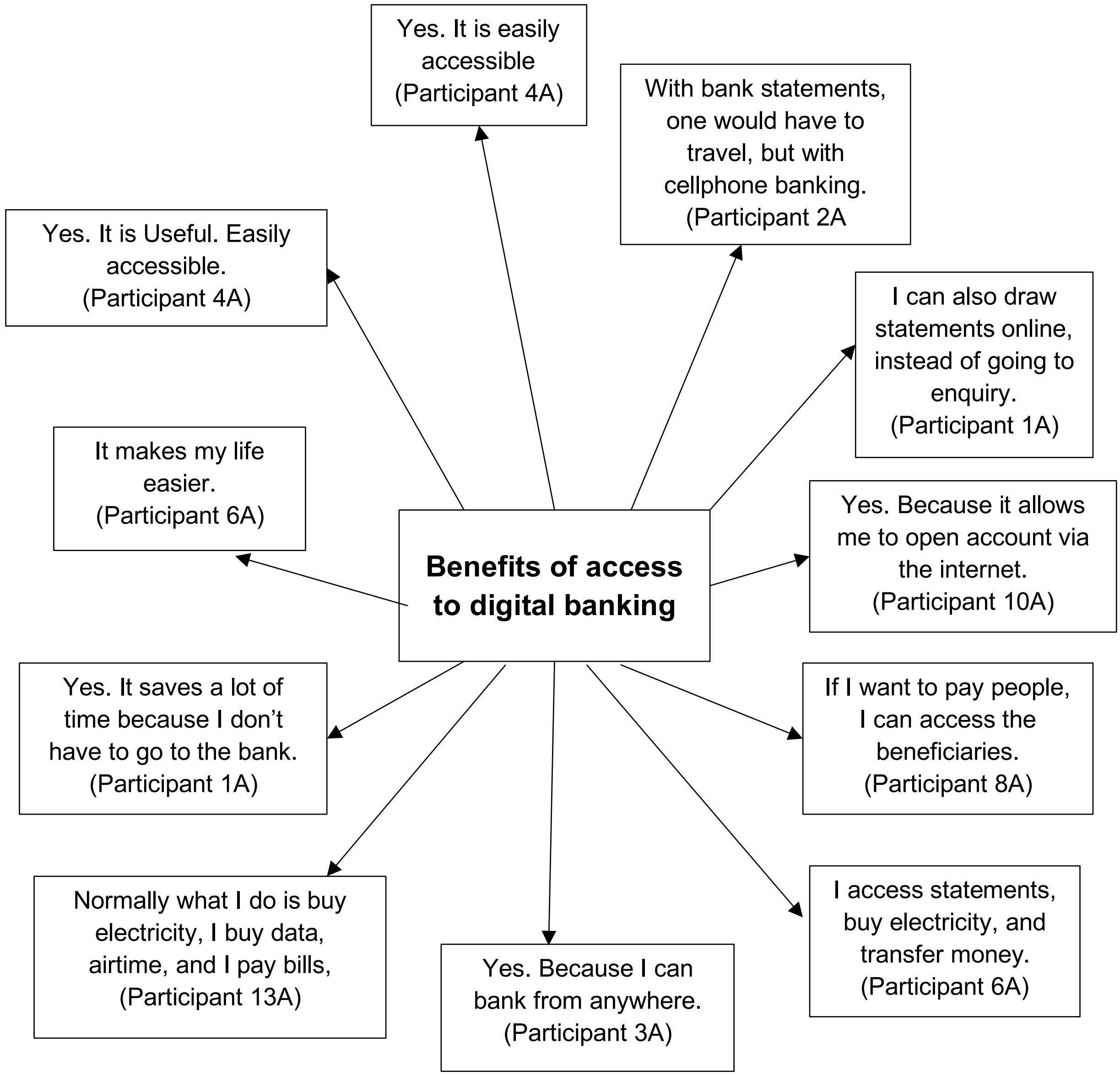

Figure 4.8: Impact of the digital banking in the rural communities

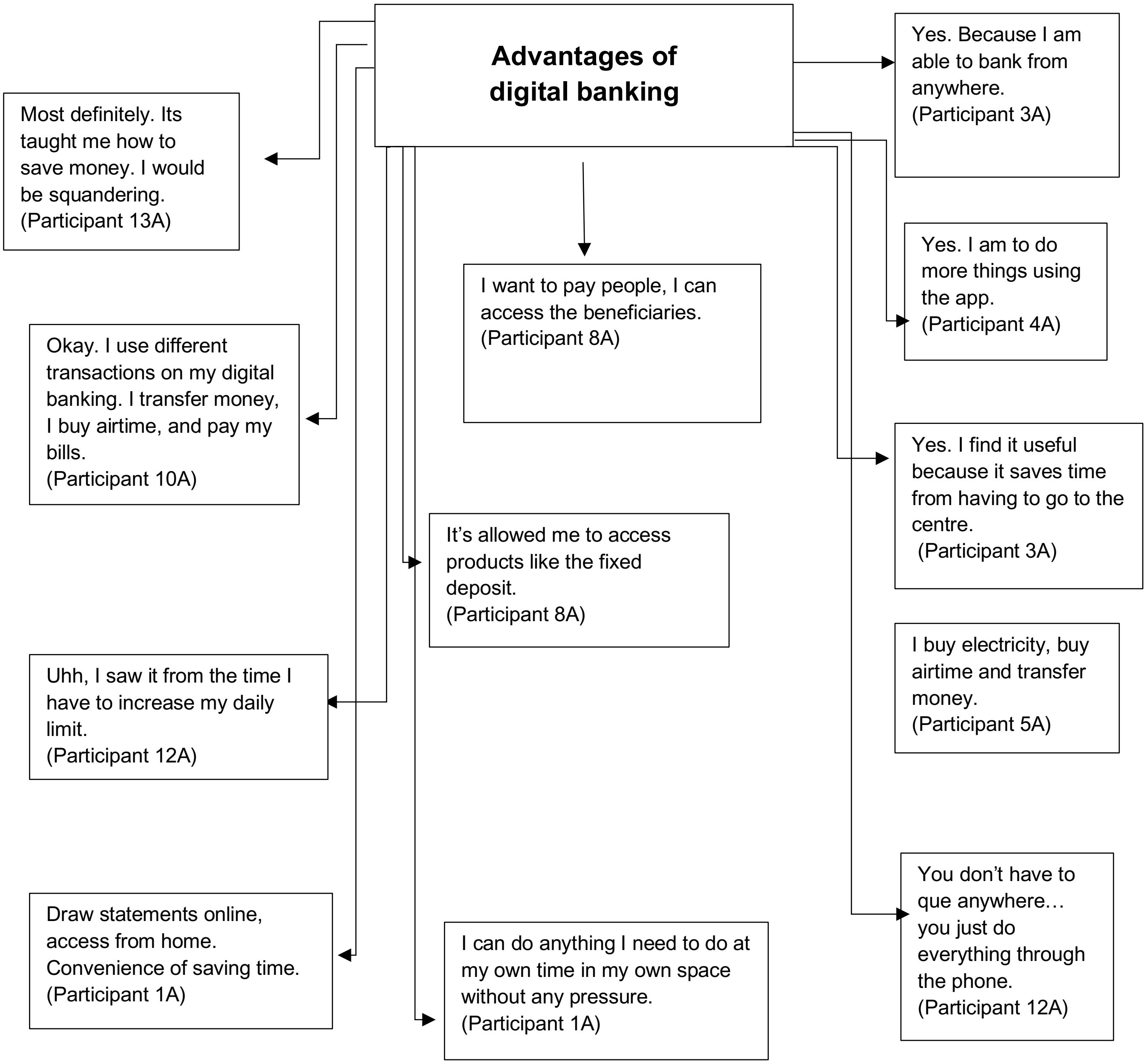

Figure 4.9: Advantages of digital banking to rural communities in Ga-Mothapo

4.5 EXPLORING THE IMPLEMENTATION OF LOW-COST DIGITAL BANKING IN EMERGING BANKS

Table 4.5 presents results of the exploration of the implementation of low-cost digital banking in emerging banks. The first theme identified is the usefulness of banking, where the results reveal that 8% of the community of Ga-Mothapo found digital banking an easy-to-use tool, 54% stated that digital banking was user-friendly, and 38% found that it had influenced the way they used their bank accounts.

The second theme was on the convenience of digital banking. The results show that 21% saved time by using digital banking, 10% operated their digital banking from home, 24% operated their digital banking from anywhere, 14% saved on travelling costs to town because of digital banking, 17% only made use of their app, 10% found that digital banking made their life easier, and 3% used the e-wallet.

The results of the third theme on the multi-functional purpose of digital banking indicate that 20% used their digital banking to transfer money, 20% bought electricity, 30% bought airtime and data, and 30% paid beneficiaries and bills.

The data analysis from the fourth and final theme on training and capacity building, established that 43% needed training on how to use their mobile apps, 50% needed training on how to use their internet/online banking and 7% needed training on how to use cellphone banking.

Table 4.5: Results of the exploration of the implementation of low-cost digital banking in emerging banks

Theme	Sub-theme	Factors for the Implementation of digital banking	
		Frequency (n)	Percentage (%)
Usefulness of banking	Easy to use tool	2	8
	User-friendly	13	54
	Influence the use of banking account	9	38
Convenience of digital banking	Saving time	6	21
	Operate from home	3	10
	Banking anywhere	7	24
	No travelling costs to town	4	14
	Just a use of the app	5	17
	Make life easy	3	10
	Use of e-wallet	1	3

Theme	Sub-theme	Factors for the Implementation of digital banking	
		Frequency (n)	**Percentage (%)**
Multi-functional purpose	Money transfer	4	20
	Buying electricity	4	20
	Buying airtime/data	6	30
	Pay beneficiaries/bills	6	30
Training and capacity building.	Mobile app	6	43
	Internet/online banking	7	50
	Cellphone banking	1	7

Figure 4.10 presents the exploration of the implementation of low-cost digital banking. In exploring the implementation from an emerging digital banks angle—in this case TymeBank—the results showed that TymeBank ensures accessibility for its rural customers through its retail partnerships where it has kiosks and an ambassador network, as well as through its banking app, which is available on both Android and IOS. TymeBank has also put in place measures such as an easy-to-use app that is zero rated, YouTube "how to" videos, a WhatsApp channel with frequently asked questions (FAQs), and trained ambassadors to facilitate the customer's journey, especially for those with no digital literacy.

In terms of encouraging rural customers to use their digital banking offering, the results reveal that TymeBank drives awareness on how their bank account is the most value-for-money product on the market with low fees for transactions, high interest rates for deposits, and a quick onboarding process. Moreover, its account has no monthly banking fees, and customers pay as they use, with the ability to bank for zero fees, regardless of the number of transactions. The TymeBank bank account is simple, with transparent pricing that does not use decimals or percentages. TymeBank finds that its low banking fee structure also encourages bank account usage. TymeBank aims to reach customers who have been ignored by traditional banks through its retail partnerships and easy-to-use banking app. The results also revealed that, because of its partnership with retailers such as Boxer, it is in a better position to reach rural customers in remote areas with a bank account that is usable, useful, and affordable. It constantly engages with its customers through SMSes and emails, as well as marketing activities, such as television and radio.

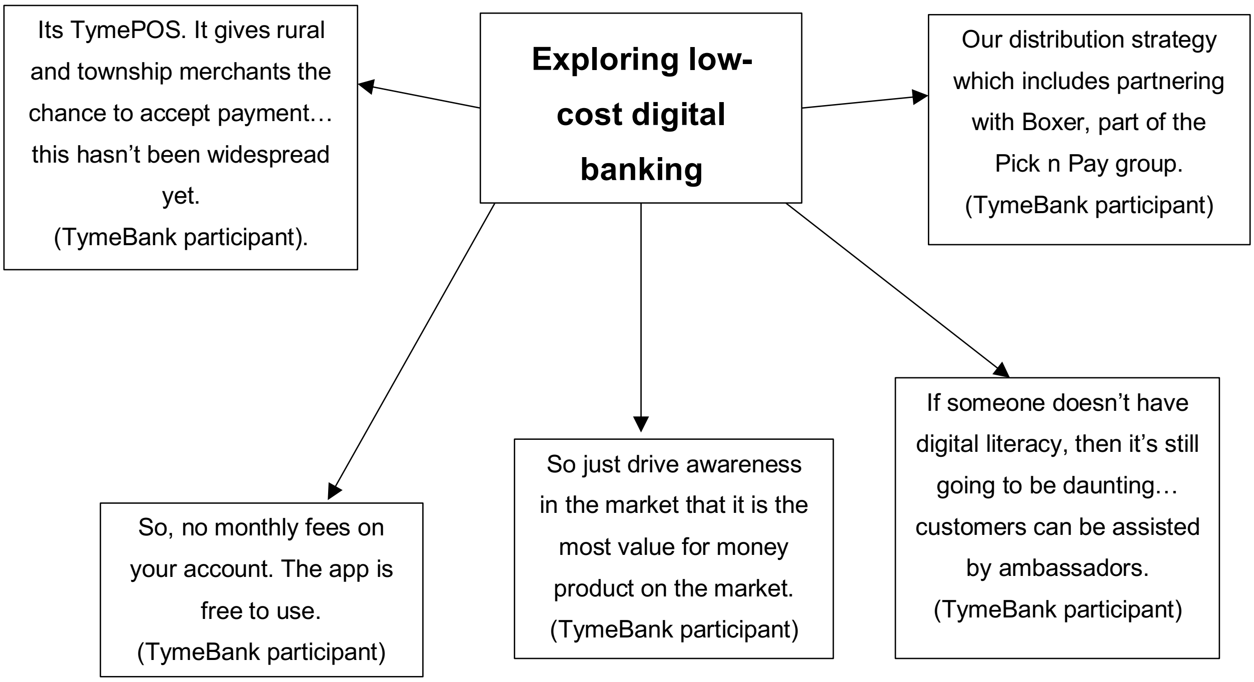

Figure 4.10: The exploration of the implementation of the low-cost digital banking

4.6 THE FINANCIAL SERVICES NEEDS AND WANTS OF GA-MOTHAPO

Table 4.6 presents the opinions of participants regarding digital banking meeting the financial services needs and wants of rural communities in Limpopo Province. The participants were asked the question: Does the digital banking method you use meet your financial service needs and wants?

Of the 15 rural customer participants, 13 agreed that digital banking meets their financial needs and wants. Some customers shared the view that digital banking allows them to access their banking through their cellphones and online without having to visit a physical bank branch.

Table 4.6: Participants' opinions regarding digital banking meeting the financial service needs and wants of rural communities in Limpopo Province

Participant	Question: (Does the digital banking method you use meet your financial services needs and wants?)/Responses:
1	Yes. There is no problem. They meet service needs and wants.
2	Yes. Able to buy things online and do online transactions instead of doing things physically.
3	Yes.
4	Yes, it does.
5	Yes.
6	Yes.
7	Yes.
8	Yes.
9	Yes. I can say yes because, via digital banking, I pay what I want at the time by using my cell phone, without going to the physical branch.
10	Yes.
11	Yes, it does.
12	Yes.
13	Yes.

4.7 POLICY FRAMEWORK IMPLEMENTED BY PUBLIC SECTOR FINANCIAL REGULATORS AND INSTITUTIONS IN SOUTH AFRICA THAT SUPPORT DIGITAL BANKING

The first stakeholder who participated was the Banking Association of South Africa (BASA) participant, who was quoted saying:

> *"So, there are two primary challenges. The first challenge is financial education. People's knowledge of different financial products and different banking products that are available and being in a position to make choices about what is suitable for them at a given point in time."*

The participant added:

> *"Maybe just by way of addition to what we have covered, that the financial services industry is subject to the Financial Sector Code, so these are BEE [Black economic empowerment] codes for the financial sector."*

The results from the policy analysis, therefore, established that educational empowerment and black economic empowerment policies are central to the implementation of the digital banking system's success.

The second respondent for the objective on policy was the National Treasury. The participant stated:

> *"From our side, we focus on learning from our peer countries that have had success in driving financial inclusion. If you look at India for example, I think they have a system that drives interoperability."*

> *"I will just stick to the financial inclusion policy. Chapter 5 or 6 speaks about from policy to implementation. So, from an implementation perspective, the policy proposes that an establishment of two bodies, one being for financial inclusion sub-working group which would essentially consist of all the key implementing stakeholders from a government perspective or from a policy and regulatory perspective… We are also members of international bodies such as SADC's sub-committee on financial inclusion, which has been driving the regional real time gross settlement initiatives for the SADC region. We are on the G20 global partnership on financial inclusion."*

These data analysis results revealed that a financial inclusivity policy is the key to development.

The final stakeholder that participated in the research was the Financial Sector Conduct Authority (FSCA), who stated:

> *"Some of the challenges include inadequate infrastructure. That's one of the major challenges which we normally encounter when promoting financial inclusion for rural customers. More especially, in these days and times where digital devices are the in things, are the things that are making it easy for people to have access."*

"So, what the IFWG has done, they have what is called regulatory sandbox. A sandbox is a space that allows innovators—all these people who've got very innovative products they want to distribute into the financial market. Sandbox gives them an opportunity to test those products under the supervision and oversight of financial regulators."

"If there are recommendations that we have put in place, first of all what we have encouraged is the issue of financial education. We have recommended to financial institutions that they must educate their customers about the digital financial products."

The results revealed that digital financial inclusion, financial education and innovation policies need to be promoted.

Table 4.7 summarises the results of the analysis of the policy frameworks implemented by the public sector financial regulators and institutions of South Africa that support digital banking.

Table 4.7: Results of the analysis of the policy framework implemented by public sector financial regulators and institutions of South Africa that support digital banking

Stakeholders	Quotation	Policy analysis
Banking Association of South Africa (BASA)	47:16 ¶ 6 in Participant 18A BASA respondent: *"So, there are two primary challenges. The first challenge is financial education. People's knowledge of different financial products and different banking products that are available and being in a position to make choices about what is suitable for them at a given point in time."* 47:17 ¶ 15 in Participant 18A BASA respondent: "*Maybe, just by way of addition to what we have covered that the financial services industry is subject to the Financial Sector Code, so these are BEE codes for the financial sector."*	The educational empowerment and black economic empowerment policies are central to the implementation of the digital banking system success.
National Treasury	48:14 ¶ 18 in Participant 19A- National Treasury respondent: *"From our side, we focus on learning from our peer countries that have had success in driving financial inclusion."*	Financial inclusivity policy is the key to development.

Stakeholders	Quotation	Policy analysis
	48:15 ¶ 21 in Participant 19A- National Treasury respondent: "*I will just stick to the financial inclusion policy. We are also members of international bodies such as SADC sub-committee on financial inclusion, which has been driving the regional real time gross settlement initiatives for the SADC region. We are on the G20 global partnership on financial inclusion.*"	
Financial Sector Conduct Authority (FSCA)	50:42 ¶ 6 in Participant 17A FSCA respondent: *"Some of the challenges include inadequate infrastructure. That's one of the major challenges which we normally encounter when promoting financial inclusion for rural customers. More especially, in these days and times where digital devices are the in things, are the things that are making it easy for people to have access."*	Digital financial inclusion and financial education are policies that need to be promoted.

Stakeholders	Quotation	Policy analysis
	50:47 ¶ 24 in Participant 17A FSCA respondent: *“If there are recommendations that we have put in place, first of all what we have encouraged is the issue of financial education. We have recommended to financial institutions that they must educate their customers about the digital financial products.”*	

Table 4.8 presents the results of the respondents’ views on the three set objectives. A 26.92% response rate was received from TymeBank on Objective 2 and another 26.92% response from them on Objective 3. Based on the age of respondents, 11.54% had views on Objective 3. Only 7.69% of the respondents’ banking experience views were reflected in Objective 3, and 11.54% of the respondents from the different provinces had views on Objective 3.

Table 4.8: Results of the respondents’ views on three set objectives.

Variables	**Objective 1 Gr=145; GS=12**	**Objective 2 Gr=22; GS=1**	**Objective 3 Gr=33; GS=4**	**Totals**
○ ABSA Gr=1	1 (3.85%)	0	0	1(3.85%)
○ BASA Transcript Gr=2	0	0	0	0
○ Capitec Bank Limited Gr=3	0	0	0	0
○ FSCA Gr=5	0	0	0	0

Variables	**Objective 1 Gr=145; GS=12**	**Objective 2 Gr=22; GS=1**	**Objective 3 Gr=33; GS=4**	**Totals**
○ TymeBank Gr=9	0	7 (26.92%)	7 (26.92%)	14 (53.85%)
Age of respondents Gr=8; GS=7	0	0	3 (11.54%)	3 (11.54)
Banking experience of the respondents Gr=5; GS=5	0	0	2 (7.69%)	2 (7.69%)
Gender Gr=9; GS=2	0	0	3 (11.54%)	3 (11.54)
Provinces Gr=7; GS=2	0	0	3 (11.54%)	3 (11.54)
Totals	1 (3.85%)	7 (26.92%)	18 (69.23%)	26 (100.00%)

4.8 CHALLENGES FACING LOW-COST DIGITAL BANKING IN RURAL COMMUNITIES

The participant from BASA asserted:

> *"The second challenge is high levels of unemployment. Because, in many ways, for you to be part of the financial system, you would need to earn an income… Having an income in some ways makes you interact with the financial system."*

Therefore, the issue of unemployment amongst rural customers is a challenge faced by public institutions when promoting financial inclusion for rural customers.

The participant from the FSCA expressed the following:

> *"More especially, in these days and times where digital devices are the in things, are the things that are making it easy for people to have access. You find that there's issue of infrastructure that is inadequate. For example, you find in some areas that network is very poor; as a result, it denies people an opportunity to make use of digital devices to access and to use their financial services."*

The results, therefore, reveal that inadequate infrastructure and poor networks in the rural communities are a challenge for low-cost digital banks.

Rural customers are also faced with the challenge of data affordability, as the participant stated:

> *"The other challenge is the issue of cost, the cost of data. As you may be aware, most people who reside in rural areas, they are low-income earners, and the price of data tends to contribute in terms of where their disposable income is concerned."*

Rural customers are faced with the challenge of digital illiteracy. The participant was quoted as saying:

> *"The third thing, there's the issue of digital literacy. A lot of people can access these things, but you find that even though they can access them, they are unable to use them. So, there's an element of digital illiteracy that is at play also. So, those are the three major challenges that I can highlight."*

Table 4.9 summarises the opinions of stakeholders regarding the obstacles to low-cost digital banking in rural communities.

Table 4.9: Opinion of stakeholders regarding the obstacles to low-cost digital banking in rural communities.

Stakeholders	Quotation	Challenges
BASA	*"The second challenge is high levels of unemployment. Because, in many ways for you to be part of the financial system, you would need to earn an income… Having an income, in some ways, makes you interact with the financial system,"*	High unemployment amongst rural customers

Stakeholders	Quotation	Challenges
FSCA	*"More especially, in these days and times where digital devices are the in things, are the things that are making it easy for people to have access. You find that there's issue of infrastructure that is inadequate, for example you find in some areas that network is very poor, as a result, it denies people an opportunity to make use of digital devices to access and to use their financial services."*	Inadequate infrastructure and poor network in the rural communities.
	"The other challenge is the issue of cost, the cost of data. As you may be aware, most people who reside in rural areas, they are low-income earners, and the price of data tends to contribute in terms of where their disposable income is concerned."	Data in affordability
	"The third thing, there's the issue of digital literacy. A lot of people can access these things, but you find that even though they can access them, they are unable to use them. So, there's an element of digital illiteracy that is at play also. So, those are the three major challenges that I can highlight."	Digital illiteracy.

4.9 CONCLUSION

Chapter 4 presented the data analysis and results of the study. It began with a presentation of the participants' demographic information—age, gender, qualifications, marital status and banking experience, provinces and district municipalities. The chapter then revealed the results from the characteristics, products, and services of digital banking in rural communities, which were classified under four themes: digital banking offering; products and services using digital banking; digital banking's usefulness and whether it reduces or increases the cost of living.

The chapter then showed the results from the impact of digital banking on rural communities and quoted some of the responses given by the rural customers who participated. The implementation of low-cost digital banking by emerging banks was explored in this chapter, which revealed four themes: usefulness of banking; convenience of digital banking; multi-functional purpose; and training and capacity building needed by rural customers.

This was followed by a presentation of results of whether digital banking meets the financial services needs and wants of rural communities in Limpopo, South Africa, to which 13 participants responded in the affirmative.

As part of the third objective, the chapter presented the results of the policy framework implemented by public sector financial regulators and institutions of South Africa that support digital banking. From the responses given by the institutions and regulators, the results revealed four policy analyses. The final part of the chapter presented the results of the challenges facing low-cost digital banking in rural communities that were identified by the public stakeholders who participated in the study.

The next chapter will discuss the results presented in this chapter.

CHAPTER 5: DISCUSSION OF FINDINGS

The purpose of the research was to explore the role that digital banking plays in providing rural customers with access to basic banking services and products. The data suggests that digital banking has provided rural customers with access to financial products and services that are useful and that cater to their needs. Emerging digital banks such as TymeBank have played in a role in this through providing banking services and products that specifically cater to the underserved market. However, public institutions, in their efforts to enhance financial inclusion for rural customers, have met with financial literacy and infrastructure challenges.

This chapter will discuss the research results outlined in Chapter 4, drawing on the literature discussed in Chapter 2 to compare the results with findings that already exist.

5.1 DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

The study had a total of 19 participants, comprising 15 participants from the Ga-Mothapo community, one participant from Tymebank, one from the Banking Association of South Africa (BASA), one from the Financial Sector Conduct Authority (FSCA), and one from the National Treasury of South Africa.

The participants ranged in age from 21 to 45 years. From the community of Ga-Mothapo, the researcher deliberately chose participants who were above 18 years, first because of the legal age in South Africa and second, because the researcher sought to explore the lived experiences of a more mature and knowledgeable population who would understand the questions and who had experience with banking services and products. This choice is confirmed in the results, which identified that 85% of the participants had banking experience spanning three or more years. The participants from the bank and public sector organisations were chosen according to their job titles in their respective companies and not according to age. Therefore, the researcher mainly selected participants who dealt with financial inclusion or digital banking within their respective organisation.

While the researcher approached both male and female potential participants, the males were more willing to take part than the females. Therefore, the study had more male participants than it did female participants. The data shows that all the participants were black, which was not surprising given that 99.9% of the Ga-Mothapo population is Black African, with other races accounting for about 0.1% of the population. However, this did not influence the results because the core focus was on the personal experiences of participants with using digital banking to access financial services, and not because of their race or gender.

The results revealed that the majority of participants went to school from grade eight to grade twelve. The literature had indeed shown that 34.7% of the Ga-Mothapo population had only some secondary education, with only 8.7% of the population having a higher education (Stats SA, 2011). Two provinces represented in the demographics—Limpopo and Gauteng. Ga-Mothapo is located in the Capricorn District of Limpopo (Sengwayo et al., 2012). Gauteng was represented in the research because the head offices of TymeBank, BASA, FSCA, and National Treasury are all in Gauteng.

The analysis identified Capitec and TymeBank as the most widely used banks amongst the participants. Both these banks have stated that they exist to serve underserved segments of the population. Capitec entered the market by setting up shop in rural communities first to reach underserved customers, after which it placed its branches strategically near taxi ranks and bus stations in the city (Vermeulen, 2018). Capitec contended, through the literature, that it has one product offering which it offers at a low-cost because it operates a low-cost business (Capitec Bank, 2021). Capitec Bank has implemented several strategies to ensure customers can access their financial services and needs from anywhere. Apart from offering different digital banking services, Capitec has implemented digital strategies, such as remote client onboarding, which allow customers to open bank accounts from anywhere; virtual cards that enable online shopping; biometric eSignature services for customers to sign documents digitally; and a scan-to-pay service for its customers to pay using their smartphones (Capitec Bank, 2021).

TymeBank was publicly launched in 2019 and had acquired three million clients by March 2021 (BusinessTech, 2021; TymeGlobal ??). TymeBank formed strategic partnerships with retailers such as Boxer, which are located in peri-urban and low-income urban areas (Battersby & Peyton, 2014). This was a strategic move by TymeBank to enable it to serve underserved customers in those areas, as well as those coming from rural areas (Battersby & Peyton, 2014). Jenik (2022) stated that TymeBank was able to onboard many rural customers because of its accessibility and affordability.

5.2 THE CHARACTERISTICS, PRODUCTS, AND SERVICES OF DIGITAL BANKING IN RURAL COMMUNITIES

The analysis identified that rural customers have adopted at least one of the different digital banking methods to access financial services. The most widely used form of digital banking was cellphone banking, followed by internet banking, and then a combination of the two. The results are consistent with the literature, which showed that cellphone banking was the most widely used digital banking method amongst South African consumers (FinMark Trust, 2022). Most of the participants stated that they used cellphone banking because it is easy to access, and it is user-friendly. According to Louw and Nieuwenhuizen (2020), because cellphone banking is accessible on both smartphones and ordinary phones through unstructured supplementary service data (USSD), impediments to accessing cellphone banking were limited.

The literature showed that banking apps were the second most preferred digital banking method amongst South African customers. However, the results of the research indicate otherwise. Louw and Nieuwehuizen (2020) found that most banks in South Africa provide their banking apps at a zero rate. Therefore, one would expect that rural customers would adopt it. However, mobile banking apps require a smartphone that supports the app.

The results identified that rural customers have adopted internet banking. The research participants stated they were able to access the bank’s full-service offerings through internet banking. Participant 3A stated that, through internet banking, they could access and manage their home loan. Participant 5A stated that they could pay beneficiaries and access their notice deposit using internet banking. Most of the participants who adopted internet banking used it as an additional tool alongside cellphone banking. They used cellphone banking for their everyday needs, such as buying prepaid products and transferring money, whilst they used internet banking to access banking services that would normally require a banking teller, such as loan management, accessing investment accounts, and making large payments to their beneficiaries and paying other bills.

The data goes on to reveal that digital banking has given rural customers access to several digital financial services. Participants stated that, using their preferred digital banking method, they accessed banking statements, transferred money, paid beneficiaries, made payments, and bought prepaid products, such as airtime, mobile data, and electricity. Other participants stated they have they had been able to open bank accounts, apply for credit cards, and manage their home loans. In line with the literature, digital banking is a catalyst for financial inclusion when it allows customers access to banking activities such as money deposits, withdrawals, transfers, paying bills, account and portfolio management, loan management, applying for financial products, and access to investment financial services (Haralayya, 2021).

Digital financial services, through digital banking, have a positive impact on financial inclusion because they eliminate the physical and economic barriers that inhibit financial access for people in remote and rural areas (UN Conference on Trade and Development, 2021). Therefore, remote accessibility of digital financial services enhances access to financial services for people in remote locations and those with a low income (Mhlanga, 2020; Pazarbasioglu, 2020). Garcia and Herminio (2021) found a positive correlation between digital banking and financial inclusion, because digital banking can be used as a strategic tool for financial inclusion to reach people in remote areas. This shows a correlation between the literature and the data presented.

The financial inclusion of rural communities is beneficial in that access to financial services allows the rural population to take part in economic activity, which, in turn, gives way to localised development (Oji, 2015). The rural community of Ga-Mothapo, which is situated about 28 km from the City of Polokwane, has been able to access financial services through digital banking, which puts them in a better position to be financially included. The National Treasury of South Africa (2020) argued that financial inclusion in South Africa is essential for addressing the inequality gap. By having access to meaningful financial services and products, rural customers are included in the economy, narrowing the inequality gap in South Africa.

The data identified that rural customers find digital banking useful. All the participants agreed that digital banking is both useful and user-friendly. The reason the participants gave for finding digital banking useful was that it reduces their need to visit physical bank branches. They found digital banking to be more convenient, giving them access to banking financial services and products from anywhere and anytime. Participant 10A stated they were convinced of the usefulness of digital banking after they had to increase their daily limit urgently and could do so through their digital banking. Some participants attributed the usefulness of digital banking to saving them time because they no longer had to stand in long queues at the branch. Participant 3Amaintained that digital banking is useful for them because it saved them from the extra charge that comes with consulting bank tellers and consultants. Therefore, rural customers find digital banking to be useful because it is convenient, saves them money, and is easily accessible. The literature supports this view as it found that perceived usefulness, coupled with perceived ease of use, were factors that enabled rural customers to adopt digital banking and facilitated its subsequent prolonged use (Nkoyi et al., 2018; Slazus & Bick, 2022).

Previous research emphasised the importance of affordability for financial inclusion. The data, however, suggests that the participants found the banks' charges to be costly. They stated that, while the digital banking services they used are mostly free, the amounts they are charged to perform their banking transactions add up and become expensive. This could indicate a problem in the long run, because the literature shows that high charges were one factor that inhibited rural customers in South Africa from adopting digital banking (Ramnath, 2018). This was supported by Chitimira and Ncube (2020) in the literature, who found that the financial inclusion of low-income and poor earners in South Africa was impeded by macro level challenges, such as high banking fees. Those participants who believed the costs of digital banking to be reasonable confirmed that they saved on time, transport, and on what they would be charged to be assisted by bank tellers. This perceived advantage is consistent with the literature, which showed that digital banking saved customers money in that it reduced the amount they spent on communication and public transport, which could be redirected towards their savings (Finau et al., 2016).

5.3 IMPACT OF DIGITAL BANKING ON THE RURAL COMMUNITIES

Apart from saving money, the data reveals that other advantages of digital banking for rural customers included being able to bank from anywhere and anytime; remotely accessing financial services and products and prepaid products; and access no longer being limited to physical card and physical banking services. Previous literature found that South African consumers adopted mobile banking for its convenience, and because it allowed them to access their banking anytime with minimal effort, time and consultation fees (Chigada & Hirschfelder, 2017, as cited in van Niekerk & Phaladi, 2021). Therefore, the data shows that the factors that play a role in the financial inclusion of rural customers through digital banking have proved advantageous for the participants in accessing financial services.

5.4 THE FINANCIAL SERVICE NEEDS AND WANTS OF THE RURAL COMMUNITY OF GA-MOTHAPO

The data analysis determined that digital banking meets the financial needs and wants of the participants. This is important because it means they can access the financial products and services they make use of and that are useful to them, their needs, and their wants. The satisfaction of needs is a significant factor when considering financial inclusion. The participants stated that digital banking met their financial services needs and wants because they do banking online without needing to go to a physical bank. The World Bank (2022) defined financial inclusion as access to affordable and functional financial services and products that satisfy customers' needs. Using the World Bank definition of financial inclusion, the data and discussion confirmed that digital banking has enhanced the financial inclusion of rural customers. This is because the participants are, first, able to access financial services and products; second, they find these products and services to useful; and third, they find the products and services meet their financial needs and wants. However, the factor of cost may pose a challenge, as the data shows that most customers found their digital banking charges to be high.

5.5 EXPLORATION OF THE IMPLEMENTATION OF LOW-COST DIGITAL BANKING IN EMERGING BANKS

Research question two was aimed at exploring the implementation of low-cost digital banking by an emerging bank as a tool for the financial inclusion of rural customers. The results reveal that participants who use low-cost digital banking found it useful and convenient for various reasons and found it to have a multi-functional purpose.

As TymeBank is a digital bank that targets low-income customers, the researcher interviewed a TymeBank official. The results show that TymeBank has made its banking products and services accessible to rural customers through its distribution network, which includes partnerships with retailers such as Boxer and its digital banking channels. Moreover, it has a low-cost and transparent fee structure to encourage adoption and use.

TymeBank confirmed that it was established specifically to target those customers who were not being serviced by traditional banks. Its partnerships with retailers such as Boxer and Pick n Pay play a big role in the business model because its target market tends to lie in areas where these retailers are located. This is consistent with the literature, which found that TymeBank had been able to reach rural and low-income customers because Boxer Supermarket is strategically situated in rural, peri-urban, and low-income urban areas, making the bank easy to access (Battersby & Peyton, 2014).

TymeBank has placed kiosks in these retail stores, which play the role of a traditional bank teller by onboarding customers. The literature states that almost 85% of TymeBank's customers are onboarded using the kiosk, which has a fingerprint reader, camera, and card printer, and where customers can receive their debit card in less than five minutes (Jenik et al., 2020). To help customers through their onboarding journey, the bank has "ambassadors" who walk customers through their onboarding journey. Jenik et al. (2020) explained that these ambassadors had been assigned to promote and assist customers in using the kiosk. Taking into consideration that digital literacy could pose a challenge for some customers, TymeBank has put in place a network of Tyme ambassadors in the retail stores that have a Tyme kiosk. TymeBank emphasised that, as much as its banking app and kiosks are designed to be simple and intuitive, without the necessary digital literacy, onboarding and banking can become a daunting task which they want to avoid. The ambassadors in the stores are there to make digital banking an easy-to-use tool and guide customers through their journey. Entering a market that has, for generations, had and continues to have human interaction, TymeBank considered the role that the human element would play in making the customer journey a smooth one.

TymeBank stated that, as a fully digital bank, it has ensured that customers can open bank accounts remotely using the TymeBank mobile app and website. The literature confirms that customers are able onboard themselves remotely, through the TymeBank website or on the mobile app using facial recognition and can finalise this process by collecting their debit card at a Tyme kiosk at a retail partner store when doing their shopping (Financial Mail, 2020). By enabling remote onboarding, TymeBank has made its products and services available, even to those located in rural areas. These customers need systems that are functional and cost effective, and that give them access to banking services that they can continue to use remotely.

Conby (2022) stated that customers benefit from remote onboarding because it is faster and more efficient, and it comes at a reduced cost to the customer. It also strengthens accessibility and lessens the travel challenges that customers in remote areas face (Conby, 2022).

The TymeBank participant revealed that they had implemented a WhatsApp channel which works to the advantage of consumers because WhatsApp is a form of communication that many people use every day. Therefore, being accessible through a means that people use in their daily lives removes the barriers of access that TymeBank is trying to overcome by serving the unbanked and underbanked. Because digital illiteracy poses such a real threat, banks need to implement channels that are accessible to impact on financial inclusion. Gong and Hollins-Kirk (2022) supported this view, stating that financial literacy is already a challenge amongst rural customers. Adding digital banking to the equation introduces the challenge of digital illiteracy, which needs to be addressed by the supply side to enhance financial inclusion (Gong & Hollins-Kirk, 2022). Ozili (2018), too, found that financial illiteracy can negate the otherwise positive relationship between financial inclusion and digital banking.

TymeBank has created an enabling system. Customers must go grocery shopping at some point and can do their banking at the same time. If they struggle, they have an ambassador to help them. However, if, in that period, they do not have to go to town, they can access their banking through TymeBank's zero-rated mobile app or WhatsApp channels, which allow them to bank and receive immediate assistance.

TymeBank discussed how it marketed itself and encouraged rural customers to use its products by being the most value-for-money product on the market. Jenik et al. (2020) supported this view in the literature, maintaining that TymeBank keeps its fees lower than those of its competition. An analysis shown in the literature by Jenik et al. (2020) revealed that TymeBank customers paid approximately 60% of what customers paid to African Bank, which they found to be the second most affordable bank next to TymeBank. Jenik et al. (2020) found that when combining charges for sending money, cash withdrawals, cash deposits, and payments, the total cost that TymeBank customers paid came up to about 65% of the fees charged by Capitec. Therefore, their findings agree that TymeBank has the most affordable product on the market.

TymeBank revealed that it managed to remain the most cost-effective product because it does not charge monthly fees, and customers only pay for the transactions they perform, which are also charged at low prices. According to Jenik et al. (2020), TymeBank's EasyDay account has no account opening fees, no monthly charges, and no minimum balance prerequisite. It is important, therefore, that TymeBank caters to its target market, which comprises mainly low-income customers. One way of doing this is through having bank charges that accommodate its target customers. High bank charges can easily exclude the very same underserved and unserved customers that TymeBank is trying to reach. This view is supported by Chitimira and Ncube (2020) who showed that macro level challenges, such as costly bank charges, can inhibit the financial inclusion of some customers.

TymeBank indicated that it encourages its customers to make use of their bank accounts by structuring its charges in a deliberately transparent and understandable way, without using decimals and percentages, thus making it easier for customers to understand. Its mobile banking app is also provided at zero rate, which means customers do not need a mobile data balance to use the app.

Most customers in South Africa withdraw all their money as soon as it has been deposited into their accounts. The National Treasury of South Africa (2020) concurs, stating that 42% of a bank's customers withdraw all their money once they have received it in their accounts. This means that they do not make use of their accounts, but rather use it as a replacement for cash distribution. Therefore, it is imperative for banks to implement strategies that will motivate their customers to make use of their bank accounts. Even though the bank account adoption rate in South Africa is high, account usage has been low.

The meaning of financial inclusion has been quite superficial because definitions only want to look at account adoption and not usage. Ikdal et al. (2017) argued that the methods in place to measure financial inclusion have been too academic or too basic and exclude a wider range of basic financial services, thus failing to measure usage and sustainability. Policymakers in South Africa have identified the low bank account usage rate as a significant area of concern. To boost financial inclusion, they are encouraging financial service providers to provide products and services that customers will use. The FSCA has established a financial inclusion strategy aimed at improving access to, usage, and the quality of financial services for individuals and small, micro, and medium enterprises (SMMEs) (FSCA, 2021). The FSCA stated in the literature that, to enhance financial inclusion, the supply side, which includes banks, must create an enabling environment by providing products and services that are simple, affordable, have transparent pricing, and have beneficial disclosure, branding, and marketing (FSCA, 2021). The results are, therefore, consistent with the literature, which shows that TymeBank is taking the necessary steps to serve the underserved market and encourage usage.

TymeBank indicated that it first wants to implement an offering in which TymeBank customers who have smartphones, and the mobile banking app can pay each other using the banking app. The second offering it has in store is the SMME business banking account in which small businesses such as spaza shops can accept payment from customers using the TymeBank app. The business will be in possession of the TymePOS app, which gives rural and township merchants a chance to interact with their customers, without being limited by cash. TymeBank aims to use this to promote its low-cost banking by confirming that everyone can have this account and use it to send money, accept payments, and make payments without needing to go to town to withdraw money, and to be able to transact on a day-to-day basis. Although not yet widespread, this is how TymeBank plans to encourage usage going forward.

5.6 POLICY FRAMEWORK IMPLEMENTED BY PUBLIC SECTOR REGULATORS AND INSTITUTIONS THAT SUPPORT DIGITAL BANKING

The objective of this question was to analyse strategies being implemented by South African public sector financial regulators and institutions that support digital banking as an enabler of financial inclusion of rural customers.

The data analysis found that the public institutions that participated were focused on policies that included the economic empowerment of black consumers, financial inclusivity policies, and financial education initiatives. The participants added that, together with the supply side, they face challenges of spatial planning, inadequate infrastructure, data affordability, and digital illiteracy.

The analysis showed that the financial sector is subject to the Financial Sector Charter (FSC), which acts as a black economic empowerment (BEE) code for the financial sector. The respondent from BASA highlighted that the one of the key elements of the

FSC is referred to as access to financial services. The literature supports this as it states that, amongst its key points, the FSC promotes access to financial services, which emphasises the importance of access to retail services as fundamental to economic development in South Africa (BASA, 2021). The respondent mentioned that the financial sector is required to be innovative to provide access to financial services. On its website, BASA emphasises that the FSC is committed to furthering a transformed and competitive financial service that mirrors the demographics of South Africa and contributes to building an equal society by supplying accessible financial services for Black people (BASA, 2021). The discussion on the FSC was supported by the National Treasury participant, who stated the FSC was one of the codes supporting financial inclusion. The participant from BASA stated that a key element of access to financial services is to look at all financial institutions and agree to specific targets, whether banking, insurance, or asset management, to develop products that cater for the underserved or unserved market, and to promote accessibility to their products to those groups. The participant emphasised that, as an association, BASA is led by laws and regulations such as the FSC. Through the access to financial services key point in the FSC, BASA indicated that it would conduct a yearly study to measure items such as the number of bank branches, automated teller machines (ATMs), and points of sale within the radius of the intended community. Similar to the literature, BASA (2021) stated that the purpose of the access to financial services key point is to supply inexpensive and continuous access to banks, ATMs and other points of access within 20 km of all consumers who are part of the All-Media Products Survey (AMPS) categories of LSM 1–5. The BASA participant emphasised that over the years, with the development of digital banking, digital services and products have been developed to assist communities.

The literature showed that in its transformation study for 2022, BASA found that banks had given access to transaction sites to 88% of low-income households in South Africa against the 85% set goal (BASA, 2022). In addition, the banks supplied twenty million products that play a part in furthering financial inclusion. This was against the fifteen million set target that was set (BASA, 2022). This was evidence that the financial sector was making strides in its financial inclusion efforts.

Another factor identified in the data analysis was the need for financial education empowerment in low-income communities and rural areas. This is particularly relevant given the low level of understanding amongst rural customers of the financial products and services that are suitable for them. Simatele and Maciko (2022) in the literature found that rural customers did not understand how bank charges worked and did not understand that credit criteria were based on more than income alone, pointing to a low level of financial literacy. In responding, BASA indicated that it ran and was part of several financial literacy programmes. The literature supports this, having found that BASA participates in the National Consumer Financial Education committee chaired by the National Treasury. Its role is to ensure that the banking industry implements what is discussed in the committee (BASA, 2021). Other financial inclusion initiatives BASA has implemented include the Starsaver, the JSE National Financial Literacy Day, and the South African Banking Risk Information Centre (SABRIC) initiative (BASA, n.d.).

As a regulator, FSCA also agreed on the importance of the financial education of consumers. The respondent from FSCA stated that one of their recommendations to financial institutions is the financial education of rural customers and consumers in general. They recommend that these institutions educate rural customers on digital financial products, how they work, their benefits, as well as some of the risks involved. The FSCA's financial inclusion strategy, as revealed by the literature, points to the fact that consumer financial education can help improve the usage of financial services and products (FSCA, 2021). The literature indicates that the FSCA's main objective regarding financial education is to ensure that consumers:

- Comprehend the essence, risks, and advantages of the various financial products and services in the market so that they can adopt products and services that suit their needs.
- Are able to compare financial services and products and make informed decisions.
- Fully comprehend their rights when interacting with financial institutions (FSCA, 2021).

Shipalana (2019), however, suggested in the literature that a more harmonised collaboration take place between the public and private sector regarding financial education. If headway is to be made towards improving financial literacy, a multitude of financial education initiatives need to be organised (Shipalana, 2019).

The data gathered from the interview with the National Treasury of South Africa identified that financial inclusion policies are crucial to the development of financial inclusion in South Africa. The participant stated that, in terms of financial inclusion, the government aims to learn from its peer countries such as China, Brazil, Russia, and India who are also part of the G20 and who have established initiatives that have helped enhance financial inclusion.

The participant gave an example of India, which has implemented an interoperability system in its financial sector. The results correspond with Mahesh and Bhat (2021), who stated that the National Payments Corporation of India (NPCI) developed the Unified Payments Interface (UPI) to allow the facilitation of digital payments. The literature shows that UPI is a real-time innovative system, which is user-friendly and permits interbank transactions to promote greater digital payment adoption in India (NPCI, 2020). The core characteristic of UPI is to promote easy and secure fund transfers between bank accounts (NPCI, 2020). It supports peer-to-peer and peer-to-merchant requests for payment (NPCI, 2020).

Brazil is another peer country that has an interoperable payment system called Pix, which was launched in 2020 (Reserve Bank of India, 2021). Pix is an instant payment system that allows the immediate payment and transfer of funds (Reserve Bank of India, 2021). In Russia, a collaboration between the Central Bank of Russia and The National Payment System saw the establishment of the Faster Payment System (FPS), which allows to customers make instant interbank transfers (Reserve Bank of India, 2021).

The National Treasury respondent emphasised that, although it would not make business sense for a bank to open a branch in a rural area, they can be interoperable. The respondent proceeded to explain that the South African financial sector is renowned for its innovation. However, these innovations are very fragmented and cater only for those financial institutions' customers. This is supported in the literature by the South African Reserve Bank (SARB, 2018), which stated that South African consumers are currently limited by the fragmented closed-loop remittance network that forces customers to receive remittance through a system chosen by the sender or have limited system networks in their areas. Therefore, by encouraging interoperability, South African consumers will be able to send and receive money through the most affordable and appropriate remittance system available (SARB, 2018).

South African financial regulators and lawmakers must support innovation by formulating regulations and frameworks that support financial inclusion. The literature revealed that, as part of the National Payment System Framework and Strategy: Vision 2025, the South African Reserve Bank has listed interoperability as of one of its nine goals (SARB, 2018). The respondent from the FSCA had also indicated that, as a regulator, they support the financial sector through the regulatory sandbox, an initiative of the Intergovernmental Fintech Working Group (IFWG). The sandbox is a space where innovators in the financial sector test their innovations under the oversight of financial regulators. This is supported by the IFWG (2022) in the literature, who stated that the regulatory sandbox is a regulated and live platform for financial sector innovators to securely test new financial products and services they want to bring to the market against the current regulations, all under the oversight of the IFWG, and with advice from the pertinent regulators. The testing is meant to provide an understanding of the risks and benefits linked with new market innovations, and to make informed decisions concerning policy positions and regulatory frameworks (IFWG, 2020). Therefore, regulators and lawmakers are supporting innovation in the financial sector by creating an enabling environment that will breed new financial products and services to help people gain access to financial services. Rahulani (2022) stated that digital financial services are a catalyst for digital financial inclusion.

The results showed that, as a policy maker, the National Treasury has also implemented a financial inclusion policy. The literature supports this, as it shows that the policy aims to:

- Promote better and continual access to, and use of, satisfactory and inexpensive financial services.
- Guarantee that enhanced financial inclusion provides visible socio-economic benefits that will improve the quality of life of South Africans, especially low-income customers.
- Advance the facilitation of and aid financial inclusion policies and strategies (National Treasury, 2020).

The literature further shows that the policy is built on three pillars: deepening financial inclusion for individuals; expanding financial services for SMMEs; and strengthening the diversification of the distributor and provider base (National Treasury, 2020).

Policy frameworks play a crucial role in enhancing financial inclusion. The Alliance for Financial Inclusion (AFI) (2022) states that policies and regulations are the primary tool at the disposal of policymakers for enhancing financial inclusion for rural customers. The National Treasury participant stated that the financial inclusion policy makes mention of “from policy to implementation” through two bodies. This is supported by the policy that suggests two bodies: a financial inclusion intra-government sub-working group, and a financial inclusion forum for all sectors and non-governmental collaborators. These two bodies are inclusive of all the stakeholders required for the implementation of policy that will enable financial inclusion.

5.7 THE CHALLENGES FACING LOW-COST DIGITAL BANKING IN RURAL COMMUNITIES

In their efforts to enhance financial inclusion for rural customers, digital banks and public institutions face several challenges. The participant from BASA stated that one of the primary challenges BASA faces in its efforts to enhance financial inclusion for rural customers is unemployment. They explained that taking part in the financial system requires an income, because having an income makes customers interact with the financial system. Without a source of income, rural customers will not see the need to have a bank account, because they have no use for it. Furthermore, they are more likely to see it as a burden than a way for them to be financially included. This is because of costs they will incur from bank charges. Chitimira and Magau (2021) in the literature found that rural customers in South Africa face the challenge of unemployment, amongst other factors, when trying to access basic financial services. This was supported by Wokabi and Fatoki (2019), who determined that unemployment impedes financial inclusion when customers do not have a consistent income. The participant from the National Treasury stated that unemployment is a macroeconomic challenge to enhancing financial inclusion. Financial products and services cost money, and rural customers do not have employment or consistent income to consistently use these types of financial products and services. Therefore, macroeconomic challenges such as unemployment counter, to a certain extent, the efforts being made to enhance financial inclusion for rural customers.

South Africa has high levels of unemployment, which are even higher amongst the rural population. This is supported by Wasserman in the literature, who found that in 2019, 43.3% of adults in rural areas had not been employed in four to five periods. The challenge of unemployment will continue to inhibit financial inclusion if not addressed at a higher level. However, government also needs to take into consideration that financial inclusion can impact on unemployment. The different avenues created to enhance financial inclusion can impact on employment. An example of this would be the TymeBank ambassadors discussed earlier. They are employed to make the customer journey a simple one, and to ensure that everyone who wants a bank account can do so free from inconvenience and thus be included in the financial system.

The second challenge faced by the supply side is inadequate infrastructure and poor networks in rural communities. The FSCA participant highlighted that even though rural customers have digital devices that are supposed to make it easier for them to have access, challenges of infrastructure, such as poor networks, cause problems. The National Treasury participant explained that public infrastructure, from a technology perspective, is not adequate to support digital banking in most remote areas. Customers in rural areas have limited network coverage, and where there is a network, it is often not up to standard. Rahulani (2022) stated that digital financial inclusion in South Africa is inhibited by infrastructural factors such as the failure of digital systems, expensive technologies, and connectivity, which is exacerbated by the absence of a dependable network infrastructure. The literature showed that this is also a challenge for rural customers in countries such as Ghana.

Serbeh et al. (2021) found that the appropriateness of digital banking methods, such as mobile money, on financial inclusion was inconsistent because rural customers were exposed to bad service delivery and experienced issues such as unstable networks. A proper infrastructure is vital for financial inclusion because customers need to be able to access the right banking products and services as and when they need them. The whole point of digital banking is for customers to access their banking and make use of it in a convenient way. Lyons, et al. (2017) stated that adequate infrastructure ensures access and usage of financial systems by households. Therefore, the failure by government to ensure adequate infrastructure that supports mobile networks is problematic. Despite the opportunities that present themselves to enhance digital financial inclusion for rural customers, the supply side is failed by inadequate infrastructure.

The third challenge identified from the results is data affordability. The literature shows that South Africa has one of the highest data prices in Africa, ranking at number 33 out of 46 countries in Africa (Chinembiri, 2020). This has meant that many South Africans cannot afford to make use of products and services that require mobile data (Chinembiri, 2020). The FSCA participant highlighted the fact that most rural customers are low-income earners and would rather spend their disposable income on other items. Banks in South Africa have tried to supplement the cost of data by providing their banking apps at a zero rate, which means that customers do not need data to use the banking apps. A study by Louw and Nieuwenhuizen (2020) found that the top five banks in South Africa offered their banking apps at a zero-rate. The results and the literature also showed that TymeBank, which most participants used, provided its banking app at a zero rate. However, customers do need airtime to make use of cellphone banking at most South African banks. Therefore, the cost may not be implied in data costs, but in airtime costs to access cellphone banking, which the results showed is prominent amongst rural customers. This was confirmed by one participant from Ga-Mothapo, who indicated that one of the reasons they consider digital banking costly is because they constantly need to buy airtime to use their cellphone for banking. Banks might want to consider that a one-size-fits-all cost plan does not work. As mentioned by the FSCA participants, rural customers would rather use their disposable income to cover other expenses. Ponnuraj and Nagabhushanam (2017) stated that while digital banking has the potential to have a wider impact on financial inclusion, supply challenges, such as high transaction costs, inconvenience, inflexibility and generic products, affect this potential.

The fourth challenge the data revealed was digital illiteracy. Digital financial services are readily available to be accessed by the different banks' customers. However, sometimes customers are incapable of using these products and services. The FSCA stated that many customers can access digital banking services but do not know how to use them. Ray et al. (2022) stated that, in the context of digital financial inclusion, digital skills allowed customers to use financial services more effectively. This is supported by Khera et al. (2021), who contended that digital literacy could encourage the adoption of digital financial services. Through digital literacy, customers will be more confident in using digital financial services, which can increase the use of these services. According to Tony and Desai (2020), digital financial literacy affects financial inclusion by facilitating the usage of digital financial services. The use of bank accounts plays an important role in impacting financial inclusion, something that has been emphasised throughout this research. The discussion shows that, even though the tool to financial inclusion is provided by the supply side, if the users are not equipped with the necessary skills to use them, they will not have the impact they are expected to have. It should, however, be noted that rural customers who participated in this research stated that, while they used a digital banking method they were comfortable with and were able to use, they were eager to learn how to use other digital banking tools.

5.8 CONCLUSION

This chapter discussed the results presented in Chapter 4. The discussion sought to explore whether the results resembled or contradicted the literature reviewed in Chapter 2.

The discussion found that digital banking met most important criteria but fell short in terms of affordability. The definitions of financial inclusion emphasised the importance of affordable financial products and services. However, this has not discouraged customers from using these services and products.

In accordance with the objectives of the research, the discussion revealed that digital banking has enabled rural customers, first, to access financial services and products, therefore enhancing their financial inclusion. Second, rural customers found digital banking useful because it is convenient, easily accessible, and saves them money. All these factors play an important role in enhancing financial inclusion.

The discussion showed that TymeBank has established various strategies to serve financially excluded communities. First, TymeBank has made sure it is physically accessible through its strategic partnerships with retailers such as Boxer and Pick n Pay. Boxer is strategically placed in rural, peri-urban, and low-income urban areas. Its goal is to serve lower- to middle-income customers. Second, TymeBank prides itself as offering the most value-for-money product on the market, which has been supported by the literature. The TymeBank mobile banking app is provided at a zero rate, which means customers do not need mobile data to access it. This is intended to encourage usage by customers, along with the bank’s simple and transparent fee structure. This impacts on the strategies and policies set by regulators and lawmakers as they aim to improve bank account usage to enhance financial inclusion. Third, TymeBank plans to implement strategies that will allow cashless customer-to-customer and customer-to-business interactions, removing the barrier created by cash. It will also address the issue of customers withdrawing all their money to pay cash, especially those in remote areas.

In terms of the policy frameworks implemented by public sector financial regulators and institutions, the discussions found that codes, such as the Financial Sector Charter (FSC), play a significant role in enhancing financial inclusion across South Africa. Through the key element of access to financial services, the financial sector is continuously working towards enhancing financial inclusion. The discussion revealed that these organisations recognise the importance of financial literacy in expanding financial inclusion. They have implemented several financial education programmes to promote financial literacy. The discussion also highlighted the importance of interoperability and presented ways in which peer countries—which one respondent stated South Africa is learning from—are implementing it. Finally, the discussion focused on the challenges presented in the results. The literature supported these findings as it showed that, in attempting to enhance financial inclusion, several challenges continue to hinder it.

CHAPTER 6: RECOMMENDATIONS AND CONCLUSION

6.1 SUMMARY OF THE FINDINGS

6.1.1 Objective 1: To investigate the impact of digital banking on the financial inclusion of the Ga-Mothapo rural community

The objective of this question was to research whether digital banking has enhanced rural consumers' ability to access useful and affordable financial products and services. The objective was guided by the literature, which found a gap in the study on the role of digital banking in enhancing access to financial services and products for rural customers and subsequently having them financially included. The findings show that cellphone banking is the most widely used type of digital banking, followed by internet banking and mobile app banking. The reason for the widespread use of cellphone banking amongst rural customers is that it is accessible through unstructured supplementary service data (USSD) using any kind of phone. With internet banking and mobile app banking, customers need to be in possession of a smartphone or a device that supports an internet connection.

Digital banking has given rural customers access to multiple financial services and products. Through digital banking, rural customers have been able to access basic financial services and products, such as money transfers, beneficiary payments, bill payments, and to buy prepaid products, such as airtime and electricity. Digital banking has allowed customers to access banking services that would normally require the assistance of a bank teller, such as managing their home loans, accessing their investment accounts, and opening new bank accounts. The findings show that rural customers have been able to access these remotely without having to visit a physical bank. Digital banking is considered a catalyst for digital financial inclusion when it allows customers who previously had no access or who had limited access to utilise a variety of financial products and services (Haralayya, 2021). Having remote access to digital financial services affects access to financial services for people located in remote areas and for low-income earners (Mhlanga, 2020; Pazarbasioglu, 2020). Therefore, considering that the rural village of Ga-Mothapo is situated 28 km from the Polokwane central business district, adopting digital banking has given Ga-Mothapo's residents access to financial services and products.

The results also found that the rural customers of Ga-Mothapo found digital banking useful. The participants stated that the reason digital banking was useful was that it gave them access to their banking financial products and services whenever they needed and reduced their need to visit a physical bank. They also found it useful because it is convenient, saves them money, and is easily accessible. The usefulness of digital banking is important in financial inclusion because rural customers need to recognise that its functions can meet their banking needs. Therefore, by finding it useful, the participants also found that digital banking met their needs. The importance of useful digital banking that satisfies the needs of the customers is highlighted by the World Bank (2022), which stated that financial inclusion is access to affordable and useful financial services and products that satisfy customers' needs.

The research did, however, reveal that the majority of rural customers felt the banking charges were high. Customers stated that, even if individual charges were relatively small, they added up to a significant amount. Other factors, such as needing airtime for cellphone banking, have contributed to the high costs of digital banking. The FSR Act defines financial inclusion as access to convenient, just, and affordable financial services and products (FSCA, 2021). This is supported by the National Treasury of South Africa, which defines financial inclusion as the supply and usage of monitored, affordable, and satisfactory financial services (FSCA, 2021). Despite the costs, most of the participants said they would continue to use digital banking because it saved them time and money and was useful.

6.1.2 Objective 2: To explore the strategies that emerging digital banks have implemented to serve financially excluded customers

The objective of this question was to explore the strategies implemented by a low-cost digital bank to enhance financial inclusion for rural customers.

The findings revealed that TymeBank has implemented an accessible distribution network by partnering with retailers such as Boxer and Pick n Pay. In this way, it has succeeded in reaching its target market, which are those customers who have been underserved by traditional banks. In these retail stores, TymeBank has placed kiosks that play the role of a traditional bank teller. Because everything is digitally based, TymeBank has assigned ambassadors to the stores that have kiosks. These ambassadors have been strategically placed to facilitate the customer onboarding process, especially for those customers lacking digital literacy. TymeBank understands that as much as their mobile app and their kiosks are designed to be simple and intuitive, if a customer is not digitally literate, then digital banking can be a daunting experience. However, for those who have the ability to use digital channels, TymeBank has made it easy for customers to open bank accounts using the TymeBank mobile app and the TymeBank website by providing their identity number and a biometric system. Through remote onboarding, TymeBank has made it easy for its customers to access its products and services. Customers benefit from remote onboarding owing to its speed and efficiency. In addition, it is offered at a reduced cost for customers; it increases accessibility and reduces travel challenges for customers in remote areas (Conby, 2022).

The data also revealed that TymeBank provides the best value-for-money product on the market. This value proposition includes zero monthly fees, and customers only pay for the transactions they perform, which are also charged at low rates. By offering low bank charges, TymeBank caters for its target market, which comprises mainly low-income customers. High charges have been identified as one of the factors hindering customers from adopting digital banking. Therefore, it is important that the charges are structured in a way that encourages customers to use their bank accounts.

Given that bank account usage is low in South Africa, the findings show that TymeBank encourages its customers to use its bank accounts by structuring charges in a transparent and understandable manner, thereby making banking easier. Because TymeBank provides zero-rated mobile banking, customers do not need mobile data to use the app. The FSCA has put in place a financial inclusion strategy that includes encouraging usage by customers. The FSCA contends that the supply side can encourage usage by providing financial products and services that are simple, affordable, have transparent pricing, and have beneficial disclosure, branding, and marketing (FSCA, 2021). The findings, therefore, reveal that TymeBank's strategy is in line with the regulator's usage strategy.

The findings indicate that TymeBank plans to encourage cashless banking for communities in remote areas. It proposes doing this by providing an offering that will allow TymeBank customers to pay each other using the TymeBank app. The second way it plans to do this is through the TymePOS app, which allows merchants in rural areas and townships to interact with their customers without being limited by cash.

6.1.3 Objective 3: To analyse the frameworks and strategies that the public sector financial regulators and institutions in South Africa have put in place to address financial inclusion

The objective of the research was to analyse frameworks and strategies that have been implemented and suggested by public institutions to enhance digital financial inclusion for rural customers. The findings show that financial sector players are guided by the Financial Sector Charter (FSC), which emphasises access to financial services. As part of this key point, BASA conducts a yearly study to measure the strides that the financial sector has taken to ensure greater financial inclusion. This study looked at factors such as automated teller machines (ATMs), bank branches, and points of sale, and has recently included digital services as these continue to grow.

The data revealed that financial education has a significant role to play in enhancing financial inclusion for rural customers, especially given the high levels of financial illiteracy amongst rural customers. BASA participates in various financial literacy programmes that are aimed at educating consumers on the financial sector. The FSCA, as a regulator, has recommended to financial institutions that they educate their customers on digital financial products, how they work, and their benefits, as well as some of the risks involved. Considering the number of financial education programmes in South Africa, the National Treasury will have to harmonise these programmes to contribute meaningfully to financially educating consumers (Shipalana, 2019).

The results showed that public institutions such as the National Treasury are learning from peer countries in an attempt to implement interoperability. This is fast becoming a reality as the South Africa Reserve Bank is promoting interoperability through the National Payment System Framework and Strategy: Vision 2025. Interoperability has been added as one of the nine goals of the National Payments Systems Vision. As a regulator, the FSCA has the potential to support such innovations through the regulatory sandbox. Supported by the Intergovernmental Fintech Working Group (IFWG), the sandbox is a platform for innovators in the financial sector to test their innovations with the regulator's oversight (IFWG, 2022). Innovations in the financial sector have the potential to enhance digital financial inclusion. Therefore, programmes such as the sandbox are crucial to digital financial inclusion.

Another framework that will play an important role in financially including rural customers is the Financial Inclusion Policy by the National Treasury. This policy is built on three pillars, one of which is to deepen financial inclusion for individuals. The policy aims to promote access to and use of useful and inexpensive financial services; ensure that improved financial inclusion provides a noticeable socio-economic advantage; and advance the facilitation of and aid financial inclusion policies and strategies.

These positive developments notwithstanding, the financial sector faces several challenges, including unemployment, inadequate infrastructure, data affordability, and digital illiteracy.

6.2 RECOMMENDATIONS

Having completed the study, the researcher makes the following recommendations:

- Financial institutions should consider tackling financial product and service affordability by offering rural customers a product that will cater specifically for them. The offerings should be seen as part of the business strategy and not necessarily as a short-term initiative.
- Financial institutions could consider reducing the charges on basic financial services.
- Financial institutions could also consider providing their USSD services for free, so that customers do not need airtime to use cellphone banking.
- If financial institutions already have products they think cater for rural customers, they should raise more awareness of these.
- Marketing of low-cost financial products and services should be highly targeted, using channels such as community radio stations, door-to-door campaigns, and activations in places such as taxi ranks where rural customers are found.
- Financial institutions should take up the responsibility of training their customers and potential customers on the different types of digital banking. Banks should also try to accommodate various kinds of customers. They could do this by supplying their information in a way that targets rural customers. They could provide the information in a simple and transparent way and in all of South Africa’s official languages.

- TymeBank should investigate raising more awareness about their low-cost products, especially for rural customers who are part of their target market. TymeBank can do this through language-based radio stations, community radio stations, and campaign activations at taxi ranks and bus stations.
- TymeBank should consider expanding their distribution network through a partnership with the Shoprite group. The Shoprite group has been opening Usave stores across the country in low-income communities to give low-income customers access to grocery shopping within their communities (Reuters, 2019). This will allow customers to deposit money more easily so that they can perform their digital transactions.
- The public should come together with the private sector to have coordinated financial educational programmes that will help rural customers.

6.3 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

It is important to note that the research was limited to just 15 participants from Ga-Mothapo. Therefore, these views may not be representative of the whole population. However, the sample was chosen carefully to represent the views and experiences of rural customers from Ga-Mothapo. There is room to expand the research to include more participants at a higher level.

The research was further limited by having only one low-cost digital bank participate in the research. The researcher reached out to Capitec, Old Mutual Bank, and Bank Zero, but did not receive a response from any of the representatives she contacted. The researcher tried to include financial technology (fintech) companies that focus on financial inclusion for rural customers, but again did not receive a response. Therefore, the findings are based on TymeBank, which was happy to participate. For future studies, the researcher would suggest that Capitec and Old Mutual Bank be included in the research as they are prominent amongst rural customers, especially Capitec.

The researcher was also limited in terms of the public institutions interviewed. She was unable to reach anyone from the Prudential Authority. During her efforts through telephone calls, she was informed that the Prudential Authority was not taking part in any studies.

6.4 MY CONTRIBUTION TO THE BODY OF KNOWLEDGE

The first contribution that the study will make is towards the body of knowledge that associates digital banking and financial inclusion in South Africa. Limited research has been conducted on the impact of digital banking on rural customers in South Africa. Therefore, this study will contribute to expanding the studies in this field.

Second, through its findings, the study showed that the definition of financial inclusion from a South African perspective can be expanded to include usage. The study indicated that rural customers make use of the different methods of digital banking to access their banking. Therefore, this study has contributed by revealing increased usage of bank accounts.

Third, banks and digital banks looking to enter the market to serve low-income and rural customers can use this study to guide their strategies. The findings of the study disclose valuable information, such as: banks used by rural customers; which digital banking methods rural customers use; the functions they access using digital banking; why they find digital banking useful; and how they feel about the banking charges they currently pay. Banks can use this information to guide them in improving their strategy.

Finally, the study will contribute towards guiding government, policymakers and regulators. The results identified key policies and challenges that will be important for government in tackling financial inclusion. Therefore, key stakeholders could use this information to inform their next moves in terms of the programmes they want to implement, the policies they want to formulate, the infrastructure they want to build, and the innovations they want to promote to enhance financial inclusion.

6.5 CONCLUSION

Chapter 6 presented the summary of findings, recommendations, limitations of the study and my contribution to the body of knowledge.

The summary of the findings reveals that, through digital banking, rural customers have been able to access basic financial products and services remotely, such as deposits, money transfers, beneficiary payments, and bill payments. The research also established that the rural customers of Ga-Mothapo found digital banking to be useful for them. However, the research also identified that rural customers considered banking charges to be too high.

The findings for Objective 2 revealed that TymeBank had implemented an accessible distribution network through partnering with leading retailers. TymeBank's product is considered excellent value for money with a transparent fee structure as its target market comprises mainly low-income customers. TymeBank plans to encourage cashless banking in remote communities through TymePOS and to allow customers to pay each other through the TymeBank app.

The results from Objective 3 acknowledge the role the FSC plays and will continue to play in enhancing access to financial services. Financial education will play an important part in enhancing financial inclusion; therefore, it is vital that the public and private sector come together to create one programme to educate customers financially. The implementation of interoperable systems and the Financial Inclusion Policy by the National Treasury will also have a significant impact on financial inclusion. This will, however, not be without its challenges, as stakeholders grapple with issues such as unemployment, inadequate infrastructure, data affordability, and digital illiteracy.

Based on these findings, the researcher made several recommendations. These include financial institutions making their products more affordable; targeted marketing by banks for products and services that cater for rural customers; financial services and products training for customers; TymeBank expanding their distribution network to include Shoprite Usave; and the private sector and public sector forming a coordinated financial education programme.

This study, like all studies, was not without its limitations. The research was limited to only 15 participants of the Ga-Mothapo community. Only one emerging digital bank agreed to take part and the Prudential Authority did not agree to participate in the study. As part of the research, the researcher's contribution towards the body of knowledge is in the field of digital banking and financial inclusion. The research will contribute to the strategies of emerging digital banks in the market and those considering entering the market. Moreover, the study will contribute towards leading the way for government, policymakers, and regulators.

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APPENDICES

APPENDIX 1: ETHICAL CLEARANCE

REGENESYS
BUSINESS SCHOOL
Awakening Potential

5 October 2022

Dear Ms Khanyisile Maswanganyi

Approval of Ethical Clearance
Project title: The Impact of Digital Banking on the Financial Inclusion of Rural Customers: A Case of The Ga-Mothapo Community

This letter serves to notify you that your application for ethical clearance to conduct the above research towards your MBA dissertation has been fully approved by the Regenesys Business School (RBS) Ethics Committee.

Please note that any changes to the title and research protocols (title/method/data collection/sample etc.) have to be reviewed and amendments approved prior to commencement of the data collection.

All research being conducted during the Covid-19 pandemic have to strictly follow the RBS research guidelines and protocols, as well as that of the South African National Research Ethics Council.

Please note that this is valid for a period of one year from the date of issue. Furthermore, a copy of this approval letter must be appended to your dissertation /research report.

We wish you every success in your research.

Yours Sincerely

Dr Stanford Makore
Head: Higher Degrees Research Committee

APPENDIX 2: PARTICIPANT CONSENT FORM

Regenesys Business School

165 West Street

Sandown

Sandton

2031

Gauteng, South Africa

Participant Consent Form

I .... (name of participant), volunteer to participate in a research study conducted by **Ms Khanyisile Maswanganyi** from Regenesys Business School. I understand the research study is designed to gather information on a study titled "**THE IMPACT OF DIGITAL BANKING ON THE FINANCIAL INCLUSION OF RURAL CUSTOMERS: A CASE STUDY OF THE GA-MOTHAPO COMMUNITY**", as a requirement for a Master of Business Administration degree, which is purely for academic purposes.

1. My participation in this study is voluntary. I understand that I will not be paid for my participation. If I decline or withdraw my participation- in the study, no one will be told.
2. I understand that I am liberty to withdraw my participation at any time from the project should I wish to do so, without any penalty
3. I consent to have my interview(s) recorded
4. I understand that the researcher will not identify me by name in any reports using information obtained from this research and that my confidentiality as a respondent in this research will remain secure. Subsequent uses of records and data will be subject to standard data use policy, which protects individuals and institutions anonymity
5. I have read and understood the explanation provided to me. I had all my questions answered to my satisfaction, and I voluntarily agree to participate in this research study
6. I have been given a copy of this consent form

....

Signature of participant Date

APPENDIX 3: QUESTIONNAIRE

THE IMPACT OF DIGITAL BANKING ON THE FINANCIAL INCLUSION OF RURAL CUSTOMERS: A CASE STUDY OF THE GA-MOTHAPO COMMUNITY

QUESTIONNAIRE

QUESTIONNAIRE NUMBER

PROJECT NAME: MBA REGENESYS BUSINESS SCHOOL

A. BIOGRAPHIC INFORMATION

A1. Please indicate your age in years____

A2. Adjudicator, please write the district of the respondents ______________________________

A3. Adjudicator, please record the gender of the respondents

Male	Female

A4. Please indicate your educational achievements.

Category	Codes	
Grade 1 to Grade 7	1	
Grade 8 to grade 11 Grade 12	2	
Diploma	3	
Degree and above	4	

A5. What is your marital status? Please indicate

Single	**1**	
Married	**2**	
Widow	**3**	
Other	**4**	

A6. What is your ethnicity? Please indicate

Black	**1**	
Coloured	**2**	
White	**3**	
Indian	**4**	
Other	**5**	

B. DEMOGRAPHIC INFORMATION

B.1. What is your province? Please indicate

Limpopo	1	
Gauteng	2	
Western Cape	3	
North West	4	
Northern Cape	5	
Mpumalanga	6	
KZN	7	
Eastern Cape	8	
Free State	9	

B.2. Indicate your district municipality.

B.3. Indicate your local municipality

B.4. Indicate the bank are you banking with.

Capitec bank limited	1	
Tyme Bank	2	

Old Mutual Bank	3	
Standard bank	4	
OTHER	5	

B5. How many years have you been banking with them?

THEMATIC INFORMATION

C. THEME 1: IMPACT OF DIGITAL BANKING IN THE RURAL COMMUNITIES

ITEMS	RESPONSES
C.1. Which digital banking offering do you use?	
C.2. What products or service do you access using the digital banking offering in the question above to do?	
C.3. Have you found the digital banking offering of your choice useful?	
C.4. How has digital banking allowed you access the same financial services and products you would normally access at a physical branch?	
C.5. Is the digital banking method of your choice user friendly for you?	
C.6. Would you like to learn more about how to use different digital banking methods?	
C.7. How do you feel about the charges on your digital banking service?	
C.8. Does the digital banking method you use meet your financial service needs and wants?	
C.9. Has digital banking influenced the way you use your bank account?	

D. THEME 2: EXPLORE THE IMPLEMENTATION OF LOW-COST DIGITAL BANKING IN EMERGING BANKS

ITEMS	RESPONSES
D.1. How do you ensure that digital banking is accessible to those customers living in remote/rural communities?	
D.2. How have you made digital banking an easy-to-use tool, especially for those with no digital literacy?	
D.3. How do you encourage customers to use the banks digital offering?	
D.4. How do you structure customer fees to encourage customers to use digital banking?	
D.5. What makes your digital banking offering one of good quality for those in remote/rural areas?	
D.6. How would you say your digital banking offering is appropriate for rural customers?	
D.7. Considering that the bank account usage is low in South Africa, how does TymeBank plan to encourage the use of bank accounts by its rural customers?	

E. THEME 3: ANALYSE POLICY FRAMEWORKS IMPLEMENTED BY THE PUBLIC SECTOR FINANCIAL REGULATORS AND INSTITUTIONS OF SOUTH AFRICA THAT SUPPORT DIGITAL BANKING

ITEMS	RESPONSES
E.1. What are some of the challenges you face in promoting financial inclusion for rural customers?	
E.2. What opportunities have presented themselves in enhancing financial inclusion for rural customers?	
E.2. What frameworks have you implemented to support digital banking as a tool for financial inclusion?	
E.3. What other frameworks/strategies has your organisation promoted financial inclusion?	
E.4. What recommendations have you put in place to ensure that financial service institutions promote financial inclusion for rural customers?	

ITEMS	RESPONSES
E.5. What initiatives/partnerships with private or other public sector institutions have you implemented to promote financial inclusion for rural customers?	

Thank you very much for your participation!

APPENDIX 4: CONFIRMATION OF EDITING

erica webster
EDITORIAL SERVICES

15 PW Ferreira Street
Malanshof
Randburg, 2194
+27 79 123 0716
websterica001@gmail.com

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2 May 2023

TO WHOM IT MAY CONCERN

I, Erica Jean Webster, ID No. 650309 0141 083 hereby confirm that I have provided a language editing service to Khanyisile Maswanganyi for her MBA dissertation: ***The Impact of Digital Banking on the Financial Inclusion of Rural Customers: A Case Study of the Ga-Mothapo Community***

I have a BA Degree from the University of the Witwatersrand, with majors in English and Industrial Psychology.

I have about 15 years' freelance writing experience, having written features for various publications, including Business Day (Surveys/Insights) and Sunday Times (Business Times Surveys), and have done copy writing for a variety of corporate organisations, NGOs and business schools.

More recently (over the past six years), I have assisted many students and academics with language editing and proofreading proposals, research reports, dissertations and theses.

Please feel free to contact me should you require further information.

Yours sincerely

Erica Webster
079 123 0716
websterica001@gmail.com
