Innovative banking, the unbanked and domestic savings in South Africa

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DEDICATION

All praises to the almighty Allah and His blessing for the completion of this master's degree.

I thank Allah for favouring me with an abundance of opportunity, trials and strength to complete writing this research report.

This research paper is dedicated to my family for their unwavering support. Without their love and encouragement, this research was not going to be possible.

I would like to thank my supervisor, Professor Mjumo Mzyece, for his guidance, help and patience through this process.

I offer special thanks to Investec Bank Limited for supporting and sponsoring my studies.

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree Master of Management in the field of Innovation Studies at the University of Witwatersrand's Graduate School of Business Administration. It was not submitted before for any degree or examination at any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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ABSTRACT

This study explores financial literacy and domestic savings and their impact on the economy, with reference to the unbanked low-income group in South Africa. Innovative and “smart” banking may be the ultimate tool that will serve the bottom of the pyramid and grant exposure to financial credit and means of saving. As almost two billion people in emerging markets are unbanked, the establishment of digital financial services is more about forming markets for future customers than about changing current bank–client relations. The greatest challenge affecting the poor around the world is their inability to adequately participate in the economy because of the challenge of being unbanked, which causes low-income groups to be excluded from mainstream financial activities. Poor communities encounter various obstacles when it comes to banking, including the distance to bank outlets, the prevailing risk of carrying cash, lack of trust, paperwork and identity and document requirements.

Financial innovation is important in addressing the two key challenges that financial intermediation faces in Africa, namely high risk and high cost of financial services. The research underpinning the theoretical framework is drawn from the Base of the Pyramid market (BoP). The intention is to encourage an inclusive approach in the adoption of technology in the financial services sector, which is envisioned to create shared value socially, environmentally, and commercially. Studies have demonstrated that combating poverty and financial exclusion requires implementation of commercially viable technological innovations to address needs of the low-income market. Key related concepts are innovation in banking, the unbanked and domestic savings.

The population under study is financial services professionals in the South African retail banking industry, mainly from Capitec Bank, as this study was inspired by Capitec Bank’s unique business model as one of the first banks in South Africa to focus on serving the bottom-of-the-pyramid client base. This research report adopts a qualitative research method. The research instrument includes key questions that were asked during semi-structured interviews. The findings of the study highlight the importance of constant enhancements of new technologies in the banking industry to address the matter of inclusion of lower-income groups in the economy by ensuring that banking is made accessible and convenient. The premise of innovation in banking is to benefit society and grow the economy in a manner that is useful for generations to come. Mobile banking has been identified as a key instrument in driving banking to unserved areas in the most cost-effective way.

KEYWORDS

Unbanked Market,

Financial innovation

Financial technology (Fintech)

Financial inclusion,

Financial literacy,

Mobile banking,

Domestic savings,

Low income

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
ALW	A Little World
ATM	Automated Teller Machine
BoP	Bottom of the Pyramid / Base of the Pyramid
CGAP	Consultative Group for the Assistance of the Poor
FICA	Financial Intelligence Centre Act
Fintech	Financial Technology
4IR	Fourth Industrial Revolution
FSC	Financial Services Charter
GDP	Gross Domestic Product
ILO	International Labour Organisation
IPA	Interpretive Phenomenological Analysis
IR	Industrial Revolution
MNOs	Mobile Network Operators
M-Money	Mobile Money
OECD	Organisation for Economic Co-operation and Development
POS	Point of Sale
SARB	South African Reserve Bank

CHAPTER 1: INTRODUCTION

1.1 Purpose of the Study

The objective of this study is to define innovative banking as the solution for the promotion of easy access to financial products and services in the unserved market. The study also describes financial literacy and domestic savings and their impact on the economy with reference to the unbanked low-income population in South Africa. The challenge of saving money has become a problem in many South African households (Darley, 2011). This study explores domestic savings as a key benefit for the economy, households and government.

Innovative and "smart" banking may be the ultimate tool that will serve the bottom of the pyramid and expose it to financial credit and means of saving. As at least 2 billion people in emerging markets are unbanked, the provision of digital financial services is more about fashioning markets for future clients than it is about changing current bank client relationships (Alexander et al., 2017). The introduction of financial technology not only offers the typical bank services, that is, receiving financial transactions or taking loans, but also aims to grow the market base through innovation at a rapid pace (Alexander et al., 2017). With Fintech, there is a possibility of provision of inexpensive and reachable products and services that are quick and offered based on variations in consumer behaviour (Alexander et al., 2017). According to Alexander et al. (2017), bank penetration in Sub-Saharan Africa is only 43 percent, meaning that more than half of the population has no access to formal banking services. There is also a shared notion that banking is for the wealthy in a country where opening a bank account can be distressingly bureaucratic (Pankomera & Van Greunen, 2018) .

This study further explores the importance of financial literacy and its significance in understanding basic financial principles that are important to for consumers' equal participation in the economy of South Africa. The objective of understanding one's finances is to better the economic well-being of poor people (Pankomera & Van Greunen, 2018). Also, it is for government together with private organisations to build a basis for poverty alleviation and to use the innovative world of banking as an avenue for promoting access to financial institutions (Pankomera & Van Greunen, 2018). The manner in which banks function will evolve substantially within the next few years as technologies advance and customer needs change. Technological developments such as artificial intelligence (AI), biometrics and automation are soon to be standard, thus opposing conventional thoughts about collaboration and provision of banking products and services to all people, especially the poor who are unbanked (Coetzee, 2018). The financial services industry needs to stop “thinking of the poor as victims or burdens to society and start recognizing them as resilient, creative entrepreneurs and value conscious consumers; by doing this, a whole new world of opportunity can open up” (Prahalad, 2008). Serving the low-income customers will require banks to embrace the digital age so as to entice formerly unbanked persons in developing markets while keeping existing customers.

The objective of this study is to bring attention to the bottom-of-the-pyramid market and grant banks a framework that will enable them to design business models best suited to target the low end of the market. This study has been inspired by elements from the Capitec Bank business model that was established by a group of businessmen to focus mainly on serving poor customers (Coetzee, 2003).

1.2 Context of the Study

Access to a bank can aid a country’s economic growth. It helps uplift society by enabling households and individuals to better invest in their health, education and business and thus reduce the burden of financial emergencies that may force families into hardship, such as unemployment or business closure (Demirgüc-Kunt et al., 2018). Globally, several poor people lack financial services that prevent monetary loss, such as bank accounts and innovative digital services. Instead, there is a heavy reliance on paper currency which is risky. This is the reason the World Bank has made it a priority to encourage use of and access to formal bank services (Demirgüc-Kunt et al., 2018).

To quote Demirgüc-Kunt et al. (2018), “69 percent of people globally have an account.” This is an important financial tool as a bank account provides a means of keeping cash and growing enough fortune for future use (Demirgüc-Kunt et al., 2018). Having an account allows one to pay for invoices and have easier access to credit and enables one to make payments, transfer money or accept payments. Owning an account is thus used by the World Bank and other organisations as an indicator of financial inclusion. Demirgüc-Kunt et al. (2018) affirms that approximately 1 000 700 000 adults are still unbanked. Owning an account is a norm in developed countries; therefore, it has been found that most of the unbanked population is in the developing world. Adults who are unbanked are most likely to have a low level of education. In poor countries, it is found that almost half of adults are literate to the level of primary school, and some are even less. Those who are employed are less likely to be unbanked (Demirgüc-Kunt et al., 2018). To determine reasons for why people are unbanked, the 2017 Global Findex questioned adults without an account; common reasons were cost and distance. Other responses included a family member already having one, no formal paperwork, lack of trust and religious concerns (Demirgüc-Kunt et al., 2018). The payment system in Africa generally lags those in other growing economies, despite improvements over the years. In terms of financial depth, the Gross Domestic Product (GDP) per capita of countries on the African continent indicates a vast difference compared to international private credit to GDP. For example, "the ratio of private credit to GDP averaged 24% of GDP in Sub-Saharan Africa in 2010 and 39% in North Africa compared with 77% for all other developing economies and 172% of high income economies" (Agolla et al., 2018). This indicates that the depth of African financial systems is still far behind, even with slight improvements over the past 20 years.

Historically, the four largest retail banks in South Africa have somewhat neglected banking products and services in the low-income market segment. Additionally, South Africa is notorious for several persistent economic issues of poverty, inequality and high unemployment rate. Financial inclusion has become a topic of major discussion for government, financial institutions, the global community banks and policy makers. Developed countries have recognised the social and political importance of financial inclusion which has become a key socio-economic challenge on the schedule of large institutions in multiple economies globally (Matsebula & Yu, 2020). Innovation has been acknowledged as a crucial driver of competitiveness in organisations. According to Matsebula and Yu (2020), innovation is the main driver of economic growth and success for any continent or firm. The 21st century has propelled a new millennium that obliges banks to contest using varied technological advances to aid the customers better and meet their needs.

Furthermore, it must be known that the adoption of retail banking innovation improves the way customers bank. Customers are now able to conduct banking transactions anytime globally without being physically present at a bank. These innovative practices have made banking convenient and efficient for customers (Agolla et al., 2018). Developing societies financially bridge valuable effects on societal growth and poverty alleviation. Traditionally, empirical literature has paid attention to financial depth; recently, serious attention has been towards the problems of financial outreach and inclusion, denoted as access to finance. The World Bank Economic Review has recently issued a unique review dedicated to this topic (Kostov et al., 2014). Barriers to the financial services industry, together with a macroeconomic perspective and the microfinance literature, have turned out to be an eminent topic in development studies.

The low-income segment of the market who do not have savings accounts are often branded as the “unbanked” (Caskey, 2005). Several homelands in rural South Africa do not have a bank, which means that there is a significant amount of time that people spend travelling only to perform a simple financial transaction. Life without financial savings is stressful. Poor people are intensely mindful that any disturbance in their wages or unforeseen expenditure could cause difficulty or cause them to struggle to tend to basic household expenditures, such as rent and transport cost (Caskey, 2005). Often, they have zero access to credit from banks. Additionally, historical debt has caused them to miss recurring debit orders, rent or tariff payments, leading to a poor credit record that causes them to be dependent on pricy borrowers, such as pawn brokers, dealerships and minor loan institutions, in emergency situations (Caskey, 2005). Banking in Africa has undergone dramatic changes over the past decade. Banking innovation presents an opportunity to elevate banking to reach out to the unbanked and improve the quality of their lives. Notably, the inclusion of the poor within the financial services sector has been top on the agenda locally and internationally since 2003, when the then United Nations Secretary General Kofi Annan stated in his address before the United Nations General Assembly Council that “the stark reality is that the poorest people in the world still lack access to sustainable financial services, whether it is savings, credit, or insurance. The great challenge before us is to address the constraints that exclude people from full participation in the financial sector. Together, we can and must build inclusive financial sectors that help people improve their lives” (Louis & Chartier, 2017). Innovative banking enables banks to provide products and services that are inexpensive, convenient and simple to use. These qualities enable market expansion.

The intention of innovative banking is to offer products and services that are inadequately offered by the conventional market to the poor. Globally, economies have found it difficult to achieve financial market inclusion of the poor. Results of a survey conducted by Caskey (2005) indicated that poor people do not have bank accounts mainly because their “bank fees are too high”; furthermore, the banks’ minimum balance requirements for an account to remain open are substantial. Caskey (2005) established that poor people find it easier to keep their financial matters private. This may seem as a challenge if their money is held at a bank where there is a record of all client historical finance data and personal background data (Caskey, 2005).

Alexander et al. (2017) addresses the challenge of being unbanked and explores Fintech as a potential solution that will enable unbanked persons' admission to formally conduct financial transactions. The Fintech sector aims to transform traditional banking methods available mostly to the elite and working class to be more accessible to the poor. This digital era has released a disruptive drive universally to attract unbanked persons. Digital financial services are proposed to be a commercial prospect for developing markets since roughly 2 billion people in developing markets do not have a bank account. The vision of digital banking is more about developing a new market for future clients than it is about changing the dynamic of current customer−bank relationships. According to the Consultative Group for the Assistance of the Poor (CGAP), digitisation has considerable promise to provide an array of affordable, appropriate, and safe banking services to the poor. Developing markets recognise these services as pertinent to private sector productivity and to the growth of the economy (Alexander et al., 2017). Digitisation of the traditional financial services industry changes the way services are rendered to clients as they are now being offered digital banking solutions such as (Alexander et al., 2017)

- retail bank branch advisors available online,
- virtual and mobile banking internet products and services, and
- the increased use of social media and data analytics to connect with bank clients at a reduced cost.

The International Finance Corporation declared that the Fintech industry is growing at an exponential rate, with an estimated figure being $12.2 billion in revenue from investors in 2014, almost tripling that of the prior years, and a substantial $19 billion in 2016 (Alexander et al., 2017). The Fintech industry forecast remains positive, and it is strongly backed by venture capitalists. Fintech industries are designed to significantly influence the financial services sector driving efficient financial services and redefining the industries' perception of what it takes to be called a bank. FinTech industries propose more than only ordinary banking products and services; they also innovate at a rapid pace and are able to grow an inclusive client base, thereby extending their offering based on consumer needs (Alexander et al., 2017). The goal is for Fintech to become an integral component of the financial services sector while differentiating itself from outmoded banks. As the African continent has the highest mobile penetration rates globally, this enables the continent to be a fruitful locale for the advent of digitisation. The revolution of Fintech has the potential to be extremely successful in Africa as

Fintech is an industry that seeks to understand customers from a grassroots level and adequately meet their requirements (Alexander et al., 2017).

Despite the remarkable possibilities of Fintech and the potential it holds for Africa in terms of financial inclusion and access to banking, Fintech resolves are frequently nation specific and may aid a niche market. Thus, digital innovations may flourish in one country but flop dismally in another. For example, M-Pesa is a good example where the core business started in Kenya but was unsuccessful with its launch in South Africa. M-Pesa is a mobile banking service that permits active subscribers to perform traditional banking services using their mobile devices (Demirgüç-Kunt & Klapper, 2012).

To elevate the innovation imperative within banking, there must be discussions surrounding developing societies' readiness to embrace new technology that must be driven by professionals employed in the financial services industry. Thus, the readiness to embrace new technology is also referred to as the individual's inclination to be in favour of and use new technologies to achieve one's goals at home or at work. According to Berndt et al. (2010), the Technology Readiness Index scores determine whether customers are prepared to accept new technologies, and they must be considered by banks when investing in technological product development and resources to increase customer satisfaction. The financial services industry in South Africa is viewed as sophisticated; however, promoting digital banking solutions to persons without a bank account is still a challenge (Berndt et al., 2010). Therefore, it is time for professionals employed in the banking industry to engage further on this challenge and propose a solution.

This study gathers information on innovative banking, the unbanked and domestic savings in South Africa, with a focus on the following categories:

- Fintech,
- the unbanked market,
- financial inclusion,
- financial literacy,
- mobile banking and
- domestic savings.

The aforementioned categories influence the unbanked population and have the potential to interact with financial services institutions that offer efficient and inclusive access. This study is motivated by Capitec Bank's business model and the fact that Capitec is known as the fastest growing innovative bank in South Africa. The study provides insight from professionals in the retail banking industry, that is, professionals from the country's top five banks, Capitec Bank, Nedbank, Standard Bank, ABSA and FNB, as industry professionals advising on their banks' product and service offerings that will help the low-income market improve their financial well-being and grow their savings. This initiative starts by promoting financial literacy and financial institutions that embrace the digital age.

This may be achieved by intensive marketing, frequent engagements with the public and the use of social media (Caskey, 2005).

1.3 Research Problem Statement

The greatest challenge affecting the poor around the world is their inability to adequately participate in the economy due to the challenge of being unbanked, which causes low-income groups to be excluded from mainstream financial activities. According to Anderson and Huerta (2004), being unbanked is a problem and is a result of financial illiteracy and a miscalculation of the high cost associated with being unbanked. This requires financial services institutions and the government to improve the admission of cost-saving bank services to the unbanked market (Coetzee, 2005). Poor communities encounter obstacles when it comes to banking. These challenges include the distance to bank outlets, the prevailing risk of carrying cash, lack of trust, frightening paperwork, and the daunting identity and document requirements. Financial innovation is important in overcoming the two main trials that financial intermediation encounters in Africa, that is, substantial risk and substantial cost of financial services. For instance, mobile banking relies to a large extent on variable rather than fixed cost; this suggests that customers who embark on few and limited transactions are more bankable than those who employ the conventional stream of banking (Coetzee, 2005).

Building of wealth requires one to have financial tools and means of saving (Anderson & Huerta, 2014). Multiple policies and digital finance innovations such as endorsing financial education, mobile banking and growing the number of banks in poor communities could enrol potential customers into the financial mainstream. To understand the issue of being unbanked, it is crucial for one to unpack the demographics and possible risk of being unbanked. Being unbanked entails being financially illiterate, having been previously disadvantaged and being a recipient of low income. These are factors associated with being unbanked. This challenge causes individuals who are unbanked to rent rather than buy their own house. This is mainly triggered by the limitations of asset accumulation. Furthermore, the goal to sustainable economic growth in Africa is still a major challenge despite several reforms that have been adopted. One of the domains that have remained a challenge is the low level of savings in individual African countries. The norm of borrowed capital from banks, such as loans, remains at an all-time high. This is a concern as the growth of an economy is determined by levels of domestic savings (Van Wyk & Kapingura, 2021). There is an ongoing need to actively explore means of overcoming negative factors and barriers linked with unbanked individuals' unwillingness to bank; therefore, there should be a drive to encourage solutions that will bring about a change in attitude of the unbanked in relation with financial services institutions.

1.4 Research Questions

The overarching research questions addressed in this study are as follows:

1. **How can banks promote inclusive access to banking services by low-income groups using innovative digital technology?**
2. **What can be done by financial services institutions and government to promote financial literacy and a savings culture?**

This study set the following objectives to answer the research question:

- to highlight the importance of using innovative digital banking as a tool for increasing inclusive access to financial services for low-income groups in South Africa,
- to emphasise the importance of financial education and
- to describe the importance of domestic savings.

1.5 The Outcome of the Study (Significance)

The challenges noted in the research problem declaration will be suitable for furthering the advancement of research in the field of Fintech and digital banking, enabling innovative solutions to the unbanked portion of society and providing valuable insights into households that battle to save. With regard to the significance for practice, the results of this study will offer the financial services sector, particularly retail banks, an opportunity to reach out to the poor and join forces with them to accomplish a sustainable win−win outcome where the underprivileged are enthusiastically involved while banks make a profit. This collaboration between the poor, the government and the financial services sector may develop the largest booming market of the economy (Prahalad, 2008).

The scope of this framework will respond to questions on the significance of low-cost banking services for the poor and the role savings can play in extenuating the adverse effects of poverty (Dallimore, 2013). There is no single answer for what may constitute poverty; however, in the literature, a few main poverty theories have been identified, namely basic requirements, social capability, lingering poverty, subjective poverty and sustainable living. According to Dallimore (2013), the *International Labour Organisation* (ILO) suggested the inclusion of "basic requirements" as an abstract and planned approach to supporting progress. A lengthened focus in this area includes the basic standards of domestic consumption (food, shelter and clothing) and government's delivery of essential services (sanitation, safe transport, quality education and superior health care), the liberty to choose employment and to participate in decision making, dignity of individuals and society, and freedom to determine one's future. The implementation of the basic requirements theory by the *international donor community* indicates that a collaborative framework between the state and people being able to bank in a regulated and just economy is also regarded as a basic requirement.

1.6 Delimitations of the Study

This empirical study is delimited to the financial services industry in South Africa. The big five banks, namely *Standard Bank, Nedbank, Amalgamated Banks of South Africa (ABSA), First National Bank (FNB) and Capitec Bank*, provide retail banking services across Africa and have applied elements of disruptive innovation. *Capitec Bank*, a new contender in the market launched in 2001, is one of the first enablers of disruptive innovation. This empirical study draws inspiration from the model of *Capitec Bank*, a bank for the mainstream market, the bottom of the pyramid clientele. Among the key innovative technologies common today is mobile banking adopted to improve access to banking, as it is convenient and cost effective.

1.7 Assumptions

The assumption of this research paper relates to the unbanked and the cost of mainstream financial services**.** Approximately 2 billion people across the globe being unbanked, and it is estimated that 60 percent of those people live in Africa. The poor are mostly faced with barriers related to the following:

- expensive pricing,
- geographical location and
- poor education.

As a result, people find it difficult to secure transfer of funds, to save money or to access credit. Thus, limited access to a bank may be spartan for the poor households as the high cost of certain bank services reduces disposable income for them. These households find it challenging to save or financially plan (Barr, 2004). This situation results in the households living from pay cheque to pay cheque, leaving the poor vulnerable to medical or job emergencies that may dent their financial well-being. Furthermore, the lack of long-term savings makes it difficult for one to acquire a new skill set, purchase property or send children to pursue higher education through a university or college (Barr, 2004). The high cost of financial services and inadequate access to bank accounts may hinder shared society goals of poverty alleviation and the movement of families from being dependent on welfare to being employed. The concepts discussed relate to the base of the pyramid in Africa (Ismail & Masinge, 2012).

1.8 Definitions of Key Terms

The following are definitions of key terms used in this study:

- Fintech makes reference to the use of technology in financial services (Galazova & Magomaeva, 2019).
- Mobile money refers to the usage of mobile networks to make a financial transaction using customer money kept on the cellphone network (Ahmad et al., 2020)
- Innovative banking is the enhancement of traditional banking using technology to better address society needs (Das, 2013).
- The unbanked market refers to individuals and households that do not own a bank account or use any traditional financial services, including savings accounts and credit cards (Chaia et al., 2009)

- Financial exclusion means “the inability of the poor to access financial services and participate in the formal global economy” (Louis & Chartier, 2017).
- Financial literacy refers to the making of informed decisions regarding the use and management of money (Refera et al., 2016).
- Mobile banking is the use of a smartphone to interact with a money-managing institute that is not only a bank that allows customers to deposit and withdraw money (Chigada & Hirschfelder, 2017).
- Domestic savings are money that is saved for an emergency or short-term financial purpose or to finance retirement (Simleit et al., 2011).
- Bottom or base of the pyramid (BoP) refers to the lower-income segment of the population. It signifies an important market that is mostly overlooked by business organisations as a source of benefit to the economy (López-Morales et al., 2020).

1.9 Summary and Conclusion

Chapter 1 introduces the study and shares the purpose and possible outcomes of the study. The research problem and objective are stated, and the significance for pursuing this research and its importance are described. Innovative banking is identified as a solution for including the unbanked and lower-income groups to the formal economy. The importance of domestic savings in conjunction with financial education is also described. Chapter 2 reviews more intensely the academic literature on the topic.

CHAPTER 2: EMPIRICAL LITERATURE

2.1 Outline and Purpose

This chapter reviews the importance of innovative banking solutions in serving the unbanked population. By adopting novel business models, banks can ultimately advance living circumstances of the market they serve and contribute substantially to economic growth while contributing to a decent standard of living and poverty reduction (Pillay, 2007). It is incumbent on banks to understand the importance of financial inclusion as they need to modify products and services, they offer to attract more clients. Financial inclusion and financial education play a key role in sustaining and developing strong and efficient digital financial infrastructure aimed at facilitating growth of the South African economy. This study demonstrates that expanding financial access to the BoP customers will positively affect the economy.

2.2 Theoretical Framework

Given the rapid technological advancements influencing needs of consumers, organisations should adapt to always remain above the curve to ensure business continuity and growing profit. The development of Fintech has transformed the business landscape, challenging traditional entities to prioritise novel solutions in product and service provision (Still et al., 2019). The theoretical framework underpinning the research is drawn from the BoP market. The intension of this is to encourage an inclusive approach to adopting technology in the financial services sector that will create shared value socially, environmentally and commercially for profit. Studies have demonstrated that technological innovations that are commercially viable should be implemented to combat poverty and financial exclusion of the poor (Lashitew et al., 2020).

Another theory explored in this study as a complementary framework is financial inclusion with a focus on financial literacy. The theory argues that economic inclusion can be achieved by educating a nation. Thus, economic inclusion refers to distribution of financial services to massive segments of the underprivileged groups of people in a manner that is cost effective. Economic inclusion also makes reference to the usage of and access to formal financial services (Ozili, 2020).

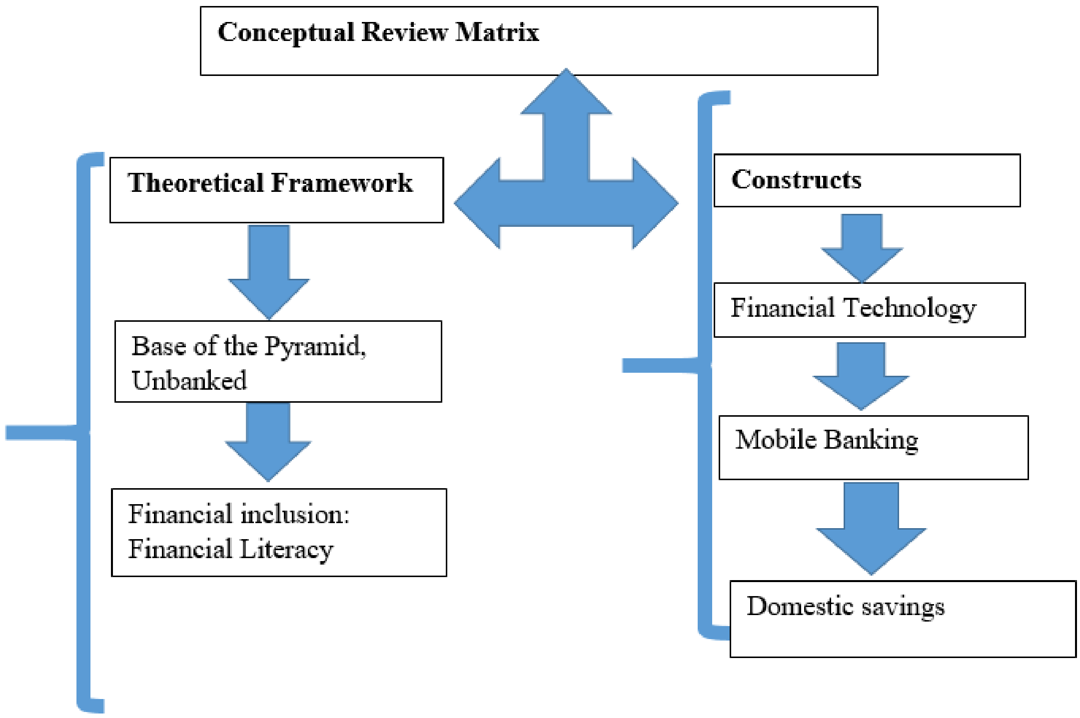

Figure 1: The conceptual framework

Source: Author's own work

2.3 Conceptual Framework

The key concepts under critique are innovation in banking, the unbanked and domestic savings. Digitalisation acts as a vital force in the performance of banks. Data and communication machinery offer multiple prospects for frugal innovations by users, resulting in value creation. According to Ntimane (2020), innovation is a passage of progression in which novel ideas are implemented for commercial success in the marketplace. Thus, it represents an attractive area of investment for organisations that are improving their product or service to serve major customers. This includes engaging with customers who are left behind because of higher costs or need changes. Firms with groundbreaking strategic skill sets are eager to target low-income markets, as they can adapt their business strategy and business model to make room for low-cost wins made possible by enhanced digitalisation (Ntimane, 2020). Affordable novelties are gradually being detected in emerging economies and are referred to as frugal innovations. For instance, A Little World (ALW) is a network founded in India that condensed *a bank branch* *to a smartphone and a fingerprint scanner, consequently bringing financial services traditionally reserved for urban populations to rural customers* (Van der Boor et al., 2014). Multiple system novelties that originate in emerging economies have had an incredible effect on the banking landscape. For example, M-Pesa is a mobile money service that enables persons to conduct money transfers using a smartphone. This service is used by more than 20 percent of Kenyan adults and approximately 50 percent of the poor (Jack & Suri, 2011). The major explanatory variable of this framework is innovation in financial services aimed at capturing the underserved market.

The Capitec Bank management team has identified a window of opportunity within the unserved population and continuously builds their strategy by understanding this market and exploiting that information to address gaps identified in the low-income market. The bank targets the poor and middle-income people who were previously overlooked when it comes to offering one-of-a-kind banking products and services that meet customer needs (Townsend & Mosala, 2006). Capitec Bank uses their advertising to attain an appropriately fitting position and thus entice low and middle-income earners. The bank offers low-salary earners a unique service that includes a paperless deposit service, longer operating hours, low banking fees and no queues. These services occur in real time and address the needs of a customer (De Lange, 2013).

A business can beat its competitors in an industry when it has grown to differentiate itself by obtaining the right knowledge, skilled employees and effective supervision of different roles they perform (Baradaran, 2012). Leaders are aware that enabling a strategy to be implemented effectively requires distinct value-add. An individual's ability to benefit from a bank's credit facility is a major step towards his/her economic advancement. Access to this credit grants individuals or entrepreneurs the capacity to expand their small businesses and build a financial safety net to withstand unexpected economic crises. Research has demonstrated that small-scale credit leads to growing income and savings amongst debtors. The inability to access credit may substantially hinder the financial advancement of poor societies (Baradaran, 2012).

2.4 Innovative Banking

The innovation imperative has for some time been recorded as the driving force to fiscal development and firm growth. According to Agolla et al. (2018), technological rivalry is the key form of competition in capitalistic economies and sets the tone for continuous transformation. The advent of technology has significantly changed the environment in which banks operate. The launch of innovative services such as online banking, e-Wallet, Automated Teller Machines (ATMs) and mobile banking has changed the manner in which financial institutions entice, please and retain their clients (Agolla et al., 2018). “Outdated” means of banking such as the drafting of cheques and telegraphic transfers have become redundant because of technology enhancement in the financial services bank sector. Customers are now privy to a wider variation of options that may be used to send or receive money. Consequently, it is now simpler and more convenient for customers to transfer funds from one account to another, between banks and across countries without physically presenting themselves at a bank counter. These have all been propelled by new technologies, competition and customer satisfaction. Developments within innovation have reduced the time it takes to perform a transaction as it is now identified as a convenient luxury to customers and nearly eliminates queues and provides speedy money transfers (Agolla et al., 2018).

Digital synchronisation is attributed to using digital innovations to develop business models and enhance efficiency (Hawkins, 2012). Banks play a crucial role in the world’s monetary policy as they drive the global payments system and are a key basis of credit for multi-national corporations, upcoming enterprises and the wider society (Hawkins, 2012). Banks act as an incubator for depositors’ funds that are reliant on interest rates, charges and propriety outcomes. Financial services institutions are highly regulated bodies by the state and are affected by compliance challenges such as the Financial Intelligence Centre Act (FICA), which is legislation that requires transacting customers to have their identities and place of residence verified before being able to conduct financial transactions. This has been found to be a significant barrier to low-cost banking (Hawkins, 2012). To effect change from the traditional mode of banking, Capitec Bank has challenged this approach and requires customers to produce only their identity document to own a savings account, as the majority of clients from rural areas and townships are unable to produce proof of residence (De Lange, 2013).

According to Omarini (2017), there must be urgency to make use of and embrace technology developments such as mobile phones, artificial intelligence (AI), big data analytics and biometrics. Financial services institutions are therefore required to use these tools to influence attitude and behaviour of their customers, especially low-income households, by using technology as a bridge to economic inclusion. The move to innovative banking is rapidly becoming the norm, and the mission is now to question orthodox reasoning on how to better present banks' product and service offering. Advancing products and services in the banking industry will result in new offerings that cater for low-income clients. Embracing the digital landscape is crucial for long-term development and growth in which business models must be constantly altered to offer sustained value to society and the economy (Omarini, 2017).

The quantity of retail branches is slowly declining, and several services are being conducted remotely, especially with loaning and investments. Innovative and digital banking has evolved into a strategic priority in the current modern society (Galazova & Magomaeva, 2019). Banks are now using AI to activate credit cards through smart card technologies and identification of customers through fingerprint scanning. The use of voice, face, handwriting, and touch screen innovations and location-based identification are examples of technology aggressively disrupting traditional banking (Coetzee, 2019).

2.5 Fintech

Fintech is better known as "disruptive" or "revolutionary" and equipped with "digital weapons" that will "tear down" blockades of orthodox means of banking (World Economic Forum, 2017, as cited by Navaretti et al., 2018). It refers to usage of technology in the financial services arena. The Financial Stability Board (FSB) in 2017 defined Fintech as "technological innovation of financial services"; it is the integration of products and services digitally in payment streams, digital wallets, and digital currency and their main technologies (Galazova & Magomaeva, 2019). These technologies form part of the Fourth Industrial Revolution (4IR), which refers to virtual networks in which new technologies have come to be prevalent (Mungai, 2019).

Fintech is beneficial for society as it provides lower-income households with a differentiated opportunity to reach markets (Mungai, 2019).

The benefits of partnering with Fintech firms is for banks to generate revenue and reduce cost. Thus, the stimulation of improved technology leads to modernisation of banking by growing bank service offerings and enhancing the speed of product offerings that increases their market demand, leading to higher profit share for banks at a reduced cost for customers. Therefore, it is mandatory and proven in networks of production, administration and governance that disapproval of innovation as an imperative means wilful exclusion from society (Coetzee, 2018). Fintech has thus revolutionised the playing fields for banks, causing them to relook at the types of bank products and services being offered, whom they are offered to, and how best new customers, especially the poor, may be served. The goal is to be strategic and adaptive to change. Monetary novelties such as mobile money and cryptocurrencies are redefining how money is understood (Coetzee, 2018).

Financial innovation is the beginning of the dispersion and promotion of novel financial tools, financial technologies and improved financial markets. The existence of financial innovation in the financial network may be referenced in two distinct ways, such as product and process innovation. The practice of using technology or market data to present new affordable products or services provides improved risk management tools. An established and functional monetary economy is important for convenient access to financial information with reduced cost, which enables fair investment decisions to be made for growth and stability.

According to Beck et al. (2015), innovation in the financial realm has an important role in the process of financial deepening, whereby innovation within the finance system may also bring certain risk and aggravate instability in bank systems. Therefore, it is important to define financial innovation in the context of a defined continent. A current example includes mobile banking, which is access to a payment system on a smartphone, even without a bank account. Financial innovation is described as technical developments that enable easy contact with information based on trading, as well as avenues of payment. It also considers the rise of enhanced financial capabilities, the establishment of new dispositions of organisations and the sophistication of thriving economies (Beck et al., 2015).

Financial innovation occurs when there is a desire for a new market to participate in establishing novel and resourceful methods of maximising profits (Bara et al., 2016). Financial digitalisation has been an important element of monetary activity for many years. In 1912, Schumpeter, in his work entitled the "Theory of Economic Development", emphasised the important fragment of work conducted by financial intermediaries in innovation and economic development.

According to Bara (2016), economic development in some societies seems to isolate financial digitalisation and continues to implement economic growth to a financial network in its current form. However, the New-Growth theory advocates for the value of an entrepreneurial mindset and technical skills. The neoclassical growth theory suggests that the development of the economy is dependent on peoples' needs. Entrepreneurs and organisations who are inclined towards working and investing in the fulfilment and improvement of these needs would lead to increased economic growth that challenges the notion of neoclassical economists who contend that a growing economy is determined by external intractable forces (Bara et al., 2016).

Innovation is believed to be a double-edged sword with a “good side”, which involves propelling economic growth, and a “dark side”, which leads to a decline in economic growth caused by unstable and volatile markets. The best of innovations mobilise banks to capitalise on new technology that will aid the financial network to be absolute in its position leading to growth. Fintech can grant the possibility to develop unique and sophisticated infrastructure and the inclusion of the poor; for example, mobile banking in Kenya and Philippines pioneered in the inclusion of poor people, as well as the generation of revenue and the solidification of complete policy and regulation that supports stable economic growth (Bara et al., 2016). Thus, Fintech stimulates the framework of financial markets and aims to spear a credible financial network that can support economic growth by encouraging economic intermediaries to expand their portfolios and meet their liquidity needs. Thus, the “dark side” of innovation, according to Bara (2016), is determined by the likelihood that financial innovation is linked to increased advancements in the economy that may cause instability or unhealthy competition among industries largely dependent on external funding of innovation.

Table 1

Distinguishing features of traditional and digital modes of banking

Distinguishing features	Traditional model	Digital model
Customer service time frame	Limited. Service is carried out only at a clearly defined time	Unlimited. Possibility of round-the-clock access
The speed of customer service	Depends on the qualification and experience of the Bank employee	Immediate
Approach to service	Flexible, however, is limited to a small variety of service channels	Flexible and carried out through any convenient channel for the client
Maintenance cost	High, taking into account the Bank's costs for the personnel and maintenance of departments	Low, often services are provided free of charge
Scope of service	Limited branching of the branch network and staffing	Unlimited, can go beyond the geographical location of the banking institution
Status of the operator in the service process	Functions of the operator is performed by an employee of the Bank	Functions of the operator are performed by the Bank's client
The procedure for learning new services and promotions	Requires time and cost	Carried out quickly, via SMS and e-mail newsletter

Source: Adapted from Galazova and Magomaeva (2019)

2.6 How Africa is Using Fintech to Reach the Poor

There is no doubt that Fintech is experiencing explosive growth in Africa, even though its adoption is slower in other regions of the continent. Yet, the strong penetration of mobile phones in Africa will boost access to financial services. The digital era has released a disruptive evolution within the banking sector, making it possible for the sector to appeal to previously "unbanked" persons in developing societies while still holding its traditional bank customers. South Africa boasts a strong and developed financial services sector relative to its neighbouring African economies, which have been on a decline, mainly in the informal sector. According to Alexander et al. (2017), "bank penetration in Africa is below 35 percent, which is approximately 80 percent of Africa's 1 billion population who are unbanked". Constant currency fluctuations in Africa hold back the banking sector, which is influenced by a minimum supply of products for domestic savings such as insurance and credit applicable to large segments of the population in neighbouring African countries. Poor infrastructure, the poor supply of electricity, pitiful roads and the lack of broadband data connectivity and utilities hinder the poor from accessing ATMs and bank branches (Alexander et al., 2017). Africa's Fintech revolution is attributed to the continent's deep understanding of its clients from the grassroots level and the ability to meet their needs. An example of a Fintech solution that has worked in Kenya is M-Pesa founded by Safaricom, which allows subscribed users to conduct traditional banking services using a mobile device (Alexander et al., 2017).

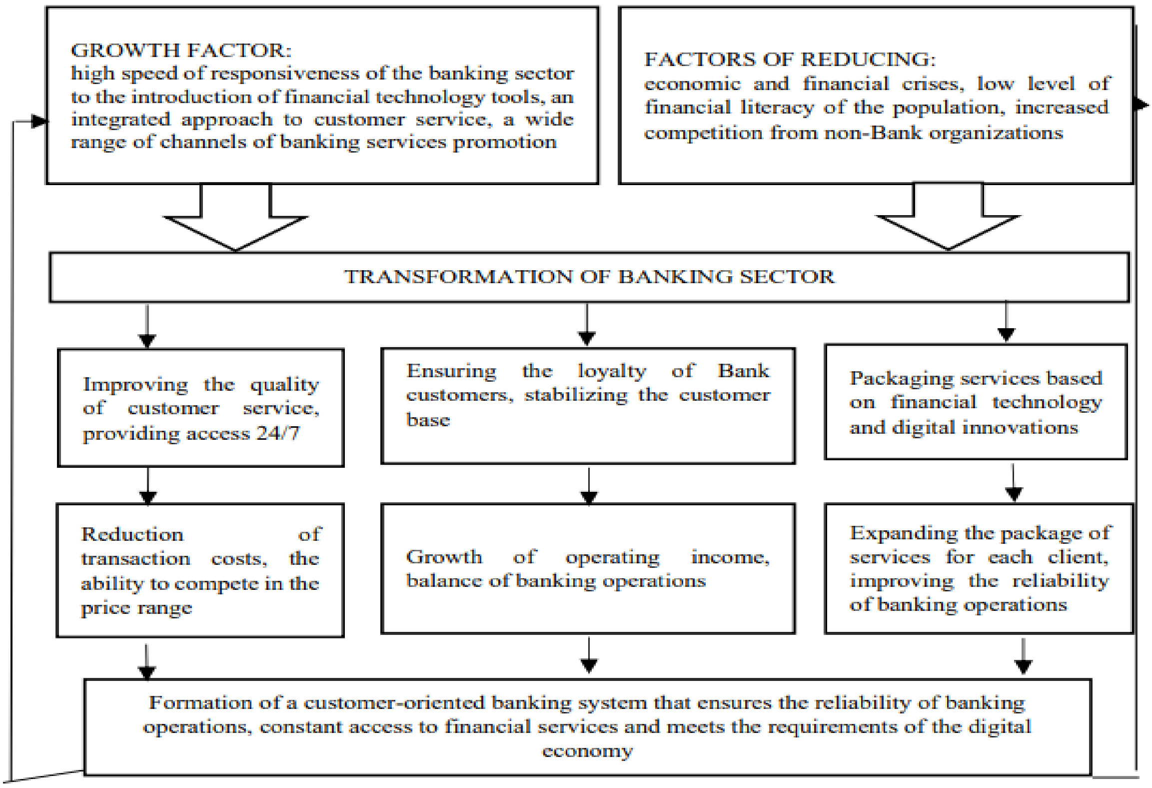

Figure 2: Transformation of the banking sector using financial technology

Source: Adapted from Galazova and Magomaeva (2019)

2.7 Invention at the Bottom of the Economy

The window of opportunity for invention amongst the world's poor is massive. This refers to customers at the bottom of the economy, who have an estimated per capita income less than US $1 500.00 and are expected to be more than 4 billion (Anderson & Billou, 2007). This suggests that for a billion people, it is estimated at one-sixth of the global population—the per capita income is below $1 a day. The 20 largest developing economies consist of more than 700 million such families, with a total yearly income estimated at $1.7 trillion (Anderson & Billou, 2007). This buying power is substantial and raises the question why the business world has failed to seize opportunities at the bottom of the pyramid. The reason is found to be exploitation, pitiable infrastructure, inadequate distribution channels, illiteracy and violent riots that may cause a reluctance of companies to serve people living in poverty (Anderson & Billou, 2007). Today, poor people offer a momentous growth area for banks in emerging markets. Multiple institutes have failed at this opportunity because of the lack of understanding and appreciation of the innovation capabilities required for basic banking areas of product distribution and process (Anderson & Billou, 2007).

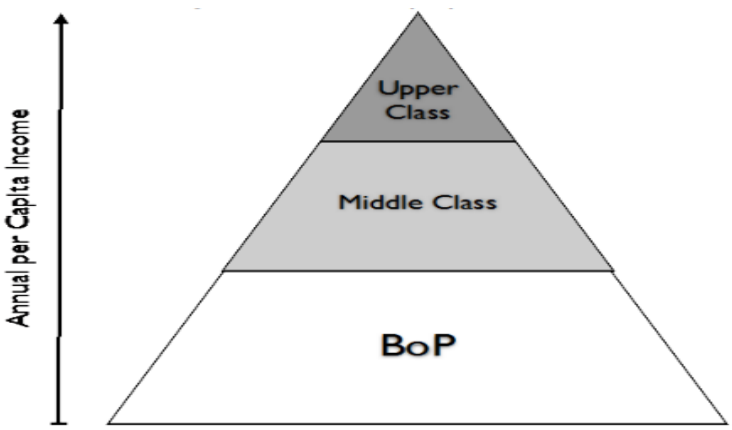

Figure 3: The world economic pyramid (adapted from Anderson and Billou (2007)) displaying the distribution of wealth amongst the global populace

According to Anderson and Billou (2007), corporations that are succeeding in capturing the BoP market are typically those that have established a strategic plan that provides the following **4 As**:

- Acceptability: The output must be identified as a novelty, even if it is incremental, that is, it is purposeful and will serve the basic requirements of the BoP market.
- Availability: easy access to the product and service being offered.
- Awareness: The market is aware of the product or service being promoted.

- Affordability: The degree to which the unbanked or lower-income group can bear the cost of the product or service offered.

Several industries have not identified the unbanked market as a promising market for sustained profit. This market is often neglected and ignored as there is a preference for the mid- and upper-class niche market segments seen to be more profitable. In these industries, the BoP are regarded as "non-consumers"; hence, they may be identified as a possible "blue ocean" (Anderson & Billou, 2007).

The portfolio of Capitec Bank demonstrates how the BoP context can be applied. It comprises practical cases used by Capitec Bank to capture the lower-income and unbanked market. Additional validation has been done through interviewing banking experts at Capitec Bank involved in the present study.

2.8 Digital Financial Services and Associated Risk

Fintech can reshape the future of the banking industry, yet there are concerns regarding the considerable risks associated with this technology. The key concern regarding the adoption of Fintech is financial in nature, for example, the loss of financial outcome and extra fees; regulation, which is the legal uncertainty for Fintech adoption; operational risk and privacy and security (Ryu, 2018). Reputable financial services institutions are constantly working on upholding their reputation and brand while managing daily risks they face, especially in the wake of adopting new digital technologies to enhance efficiency. For corporations to compete on a global stage across geographic markets, there must be a consideration for important aspects of risk management, such as the following (Nuyens, 2019):

- the upkeep and constant improvement of cyber security,
- combating money laundering and terrorism financing with the objective of preventing risks that may cause harm to society, and
- maintenance of the strength and security of the international payments system.

To counter the risk stipulated above, national policies should be implemented to ensure that standards and rules are enforced on FinTech and banks that are responsible for the movement of client funds. It is imperative that customer information is protected. Accountable institutions should take the responsibility of notifying the public should there be a breach in the security of their customers' information and bear the cost for their failed security (Nuyens, 2019). Regulators globally should carefully observe the development of Fintech and big tech and take action when required (Nuyens, 2019).

2.9 Blue Oceans

The concept of blue oceans was created by Kim and Mauborgne (2014); blue oceans signify all industries that are not present today. The approach identifies new customers and creates unique markets by challenging existing industries. The prospect of this strategy is defined as reaching out to an unexploited retail space, to create demand and harness the prospect for sustained profitability and development. Blue oceans are least influenced by competition and have the potential to be lucrative at the BoP. It is believed that organisations are divided between two spectrums: creation of value at a reduced price for customers and addition of greater value at a higher price (Kim & Mauborgne, 2014). Creation of value is the cornerstone of the blue ocean strategy. A single organisation that was successful in tapping into the low-income market is Capitec Bank, who altered the narrative by redefining the banking industry and recognising that the BoP lower-income customers are a viable market. Capitec targets a market that was previously deemed unprofitable by other financial institutions, therefore being identified as diving into a blue ocean (Kim & Mauborgne, 2014).

2.10 Development of Capitec's Business Model

A business model is a strategic framework designed by organisations to create value (Ver Loren van Themaat et al., 2013). It presents various tactics and approaches that can lead to an organisation's success. It may be described as an action program or blueprint on how a firm operates to create value for its target audience and be lucrative (Ver Loren van Themaat et al., 2013). Business models are designed to create, deliver and capture value. When banks such as Capitec want to create a business model that expands into the poor market, they should meet a few fundamentals to ensure success. These fundamentals ensure differentiation of the BoP group from any other market.

Businesses should frequently adjust to the changing high-technology environment that will grant them an advantage over their competition. The business strategy of Capitec Bank is founded on transaction economics, as the organisation is proven to have capabilities of creative disruption and is capable of being the most competitive bank in the market by providing expedient services and low-priced products. Enterprises with disruptive risk-taking mindsets have a yearning to pursue lower-end markets. The primary purpose of introducing technology to the banking industry is to refine client experience and accessibility to resources, such as real-time access to applications. The banking industry is also highly regulated, mostly because of the risk associated with the financial services industry. Ongoing strategies and technological advances enable organisations to mitigate risk factors and protect financial systems from crime and other risks (Ntimane, 2020).

The Capitec Bank service framework aims to define requirements of the low-income consumer. The plan of the bank is to start serving from the poor segment of society and aspire to ultimately serve wealthy clients. Capitec Bank's ambition is to challenge old-fashioned bank frameworks by presenting novel digital bank services supplied explicitly to the unserved market. An additional upper hand that the bank has is its affordability model, which is difficult to duplicate. Capitec Bank strives to meet its customers' evolving needs in a manner that is cost effective, easy and efficient (Ntimane, 2020).

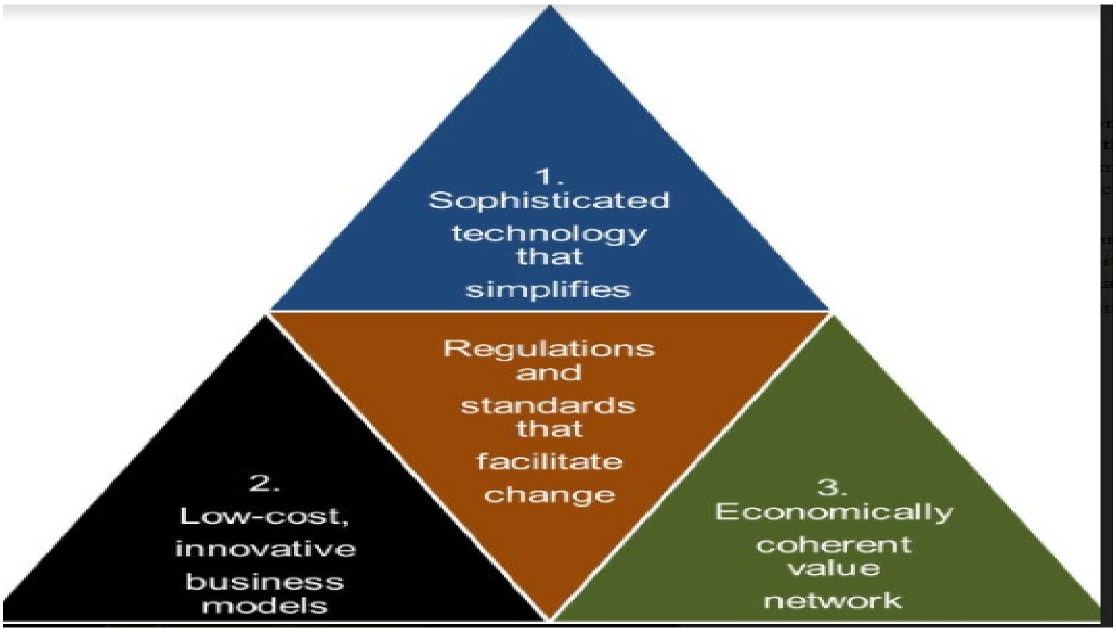

Figure 4: Business strategy elements

Source: Adapted from Ntimane (2020)

2.11 Mobile Money

Current research indicates that mobile devices play a crucial part in endorsing financial inclusion (Ahmad et al., 2020). Mobile phones can be used to communicate market and other data in physically remote areas where branch saturation is low and enable the development of mobile money services (Ahmad et al., 2020). M-money includes the usage of telecom networks to facilitate transactions using a customer's money of which wireless service providers take care. M-money is different from mobile banking. The distinctive feature of mobile money to mobile banking is that with m-money customers transact exclusively through mobile network operators (MNOs) and do not need to own a bank account, whereas with mobile banking, clients gain entry to their accounts using their wireless device (Ahmad et al., 2020).

2.12 Cellphone Banking

Cellphone banking is denoted as the management and presentation of financial services through a smart mobile device. The expansion of mobile banking is linked to the increase in usage of mobile cellphones, especially in Sub-Saharan Africa. Mobile banking technology provides customers easy access to money without them carrying cash and permits for exposure to online lending markets (Mungai, 2019). According to the World Bank, an increased number of households have a smartphone but, sadly, do not have access to necessities such as clean water and sanitation. Nearly 70 percent of the poor market own a mobile phone (Shipalana, 2019). There has also been an increased number of internet users over the last decade in developing countries.

"Mobile technology is transforming the global banking and payment industry by providing added convenience to existing bank customers in developed markets, and by offering new services to the unbanked customers in emerging markets" (Gupta, 2013). The eruption of high-technology mobile devices in Africa saw the swift growth of cellphone banking. Smartphone communication systems present novel products to spread wireless banking into the countryside. Poor people without access to financial services are not only an African problem but a global challenge evident in emerging economies (Rouse, 2017). South Africa has a high smartphone ownership rate (89%) and consequently matured mobile money services (Chigada & Hirschfelder, 2017). Mobile banking in South Africa aids as a critical bridge between the financial services industry and the unbanked by granting suitable savings and investment prospects.

Mobile broadband subscription has undergone remarkable growth in Africa. According to Statistics South Africa (2014), quoted by Chigada and Hirchfelder (2017), the progressive improvement of mobile technology indicates that 30.8% of all households in South Africa, with 17.9% of rural households, go online using mobile devices. Additionally, 84% of South African cyberspace users access the net using a smartphone (Chigada & Hirschfelder, 2017).

2.13 Simplification of Banking

The key reason for adopting mobile technology is accessibility to banking services at any time and at no cost and effort. The five well-known banks in South Africa, which are ABSA, Capitec, FNB, Nedbank and Standard Bank, all provide cellphone banking. Another available option that simplifies the transfer of funds in low value, real time and individual-to-individual payments is referred to as mobile money (Refera et al., 2016).

2.14 M-Pesa

The Kenyan mobile money service known as M-Pesa, meaning mobile money in Kiswahili, is a unique example of a network that is used to transfer funds on a wireless device. This scheme uses cellular numbers as a virtual bank account number. M-Pesa enables persons to deposit, save, send and withdraw funds through a mobile phone (Chigada & Hirschfelder, 2017). Figure 5 below displays how easy it is to use M-Pesa. The M-Pesa system allows for the conversation of money without the sender being present at a bank. The requirements of M-Pesa are simple; it only needs a cellphone number together with a reference to transfer cash virtually anywhere, irrespective of distance. M-Pesa is reliable and facilitates safe storage and transfer of money, which may increase household savings. Additionally, the M-Pesa model boasts serious commercial benefits as it heightens the security of users, especially in poor locations (Chigada & Hirschfelder, 2017). Cellphone banking is most certainly the best alternative to traditional banking (Refera et al., 2016). Its innovative service is driven by the development and spreading of mobile technology. Introduction of mobile banking services positively affects the economy as it enables the unbanked to easily become active participants in the economy.

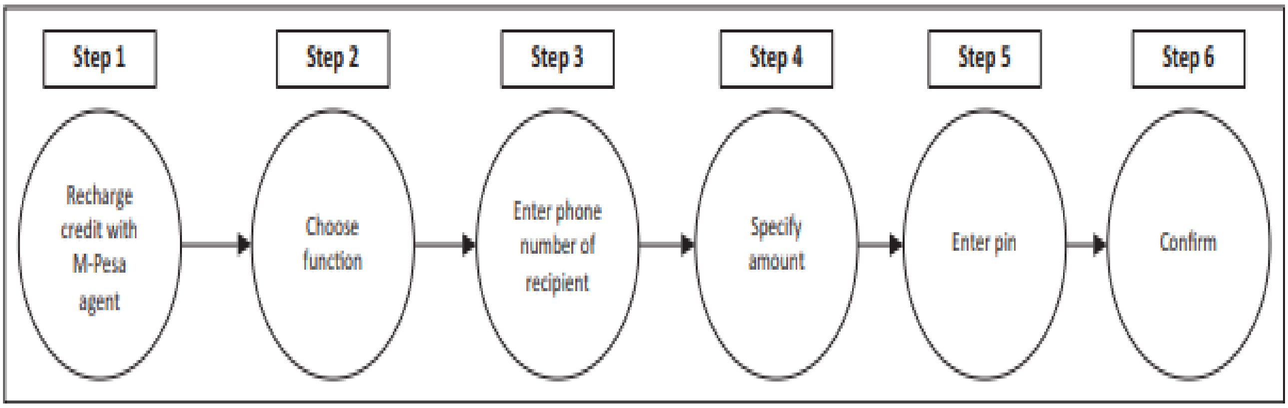

Figure 5: Steps used to make a payment on M-Pesa

Source: Adapted from Chigada and Hirschfelder (2017)

2.15 Inclusion of Digital Payments in South Africa

Digital payment systems have mostly been helpful to the country's higher-income and privileged earners, who appreciate the comfort of cashless transactions and have easy access to the country's digital payment infrastructure. According to FinMark Trust research, approximately one in five South Africans is unbanked and an additional one-third choose to withdraw all their money in cash than to keep it in a bank account. This trend is most prevalent among social grant recipients (Payments Association of South Africa (PASA), 2021). Physical cash is identified as a dominant method for value exchange in poor communities as it is easy to use and is widely accepted (Shy, 2021). According to PASA (2021), the South African Social Security Agency (SASSA) statistics indicate that 95% of grantholder beneficiary funds are withdrawn within seven days of receipt. Another SASSA report made reference to by PASA (2021) finds that this behaviour is driven by fear that the funds would be retracted by the SASSA if left in the beneficiaries' accounts for too long and a general distrust in the digital services system and additional cost like taxi fares for having to frequently commute to ATMs (PASA, 2021).

The evolution of money has been unfolding for decades. Cash transactions are still a norm in rural communities; hence, the urgent transition to low-cost digital payment services would most certainly reduce the cost of producing, storing and circulating cash. It is, therefore, important to build awareness by educating lower-income cash users on the benefits of cashless transactions. Furthermore, there needs to be collaborative efforts with government, digital payment providers, banks and communities to ensure that progress is made for the sake of increased inclusive, cost-effective and modernised means of transacting (Taskinsoy, 2021).

2.16 The Importance of Financial Participation (Inclusion)

Financial participation refers to the use of and access to financial services with the aim of providing products and services that will be beneficial to the unbanked and unserved segments of the population. Discussions on financial inclusion are being promoted globally as an avenue for development. Their objectives include simplicity, diversification, appropriateness, quality and consumer financial education (Shipalana, 2019). The challenge to address poverty of those without access to finance was pioneered three decades ago by Muhammed Yunus, the 2006 Nobel Laureate who founded the Grameen Bank using a social banking model. The debate surrounding financial inclusion gained traction long before the 2008 global financial crisis. Therefore, financial inclusion alone is not sufficient to address poverty, without considering additional pertinent development initiatives such as education and digital infrastructure. Financial inclusion is an enabler to economic well-being. The World Bank Group has recognised the potential of financial inclusion as a transformative tool for accelerating development gains (Shipalana, 2019).

Financial inclusion refers to adults having access to using an array of suitable financial services. Such services must be granted sensibly in a regulated environment. Essentially, financial participation begins with owning a deposit or transaction account at a bank or mobile money service provider that may be used to facilitate transactions and to grow earnings (Demirgüç-Kunt & Singer, 2017)

Research scholars refer to financial participation as the ability to access a bank with ease. It is also the ability to access essential financial services. Furthermore, according to Matsebula and Yu (2020), the World Bank asserts that being financially included means the lack of pricing as a barrier to using financial services. It is found that helpless societies in third-world countries, such as the poor in South Africa, are not included in their country's formal economy as they lack access to financial services. Consequently, low-income groups find it difficult to endure and to get the attention of the bank sector to grant them access to inexpensive financial services. Initiatives to involve the underprivileged in the financial textile of the domestic economy have proven to be unsustainable. This is because the idea of financial inclusion has been designed by government and the banking sector as a 'social responsibility', without a defined pathway to sustainable financial inclusion (Louis & Chartier, 2017).

To move beyond a dependency model in South Africa it is important for decision-makers to consider a cohesive agenda for financial inclusion that rethinks financial inclusion as a 'business opportunity'. To understand financial inclusion, it is incumbent on banks to differentiate the class of individuals who are voluntarily financially excluded from those who are involuntarily excluded (Matsebula & Yu, 2020). The latter group refers to those who are excluded because they are poor, whereas the former refers to those who choose to be excluded as they see no benefit in being part of these services for cultural or religious reasons. Figure 8 displays a clear picture of access and use of financial services. It articulates the narrative that a portion of consumers may be excluded involuntarily from using financial services. A notable group consist of households and firms that are identified as unbankable. This group is excluded as they do not meet the affordability criteria or denote an extreme lending risk. In this instance, not using financial services is not caused by government failure or the market. By contrast, groups of consumers may not have access because of other reasons, for instance, discrimination, lack of information, shortcomings in product features not meeting the needs of potential clients, price barriers, ill-informed regulations and religious or cultural reasons (Matsebula & Yu, 2020).

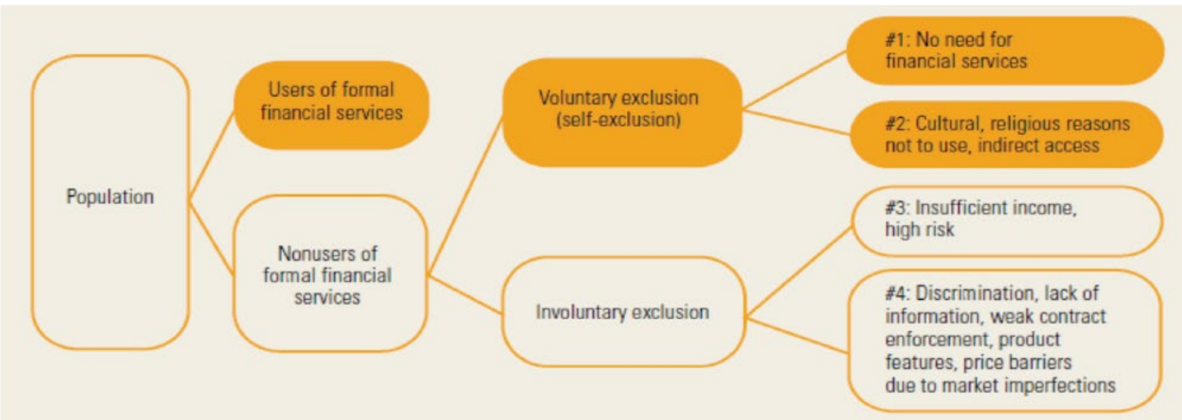

Figure 6: The use of and access to financial services

Source: Adapted from Matsebula and Yu (2020)

The South African economy is distinguished as one of the most unequal economies, but it has developed the most complex financial systems in Africa (Kessler et al., 2017). The Mzansi account initiative aimed at supporting financial inclusion in South Africa was initiated in 2004. It offered entry-level accounts conjured up by the Financial Services Charter (FSC) and the big four banks in South Africa and a state-owned institution (Postbank). This was a voluntary initiative as other financial institutions did not participate in it, mainly because they took care of different niche markets other than the unserved, poor and vulnerable. This intervention aimed to broaden the landscape and outreach to the unbanked in terms of scale, depth, scope and breadth by working below the broad government policy of economically empowering the black society of South Africa. The mission of the FSC is to provide access to transaction and savings in a formal bank environment. Although this initiative had no legal backing, collaborations with banks through some form of social agreement were committed to growing and providing cheaper alternatives to financial services to the wider population (Kostov et al., 2014). Consequently, the Mzansi account only addressed the question on penetration, which is not enough to cater for the required demands of financial services to the people to whom it is directed (Matsebula & Yu, 2020).

Likewise, the issue concerning financial inclusion at the bottom of the client base is a relook at the issue of market incorporation, as an opportunity to 'incentivise' the financial services industry and determine financial inclusion to generate an income. This type of combined venture would encourage banks to financially commit to financial inclusion, thereby ultimately revealing the economic possibilities concealed within feeble societies in South Africa and the continent. This will necessitate enhanced governing protocols and *depoliticisation* of the financial network. Further, it will necessitate a commitment from the banks themselves to re-examine and reimagine unexploited business opportunities that are found in unpredicted areas of the population (Louis & Chartier, 2017).

Figure 7: Proposed South African financial inclusion model

Source : Adapted from Louis and Chartier (2017)

2.17 Financial Education for the Unbanked

Financial freedom is a goal shared by all. The desire for economic security for poor people in developing countries is a challenge as many households have few resources and prospects. Most reside in impoverished and volatile surroundings that, compared to others, have little income. In this reality, the management of the tiny income they possess is important. The ability to manage one's finances enables one to meet day-to-day needs such as unforeseen crises (Sebstad & Cohen, 2003). The objective of financial literacy is to teach people ideas of making money and managing it prudently. The objective is to ensure that people are more knowledgeable when making monetary decisions and that there is a cognizance of individual finance and the will to study elementary skills associated with "earning , spending , budgeting, saving, borrowing, and investing money" (Sebstad & Cohen, 2003). Financial literacy is crucial for the sake of setting financial goals and optimising financial options.

The OECD defines financial education as follows:

The method in which households or investors better their understanding of financial concepts and risk through relevant material, objective advice and the active seeking of financial knowledge to improve their financial well-being (Sebstad & Cohen, 2003). Financial education is, therefore, intended to enable admission and, where necessary, promote the use of suitable financial products that will benefit individuals, households and societies. 'Financial knowledge is not just convenience but a crucial survival tool' (Refera et al., 2016) An essential indicator of people's ability to make wise financial decisions is their level of financial literacy.

The Organisation for Economic Co-operation and Development (OECD) suitably defines financial learning beyond knowledge and comprehension of financial concepts and risks by including skills, motivation and confidence to apply the knowledge in life situations in order to make operative decisions in different financial contexts and participate meaningfully in economic life (Lusardi, 2019).

Learning about finance propels one's the ability to make learnt choices and sensible decisions regarding the use and management of money. According to Refera et al. (2016), several studies in developing countries have demonstrated low levels of financial literacy. For example, Refera et al. (2016) quoted survey results on their research paper in Sub-Saharan Africa indicating that "a large proportion of the population in countries such as Mozambique, Malawi, and Nigeria lack awareness of basic financial products and concepts such as saving accounts, interest on savings, insurance, and loans". Correspondingly, a Fin Scope review in Uganda indicated low levels of financial learning in the country, where most grown-ups lack the basic understanding of personal finance and struggle to comprehend concepts such as the interest rate, discount rate and money lending, which may hinder access to financial services institutions (Refera et al., 2016).

The idea of financial learning indicates that knowledge on financial concepts is a basic life skill to acquire in this modern age to make informed long- and short-term financial decisions. According to global research, there are lower levels of financial understanding particularly amongst the youths; this raises serious concerns about the youths and their capabilities to secure a good financial well-being. Because of the continuous change in financial status and needs with the passing of time and the dynamic nature of financial products, there is a pressing need for continuous update of financial learning amongst all age groups (Garg & Singh, 2018). Scholars have found that financially literate persons have minimum inflation rate expectations and understand the impact of inflation on returns. Members of society who understand finances lend at low cost and are aware of fees and are thus more inclined to pursue investment opportunities and control their spending behaviour. People who are financially literate possess debt literacy, understand financial terms such as interest compounding and time value of money and are more inclined to save for retirement (Garg & Singh, 2018). People with high financial literacy partake in stock market and formal financial markets; thus, they are less likely to experience reduced spending during challenging times and are able to better manage macro-economic and exhibit reduced negative emotions on the rapid devaluation of currency (Klapper et al., 2012). Garg and Singh (2018) found that people who are knowledgeable of their finances and are credit card holders have no intensions to use their credit cards as instruments to borrow and are, therefore, not concerned about borrowing cost.

The result of poor personal financial decisions affects not only individuals but also the entire financial system and stability of a nation. Therefore, for them to be worthy, financial learning initiatives should be realistic and scalable. Community centres, learning institutions and places of work afford society an opportunity to address issues relating to financial education on a large scale and to various sections of the population. Additionally, vulnerable groups, such as women and children, across countries are perfect targets of financial learning programs (Lusardi, 2019). Financial education is crucial in setting a strong foundation of raising a financially literate society and communicating about financial literacy to consumers, workers and citizens. An important lesson one should learn regarding financial education is acknowledgement that '*one size does not fit all'*. This suggests that the main aspects of any financial learning programme must be designed in a manner that targets a specific audience.

According to Lusardi (2019), there are three reasons for implementing financial learning in schools. First, it is crucial to expose young people to basic concepts underlying financial decision before they make important consequential life decisions. Second, schools provide access to financial literacy to students. Third, reduction of the cost of receiving financial literacy is crucial if societies are to promote advanced financial literacy. Financial education can also be provided in places of work. A comprehensive and effective financial education program targeted at adults and tailored to their specific needs is necessary. It is also essential to provide financial education in the community, in places where people go to learn, for example, museums, galleries and community clinics, where both the young and the old can benefit. The capability to manage one's personal finances enables people to save, especially in developing countries where people face several risks such as the fluctuation of prices of goods and services, unforeseen circumstances such as illness or death of a breadwinner and unemployment, which have detrimental effects for many (Refera et al., 2016).

2.18 Domestic Savings

Families and individuals form the backbone of an economy. This is the case in South Africa as people's spending habits account for at least 60 percent of the gross domestic product (GDP) (World Bank, 2016). Findings of Mungai (2019) indicated that the household affiliation between GDP and savings in South Africa is countercyclical. "During times of economic prosperity, consumers are less likely to save, and they prefer to spend as they have an expectation for this healthy economic trend to continue well into the future" (Mungai, 2019). The effects of Covid-19 have resulted in a momentous economic impact on the monetary well-being of households and has in multiple ways caused a reduction in household savings and a rise in domestic debt. This is evident as retail banks are reporting on consumers' massive request for funding by means of credit allowances and finance leases, which cause a decline in economic growth. In South Africa, where the level of domestic savings is low, household savings for the sake of economic growth are crucial. For years, South Africans have had their debt growing quicker than their savings, as borrowing money is a norm in the country; this has instilled a culture of dissaving. Worst of all, household debt has become so easily available as interest rates are deemed to be relatively low (Mongale et al., 2018).

Household savings are important for achieving continued levels of economic growth if they are directed towards lucrative and fitting investment prospects. Financial institutions and the government should regularly host financial literacy seminars close to community centres and local libraries to educate and share information on how one can manage one's debt and finances. Empirical evidence by Mogale (2018) indicates that households should nurture a culture of saving so that there is reduced dependence on credit to purchase products. The South African Government and the National Credit Regulator are to impose stricter credit control measures to control client demand for credit. This may encourage consumers to depend less on credit and save and may lead to superior access to and coverage of retirement benefits. The government can motivate this culture by introducing incentives that will stimulate households to save (Mongale et al., 2018).

2.19 Summary and Conclusion

This chapter reviews the theoretical literature on innovation in banking that largely affects lower-income groups, called customers at the bottom of the pyramid. The literature covers access to banking in underserved communities, where the majority of households are unbanked. The chapter explores important revolutions in the banking sector that have disrupted traditional banking, such as Fintech and digital banking on mobile devices. This chapter also taps into financial literacy and the importance of savings in strengthening economic growth. Chapter 3 describes the methodology employed in this study and examines these features.

CHAPTER 3: RESEARCH STRATEGY AND METHODOLOGY

3.1 1ntroduction

In Chapter 1, the overarching research question and objectives are provided and examined in detail in Chapter 2. In this chapter, the research methodology used to addresses the research question and objectives is highlighted with reference to a sound methodological direction and good practice. . The sampling technique and sampling method used in the study are described. This study adopted a qualitative approach using data that were collected by means of informal semi-structured interviews and analysed using an interpretivist paradigm. The ethical considerations and limitations of the study are described. Lastly, an outline of confidentiality, trustworthiness and anonymity issues is presented. According to Thwaits (2017), a qualitative study should be interactive with the researcher by having a detailed narrative and interpretation of the research problem and its contribution to research (Thwaits, 2017).

3.2 Research Strategy and Design

According to Mungai (2019), research designs are composed of three factors; on deciding on a research design, one must first differentiate on the study being empirical or non-empirical. Should the research be empirical, the questions asked during the interview should pertain to a live environment in which the scenarios are observed. By contrast, a non-empirical research study focuses on questions that will not be answered using observed data. Second, this study used primary data and not secondary data, as the researcher collected the data directly from the source. Third, the study adopted an interpretivist paradigm, which is a qualitative data analysis approach that encompasses textual data that focus on how individuals experience and make sense of the world (Wilson & MacLean, 2011). For this study, professionals from the retail banking industry were interviewed and formed part of the unit of analysis. The focus was on understand Capitec Bank's digital infrastructure, products, services and approach to making banking more accessible to the poor and low-income groups to gain an insight into financial inclusion initiatives, Fintech and current approaches the bank uses to encourage domestic savings. The study's approach is naturalistic in nature; that is, the study was conducted in a natural setting rather than a controlled environment. The interpretivist paradigm ensures that the researcher's integrity is intact at all levels of the study process (Wagner et al., 2012).

The selection of the interpretivist approach was motivated by the principles of inductive logic, which is open and explorative and allows for conclusions to be made based on perceived patterns. This research design also enables the formulation of a conceptual framework that is flexible and is shaped by perception (Rossman & Rallis, 2016). A research design is a summary that is tailed in pursuit of a research objective (Wagner et al., 2012). This study adopted a qualitative research design. Qualitative research is depicted by a fortune of experience and a descriptive outcome. It has been argued that a qualitative design provides for in-depth understandings of phenomena that grant a scholar the prospect of comprehending and discovering insights into targeted research participants more comprehensively. Likewise, qualitative researchers approach people and do not extract them from their everyday world. Participants are observed in their natural setting. Qualitative researchers work on the ground, face to face with real people (Rossman & Rallis, 2016).

3.3 Selection of Participants

According to Rossman and Rallis (2016), "qualitative researchers decide on how broadly to employ data gathering techniques". It was recognised that for the present study, it was practically impossible to collect data from the whole population. Therefore, a non- probability sampling method, namely purposive sampling and snowball sampling, was used to select the individuals of the sample. Sampling is a method of obtaining data about a population without testing all individual members of a population. Snowball sampling is a non-probability sampling technique wherein samples selected have unique qualities. For this study, participants provided referrals to recruit other participants to engage in the study. Purposive sampling, also known as a subjective sampling technique, was also applied to participants from the various retail banks who were invited based on sound judgement that they would be able to effectively engage in the study based on their work experience. Purposive sampling also seemed effective in this regard as only a limited number of people served as primary data sources in this study because of the nature of the research design, aims and objectives.

The population under study was 48 bank professionals, of which only 20 individuals agreed to participate in the study; most of them were financial services professionals in the retail banking industry, mainly from Capitec Bank, as this study was inspired by the unique business model of Capitec Bank, one of the first banks to serve the unserved market in South Africa.

3.4 Research Methodology

This study employed a qualitative research method to capture the true essence of research by "viewing the social world holistically, conducting systemic enquiry and using complex reasoning" (Rossman & Rallis, 2016).

The methodology used in this study was aimed at explaining the world of banking in a social setting, process, and interaction. Primary data were used in this study as the data were collected by conducting semi-structured interviews. The theory was derived from the data provided by 20 participants. The nature of this research methodology made it possible for the researcher to establish common themes and quote words spoken by the participants, which are highlighted in Chapter 4. The common themes established gave more meaning to the phenomenon of innovative banking and enhancements it may bring to poor people. The interviews were recorded and transcribed.

3.4.1 Data Collection Instrument

The collection instrument adopted in this study is interpretive phenomenological analysis (IPA), which measured the bank professionals' views on innovative banking, the unbanked and domestic savings of lower-income groups in South Africa. The research instrument, which was an interview guide, comprised important questions that were asked during the semi-structured interviews. The instrument is in alignment with the aim of this study and is attached as an appendix at the end of this research paper.

The rich data pulled out from the interpretive analysis gave a summary of the current trends in Fintech and the adoption of mobile banking amongst poor South Africans for assessing whether payment channels were becoming more accessible. Likewise, they were used to determine whether poor South Africans were still deeply affected by geographic barriers or were making use of enhanced payment systems such as mobile online banking. This was identified as important for improvement of the quality of financial inclusion (Townsend & Mosala, 2006).

The objective of IPA in this study was to determine the banking needs of low-income groups for the sake of financial inclusion and financial literacy through the lens of a bank that is deeply invested in the low-income market in South Africa. The focus was on banking lower-income groups in a manner that is affordable and simple yet sophisticated. IPA is a popular instrument used to address how persons experience and objectify the world. It is based on phenomenology, a branch of philosophy that addresses how a researcher comprehends or perceives an observed experience (Rossman & Rallis, 2016).

Table 3

The sample list of research participants and their background

Participants	Background	Channel
1	Internal sales consultant at Capitec Bank	Online Microsoft Teams meeting
2	Internal sales consultant at Capitec Bank	Online Microsoft Teams meeting
3	Onboarding consultant, banks with Capitec	Online Microsoft Teams meeting
4	Consultant working in financial services, banks with Capitec	Online Microsoft Teams meeting
5	Consultant working in financial services, banks with Capitec	Online Microsoft Teams meeting
6	Consultant working in financial services, banks with Capitec	Online Microsoft Teams meeting
7	Marketing consultant, Capitec Bank	In-person meeting
8	Frontline supervisor at Capitec Bank	Online Microsoft Teams meeting
9	Client optimisation consultant at Capitec Bank	Online Microsoft Teams meeting
10	Bank better champion consultant at Capitec Bank	Online Microsoft Teams meeting
11	Electrician at Capitec Bank	In-person meeting
12	Accountant at FNB	In-person meeting
13	Attorney and researcher with experience in financial inclusion, banks with FNB	Online Microsoft Teams meeting
14	Internal consultant at Standard Bank	Online Microsoft Teams meeting

15	Universal banker at Standard Bank	Online Microsoft Teams meeting
16	Digital banking helpdesk officer at Standard Bank	Online Microsoft Teams meeting
17	Internal consultant at Nedbank	Online Microsoft Teams meeting
18	Teller at ABSA	Online Microsoft Teams meeting
19	Payment fraud risk officer at ABSA	Online Microsoft Teams meeting
20	Entrepreneur working in the property market, banks with FNB	In-person meeting

The sample of the study was small and not sufficiently representative of all bank professionals in the South African banking industry. Most of the sample members agreed to a Microsoft Teams meeting online. Only 4 of the 20 participants agreed to a face-to-face engagement. Referrals from participants were also welcomed by the researcher and pursued, as this allowed for ease of proceeding with the next relevant interviewees and saved much time. More details surrounding the profile and background of respondents are provided in Chapter 4.

3.5 Data Analysis

Data analysis is a method of studying, presenting and changing data with the objective of finding novel and beneficial data to contribute to a new frame of knowledge (Wilson & MacLean, 2011). Data analysis comprises assembling of data and obtaining of new insights with the hope of simplifying any possible challenges that may emerge in answering the research question. To respond to the study question, data were collected by conducting semi-structured face-to-face interviews and online interviews that were recorded. Thereafter, the data were analysed by transcription, which entailed listening to the recording and taking notes. The interview guide was formulated and used as the research instrument that included semi-structured interview questions. The key purpose of the data analysis process was to generate a detailed record of the participants' responses, which were spoken words and non-verbal cues (Rossman & Rallis, 2016). This method of analysing data was appropriate as the research design was qualitative, and an IPA instrument, which is typically used with semi-structured interviews focused on a small homogeneous sample, was used.

3.6 Anticipated Limitations of the Study

- The research study used a non-probability sampling method; therefore, its results are not generalised to the entire banking community in South Africa or the world. The targeted sample size was 20 research participants. Eleven of the study participants were from Capitec Bank, and the rest of them were drawn from the other four retail banks. Three participants were from FNB;, three, Standard Bank; one, Nedbank; and two, ABSA Bank (refer to Table 3). Because of time constraints, the research excluded other Fintech-based financial services organisations involved in innovative payment systems that are novel and inclusive of lower-income groups.

- Covid-19 restrictions made it difficult for the researcher to conduct face-to-face interviews. There was an opportunity to interview only four participants in person. For the rest of the participants, the interviews were conducted online.

- Because of time limitations, it was difficult for the researcher to conduct follow-up interviews.

- Researcher bias also influenced the collection of data, especially during the interview process, as the researcher is a professional in the banking industry and was probably appearing to be subjective. Therefore, an objective data-collection process was challenging. However, every effort was made to minimise bias during the interviews.

3.7 Ethical Considerations

Ethics are an important matter that was considered at every stage of the research design and implementation process. Wagner et al. (2012) stated that the reason for conducting ethical research is that participants of the research may be easily harmed physically or emotionally; this may cause researchers to lose their credibility, reputation, and the opportunity to complete the research. Ultimately, failure to follow ethical guidelines may lead to the loss of funding for the researcher and the university and a censure of the researcher by other professional organisations.

The official data collection process commenced after ethical clearance was obtained from the respected research ethics committee of the Wits Business School. To ensure anonymity and confidentiality of all respondents, their pseudonyms were used on the consent forms. Participants were guaranteed confidentiality and anonymity of all information provided.

3.8 Informed Consent

Informed consent formed a crucial part of the research process. As part of the research process, participants were granted written consent forms and permission letters, which are attached as an appendix at the end of this research paper, to inform participants about the purpose of the research study before they agreed to participate in the semi-structured interview process. The purpose behind the principle of informed consent was to grant participants a fair opportunity to decide whether they wished to participate in the research study. The following principles were adhered to as per Wagner et al. (2012):

- The respondents were not compelled to continue participating in the study.
- Involvement was voluntary.
- Respondents were to recognise that the interview process might affect them emotionally.

3.9 Interview Format

Semi-structured interviews were conducted; most of them were online on Teams, and only 4 were face to face, in the month of March 2022. The purpose of the research and the research questions were briefly explained before the interviews. Consent forms were also completed and signed by the participants.

3.10 Ensuring Trustworthiness and Credibility

According to Wagner et al. (2012), to establish precision and consistency of a research framework, it is crucial that the data obtained are from credible and dependable sources and are untainted from inception. The researcher also ensured avoidance of any form of personal bias or subjectivity that might affect the end results of the study. Therefore, four basic criteria were used to judge the precision of this qualitative study: credibility, dependability, conformability and transferability. These concepts are explained in Table 4 in relation to the study. Additionally, there the respondents' confidentiality and anonymity were maintained throughout the data collection process.

Table 4

Precision of qualitative research

Precision of qualitative research	
Credibility	Throughout the study, there was a demonstration of internal consistency, more especially with the way the data were collected in a rigorous and defined process. Secondary sources of information such as recent academic articles, current affairs and journals were used to compare and reflect on the interview results.
Dependability	The accuracy and relevance of the study were presented to two of Wits Business School's senior scholars, one of whom is a professor who supervised this study.
Confirmability	The results of this study were based on the data collected and scholarly research conducted by other researchers.
Transferability	The findings were derived from the recorded semi-structured interviews. The participants' spoken words were compared with the information gathered from the empirical literature. For transcription of the data, as presented in Chapter 4, quotes were used to ensure that the participants' experiences and voices were clear and explicit.

Source: Author's own work in relation to the study

3.11 Summary and Conclusion

This chapter defined the methodology of the study. A qualitative method was adopted for the study. The chapter further describes the method and techniques of data collection of this study. The study used primary data from semi-structured interviews to fulfil the objective of the qualitative methodology. This chapter concludes with measures put in place to ensure that the study was ethical and ensured anonymity and confidentiality. Lastly, the anticipated limitations of the study are described.

CHAPTER 4: PRESENTATION OF DATA

4.1 Introduction

This chapter presents findings of the present study by expanding on the data collection methods and techniques mentioned in Chapter 3 using primary data obtained from interview respondents who are bank industry professionals and customers of the retail banking sector. Interview participants shared their lived experiences in matters relating to innovation in banking, low-income groups and domestic savings. The interview respondents in this study are the primary sources of the study. The interviews were conducted online using the Microsoft Teams application. The interview sessions were scheduled at times convenient to the respondents. The findings are categorised based on questions in the research instrument and the conceptual framework formulated in Chapter 2 of this study. The findings are identified as recurring themes in response to the research questions that relate to the main themes identified in the conceptual framework.

4.2 Background Profile of Respondents and the Interview Process

Most of the interview respondents who participated in the research study are professionals in the retail bank industry, and a few of them are customers of the big five banks of South Africa, namely ABSA, Capitec Bank, Standard Bank, Nedbank and FNB. The bank professionals interviewed were mainly frontline staff who work with customers daily, such as sales consultants, digital consultants and staff from the debt and recoveries departments. Only a few were non-bank professionals and feature as only retail bank customers. Twenty interviews were conducted; 16 were with bank professionals, and 4 were with participants from varied fields, such as electronics, accounting and marketing, and an entrepreneur, who are all customers of the retail banks mentioned. Sixteen of the study's participants were interviewed on Microsoft Teams, which is an online communication platform designed as an application that may be downloaded on a smart mobile phone, desktop or laptop for a conference or individual chat and video conferencing. Collaborations on this platform may take place at any time provided that the users have a stable internet connection. Only four respondents were interviewed in person.

4.3 Presentation of the Findings

This portion of the study highlights the findings collected from respondents during the interview process. The questions on the research instrument guided the process. The master themes identified are in relation to the conceptual framework designed from the empirical literature 2 and include the following:

- Fintech;
- financial education;
- mobile phones and inclusive banking;
- base of the pyramid, low-income groups; and
- domestic savings and debt.

4.3.1 Presentation of answers to introductory questions pertaining to technology

Master Themes 1: - **Technology in banking (digital banking)** - **Convenience** - **Risk**

Why is technology important in banking in the 21st century?

Responses from the 20 respondents are summarised as follows:

"Banking has become less expensive. It is convenient and easier than before. It is seamless and saves time." (All participants shared the same response.)

"Digital technology as the cornerstone of New Age banking. With technology, we are becoming a cashless environment." (Participant 18)

"It is safer. One can bank from the comfort of one's home. Save on travel cost; also like the fact that we can service ourselves using the online bank app." (Participant 12)

"The drive towards AI has aided banking to evolve. Without technology, there wouldn't be advances in banking." (Participant 16)

Responses from the 20 respondents are summarised in the table as follows:

Table 2: Branch banking versus digital banking

BRANCH BANKING VERSUS DIGITAL BANKING			
Appreciating branch-based Banking	**Not appreciating branch-based banking**	**Pros of digital banking**	**Cons of digital banking**
"Appreciate face-to-face interaction; find that queries may be resolved on the day, as opposed to struggling alone on the bank app. (Participant 11)	*"Services may be poor."* (Participant 20)	*"Time and Cost efficient"* (Participant 16)	*"The possibility of being a victim of cyber theft"* (Participant 20) *"Scarcity of mobile ATMSs in rural locations* (Participant 11)
"Appreciate face-to-face interaction as there is an understanding of human emotion and urgency." (Participant 12)	*"Do not appreciate having to queue"* (Participant 11)	*"Seamless and fast"* (Participant 1)	*"Possible technical difficulties on an online platform"* (Participant 12) *"May experience network issues"* (Participant 11)
"Important for clarity on banking needs" (Participant 2)	*"Travel cost to the bank"* (Participant 11)	*"There is no need to carry cash at all times*." (Participant 4)	*"May have a negative experience online or on call. Tend to be brushed off without being attended to.* (Participant 13)

			"Certain expectations are not met online, unlike in a branch." (Participant 2)
"Peace of mind when dealing face to face with a bank staff member" (Participant 20) *"That personal touch, as queries are resolved with a human being."* (All participants shared similar sentiments)	*"In a branch, services are costly, unlike on the online banking platform."* (Participant 12)	*"No need to have your physical card with you as there are services such as Instant Money, which is an online banking service"* (Participant 14)	*"The elderly might not enjoy the online platform"* (Participant 3) *"Using the app may be confusing."* (Participant 4)
"Queues, especially during month-end, and delays" All participants shared the same sentiment)		*"Prevention of criminal activities linked to card cloning when using an outside ATM; its best to transact online."*	*"Fraud can easily happen on a digital platform."* (Participant 5)
"Problems are resolved on the spot." (Participant 8)		*"Multiple methods in which payments may happen due to enhanced technology"* (Participant 16)	*"At my age, almost 60, I still feel sceptical about using online banking."* (Participant 5)

		"Allows the user to be in control" (Participant 9)	
		"Easy to send money anywhere" *"Services are faster and more efficient"* (Participants 16)	

Source: Author's illustration using primary data

4.3.2 Presentation of answers to key research questions

Master themes 2: - **Inclusivity**

In what way has the bank's current digital products improved the welfare of lower-income customers who were previously unbanked?

Responses from the 20 respondents are summarised as follows:

"There is less documentation required when opening an account." (Participant 13)

"There is easy access to banking; it is affordable." (Participant 6)

"Able to save on travel costs to the nearest bank, as online banking facilities are now available." (Participant 13)

"Low banking fees which appeal to the masses; for example. when Capitec Bank was launched, the monthly fee was just R5.00." (Participant 10)

"Now able to send money to a cell phone number linked to a bank account." (Participants 1, 2, 3 and 10)

"The digital platform does not require one to have data, but rather a strong network" (Participant 8)

"The ability to transfer money using a Cash Send option should you be a Capitec Bank account holder at minimum bank charges." (Participant 1)

"Pick n Pay together with TymeBank offer banking services at a reduced cost, allowing for the inclusion of low-income earners." (Participant 13)

"Nowadays, there are minimum to low chargers on opening a bank account." (Participant 6)

"I have multiple savings accounts with different banks but find the Capitec Bank app the easiest to use; it is user-friendly, and I find that it is more appealing to lower-income groups." (Participant 20)

"There is a feeling of belonging; for example, TymeBank has accommodated people who are considered poor by having an integrated bank card that enables one to save and earn interest on a transactional account. They are on the very same card; one is able to earn points at a Pick n Pay store as a smart shopper." (Participant 4)

"There are multiple ways to access money, especially with banking being linked with supermarkets." (Participant 7)

Government grants are deposited into a bank account; there is no longer a requirement to stand in queues at welfare organisations. (Participant 13)

"Reduced banking cost even with foreign nationals; digital banking has simplified the process of owning an account." (Participant 15)

Are the current digital payment channels and digital savings products convenient for lower-income customers?

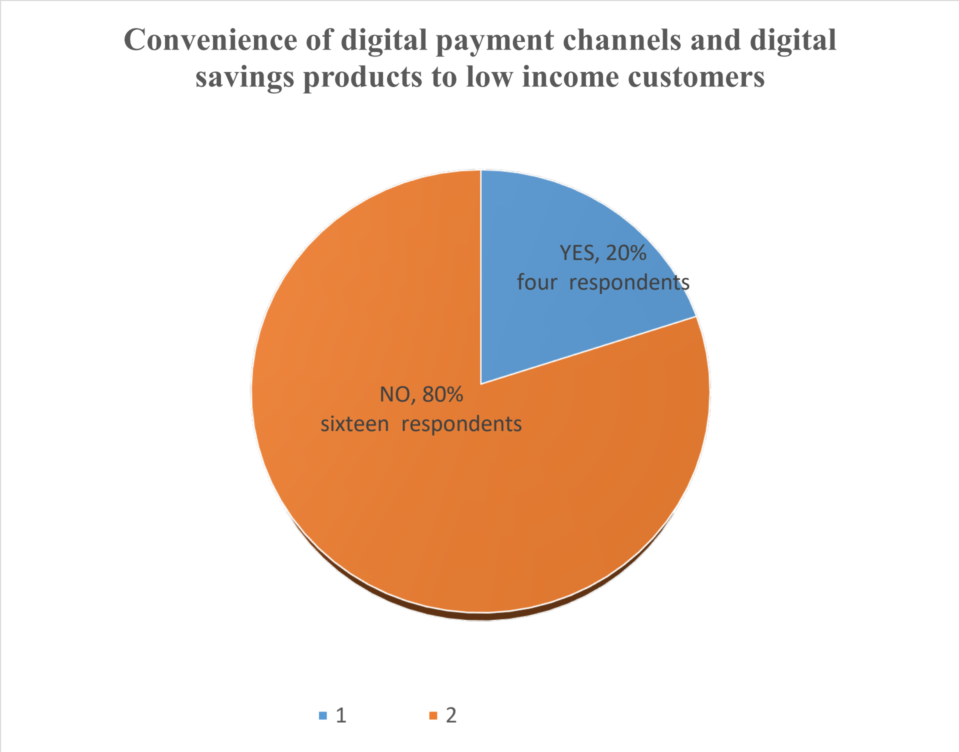

Figure 8: The degree of convenience of digital payment channels and digital savings products to low-income customers based on participants' responses

Source: Author's own calculations using primary data

Responses from the 20 respondents are summarised as follows:

"Not all; most do not have access to the technology platforms like a smartphone, especially in rural townships; one may find that they are not tech savvy at all." (Participant 3)

"No, others might find it expensive to save even on a digital platform, especially when the customer wants to withdraw funds; they are charged a large withdrawal fee." (Participant 18)

"Not really, because of bank charges. This may not add value to someone earning a bare minimum. Unless there are payment plans targeted for a lower income." (Participants 15)

"Yes, digital payment channels have improved for lower-income groups, as they are now able to pay at a supermarket like Pick n Pay, which makes it convenient for them." (Participants 7 and 11)

"Not at this stage; there is still room for improvement." (All participants shared similar sentiments)

"Yes, as it is easier to pay for goods and services using the bank app, as opposed to carrying cash." (Participant 19)

"There is still a lack of trust on the online banking platform with the elderly from rural villages when it comes to sending money online; others still prefer using money market instead."

"Digital savings products and payment channels may be a challenge to use for low-income groups, especially the elderly. This is also the situation with ATMs, as they usually request strangers for help. The online banking platform can be made even easier." (Participants 13 and 19)

What innovations may be implemented in the payment / transaction system to make lower-income lives easier?

Responses from the 20 respondents are summarised as follows:

"My suggestion would be for lower-income groups to receive an attractive interest when transacting, especially when saving." (Participant 2)

"Lower transaction fees." (All participants had similar sentiments. However, more emphasis was made by Participant 3.)

"Reduce transaction fees on the banking app to an extreme minimum, and educate the poor on how to bank better." (Participant 10)

"Simpler app without the frills, and offer self-service help in multiple languages to cater for the diversity of South Africans, not only English." (Participant 15)

"Educate entrepreneurs and owners of small businesses on the iKhokha and Yoco portable speedpoint devices, which are affordable smart card machines, instead of them receiving cash payments." (Participant 7)

*"The banking system must be simple, starting from using simple terminology, especially in the terms and conditions." (*Participants 11)

*"It would be interesting to implement a USSD code (Example *166# to access your bank) functionality for low-income groups who do not have a smartphone; this USSD function must be free*." (Participant 17)

"Some banks do upgrade their digital platform to be more user-friendly; the main focus should be on payments and transaction systems and how it can be easily managed and executed." (Participant 16)

"The current system should be enhanced or rather tweaked to also suit someone from the low-income group, so it may be to their benefit. The system itself must be inclusive as we still notice that certain systems only allow for a certain calibre of people, there is still a lot of work to be done." (Participant 13)

*"Having digital ATMs in specified locations, this may not specifically be a cash ATM." (*Participant 9)

"Being able to deposit money as easy as it is to withdraw money, but from any ATM." (Participant 9)

Are you happy with the bank's current service offerings, mainly for the lower-end client base?

What can be done better?

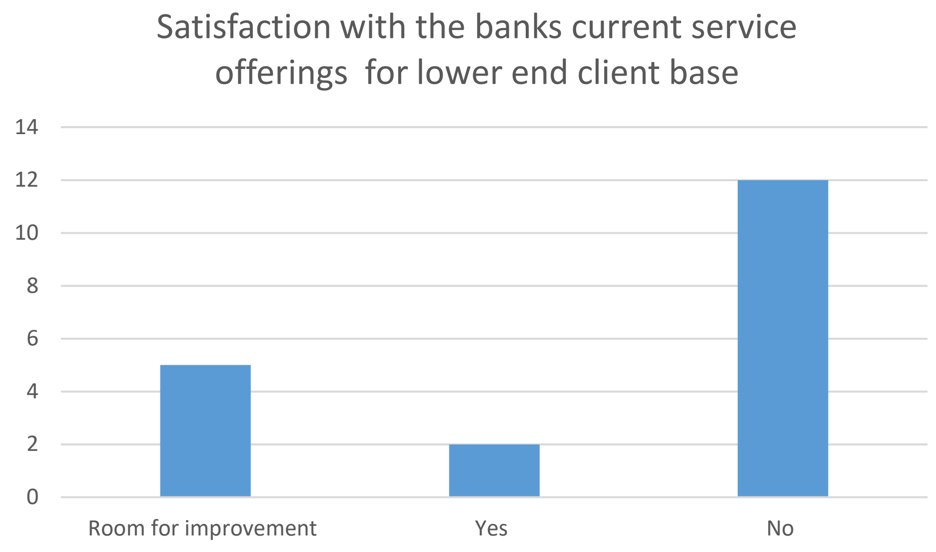

Figure 9: Satisfaction levels of low-income groups due to banks' current service offerings

Source: Author's own calculations using primary data

Responses from the 20 respondents are summarised as follows:

*"Not really; improvements can be made, especially with bank charges being more affordable to the poor." (*Participant 11)

"Improvement may be made, like free banking for the poor. Higher-income earners should be charged more. Reduced bank fees may promote usage of banking services." (Participant 13)

*"No, there is not enough focus on lower-income groups; traditional banks still have their focus mainly on middle- and high-income groups." (*Participant 19)

"No. Implement an innovation within the app, like an online banker who can assist with all services relating to the clients banking needs, not a robot but a please call me service that's efficient and has a quick response rate, where a human being answers the phone and assists the customer in their preferred language." (Participant 16)

"Yes, banks like Capitec and African Bank are continuously improving on offerings to lower-income groups. What can be done better is to have multiple ATMs available to the poor masses or improve Money Market and Cash Send options." (Participant 1)

"Yes, I am happy. Everyday transactions are cheap, as well as my monthly service fees." (Participant 5)

*"Not entirely happy as the lower-income groups are not always considered. Lower-income groups must be assisted to plan their finances." (*Participant 13)

*"Improvements may be done with stokvel accounts. Interest rates are very low, and withdrawal charges are significantly high. There must be a reconsideration of the structure of stokvel accounts and not exploiting users of the service." (*Participant 18)

"Not happy as an FNB customer as it does not cater for lower-end clients." (Participant 13)

- *"No, fees should be dropped significantly." (*Participant 20)

- *"No, interest rates should be reconsidered." (*Participant 20)

- *"No, offer more to low-income customers; increase the offering." (*Participant 15)

"No, reduce interest rates on credit options and not offer loans for more than 10 months." (Participant 1)

*"Short-term loans are preferable." (*Participant 1)

*"No, the credit behaviour of bank customers must be monitored." (*Participant 10)

*"Customers should be trained on how to use the bank app and have designated stations at the branch to educate them on how to use digital banking functionalities." (*Participant 15)

*"Not happy, more can be implemented for the sake of convenience and efficiency; introduce products which resonate with low-income groups." (*Participant 13)

*"No, bank staff should be more transparent and informative towards the poor and not only focus on a sale or reaching a target." (*Participant 17)

Master themes 3: - The unbanked **- Education (financial literacy)** **- Mobile banking**

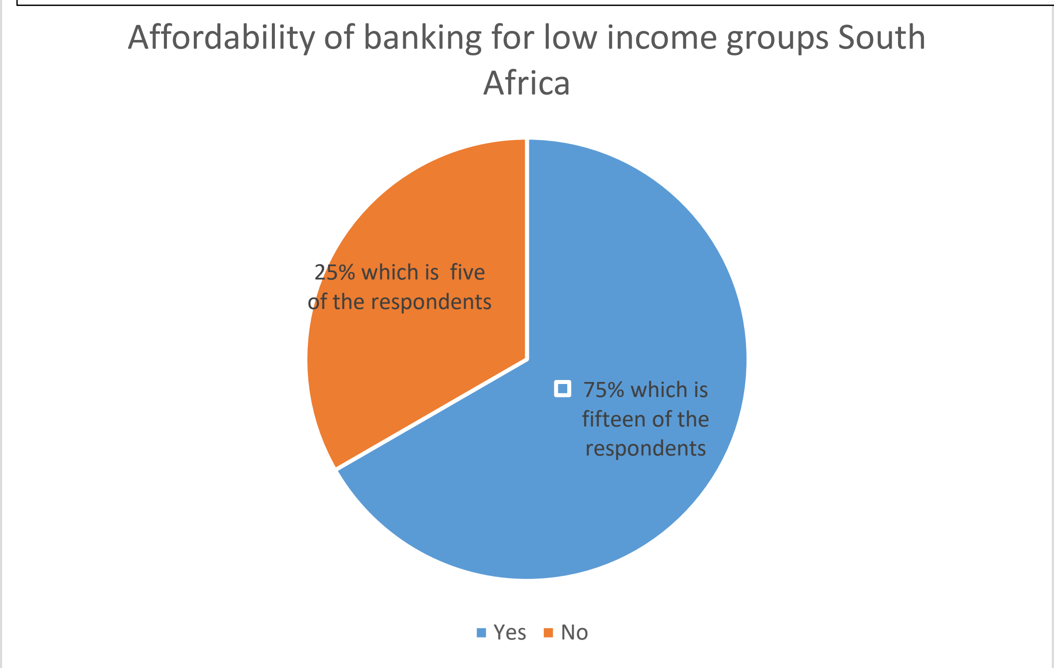

Figure 10: Affordability of banking, in percentage, in terms of responses received from participants

Source: Author's own calculations using primary data

Do you think banking is affordable to low-income groups in South Africa?

Responses from the 20 respondents are summarised as follows:

"Yes, *certain banks are affordable*, *whereas other banks still fall short "(Participant 19)*

"Yes, it is affordable as most banking apps are zero rated, you only require a strong network to use the app." (Participant 9)

"Yes, I believe that we are moving towards making banking more affordable to lower-income groups" (Participant 1)

"Yes, it is affordable, some of the bank products available cater for customers' basic needs." (Participant 9)

"Not really; there must be more transparency when it comes to bank chargers." (Participant 4)

"Yes, and I believe Capitec Bank to be the cheapest." (Participant 1)

"It is not affordable. There is still an inherent fear within the low-income community to trust banks with their money as they fear bank charges." (Participant 13)

"No, it is not affordable. People considered low income must not pay bank service fees. People who earn below a certain income bracket must not be charged bank fees." (Participant 17)

"Not all banks. Capitec is affordable." (Participant 2)

"Banking is becoming affordable because of new entrants like TymeBank and Bank Zero" (Participant 19)

"Not really; most banks offer a flat fee and may be more flexible instead." (Participant 7)

"Yes; for example, Bank Zero and TymeBank do not require exorbitant fees." (Participant 7)

"Not affordable; interest rates on loans and bank charges are still too high." (Participant 8)

"I believe it's affordable as it's free to open an account." (Participant 6)

"It is affordable, but not to all, especially to those earning R2 000.00 and below." (Participant 1)

"It is affordable to an extent; there is room for improvement." (Participant 2)

How is Fintech used to promote financial inclusion?

Responses from the 20 respondents are summarised as follows:

"Mobile banking is being used as an instrument for financial inclusion. Nowadays, with mobile banking, transfers can be made immediately; there is no need to travel long distances to a bank just to effect a simple transaction." (Participant 13)

"Financial technology is a means to drive innovative banking in the future; without it, there is no inclusivity." (Participant 13)

"Digital banking is the future, as it grants the opportunity to provide consumers with reduced fees." (Participant 16)

"Capitec Bank makes use of financial technology to simplify banking for low-income groups; as a result, they are considered more inclusive." (Participant 3)

"The technology enhancements of mobile banking have enabled banking to be more flexible, for example, Send Cash and e-Wallet options available, which enhance financial inclusion." (Participant 15)

"Payment streams today are making room for financial inclusion; examples are speedpoint devices for vendors, such as the Yoco and iKhokha machines." (Participant 7)

"Robots on apps such as the "Can we chat?" facility on an app; this automated process has led to banking services being cheaper." (Participant 16)

"Fintech is used quite well in banking; for instance, debit checks are now being used on customers to authenticate their debit orders. Voice biometric enhancements enable customers to transact from anywhere in the world." (Participant 16)

"The bank apps are appealing to ordinary South African citizens, as customers are able to receive money immediately even if the recipient is from a different bank." (Participant 4)

"With Fintech, there is an upkeep with the latest trends; speed points are being used at supermarkets as devices to facilitate a transaction."

"Fintech is being used for fingerprint recognition, biometrics; also a new technology in banking called Snaps is being used, which is a virtual bank account which one may use to send, receive or store money." (Participant 1)

"Money market facilities are being made available at major supermarkets that assist with money transfers." (Participant 8)

Do you think the banking needs of low-income customers are being fulfilled adequately?

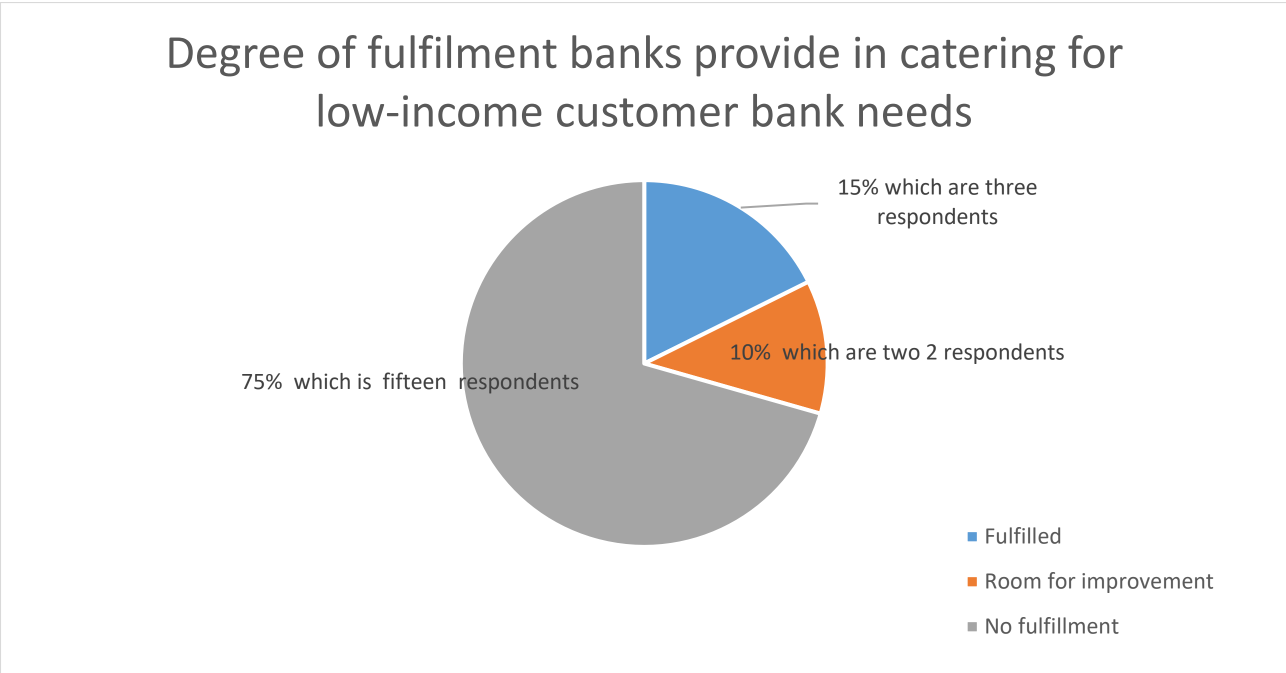

Figure 11: The degree of fulfilment banks provide in catering for needs of their low-income customers

Source: Author's own calculations using primary data

Responses from the 20 respondents are summarised as follows:

"No, not at all; low-income customers are being charged higher interest rates on lending facilities." (Participant 13)

"There is always room for improvement. Currently, there are alternatives; for instance, instead of a customer going to a bank where there may be a language barrier at a specific location, customers may find it easier to approach the services of a money market vendor from a retailer who speaks the same language." (Participant 7)

"No, it can be made better." (Participant 5)

"No, the interest rates for low-income customers can be reconsidered by banks. There should be fairness in that regard. Good banking habits must be rewarded." (Participant 20)

"No, bank charges and interest on loans are not fulfilling the needs of low-income groups." (Participant 17)

"Yes, I find that Capitec Bank fulfils the needs of their clientele adequately; other banks can do better. Banks are to partner with medical aid schemes for affordable medical care; furthermore, to partner with cellphone providers, the department of education and supermarkets to fulfil the needs of low-income groups and to be more affordable." (Participant 1)

"Not enough people in rural communities know about affordable banking options. Therefore, more advertising is required, especially on radio." (Participant 7)

"No, not at this stage." (Participant 5)

"No. However, Capitec Bank has broken the stigma. There are funeral covers available for less than R100. They have broken the stigma of treating people a certain way based on how much money they have in their bank account. An example of this is the fact that all customers at Capitec Bank, rich or poor, have a bank card which looks the same." (Participant 2)

"No, the fact that low-income groups have to qualify for small loans does not fulfil the needs of low-income group." (Participant 13)

"No, there are barriers to entry, such as not having access to a smartphone and high bank fees." (Participant 11)

"No, being able to bank is not straightforward and, therefore, creates fear and issues of trust between the bank and the customer. This is prevalent in poor rural communities." (Participant 11)

"Yes, banks are working towards meeting lower-income needs adequately, for example, the ability to send cash at a supermarket and the allowance of transactions to take place even if the recipient is miles away." (Participant 13)

"No, some payment types should be exempt from bank chargers." (Participant 10)

"No, some bank facilities, especially in rural communities, are too far, and if the facility is available, there is no one to assist on how to use an ATM, for example. The elderly are most vulnerable." (Participant 11)

"Yes, there are attempts being made by banks as some of the banks are offering different account types, for example, a stokvel account." (Participant 15)

How do you know that a client is able to use a proposed financial product and all its functionalities?

Responses from the 20 respondents are summarised as follows:

"*When the customer does not require assistance, and there is less traffic at the bank."* (Participant 8)

"The customer understands the product offering and makes use of all the benefits." (Participant 15)

"As bank professionals, we may assess the usage of an account type by calculating daily usage of a bank product as customers get in and out of the system. This can be monitored for over a month; thereafter, as a bank, we may determine if enough clients know of a certain product and its proposed benefits." (Participant 9)

"The customer displays an understanding of the product when first being introduced to a product. This occurs when the bank sales consultant takes the time to explain and not only entice a client simply to reach a target." (Participant 17)

"Banks may monitor the spending behaviour of their customer." (Participant 16)

"People might not read and understand the basic benefits and restraints of a proposed bank product. Hence, they may not understand all of its functionalities' terms and conditions." (Participant 1)

"I guess it depends on the client's previous knowledge on a specific product." (Participant 1)

"Through engagements with the client, one can assess the customers' needs by conducting a needs analysis which will determine whether a customer will make use of all the product functionalities." (Participant 2)

"Educate and inform the customer first on the usage of a proposed product or service to enhance usage." (Participant 4)

"All depends on the customer's understanding." (Participant 7)

"The clients being able to take advantage; aware of how a certain product works, for example, the product's benefits; and able to use the product in a manner that is beneficial to them." (Participant 9)

"Banks need to share more information on their product benefits as this is not being communicated enough to low-income groups." (Participant 7)

Master Theme 4: Domestic Savings

Sub-themes:
- **Education**
- **Transparency**
- **Save**
- **Debt**

What can be done by financial services institutions and government to promote financial literacy and encourage savings?

Responses from the 20 respondents are summarised as follows:

"There needs to be more conversations, dialogue and lessons on how to save and to start from an early age in schools. It must be ingrained in the mind of a child lessons on good spending

and saving habits, for example; there is no need to buy an expensive car in your first year of working." (Participant 13)

"There must be workshops at places of employment to encourage employees to save, and the government is to monitor companies that employ low-skilled minimum-wage employees." (Participant 12)

"There should be a joint venture between the private and public sectors to set up weekend courses on savings. The best time to implement this may be during voting seasons. Stokvels are also to be taken more seriously by banks." (Participant 6)

"These are important conversations that must start from primary school." (Participant 10)

"There must be transparency when helping customers to choose how to bank. Government as well as the bank can do better when it comes to advertising. The National Credit Act to work with banks to ensure that there are fair lending practices implemented at all times." (Participant 13)

"Banks are to implement a hash-tag challenge campaign to encourage savings and reward good savings behaviour." (Participant 7)

"Increased marketing and promotions to encourage savings. Banks are also to start charging fees based on salaries being earned." (Participant 7)

"Implement digital products that relate to all income groups. Information surrounding this must be out there and allow for people to come forward." (Participant 20)

"Have workshops at community centres and seek to really educate people in poor communities to save by using real-life examples that resonate with the people." (Participant 5)

"There is an expectation on savings, but no one teaches the poor how to save; hence, the poor get poorer." (Participant 5)

"Mayors and councillors must make teaching [about] saving a priority in poor communities." (Participant 20)

"Banks must take responsibility to educate customers as not all customers are aware of the full benefits of a proposed bank product. People must also take the initiative to educate themselves." (Participant 1)

"Banks are to go out and educate communities as part of their social responsibility programs." (Participant 10)

"Government to implement financial well-being lessons in schools [for learners] to understand the value of money from a young age. This must be at all schools, urban and rural communities." (Participant 8)

"Free workshops on saving, especially in low-income communities." (Participant 11)

"Government to stretch the conversation on savings to bonds and investments as well." (Participant 12)

"Introduce saving in the schooling system. Government to regulate how customers are being offered loans without [them] being exploited." (Participant 7)

"ABC banking in rural communities should be implemented by banks and government in the form of workshops." (Participant 11)

"Social media should be used as an avenue to effectively communicate how people can save." (Participant 6*)*

Government to encourage the youths and pay them to create platforms on how to save. Reach out to people, young and old, in a method in which they are comfortable." (Participant 7)

Do digital savings account options in SA meet the client flexibility needs of low-income customers?

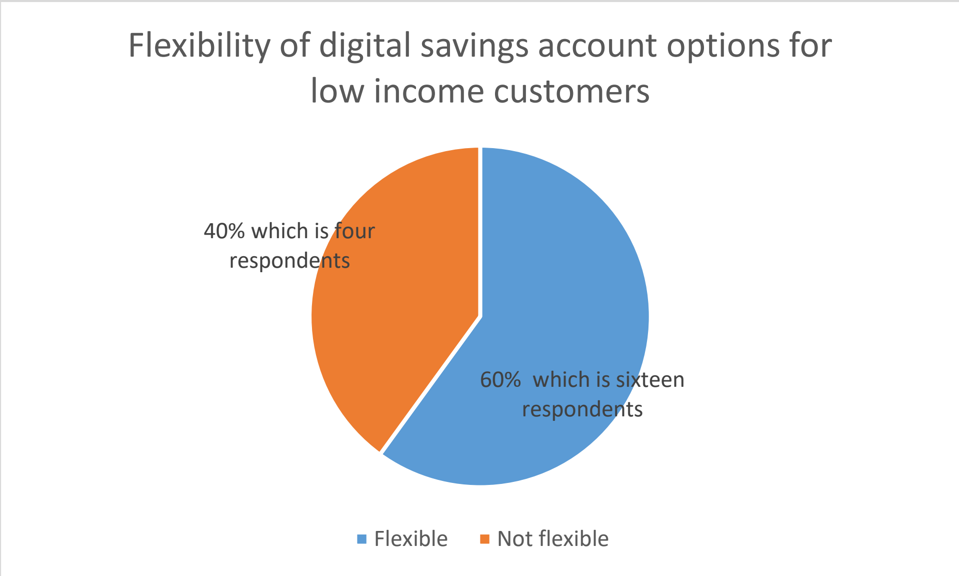

Figure 12: Flexibility of digital savings account options, in percentage, based on participants' responses

Source: Author's own calculations using primary data

Responses from the 20 respondents are summarised as follows:

"*No, as banking is traditionally known to be expensive to low-income groups. However, the true value of banking will only be most effective once banking is marked free for those earning below a certain income bracket*." (Participant 8)

"Yes, in some ways, it does. However, not enough people know of it. There is a lack of understanding and usage of digital savings accounts." (Participant 16)

"No, low-income customers do not have enough products that cater for them." (Participant 11)

"Yes, because of the low fees offered by some banks." (Participant 11)

"Yes, with several savings options available. What may be implemented is for savings to start at any amount, with a very low minimum making it flexible." (Participant 17)

"No, there needs to be greater transparency and reasonable early withdrawal fees." (Participant 14)

"Yes, for example, the Nedbank My Pocket Savings Account linked to a Nedbank current account which allows one to start saving from as little as R1." (Participant 17)

"Yes, especially with Capitec Bank, as there is not much of a difference when withdrawing from other ATMs. Bank charges [are incurred] only [for withdrawal amounts that] start from R 100 upwards." (Participant 1)

"Yes, I may give you an example of my personal bank FNB. [There is a] savings pocket which is linked to my FNB personal savings account where transfers can be made free of charge multiple times using various methods such as an ATM, FNB online or cellphone banking." (Participant 20)

"No, they are not flexible enough. Digital platforms are used mainly for transacting. They must be updated for savings purposes which are user friendly and not technical in nature." (Participant 16)

"In my opinion, Capitec Bank and TymeBank are considered the people's banks, and because of that, I believe they do indeed meet the people's flexibility needs." (Participant 4)

What would you advise to be important for reaching financial goals: should savings or paying off debt be prioritised?

Responses from the 20 respondents are summarised as follows:

"Pay off debt first; save as much as you can, no matter the amount, as it means something." (Participant 5)

"Rule of thumb: "Live within your means.

Save towards achieving a goal.

Treat your savings as an expense." (Participant 5)

"Paying off debt as a priority." (Participant 4)

"Remember a little bit of saving goes a long way." (Participant 4)

(18 of 20 participants agree with the following statement)

"First clear off debt so that more savings can be made, and do not take on unnecessary debt." (Participant 1)

"Pay your debts first to clear the interest which accompanies it." (Participant 10)

"Pay off debt to free up available current spend as debt has a higher interest rate than savings." (Participant 17)

"Savings should be prioritised first as money makes money. The interest earned via saving can pay off debt, while saving may offset the debt slowly." (Participant 12)

"Pay off debt as a priority to get access to credit and improve one's [sic] income stream. Thereafter, save to invest back into yourself, save with a purpose and save to buy assets." (Participant 8)

"Pay off debt first. Thereafter, start saving as soon as you earn your first pay cheque." (Participant 5)

"There is good debt and bad debt. Good debt is that of an asset which will appreciate. Bad debt may include clothing accounts, as you may pay over 14% interest in this instance. Pay off bad debt, and then start saving." (Participant 1)

"There must be a 50/50 split between debt and savings. Paying off debt should be prioritised first, and keep one's debt to the minimum. Be wise and plan for unforeseen circumstances." (Participant 4)

"Pay off debt as you cannot save if you have debt. Do not be influenced by a glitz lifestyle, and refrain from taking any unsecured loans." (Participant 9)

"Create a mindset of saving and forgetting about the savings, and be willing to compromise in terms of spending habits. Prioritise saving while paying off your debt." Participant 19)

"First clear debt, and then start saving. Have a budget, and do not buy what you do not need." (Participant 16)

*"I believe both are equally important. Be honest with your finances to make better financial decisions." (*Participant 10)

4.4 Summary and Conclusion

The findings are presented by using a narrative and direct quotations garnered from interview respondents. Graphs are also used to present the data in a more understandable way to draw conclusions with ease on recurring themes that were determined from the interview process.

CHAPTER 5: ANALYSIS AND DISCUSSION OF QUALITATIVE RESEARCH FINDINGS

5.1 Introduction

This chapter describes the qualitative research results presented in Chapter 4 and provides an analysis of the master themes identified during the semi-structured interviews. The results are analysed in depth by referring to the research questions and conceptual basis of the present study. The findings are in line with the context and purpose of the study described in Chapter 1 and highlight some aspects of the literature reviewed in Chapter 2. The responses from the interview grant an opportunity to determine parallels between the findings in the literature and those in practice, which are on-the-ground experiential responses of bank professionals in the retail banking industry, who are in contact with low-income customers, grantholders and first-time bank account holders from different walks of life, to questions pertaining to innovative banking, the unbaked and domestic savings.

The findings are considered credible as they are realistic in the context of the study. The demographics of the sample were mainly bank professionals from the five prominent retail banks in South Africa, namely ABSA, Standard Bank, Nedbank, FNB and Capitec Bank. Sixty percent of the respondents were females, and 40 percent were males from varied age groups of 26−60 years. The vast differences in age amongst the respondents has really added richness and depth to the data. The older respondents resonated much with the unbanked as they were able to tell a story closer to home, as some of them came from poverty-stricken backgrounds and households in which no one in the family owned a bank account.

5.2 Analysis of Data

This section analyses the responses obtained for the interview questions in terms of the master themes identified during the semi-structured interview process.

5.2.1 Analysis of questions pertaining to technology

Master themes 1: **Technology in banking (digital banking), convenience and risk**

Technology in banking has proven to have great potential of extending banking and financial services to the poor, unbanked and underbanked. Offering technology-based banking (digital banking) services could offer millions of people better access to banking and financial services, thus enhancing the standard of living for all. With modern technology, consumers can access banking services at any time from any location. Individuals, entrepreneurs and businesses can save time by using mobile devices to process their payments. Technology in banking reduces cost and increases the speed, security and transparency of transactions suited for people from low-income groups.

Master theme 2: **Inclusivity**

Banking is regarded as inclusive when all people have access to useful and affordable financial products and services that meet their needs in a manner that is safe and sustainable. Inclusive banking is one that is well regulated with minimum paperwork required to open a basic savings account. Being able to have access to a transaction account is the initial step towards broader financial inclusion. Advancements in technology are making financial inclusion easier to achieve. Financial inclusion has been demonstrated to reduce poverty and improve lives, especially those of poor people.

Master themes 3 and 4: **The unbanked, education, mobile banking and domestic savings**

It was discovered that despite having a well-developed financial services sector, South Africa still faces significant challenges with financial education and inclusion of low-income people. The government and the private sector should assist with financial education program interventions aimed at empowering the working poor to make more informed financial decisions at the household or business level. Being financially educated strengthens the behaviour amongst lower-income groups as improved decisions may be made towards better budgeting, planning and increased savings. The significance of mobile banking lies in its simplicity and low cost. Mobile banking has transformed how people manage their money. It has made it easier for banks to immediately bring financial services to the masses in a cheap and accessible way.

5.3 Discussion Pertaining to Research Question 1

How can banks promote inclusive access to banking services by low-income groups using innovative digital technology?

INNOVATION

The purpose of this research question is to define innovative banking as a solution that promotes easy access to banking products and services by low-income groups in South Africa. Banking was traditionally reserved for the wealthy and the middle class, with the underprivileged being completely excluded because bank products and services were expensive or too far from their homes. Online banking offers value to customers due to its proven convenience, usefulness and the fact that it saves time (Tarhini et al., 2015). Innovative digital technology has been identified as a solution that includes low-income groups to the formal economy by easing access to the banking world using novel technology. Digital technology is considered to be a catalyst for growth in the banking sector (Abbasi & Weigand, 2017). From the interview responses, it is evident that even today, the range and quality of services available to low-income customers are limited because traditional bank models and management culture are yet to evolve (Jeník et al., 2020). In a broad sense, innovation in banking refers to the use of new technologies that are unique to conduct banking activities smoothly and that are of value to the mass population (Sardana & Singhania, 2018).

CONVENIENCE

Modern-day banking has surfaced and promises to serve the needs of the unserved population. TymeBank, which is a fully digital retail bank, is composed of a bank model founded on the premise of financial inclusion as a key business objective (Jeník et al., 2020). Capitec Bank is another bank that is not completely digital but has been established solely to meet the requirements of underserved consumers with its vision to create economic value through banking its low-income customers in a manner that is creative, affordable, simple and sophisticated (Ntimane, 2020).

Digital banks offer a wide variety of financial products by analysing financial and non-financial customer data and designing products to the needs of unbanked and unserved customers (Jeník et al., 2020). This approach allows digital banks to offer a better customer experience. Furthermore, bank products are priced more favourably than what was available on the market, as digital modern banking technology is more cost efficient (Jeník et al., 2020). This answers the question on the importance of technology as posed in the research instrument of the study, and it has been found that with technology, banking has become affordable and more convenient than in the past. Today, banking has become seamless and saves time.

If banks decide to continue with business as usual without considering changing their business model, they face a risk of failing in the long term. For instance, companies such as Nokia, Kodak and the Post Office are examples of companies that have failed to evolve to meet and satisfy the needs of the market (Ohene-Afoakwa & Nyanhongo, 2017). At least 80% of this study's respondents mentioned that the digital payment options and digital savings products are inconvenient, more specifically for low-income groups, on the bank application. This is concerning, as there is a need for continuous innovation and strategy within the bank system's products and services that are agile, scalable and efficient, and it is important that this is recognised in the financial services sector (Ohene-Afoakwa & Nyanhongo, 2017).

RISK

The introduction of digital banking has not been welcomed by a few because of the perceived risk that may be encountered, such as cyber theft. It is for this reason that some bank customers, particularly the elderly, are scared to trust the online banking system, and they prefer traditional banking services as they are identified as more reliable and trustworthy (Tarhini et al., 2015). Additionally, respondents mentioned a preference for interacting with a human being at a branch despite waiting in long queues, as for them, money is a personal dilemma, and they prefer face-to-face interaction, that personal touch received from consultants at a bank to resolve queries, as opposed to getting trapped online. One of the main risks discussed in the interview was that of the possibility of being a victim of fraud or hackers breaching the security of their private information. Despite the serious risk that may be encountered using the online banking platform, all respondents do not deny the benefits of banking online provided there is an awareness of possible challengers that may arise. By taking digital banking security seriously, banks may avoid unnecessary threats, and users can enjoy the ease of using an online platform without becoming victims of fraud (Tarhini et al., 2015).

INCLUSIVITY

Financial inclusion is a prime factor in the socio-economic growth and development of a country. A financially inclusive country is one that extends banking services to the unbanked and the poor (Paramasivan & Kamaraj, 2015). Innovative banking has an incredible potential to drive basic financial services that are affordable and secure to society at as a whole, especially to low-income groups, the unbanked and the poor. By using innovations such as mobile phone technologies, electronic money vendors like supermarkets and non-financial suppliers such as mobile network providers and third-party agents who facilitate payments, offering basic financial services at a reduced cost (Abbasi & Weigand, 2017). This revolution to digital innovations in banking has opened the pathway to financial inclusion, enabling poor households to become producers of financial assets (Abbasi & Weigand, 2017).

Respondents have also mentioned how easy it is to open a bank account today with the current technological advancements. For instance, less documentation is required; for example, a respondent from Capitec Bank mentioned that there is no need for proof of address when opening an account at Capitec Bank. This is to cater for customers who live in villages or locations with no designated physical address. This is an incredible initiative to truly foster an inclusive bank, especially for the poor. Most respondents also mentioned how affordable it is to open a bank account. Furthermore, multiple respondents mentioned Pick n Pay as a money market vendor that has partnered with TymeBank to offer banking services at a reduced cost for the inclusion of low-income earners. Also, most of the banking applications do not require customers to purchase data; all that is required is a strong network. This further ensures that banking is inclusive to all.

The internet and other electronic banking services reduce running expenses for a physical bank; thus, financial institutions that use electronic services extensively are considered innovative as they have a larger distribution channel. However, a level of education is required to use the online banking platform, and the usage of the facility determines the success of the product (Akhisar et al., 2015). All respondents mentioned that financial services institutions should be considerate to all when creating bank apps so that they are simple and easy to use. Respondents also mentioned that there must be simple terminology used, especially in terms and conditions of a financial product.

MOBILE BANKING

Mobile banking is defined as “any mobile interaction with a money managing institute that is not necessarily a bank, that enables customers to deposit, send and withdraw money” (Chigada & Hirschfelder, 2017). Mobile banking has been instrumental in the implementation of strategic changes within retail banking over the past decade. These changes in technology have enabled the financial services industry to please its clients with an immediate resolve to their challenges by using self-service technologies (Tam & Oliveira, 2017). According to the research respondents, the volume of smartphone distribution in urban areas is higher than that in the rural population in South Africa, where the cellphone network coverage is weak and thus reduces the mobile phone distribution rate. Therefore, mobile phone internet usage in rural locations may be low. However, positive changes have been made by the South African

Government to improve the network coverage in rural locations so that customers dwelling in these areas may also take advantage of banking being more affordable on a mobile or telecommunication device (Chigada & Hirschfelder, 2017). The importance of a bank account plays a substantial role, mainly in low-income groups (Chigada & Hirschfelder, 2017).

Online banking enables clients to process financial transactions such as payments to third parties, payment of monthly bills, purchase of electricity or airtime, stock exchange transactions and other financial transactions on a secure website offered by a financial services provider (Tam & Oliveira, 2017). Several banks are motivating their clients to use self-service options such as the mobile bank apps so that customers may transact by themselves, thereby saving on costs and cross selling while offering product enhancements to better the relationship between the customers and their bank (Tam & Oliveira, 2017). The findings in the research study highlight that mobile banking is instrumental for financial inclusion. It has also been found that with mobile banking, payments may be made instantly without having to travel long distances to enable a financial transaction to take place.

The research respondents confirmed that enhancements in mobile banking, such as the e-Wallet and Cash Send options, have made banking more flexible. Additionally, unlike in the past, payments to other banks may now be made immediately at a minimum fee. Most of the respondents have also commented on banking for low-income groups as mainly focused on money transfers without being affiliated to a bank but rather money market providers, such as Shoprite and Pick n Pay, that assume the function of a bank. Despite these supermarkets playing an incredible role in assisting low-income groups and the unbanked with financial transactions, the growth in technology foresees a promising future for mobile banking (Chigada & Hirschfelder, 2017).

5.4 Discussion Pertaining to Research Question 2

What can be done by financial services institutions and government to promote financial literacy and a saving culture?

EDUCATION (FINANCIAL LITERACY)

The importance of financial knowledge extends beyond the convenience of understanding the value of money, but it is an essential survival tool. The lack of financial literacy may lead to poor financial choices and decisions that could have devastating financial and economic consequences, which could inherently affect the economy (Refera et al., 2016). Improvement of the personal financial well-being of a population is, therefore, crucial. This should become a mandatory consideration for government policy, the schooling system and financial services industries (Refera et al., 2016). The term "financial literacy" is an important life skill in this millennium, when individuals should take responsibility for their short- and long-term financial decisions. According to Refera et al. (2016), financial literacy refers to the minimal knowledge that a person may have regarding finance, which includes financial terms such as interest rate, credit, and inflation and the ability, skill and understanding of a person to use all the information in practical life such that he/she is equipped, even at a basic level, to make sound financial decisions.

Most of the respondents in the research interview reported that there should be more conversations and lessons on how to save from an early age and that schools should be the driving force behind the initiative of good spending and saving habits. There should also be workshops at places of employment and joint ventures between the public and private sectors to set up weekend courses on savings at community centres. This finding corresponds with the study describing the importance of financial literacy (Garg & Singh, 2018). Furthermore, with regard to the youth, several financial products are available, even for low-income groups; for instance, bank accounts may be opened at most financial services institutions at zero fees. Therefore, it is important for one to understand various savings accounts that are available, which cater for one's present and future needs, as once a decision is taken, it might affect financial decision making in the future (Garg & Singh, 2018). This indicates the importance of understanding basic financial products to avoid making wrong decisions.

The respondents also felt strongly about transparency when it comes to financial services institutions helping customers to bank soundly, as it has been found that individuals, particularly the youth, with high financial literacy are able to better perform in mathematics and save as much as possible. This helps in understanding the impact of inflation on return. These individuals tend to take less unsecured loans and focus on the fees and additional cost (Garg & Singh, 2018). It is through being financially literate that communities are feel more empowered when it comes to their earnings and are likely to experience controlled spending behaviour. (Garg & Singh, 2018). The respondents also mentioned their transparency when helping new bank customers choose a bank product that will be best suited for their needs. Therefore, the National Credit Regulator should work with banks more closely than before to ensure that fair lending practices are always implemented by banks. As one of the objectives of the National Credit Act (NCA) of 2005 is to cut down on the skyrocketing consumer over-indebtedness by encouraging banks to adopt responsible rather than reckless lending practices (Migiro, 2017). Reckless lending describes the provision of credit to customers who cannot afford to repay a loan (Migiro, 2017).

SAVINGS

The savings culture in South Africa has been defined as dismal and is on the brink of becoming an economic tragedy. Household savings have declined to a point of dissaving, and this urgently requires rectification (Darley, 2011). The importance of household savings cannot be overstated, especially in preparation for unforeseen circumstances. According to Darley (2011), household saving rates are beneficial to economic stability and growth. The discussion with the research respondents surrounding domestic savings highlighted the need for schools, organisations and government to host seminars and workshops on financial literacy and to stress on the importance of household savings. According to Darley (2011), former Finance Minister Trevor Manuel mentioned the fact that the reduced rate of domestic savings means that people are borrowing money at emergency rates, creating a culture of indebtedness, as several people are trapped in the debt trap. This means that people are spending money that is not earned on expenses that are futile (Darley, 2011).

Savings are an essential financial tool and are recognised as a means of reducing poverty (Ruh, 2017). When discussing the importance of saving, most of the research participants felt that it is important to pay off one's debt to prioritise savings. However, according to literature, the mobilisation of saving must be acknowledged as critical, both on a macroeconomic and individual level, as a higher gross national savings rate is correlated with economic growth (Steinert et al., 2018). The respondents also stated that a continuous cycle of saving leads to reduced reliance on borrowing and the incurrence of additional debt that attracts high interest rates. Therefore, as much as it is important to save, the respondents expressed that it is rather important to pay off debt quicker, as according to the research participants, paying off debt first grants easier access to credit and grants peace of mind that allows one to prioritise saving.

5.5 Summary and Conclusion

This chapter critically analyses the findings obtained from the research interview responses. Participants' responses highlighted key themes in line with the conceptual framework that is discussed as part of this chapter. The respondents gave practical insights about the main aspects of the study pertaining to innovation, mobile banking, convenience, the risk in using digital technology, financial education and savings. These are essential and prevalent factors in the banking sector. Therefore, innovative digital technology has been identified as a crucial tool for the inclusion of lower-income groups to the formal banking sector. The use of digital platforms grants an added convenience to the customer and is more affordable. The government and financial services institutions should work together to improve the financial well-being of the population, urban and rural, for individuals and families to make sound financial decisions and to save.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the qualitative findings of the present study with the aim of providing a conclusion to the core objectives and purpose of the study. The study is aimed at granting a feasible resolve to the greatest challenge affecting the poor around the world, which is their inability to adequately participate in the economy because they are unbanked; this causes low-income groups to be excluded from mainstream financial activities (Anderson & Huerta, 2014). Another trial experienced by low-income groups is the challenge to save, which is a problem experienced nationally in South Africa as the country has not escaped the global economic crises that has led to a rise in unemployment, poverty and debt (Darley, 2011). This chapter presents the significance of the study, as pointed out in Chapter 1, which is to enable innovative solutions for the unbanked portion of society and to provide valuable insights and solutions for households that battle to save.

The findings of this study provide responses to the questions pertaining to the importance of low-cost innovative banking services to the poor and the role domestic savings can play in mitigating the negative outcomes of poverty.

Lastly, this chapter concludes on findings and makes recommendations for future research.

6.2 Major Findings

The main finding of this study particularly is that multiple banks are proliferating the market, causing traditional financial services institutions to become more competitive as new digital banks are now operating, forcing traditional banks to expand their digital offerings. For example, the likes of TymeBank and Bank Zero are increasing the likelihood of banking to be more affordable to lower-income groups. New banks are offering services on digital channels that reach underserved locations.

Mobile banking in South Africa is a key tool for incorporating banking into the daily lives of lower-income groups. The progressive improvement of mobile devices in rural households is remarkable and encouraging, as mentioned by many of the research participants working for the five major retail banks in South Africa. Through mobile banking applications, banking is simplified and may be easily enhanced to suit the user. By banking online using a mobile device, one is in more control of one's money.

South African banks enable all residents to open a bank account for free. All that is required is to produce a valid identification document, a passport accompanied by a visa or an asylum permit. Previously, customers were required to provide proof of residence in terms of the requirements of the Financial Intelligence Centre Act. However, some banks have done away with that requirement as many of their customers are from the township and rural locations and do not have proof of address, thus simplifying the requirements to open a bank account for low-income groups. Capitec Bank is one of the banks that do not require proof of address from their customers.

A challenge identified in relation to mobile banking in South Africa is that in rural households far away from the city, most people are unable to effectively use mobile bank applications because they are uneducated and do not understand the importance of digital communication technologies. Additionally, the network coverage in rural areas is poor, so it disables users to access the online platform. Additionally, older bank customers are resistant to using digital banking technologies, mainly because of security reasons. This includes potential risks associated with an online platform, such as online fraud, hacking and scamming that target vulnerable people. Consequently, some bank clients believe that online banking services are unreliable and prefer traditional banking services as they feel that they are more trustworthy and dependable. Moreover, some customers of the bank are afraid of losing their money while transferring funds over the internet. Thus, online banking services are seen as providing less assurance than traditional banking services, leading to bank customers seeking compensation for errors that may occur online. This may hamper progress in disadvantaged communities.

Another significant finding in terms of transforming into a cashless society, not only in cities but also in rural areas, is the introduction of card machines such as Yoco and iKhokha. These devices are identified as South Africa's most affordable smart card machines that process payments in under three seconds with unlimited 4G data. These devices may be paired with a vendor's smartphone and are most appropriate to use at flea markets and even taxi ranks. This protects customers from having to carry cash as they are now able to make payments using these point of sale (POS) card machines by merely swiping them. The benefits of using a POS system for small and medium enterprises is that it can accelerate the checkout process and help entrepreneurs save and organise their sales data and customer information and create reports that analyse their business and performance in terms of sales. The use of these smart-card machine devices is a step in the right direction for entrepreneurs in South Africa as they are given the opportunity to compete in the digital economy irrespective of their location.

An additional finding in terms of financial literacy and banking is that communities with low literacy levels are less likely to open a bank account and use online banking facilities, because people who are unable to read find it difficult to use the internet and feel that it is too complex and meant only for people who are educated. Also, it is established that low-income groups struggle with the challenge of not only using online banking but also the language barrier as most online banking platforms are formed in English. Being financially educated enables one to make informed financial decisions on the management of money. Education on managing finances should be implemented from a school level because financial literacy is a step towards financial inclusion. Building of financial knowledge capabilities improves financial management skills of individuals and households. The promotion of financial education in Africa could have a positive influence on poverty reduction and economic growth. Therefore, improving financial literacy may strengthen the efficiency of the economy and bring about a positive economic well-being for the future.

In terms of domestic savings, it is found that low savings negatively affect households during an unforeseen crisis, for example, the loss of income due to unemployment or sudden death of a breadwinner in the family. A household may struggle financially if they have no financial safety net. The lack of saving in South Africa results in poor investments and growth. Low-income households tend to have reduced knowledge on how to save; therefore, it is important for government to partner with the private sector to better advertise and promote saving and its offers. This may be done by having regular workshops in community centres. Additionally, social media should be used as a tool for effectively communicating to the youth on how to save. It is also found that banks have low interest rates on stokvel accounts, which are popular in townships and low-income households. Communities that invest in stokvels should be granted better returns on their savings and not be charged high withdrawal fees, because these are discouraging to stokvel members as they would prefer to keep money at home instead of investing it.

6.3 Key Conclusions of the Study

This study set to find out how innovative banking may lead to inclusive access to financial services and increase domestic (household) savings in South Africa. The importance of innovation in banking is that it addresses challenges experienced by underserved communities at the bottom of the pyramid. The findings of this study highlight the importance of constant enhancements of new technologies in the banking industry to address the issue of inclusion of lower-income groups to the economy by ensuring that banking is made accessible and convenient. The premise of innovation in banking is to benefit society and grow the economy sustainably. Mobile banking has been identified as a key instrument in driving banking to unserved areas in the most cost-effective way. In promoting the importance of becoming largely banked to society, there is also the principle of informing households and individuals about the importance of managing one's money and encouraging lessons and workshops on financial literacy in communities and schools as an initiative by government and the private sector. The study provides context into the South African retail bank industry and the work that still has to be done to promote access to banking and ensure that a needs analysis is conducted before onboarding a customer to ensure that the core needs of the customer are analysed so as to provide the right financial product that will meet those needs. Furthermore, innovative techniques, such implementation of an application on the online banking platform that will remind customers to set goals on building their wealth and banks to provide a reward as an incentive for saving, should be applied. The importance of saving cannot be overstated. The encouragement of household savings in South Africa will benefit all of society and strengthen the economy.

6.4 Recommendations for Financial Services Institutions and the Government

The findings of this study resulted in the following recommendations for key stakeholders, that is, banks and the government of South Africa:

- Innovative banking approaches are favoured by customers as customers opt for ease. For instance, innovative technologies such as mobile banking make cost-effective transacting possible. Therefore, banks should focus on implementing technologies that meet the needs of customers and ward off competition.

- The government should increase funding to build information communication technology infrastructure, particularly in rural townships, to promote digital inclusion and enable equal participation of the poor in the online banking platform.
- Government together with the private sector should promote innovative technology as a key strategy in which South Africans will participate to leverage the opportunity of being part of the global village through technology. Education of communities on the significance of technology and its convenience, such as its efficiency and cost saving, should be addressed frequently, especially in rural areas.
- The government and banks should spread awareness on risks associated with banking online and risk prevention methods and solutions so that customers are knowledgeable, aware and less fearful of banking online when they are better informed, such as communicating tips on password protection and what to do or who to contact should online privacy be compromised.
- There is a need for government and retail banks to invest in financial literacy and its marketing to help people understand the value of money and the difference between needs and wants. They should also assist in the creation and management of a budget. Furthermore, poor communities and urban societies should be taught how to save, pay bills on time and plan for retirement and about the importance of being part of the formal economy by joining a financial services institution.
- Banks should be more strategic in bringing the unbanked to the banking system. They should offer the poor entry-level bank accounts that will help them accumulate savings.
- Stokvel accounts, which are commonly used by low-income communities, should be redesigned such that members can benefit from their savings; for example, these accounts should have higher interest rates and reduced yearly withdrawal fees.
- The government and financial services institutions should put measures in place to encourage households to save. Greater attention should be paid to addressing the challenge of saving, thereby promoting a culture of saving in South Africa.

6.5 Suggestions for Future Research

- It would be helpful to replicate the study and use a larger sample for the semi-structured interview process in a different province. For example, it might be interesting to establish findings from retail bank professionals in a province such as Limpopo, in

South Africa, where the lifestyle may be more relaxed than that of dwellers in the Gauteng Province.

- Further research could be conducted on newly established banks such as TymeBank and Bank Zero to understand their innovation capabilities and business models, as these banks are largely digital.
- It would also be worthwhile for the government and financial services institutions to determine whether the behaviour of social grant recipients in terms of savings and financial literacy is different from that of low-income individuals who do not receive any grants from the state.
- Further research could investigate how the South African Reserve Bank (SARB) could ensure that banking practices in this new digital age are fair and just to all stakeholders. Additional SARB-related research could look at the avoidance of any risks that may be posed by Fintech companies that operate in the banking system when they serve BoP customers.

REFERENCES

Abbasi, T. & Weigand, H. (2017). The impact of digital financial services on firms' performance: a literature review. *arXiv preprint arXiv:1705.10294*.

Agolla, J. E., Makara, T., & Monametsi, G. (2018). Impact of banking innovations on customer attraction, satisfaction and retention: the case of commercial banks in Botswana. *International Journal of Electronic Banking*, *1*(2), 150−170.

Ahmad, A. H., Green, C., & Jiang, F. (2020). Mobile money, financial inclusion and development: A review with reference to African experience. *Journal of Economic Surveys*, *34*(4), 753−792.

Akhisar, I., Tunay, K. B., & Tunay, N. (2015). The effects of innovations on bank performance: The case of electronic banking services. *Procedia-Social and Behavioral Sciences*, *195*, 369−375.

Alexander, A. J., Shi, L., & Solomon, B. (2017). How fintech is reaching the poor in Africa and Asia.

Anderson, J. & Billou, N. (2007). Serving the World's Poor: Innovation at the Base of the Economic Pyramid. *Journal of Business Stategy.*

Anderson, M. & Huerta, I. (2014). Literature on the Unbanked. *UC Merced Undergraduate Research Journal*, *7*(2).

Bara, A., Mugano, G., & Le Roux, P. (2016). Financial innovation and economic growth in the SADC. *African Journal of Science, Technology, Innovation and Development*, *8*(5), 483−495.

Baradaran, M. (2012). How the poor got cut out of banking. *Emory LJ*, *62*, 483.

Barr, M. S. (2004). Banking the poor. *Yale J. on Reg*, *21*, 121.

Beck, T., Senbet, L., & Simbanegavi, W. (2015). Financial inclusion and innovation in Africa: An overview. *Journal of African Economies*, *24*(suppl_1), i3-i11.

Berndt, A., Saunders, S., & Petzer, D. J. (2010). Readiness for banking technologies in developing countries. *Southern African Business Review*, *14*(3).

Caskey, J. P. (2005). Reaching out to the unbanked. *Inclusion in the American dream: Assets, poverty, and public policy*, 149–166.

Chaia, A., Dalal, A., Goland, T., Gonzalez, M. J., Morduch, J., & Schiff, R. (2009). Half the world is unbanked.

Chigada, J. & Hirschfelder, B. (2017). Mobile banking in South Africa: A review and directions for future research. *South African Journal of Information Management*, *19*(1), 1–9.

Coetzee, G. (2003). Innovative approaches to delivering microfinance services: The case of Capitec Bank . *August, MicroSave*.

Coetzee, J. (2005). Banking the unbanked in South Africa: The practical implications on branch banking. *Retrieved March*, *1*, 2011.

Coetzee, J. (2018). Strategic implications of Fintech on South African retail banks. *South African Journal of Economic and Management Sciences*, *21*(1), 1−11.

Coetzee, J. (2019). Risk Aversion and the Adoption of Fintech by South African Banks. *African Journal of Business & Economic Research*, *14*(4).

Dallimore, A. (2013). *Banking on the poor: savings, poverty and access to financial services in rural South Africa.* The London School of Economics and Political Science (LSE)].

Darley, L. W. (2011). *Measures to improve household savings in South Africa* (Doctoral dissertation).

Das, S. K. (2013). Social and innovative banking strategies for sustainable banking in India. *International Journal of Economics, Finance and Management*, *2*(2).

De Lange, M. C. (2013). *A strategic analysis of Capitec Bank Limited within the South African banking industry* (Doctoral dissertation, Nelson Mandela Metropolitan University).

Demirgüç-Kunt, A. & Klapper, L. (2012). Financial inclusion in Africa: an overview. *World Bank Policy Research Working Paper (6088).*

Demirgüc-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank Publications.

Demirgüç-Kunt, A. & Singer, D. (2017). Financial inclusion and inclusive growth: A review of recent empirical evidence. *World Bank Policy Research Working Paper* (8040).

Galazova, S. & Magomaeva, L. (2019). The transformation of traditional banking activity in digital.

Garg, N. & Singh, S. (2018). Financial literacy among youths. *International JournaL of Social Economics*.

Gupta, S. (2013). The mobile banking and payment revolution. *European Financial Review*, *2*(36), 215254.

Hawkins, P. (2012). Can agency banking improve financial inclusion in South Africa? *In Economic Regulators Conference.*

Ismail, T. & Masinge, K. (2012). Mobile banking: Innovation for the poor. *African Journal of Science, Technology, Innovation and Development*, *4*(3), 98−127.

Jack, W. & Suri, T. (2011). *Mobile money: The economics of M-PESA*. *Unpublished paper*

Jeník, I., Flaming, M., & Salman, A. (2020). Inclusive digital banking: Emerging markets case studies. *Consultative Group to Assist the Poor Working Paper. Washington, DC*.

Kessler, K., Ikdal, A., Naidoo, E., Portafaix, A., Hendrickson, J., Boje, A., & Rabec, D. (2017). Improving financial inclusion in South Africa. *The Boston Consulting Group*, 1−15.

Kim, W. C. & Mauborgne, R. (2014). *Blue ocean strategy, expanded edition: How to create uncontested market space and make the competition irrelevant*. Harvard Business Review Press.

Klapper, L. F., Lusardi, A., & Panos, G. A. (2012). *Financial literacy and the financial crisis*. (No. w17930). National Bureau of Economic Research.

Kostov, P., Arun, T., & Annim, S. (2014). Banking the unbanked: the Mzansi intervention in South Africa. *Indian Growth and Development Review*.

Lashitew, A. A., Bals, L., & Van Tulder, R. (2020). Inclusive business at the base of the pyramid: The role of embeddedness for enabling social innovations. *Journal of Business Ethics*, *162*(2), 421–448.

López-Morales, J. S., De Jesús Rosario-Flores, F., & Huerta-Estevez, A. (2020). Business in the Base of the Pyramid: A Literature Review and Directions for Future Research. *Organizations and Markets in Emerging Economies*, *11*(2), 327–347.

Louis, L. & Chartier, F. (2017). Financial inclusion in South Africa: An integrated framework for financial inclusion of vulnerable communities in South Africa's regulatory system reform. *Journal of Comparative Urban Law and Policy*, *1*(1), 13.

Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, *155*(1), 1–8.

Matsebula, V. & Yu, D. (2020). An analysis of financial inclusion in South Africa. *African Review of Economics and Finance*, *12*(1), 171–202.

Migiro, S. (2017). Post National Credit Act reckless lending in the South African banking industry. *Public and Municipal Finance*, *6*(2), 27–34.

Mongale, I. P., Mashamaite, T., & Khoza, K. (2018). Household savings, financing and economic growth in South Africa. *Business and Economic Horizons (BEH)*, *14*(1232-2019-741), 105–116.

Mungai, K. (2019). The economic impact of FinTech in the South African banking industry: A case of digital disruption.

Navaretti, G. B., Calzolari, G., Mansilla-Fernandez, J. M., & Pozzolo, A. F. (2018). Fintech and banking. Friends or foes? *Friends or Foes*.

Ntimane, L. M. (2020). *Disruptive innovation in the South African banking sector: a case study of Capitec Bank* Stellenbosch: Stellenbosch University.

Nuyens, H. (2019). How disruptive are FinTech and digital for banks and regulators? *Journal of Risk Management in Financial Institutions*, *12*(3), 217−222.

Ohene-Afoakwa, E. & Nyanhongo, S. (2017). Banking in Africa: Strategies and systems for the banking industry to win in the fourth industrial revolution. *Bank SETA: Africa Expansion Project 2017*.

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

Ozili, P. K. (2020). Theories of financial inclusion. In *Uncertainty and Challenges in Contemporary Economic Behaviour*. Emerald Publishing Limited.

Pankomera, R. & Van Greunen, D. (2018). Challenges, benefits, and adoption dynamics of mobile banking at the base of the pyramid (BOP) in Africa: a systematic review. *The African Journal of Information and Communication*, *21*, 21−49.

Paramasivan, C. & Kamaraj, R. (2015) INCLUSIVE BANKING THROUGH PRADHAN MANTRI JAN DHAN YOJANA WITH RESPECT TO REGIONAL RURAL BANKS.

PASA. (2021). *Payments Association of South Africa*. https://www.pasa.org.za/media/2021/10/06/news.

Pillay, K. (2007). *An evaluation of the strategy of banking the unbanked for a leading South African bank*

Prahalad, C. K. (2008). The fortune at the bottom of the pyramid: Eradicating poverty through profits. *McKinsey briefing notes series*, *36*(3), 52–74.

Refera, M. K., Dhaliwal, N. K., & Kaur, J. (2016). Financial literacy for developing countries in Africa: A review of concept, significance and research opportunities. *Journal of African Studies and Development*, *8*(1), 1–12.

Rossman, G. B. & Rallis, S. F. (2016). *An introduction to qualitative research: Learning in the field*. Sage Publications.

Rouse, M. (2017). Mobile banking in Sub-Saharan Africa: setting the way towards financial development.

Ruh, C. (2017). The Impact of Mobile Money on Saving in Sub-Saharan Africa. *Boston College Electronic Thesis or Dissertation*.

Ryu, H. S. (2018). Understanding benefit and risk framework of fintech adoption: Comparison of early adopters and late adopters. Proceedings of the 51st Hawaii International Conference on System Sciences.

Sardana, V. & Singhania, S. (2018). Digital technology in the realm of banking: A review of literature. *International Journal of Research in Finance and Management*, *1*(2), 28−32.

Sebstad, J. & Cohen, M. (2003). Financial education for the poor. *Financial Literacy Project, Working Paper*, *1*, 2−17.

Shipalana, P. (2019). Digitising financial services: a tool for financial inclusion in South Africa?

Shy, O. (2021). *Digital Currency, Digital Payments*, and *the 'Last Mile' to the Unbanked*. (No. 94158). Federal Reserve Bank of Atlanta, 2021.

Simleit, C., Keeton, G., & Botha, F. (2011). The determinants of household savings in South Africa. *Studies in Economics and Econometrics*, *35*(3), 1−20.

Steinert, J. I., Zenker, J., Filipiak, U., Movsisyan, A., Cluver, L. D., & Shenderovich, Y. (2018). Do saving promotion interventions increase household savings, consumption, and investments in Sub-Saharan Africa? A systematic review and meta-analysis. *World Development*, *104*, 238−256.

Still, K., Lähteenmäki, I., & Seppänen, M. (2019). Innovation relationships in the emergence of Fintech ecosystems. Proceedings of the 52nd Hawaii International Conference on System Sciences.

Tam, C. & Oliveira, T. (2017). Literature review of mobile banking and individual performance. *International Journal of Bank Marketing*.

Tarhini, A., Mgbemena, C., Trab, M., & Masa'Deh, R. (2015). User adoption of online banking in Nigeria: A qualitative study. *The Journal of Internet Banking and Commerce*, *20*(3).

Taskinsoy, J. (2021). Say Good Bye to Physical Cash and Welcome to Central Bank Digital Currency. *Available at SSRN 3972858*.

Thwaits, C. (2017). *The barriers and enablers to effective fintech start-up collaboration with South African Banks (*Doctoral dissertation, University of Pretoria).

Townsend, S. & Mosala, T. (2006). *Capitec Bank : Low-Cost Banking for Joe Average*. In *SAGE Business Cases*. Wits Business School.

Van der Boor, P., Oliveira, P., & Veloso, F. (2014). Users as innovators in developing countries: The global sources of innovation and diffusion in mobile banking services. *Research Policy*, *43*(9), 1594−1607.

Van Wyk, B. F. & Kapingura, F. M. (2021). Understanding the nexus between savings and economic growth: A South African context. *Development Southern Africa*, *38*(5), 828−844.

Ver Loren van Themaat, T., Schutte, C. S., Lutters, D., & Kennon, D. (2013). Designing a framework to design a business model for the 'bottom of the pyramid' population: case study. *South African Journal of Industrial Engineering*, *24*(3), 190−204.

Wagner, C., Kawulich, B., & Garner, M. (2012). *EBOOK: Doing Social Research: A Global Context*. McGraw Hill.

Wilson, S. & MacLean, R. (2011). *Research methods and data analysis for psychology*. McGraw-Hill Higher Education.

APPENDICES

Appendix 1: Interview Protocol: Research Instrument

Thank you for agreeing to a meeting in such short notice.

The purpose of the interview is to answer research questions on the topic **"Innovative banking, the unbanked and domestic savings in South Africa".** The research report broadly focuses on the low-income population that is unbanked.

According to Statista (2021), *individuals living in South Africa with less than 890 South African rand (roughly 62.8 US dollars) per month are considered poor. Furthermore, individuals* *having 624 rand (approximately 44 U.S. dollars) a month available for food are living below the poverty line according to South African National Standards.*

https://www.statista.com/statistics/1127838/national-poverty-line-in-south-africa/

Statistics South Africa Census (2011) defined low-income category households as those that reported annual household income between R1 and R19 200. According to the Income and Expenditure Survey 2010/2011 (IES 2010/11), the average annual household income for poor households was R25 348, which is substantially higher than the maximum household income of R19 200 (using the upper bound poverty line) for the low-income category. Therefore, it would be practical to classify households in this category of income as poor households.

The special focus of this study will be on innovative banking, financial inclusion and domestic savings.

I am delighted for your company to feature in this research.

Introductory Questions

1. What do you love most about banking in the 21st century?
2. Why is technology important in banking?
3. What do you or do not appreciate about branch-based banking since you moved to a digital platform?

Addressing Key Research Questions

(Innovative Banking)

1. In what way has the bank's current digital products improved the welfare of lower-income customers who were previously unbanked (excluded)?
2. Are the current digital payment channels and digital savings products convenient for lower-income customers?
3. What innovations may be implemented in the payments / transaction system to make lower-income customers' lives easier?
4. Are you happy with the bank's current service offerings, mainly for the lower-end client base? What can be done better?

(The Unbanked)

1. Do you think banking is affordable to low-income groups in South Africa?
2. How is Fintech being used to promote financial inclusion?
3. Do you think the banking needs of low-income customers in South Africa are being fulfilled adequately?
4. How do you know that a client is able to use a proposed financial product and all its functionalities?

(Domestic savings)

1. What can be done by financial services institutions and government to promote financial literacy and to encourage savings?

2. Do digital savings account options in SA meet the client flexibility needs of low-income customers?
3. What would you advise to be important for reaching financial goals: should savings or paying off debt be prioritised?

Closure
What are your closing comments? Could you kindly suggest any other persons who might have different perspectives, for me to possibly interview?

Thank you for your time and input and for accepting this interview at short notice.

Appendix 2: Respondent Correspondence

The Graduate School of Business Administration
2 St David's Place, Parktown, Johannesburg, 2193, South Africa
PO Box 98, WITS, 2050
Telephone: +27 11 717 3600
Facsimile: +27 11 717 3514
Website: www.wbs.ac.za

Dear Respondent:

I am a student at the Graduate School of Business, University of the Witwatersrand, Johannesburg, studying a Master of Management in Innovation Studies (MM Innovation Studies). I am required to conduct research as part of the fulfilment of the requirements for the degree.

The purpose of this research is to understand how financial services institutions can implement innovation within banking to cater for the unbanked population in South Africa and how can banks better promote domestic savings to low-income groups and economically excluded citizens in the country.

In carrying out this research, I will be interviewing bank professionals who are knowledgeable in this issue under investigation. Therefore, I am writing to request your permission to interview you as an employee and customer of one of the five major retail banks about your insights regarding Fintech, mobile banking, financial inclusion and domestic savings.

The interview should take between 30 and 40 minutes of your time, and your assistance would be much appreciated. Information supplied as part of the interview will be used for academic purposes only, and if you wish, any comments can be non-attributable.

I will be contacting you to arrange a suitable and convenient time to undertake the interview, and I look forward to your co-operation.

For any queries that you may have regarding the research process, you may contact
Dr Diran Soumonni or Professor Mjumo Mzyece.
Their email addresses are as follows: Diran.Soumonni@wits.ac.za
mjumo.mzyece@wits.ac.za

Kind regards,

Safiya Umar
MM Innovation Studies Student
Wits Business School

Appendix 3: Consent Form for Interviews

Title: **Innovative banking, the unbanked and domestic savings in South Africa**

	Please Initial box:
I confirm that I have read and understood the information sheet dated **[ ]** and have had the opportunity to ask questions.	☐
I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any question or questions, I am free to decline.	☐

I understand that my responses will be kept strictly confidential. I understand that my name will not be linked with the research materials and will not be identified or identifiable in the report or reports that result from the research. ☐

I agree for this interview to be tape-recorded. I understand that the audio recording made of this interview will be used only for analysis and that extracts from the interview, from which I would not be personally identified, may be used in any conference presentation, report or journal article developed from the research. I understand that no other use will be made of the recording without my written permission and that no one outside the research team will be allowed access to the original recording. ☐

I agree that my anonymised data will be kept for future research purposes, such as publications related to this study after the completion of the study. ☐

I agree to take part in this interview. ☐

____________________	____________	______________
Name of participant	Date	Signature
Safiya Umar	/03/2022	______________
Name of Researcher	Date	Signature