



Graduate School
of **BUSINESS**
UNIVERSITY OF CAPE TOWN

MPhil

Re-introducing prize-linked savings products in South Africa through business model innovation.

A dissertation submitted to the Graduate School of Business, Faculty of Commerce, University of Cape Town, in fulfilment of the requirements for the degree of Master of Philosophy in Inclusive Innovation.

By

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ACKNOWLEDGEMENT

I would like to thank my family for allowing me to dedicate our valuable time towards this research study.

To Prof. Geoff Bick, my supervisor, thank you for the guidance and support that you provided me throughout this journey.

ABSTRACT

The aim of this research study was to determine how business model innovation can be used to re-introduce prize-linked savings (PLS) products in South Africa in the context of the illegalization of FNB's Million-a-Month-Account (MaMa) by the Supreme Court of Appeals ruling in 2008. The study first explores the detailed underlying factors that led to the demise of FNB's MaMa program, beyond the obvious Lotteries Act challenges.

Using FNB's Million-a-Month account experience as a case study, a qualitative research study was undertaken, with primary data collected through 10 in-depth semi-structured interviews with financial services experts and regulatory authorities. Content analysis of the data was used to identify themes to address the research questions.

Key research findings suggest that the failure of FNB's MaMa program was due to: the ambiguities of the Lotteries Act with regards to prize-linked savings that existed until the ruling by the Supreme Court of Appeal was made in 2008; poor co-operation between government departments towards positive alignment between the regulation of the financial services industry versus the national lottery; and high industry or market concentration in the banking sector that led to lack of innovation and collaboration.

A theoretical and practical contribution is made in the form of a comprehensive business model innovation framework for re-introducing PLS products in South Africa, which will provide valuable guidance to practitioners and researchers. As far as could be determined, it is the first academic study to explore prize-linked savings products from a business model innovation perspective.

Keywords: *Prize-linked savings; business model innovation; lottery; and promotional competitions*

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ABBREVIATIONS

BASA	Banking Association South Africa
BoP	Bottom-of-the-Pyramid
DTI(C)	Department of Trade, Industry and Competition
ESG	Environmental, Social, and Governance
FNB	First National Bank
FSC	Financial Sector Charter
FSCA	Financial Sector Conduct Authority
GDP	Gross Domestic Product
IFWG	Intergovernmental Fintech Working Group
INFE	International Network on Financial Education
LMI	Low-to-Moderate Income
MaMa	Million-a-Month Account
NBER	National Bureau of Economic Research
NCA	National Credit Act
NCFEC	National Consumer Financial Education Committee
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
PLS	Prize-linked Savings
RDI	Research, Development and Innovation
SASI	South African Savings Institute
SCA	Supreme Court of Appeal of South Africa
VECM	Vector Error Correction Model

CHAPTER 1: INTRODUCTION

1.1. Background

In 2005, FNB introduced an innovative Million-a-Month account (known as “MaMa”) in South Africa. MaMa was not a traditional savings account, but it was an innovative prize-linked savings account. One of the FNB executives that was interviewed for this dissertation stated that the promise for the MaMa product was that “you have everything to win, and nothing to lose!”

Prize-linked savings (“PLS”) accounts are a savings products with a thrill factor (Kearney, Tufano, Guryan, and Hurst, 2010). They differ from traditional savings accounts by two key features, namely: they typically offer zero or very low interest rate on the deposited funds, but instead, depositors stand a chance of winning prizes where winners are periodically selected at random, much like a lottery. PLS accounts are aimed at encouraging non-savers to start saving (Tufano, De Neve, Maynard, 2011; Tufano & Schneider, 2008), low savers to increase their level of savings, and ultimately reduce the level of financial fragility for households. Households are considered to be financially fragile if they cannot withstand routine financial shocks.

FNB’s MaMa proved to be very successful during its existence. FNB managed to open over one million accounts and secured R1.4 billion in deposits between January 2005 and March 2008 (Kearney et al., 2010). Cole, Iverson, and Tufano (2016) conducted an empirical study of the FNB’s MaMa program, using account-level data obtained from the bank, with an intention to demonstrate that PLS accounts are appealing to individuals that do not have a common savings account and to those who have serious amounts of debt. Their key findings are:

- people who did not have a typical savings accounts were 12.2% more likely to open a prize-linked savings account than those that had a normal savings account;
- savings products with a lottery-like reward structure are able to generate new savers and raise the level of saving by existing savers; and
- there was no evidence that the MaMa served as a substitute for normal savings products, but an increase in MaMa usage also saw a general increase in regular savings products.

The MaMa innovation was discontinued in 2008 when it was considered to be an illegal lottery in terms of the Lottery Act of 1997 by the South African Supreme Court of Appeals (*Firststrand Bank Limited vs. National Lotteries Board*, 2008). PLS products were not to be in South Africa, despite their promising success that could have helped the country achieve higher levels of financial inclusion, and potentially reverse the concerning trend of low and declining gross domestic savings rates (see figure 1).

Figure 1 below shows the gross domestic savings rate between 1960-2020, which is below a minimum level required for high and sustainable economic growth (Commission on Growth and Development, 2008; Saville, Firth, and Madinginye, 2015; Saville & Macleod, 2019). The graph was prepared using data from The World Bank website (Bank, 2021).

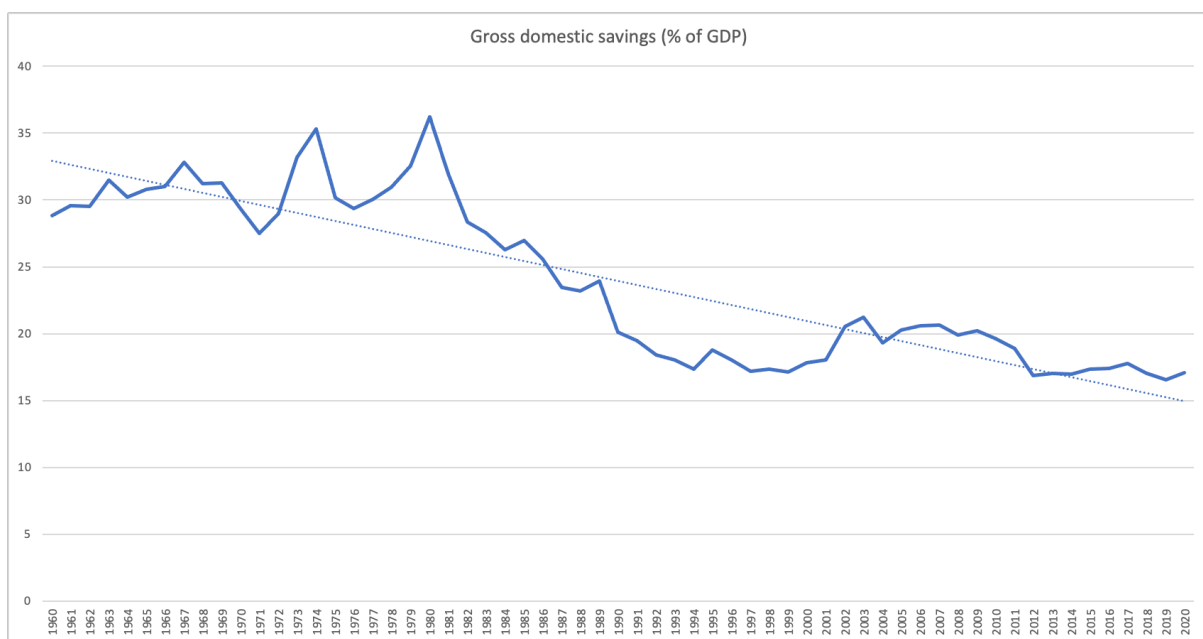


Figure 1: South Africa’s Gross Domestic Savings Rate 1960-2020

Academic literature presented in this research study shows that raising household savings rates (and total national savings as a combination of corporate; government and household savings) is one of the critical ingredients required for the South African economy to turn the tide and achieve what Saville et al. (2015, p. 63) refers to as “elevated, inclusive and sustained economic growth”. According to lab experiments conducted by Atalay, Bakhtiar, Cheung, and Slonin (2014) and Feliz-Ozbay, Guryan, Hyndman, Kearney, and Ozbay (2015), the introduction of PLS accounts tends to increase total savings rates, especially among individuals with the lowest

levels of savings and income. This was demonstrated by the impact that FNB's MaMa innovation had in the market between 2005 and 2008.

The recent government consultation paper states that "the COVID-19 pandemic has demonstrated the fragility of households, and the need to proceed with more speed with government's initiatives to increase household savings and make households less vulnerable" (National Treasury South Africa, 2021, p. 2). Household financial fragility is defined as the level of sensitivity that the household balance sheet has to sudden changes (mainly reduction) in financial factors such as income, interest rates, food prices, and inflation (Tymoigne, 2011). The consultation paper by National Treasury goes on to identify causes for financial fragility among South Africans as poor knowledge about investments; discretionary savings; and retirement savings, and individuals who simply do not save for emergencies or retirement.

The South African government's policy response towards addressing household financial fragility has so far in the main focussed on protection measures. For example, through the introduction of the National Credit Act (NCA), which imposes rigour on affordability evaluation; information and disclosure; and penalises reckless lending (Ssebagala, 2016). There has been no substantial intervention by government to stimulate emergency household savings, as a measure to cushion households against financial crises such as the recent covid-19 pandemic. Prize linked savings accounts present an option as an innovative emergency savings product that could find broad appeal and help ameliorate the level of financial fragility for low-to-moderate income households.

1.2. Research Problem

In the context of a South Africa that has low households saving rate (Prinsloo, 2000a; Saville et al., 2015), very low discretionary household savings for emergencies (National Treasury South Africa, 2021) – it is unfortunate that prize-linked savings accounts are considered illegal in South Africa. PLS products have proven to be successful as a savings vehicle that is attractive to low income households and financially vulnerable groups (Kearney et al., 2010; Tufano et al., 2008), including the recorded success that FNB's MaMa product had in South Africa between 2005-2008.

PLS products are prohibited in South Africa based on the ruling by the Supreme Court of Appeals in 2008 (*Firststrand Bank Limited vs. National Lotteries Board*, 2008), which affirmed

that the FNB MaMa scheme was in violation of the Lotteries Act 57 of 1997. The prohibition of PLS products, and how they might be re-introduced in South Africa constitute a primary concern that this research sought to address.

1.2.1. Aims and objectives

The aim of this research study was to determine how business model innovation can be used to re-introduce prize-linked savings (PLS) products in South Africa in the context of the illegalization of FNB's Million-a-Month-Account (MaMa) by the Supreme Court of Appeals ruling in 2008. The study first explored the detailed underlying factors that led to the demise of FNB's MaMa program, beyond the obvious Lotteries Act challenges.

As far as could be determined, there is no academic research into the lack of use of PLS products in South Africa, and strategies that could be adopted to re-introduce PLS in South Africa. While research studies about the FNB's MaMa product have been conducted previously (Cole et al., 2008, 2016; Kowalski, 2015; Tufano & Schneider, 2008), their focus was mainly descriptive and did not seek to uncover the factors that led to the demise FNB's MaMa scheme or how PLS products might be re-introduced in South Africa. The savings parameter of the economic growth model is severely constrained in South Africa (Prinsloo, 2000b; Romm, 2003; Saville et al., 2015; Saville & Macleod, 2019). Prize linked savings products are acknowledged for their positive impact on household savings, especially among non-saving low to moderate income groups (Cole et al., 2016; Filiz-Ozbay et al., 2015; Kearney et al., 2010; Tufano, 2008).

1.2.2. Research Questions

This research study addressed the two questions presented below, which flow from the primary concern regarding PLS products in South Africa as discussed earlier.

Research Question 1 (RQ1): What are the perceived factors that caused FNB's Million-a-Month-account to be discontinued in South Africa?

To answer RQ1 fully, the following subsequent questions were also investigated:

- Are these factors still relevant today?

- If so, what could be done to address these factors and make it possible for PLS products to be made available as a savings vehicle for individuals and households in South Africa?

Research Question 2 (RQ2): How can business model innovation be used to re-introduce prize-linked savings products in South Africa?

1.3. Research Approach and Ethics

This is a qualitative and exploratory research study, using a case study approach and the qualitative content analysis method. The empirical data was obtained through semi-structured interviews with research discussants that are selected through purposive sampling. This research complies with ethics standards espoused by the University of Cape Town and outlined in the Faculty of Commerce Ethics Policy handbook. UCT strives to ensure compliance with the highest ethical standards in social and scientific research, including matters involving authorship and research integrity.

The researcher obtained ethics clearance for this research study from the University of Cape Town's Ethics in Research Committee (EiRC), and all research participants in this research study signed the research participant consent form (see annexure A).

1.4. Research Significance and Contribution

The research study makes a meaningful contribution in two ways:

- It is the first known academic study that explores in detail the reasons for the discontinuation of the successful FNB Million-a-Month account program, and proposes a business model innovation process for the re-introduction of PLS products in South Africa. Other studies such as Cole et al. (2008, 2016) only focused on understanding the program structure and its performance. This is a research gap this dissertation addresses.
- It introduces a theory-based (Geissdoerfer, Savaget, and Evans, 2017; Osterwalder & Pigneur, 2010) business model innovation framework and a business model canvas that could be used to re-introduce PLS products in South Africa, under current regulatory

limitations while proactively engaging authorities and stakeholders to craft an enabling regulatory regime for PLS products.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

The selection of academic literature and publications reviewed for this dissertation was influenced by the research questions, the conceptual themes surfaced from the data that was gathered from research interviewees, and the generally available publications related to the research topic. The following related functional themes are covered:

1. Savings, investments and economic growth relationship.
2. Financial education, literacy, and inclusion.
3. Prize linked savings accounts.
4. Market Concentration, Competition, and Innovation.
5. Business model innovation.
6. Inclusive innovation.

2.2. Theoretical perspectives on savings, investment and growth

The purpose of this research report is focused on prize-linked savings, and not directly on economic models, hence this section only provides a cursory coverage of theoretical perspectives on the relationship between savings, investment, and economic growth. It is meant to emphasise the importance of national household savings in the context of a country's economic development, and therefore the role that prize-linked savings products could play towards increasing the level of household savings.

Economic development and growth requires financial capital, which can be acquired from domestic savings and/or foreign investments. Foreign direct investments (FDI) are an important source of funding for economic growth. However a country cannot rely on FDI alone in the long run, and therefore domestic savings need to be mobilised as well to finance economic growth (Harjes & Ricci, 2006).

Classical economic models (Romer, 1986; Solow, 1956) postulate that higher national savings rates result in higher economic growth by increasing domestic capital accumulation. Adam, Musah, and Ibrahim (2017) refer to Harrod–Domar's growth model; Lewis's growth theory; and Rostow's growth stages as examples of economic growth theories that put national savings at the centre of economic growth. Romm (2003) contends that economic growth theory justify not only the impact of savings on growth, but also the impact of growth on the savings rate.

Adam et al (2017) used the Granger causality; the Toda–Yamamoto approach; and instantaneous causality tests to examine the causal relationship between domestic savings and economic growth in 10 sub-Saharan African countries, including South Africa, utilizing time series data. Their findings with respect to South Africa (and Mali) reveal “uni-directional causality running from savings to growth” (Adam et al., 2017, p. 117), and they conclude that policies that are intended to increase domestic savings would successfully stimulate economic growth for South Africa. They further reveal “an instantaneous unidirectional causality from domestic savings to economic growth for South Africa; Benin; and Mali, suggesting that savings-led growth is rapid for these countries” (Adam et al., 2017, p. 117).

The savings-economic growth relationship, specifically for South Africa, is also explored by Romm (2003) using data over the period 1946-1992. The study concludes that the private saving rate has a direct as well as an indirect effect on growth, based on the results of the Johansen Vector Error Correction Model (VECM) estimation technique that she used to examine the directions of association between savings and growth in South Africa over the stated period. The primary determinant of economic growth are investment flows that are funded through savings (Commission on Growth and Development, 2008; Saville et al., 2015)

The literature shows that a relationship between savings, investment and economic growth does exist. However, the direction of the causal relationship between savings and economic growth remains an area of debate and discussion. Some researchers argue that economic growth precedes the increase in domestic savings (van Wyk & Kapingura, 2021), while others believe high domestic savings are a necessary ingredient for sustainable economic growth (Adam et al., 2017; Bankole, 2020; Solow, 1956; Thanoon & Baharumshah, 2007).

The empirical study conducted by Harjes and Ricci (2006) using South African Reserve data for the period 1970 - 2002, concludes that private saving in South Africa is largely determined by commodity prices; fiscal policy; and financial liberalization. Their study points out that financial liberalization may have contributed to the decline of level of household savings in South Africa by providing households with greater access to consumer credit with little attention to savings. There has been less emphasis or effective policies put in place to stimulate and support high savings among households.

Globally, it has been shown that there is strong positive correlations between households' savings and investment behaviour and their levels of financial literacy (Lusardi & Mitchell, 2014). Better financial literacy is associated with positive savings and investment behaviour. This is explored further in section 2.3 below.

2.3. Financial Education, Literacy, and Inclusion

Yoong (2011, p. 11) defines financial education as “the process by which financial consumers improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being”. Financial education aims to produce households that are capable of being critical in evaluating their needs and making buying decisions, and who pay attention to the functions and interests of financial services providers, as informed consumers. Therefore the focus of financial education would also be to ensure that there is balance in the information pertaining to financial advice and promotion of financial products (Wuttke, Seifried, and Schumann, 2016).

Another conceptualisation of financial education focuses on having a large part of the population being able to understand and participate actively in a democratic economic and financial system, thus placing financial literacy into a larger context of the economy and society where citizens are co-creators of the conditions of the economic and political framework (Wuttke et al., 2016).

The main output of financial education is improved and ultimately high levels of financial literacy at household level. Financially literate persons are more likely to save a greater percentage of their income, evaluate and compare financial products, and discuss financial matters and budgets with their families (Ifeanyi, Rena, and Prinsloo, 2019). Poor levels of financial literacy and inadequate access to appropriate financial instruments, especially for low income individuals, account for financial fragility among households (Lusardi, Schneider, and Tufano, 2011; Lusardi & Mitchell, 2014).

Financial literacy is about making rational and well informed choices and decision pertaining to personal or household financial matters “including budgeting, everyday payments, use of credits, insurances of life risks, wealth building and retirement provision” (Wuttke et al., 2016,

p. 21). The OECD Programme for International Student Assessment (PISA) uses a working definition for financial literacy as “knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life” (OECD, 2013b, p. 144).

The importance of financial literacy is increasingly being recognised globally due to various socio-economic factors and structural changes in the financial services and in the labour market, the decline of a welfare state, as well as demographic changes, which have resulted in a wide-ranging transfer of risk from governments and employers to employees and consumers (Lusardi & Mitchell, 2014; Wuttke et al., 2016). This transfer of risk imposes the responsibility to care for current and future financial security onto individuals or households, which has a bearing on how much households save and invest.

Improving financial literacy has become an essential means towards greater economic, social and financial inclusion. Governments in countries such as Mexico; Pakistan; India; Kenya; Ghana; Brazil; Peru; United Kingdom; and Indonesia are responding to the financial inclusion and financial education requirements of their citizens by addressing both demand and supply-side barriers to generally high levels of financial literacy and financial inclusion (Atkinson & Messy, 2013).

Financial literacy results in better-informed and financially confident consumers, which would increase demand for financial products and increase financial inclusion (Atkinson & Messy, 2013; Yoong, 2011). Financially literate consumers are most likely to be able to better manage their money, save and plan for retirement. These consumers are likely to expect services of higher quality, and thus stimulate more innovation and competition (OECD, 2013b). There is appreciation by governments of the risks involved when new and innovative financial products are introduced to consumers who are financially illiterate and if such products are not properly regulated and monitored (Atkinson & Messy, 2013). This risk can be better managed and mitigated by increasing financial literacy levels at individual and household level.

The direct and indirect benefits of financial education and higher financial literacy, particularly for the unbanked population, include higher household savings levels and better understanding

of mainstream financial services (Atkinson & Messy, 2013). The importance of financial literacy was formally codified by the OECD in 2002 when they established a comprehensive project to deal with this subject, and further enhanced the project in 2008 through the establishment of the International Network on Financial Education (OECD/INFE), of which South Africa is a member (OECD, 2008). South Africa, as a member of the OECD and a participant in the INFE program, committed herself to designing and implementing a national strategy for financial education and literacy (Atkinson & Messy, 2013; OECD, 2013a, 2017).

The OECD defines financial inclusion as “the process of promoting affordable, timely and adequate access to a wide range of regulated financial products and services and broadening their use by all segments of society through the implementation of tailored existing and innovative approaches including financial awareness and education with a view to promote financial well-being as well as economic and social inclusion” (Atkinson & Messy, 2013, p. 11).

The financially excluded and marginalised tend to be low income population groups (Allen et al., 2016; Atkinson & Messy, 2013), who may not be able to afford or access financial products and services if their realities are not be catered for. Low income groups and those who are less educated tend to have the least levels financial literacy. There is a consistent correlation between education and income, with surveys persistently showing that those with lower income and education exhibited the least financial knowledge (Yoong, 2011).

There has been explosive growth in the variety of financial products available to consumers over the past decade due to technological and financial innovations, which is beneficial and presents wealth creation or preservation opportunities for households, but also introduces further complexity to the financial marketplace (Yoong, 2011). The noted shift from defined-benefit to defined-contribution in public and private pension schemes has resulted in an onerous transfer of responsibility from the state and companies to households (OECD, 2013a). While these shifts have positively improved financial access for households, they have also introduced complexity through expanded variety and sophisticated products available to individuals. When considering the increase in life expectancy and healthcare costs, the responsibility and burden on households is even more significant (Lusardi & Mitchell, 2014; Yoong, 2011) and requires higher levels of savings and wealth creation. The ability of households to make informed and responsible short and long-term financial decisions is

therefore critical, and financial education that can build or improve this ability is desirable to all stakeholders in the economy (Yoong, 2011).

A successful implementation of financial education and meeting financial inclusion objectives requires the support from multiple stakeholders such as financial sector regulators; private sector entities such as banks; non-government organisations; lawmakers and politicians (Atkinson & Messy, 2013). Multi-stakeholder collaboration is necessary when formulating and implementing a national scale financial education strategy (Atkinson & Messy, 2013; Ifeanyi et al., 2019; National Treasury, 2013; OECD, 2013a).

2.3.1. Financial Education in South Africa

In 2012, South Africa established the National Consumer Financial Education Committee (NCFEC), which reports to the Minister of Finance and is chaired by National Treasury. Table 1 below outlines the diverse multi-stakeholder composition of the NCFEC. The individual responsibilities of the NCFEC members includes the creation and updating of consumer financial literacy education schemes in line with South Africa’s national targets and procedures (Ifeanyi et al., 2019), as well as to “plan, fund, implement, monitor and evaluate consumer financial education programmes and initiatives” (National Treasury, 2013, p. 6).

Table 1: Stakeholders involved in Financial Literacy in South Africa

Industry Bodies and Associations	Regulators	Government Departments	Consumer and Labour Representatives	Offices of Ombudsmen
South African Insurance Association	National Credit Regulator	Trade, Industry and Competition	South African National Consumer Union	Credit Ombudsman
Association for Savings and Investments, South Africa	South African Reserve Bank	National Treasury	National Consumer Forum	Ombudsman for long-term insurance
Banking Association of South Africa	Financial Sector Conduct Authority	Basic Education	South African Trade Unions Congress	Ombudsman for short-term insurance
Institute for Retirement Funds	National Consumer Commission	Higher Education and Training	Federation of Unions of South Africa	Ombudsman for banking services
JSE Limited		Provincial Consumer Affairs Offices Forum		
Financial Planning Institute				

Industry Bodies and Associations	Regulators	Government Departments	Consumer and Labour Representatives	Offices of Ombudsmen
Financial Intermediaries Association				
Principal Officers Association				
Financial Sector Charter Council				
South African Savings Institute (SASI)				

Source: Adapted from (Ifeanyi et al., 2019)

The NCFEC approved South Africa’s National Consumer Financial Education Strategy in July 2013. The primary aim of this strategy is to provide high-level guidance for stakeholders, who are largely members of the NCFEC, in the development of their strategies for consumer financial education (National Treasury, 2013). A recent review study of South Africa’s national strategy on financial education that was conducted by Ifeanyi et al. (2019) highlights challenges and makes pertinent recommendations, which include the following factors:

- *Lack of unified programmes.* Even though there has been much effort and good work done to establish a comprehensive national agenda to improve financial literacy, more is still needed to realise a coherent and a unified programme among the stakeholders. Sibanda and Sibanda (2016, p. vii) share the same observation as they assert that South Africa’s “financial education initiatives are scattered with low levels of coordination”.
- *Lack of research.* There has been little effort committed to conducting research on pillars that anchor South Africa’s national strategy on financial education. The national strategy identifies behavioural economics as an area that requires research in the context of financial education and literacy (National Treasury, 2013), but there is no notable action towards this goal.
- *Narrow dimensional programmes.* Most stakeholders are implementing financial education initiatives that focus on the financial products that they offer, which deviates from the overall scope of the national strategy (i.e. financial control; financial planning; product choice; and financial knowledge).
- *Limited supervision and monitoring of implementation.* There is a need for better supervision and monitoring to ensure that there is adequate adherence to financial literacy standards and the national strategy.

- *Research and innovation.* Activity in research is necessary to identify areas that require improvement, and innovation to develop practical interventions to enhance financial literacy education.
- *Policy and Regulation.* Specific legislation that that will provide standards that enhances quality delivery of financial literacy programme is required. According to the national strategy on financial education, NCFEC members have a collective responsibility to propose legislation, if necessary (National Treasury, 2013)

Financial education for improved financial literacy levels among a country's population, especially low to moderate income groups, is identified by a number of countries as critical for financial inclusion and improved economic growth and its impact (Atkinson & Messy, 2013; OECD, 2013a). Therefore, the ability for savers to review, assess, compare and make informed decisions about various savings products is desirable (Saville et al., 2015; Saville & Macleod, 2019) – including the understanding of how prize-linked savings products work.

2.4. Prize-linked Savings Accounts

This section provides a literature review of what prize-linked savings (PLS) products are, as well as a detailed account of the South African experience with FNB's Million-a-Month Account product.

Prize-linked savings (“PLS”) are savings accounts that offer savers a thrilling opportunity to win a lumpsum amount through a lottery-like draw instead of a guaranteed market related interest on deposited funds (Atalay et al., 2014; Kearney et al., 2010; Kowalski, 2015; Tufano & Schneider, 2008). PLS accounts differ from traditional savings accounts by two key features, namely: there is no or very low interest rate earned on the deposited funds; and the depositors stand a chance of winning prizes where winners are periodically selected at random, much like a typical lottery. The random component of the return on your saving can take the form of goods or cash as prizes awarded to account holders through regular lottery-like draws (Kearney et al., 2010). The pay-out of prizes are made possible by the pooling of the interest that would have been due to depositors under traditional savings accounts, which is periodically (e.g. monthly) distributed using a stochastic method to select winning account holders (Kearney et al., 2010; Kowalski, 2015). There are various ways for determining the prize money or the value of winnable goods that can be used by PLS product issuers, including *ex ante*

determination or based on the total amount of deposits made during the period prior to the draw (Kowalski, 2015).

Below are the typical requirements for saving using a PLS account:

- Savers must deposit a specified minimum amount into PLS account during the period leading to a lottery-like draw.
- The deposited funds may be withdrawn, but the participation in the draw for lucky winners is immediately forfeited if funds are withdrawn.
- The cost of participating in a PLS product is that the depositor forfeits the “normal” savings account interest rates offered in the market for a chance to win some big prize, usually a lumpsum of cash.

PLS products are reportedly over three centuries old, as the first of its kind was introduced in the United Kingdom around 1694 - as the ‘Million Adventure’ product (Kearney et al., 2010; Murphy, 2005). Over the years and today, there is a widespread of PLS products offered in many countries confirming their popularity irrespective of differences in cultures and societies. Examples of countries that offer or have offered PLS products include Sweden; Pakistan; Kenya; Indonesia; United States of America (not all states currently); United Arab Emirates; Germany; Ireland; Argentina; Mexico; South Africa; and Turkey (Guillén & Tschoegl, 2002; Kearney et al., 2010). They are aimed at encouraging non-savers to start saving; low savers to increase their level of savings; and ultimately to raise the level of national savings available for productive investment in a given country (Atalay et al., 2014; Cole et al., 2016; Saville & Macleod, 2019). The encouragement to save is achieved by introducing an opportunity for PLS savers to win big through a lottery-like assignment of winnable awards (Pfiffelmann, 2007, 2013).

While PLS products, much like lottery or gambling, are popular across various sections of the population (gender; race; income levels; education; etc), they find particular resonance with low income households (Kearney, 2005; Kowalski, 2015).

2.4.1. Reasons for the popularity of PLS appeal

PLS products are popular and useful to both depositor (or savers) and product issuers (e.g. banks) for different reasons. For depositors (i.e. savers), the appeal of PLS products is explained succinctly by (Tufano et al., 2008) in their observation that:

“The power of compound interest provides little incentives to savers with short and uncertain savings horizons and small principal balances that generate meager amounts of interest. Instead of receiving a certain but small payout, the PLS saver gets a small chance at a large payoff.” (p. 7)

The lure of PLS products is derived from the expectation by a cash depositor of a life changing event, which is a remote chance of winning a large pay-out prize (Gabhart, 2019; Kearney et al., 2010). Fundamentally the appeal of PLS products for savers can be explained by the cumulative prospect theory developed by Tversky and Kahneman (1992). Research shows that PLS programs are more successful when there are multiple smaller and frequent draws, in addition to a large grand prize that only one saver could win at less regular periods (Boyd & Maynard, 2011). The frequent draws and multiple winners (for smaller amounts) creates excitement and a buzz that gets people talking and generates interest for more participants. Guillén & Tschoegl (2002, p. 223) refer to this phenomenon as “skewed returns and mechanisms to reduce holders' fatigue from the low likelihood of winning”. The large prizes create the skewness in returns, while the numerous smaller prizes serve as a long tail to reinforce interest from participants who do not catch the jackpot.

For product issuers (i.e. banks), PLS products help increase the depositors' funds available to the bank for investments. FNB coined a mantra “No Deposits, No Bank”, signalling their intent to raise retail bank deposits as the key driver for the launch of the Million-A-Month-Account as their prize-linked savings product (Cole et al., 2008). Deposits are a *raison d'être* for banks, and the PLS products play a good role in rallying and encouraging non-savers to deposit their funds into a bank as savings. Guillén & Tschoegl (2002) point out that while PLS deposits may provide cheaper sources of funds for the banks, primarily they serve as an effective marketing scheme to drive up market share. The monetary cost of the scheme to the banks is primarily determined by the associated administration costs; a specified interest rate on deposited funds; and promised lottery prizes.

2.4.2. Potential impact of PLS products

The most important impact of PLS products, evaluated from a country perspective, is to help financially vulnerable households build savings as a critical step towards addressing financial fragility in low-to-moderate income households (Atalay et al., 2014; Boyd & Maynard, 2011; Cole et al., 2016; Kowalski, 2015). In a country with low national savings like South Africa (National Planning Commission, 2013; Prinsloo, 2000b; Saville et al., 2015; Saville & Macleod, 2019; World Bank, 2011), PLS products present a real opportunity for bringing in new savings deposits into the national savings pool that can be used to fund productive investments and fuel economic growth (Atalay et al., 2014; Cole et al., 2008, 2016).

Kowalski (2015) assesses the impact of PLS products by looking at their potential effect on the welfare of households, using current consumption; regular savings; lottery spending; and PLS savings as parameters. She concludes that PLS products have a net positive impact on household welfare, even after taking into consideration potential decreases in the use of regular savings (traditional interest bearing accounts) and diversion of some lottery participation resulting in the reduction of lottery revenues.

2.4.3. Regulatory factors

The thrill factor of PLS products in the form of randomly picked prize winners usually places them in the highly regulated territory of lotteries. In most countries, lotteries are protected by monopolistic regulations that prevent any form of competition, including prize-linked savings products (Gabhart, 2019; Tufano et al., 2008; Vitello, 2011; Watford, 2014).

A lottery is defined as having three main components: a prize offer; allocation of the prize(s) by chance; and a consideration paid by a participant (Watford, 2014). A prize-linked savings product combines a guaranteed principal investment that is typical of a traditional savings account, with a prize that is allocated in a lottery-like manner according to defined rules and terms of the account (Kearney et al., 2010). While some researchers and practitioners may argue that PLS accounts do not constitute a lottery (Louw, 2012), most researchers agree that there is sufficient uncertainty to warrant for the introduction of legislation that explicitly permits PLS products in countries that have national lottery regulations and yet wish to encourage household savings using PLS products (Gabhart, 2019; Kowalski, 2015; Watford,

2014). Kearney et al (2010, p. 1) note that the “primary obstacle to the widespread adoption and offering of PLS accounts in the United States is the questionable legality of such products”.

It is the lottery feature that puts PLS products on a collision course with national lottery regulations in most countries (Watford, 2014). National lottery regulations usually prohibit private lotteries and grants a monopoly right to a single entity that is appointed by the state. Watford (2014) asserts that “lottery prohibitions remain a significant barrier to PLS programs in the absence of specific authorizing legislation.” (p. 923) and “No PLS product can succeed if it is illegal.” (p. 928). Therefore a new piece of legislation or an amendment of some existing legislation is likely to be required in countries that have national lotteries, if PLS products are to be introduced without hinderances (Gabhart, 2019; Kowalski, 2015; Watford, 2014).

Given the significant regulatory barriers that PLS products need to overcome, it is important to invest effort and time to educate legislators about the positive impact that prize-linked savings products could have on the financial wellbeing of low-to-moderate income earners. The United States of America’s Advisory Committee on Economic Inclusion at the Federal Deposit Insurance Corporation took time to study the potential benefits of prize-linked savings for low-income individuals (Watford, 2014). The then Harvard Business School Professor, Peter Tufano, chaired the FDIC’s subcommittee on prize-linked savings and led the effort to educate the US government about the potential benefits and impact of the PLS products (Watford, 2014). The investment on education about the potential positive impact of PLS products paid off in the United States when the American Savings Promotion Act was finally enacted in the December 2014 (American Savings Promotion Act, 2014)

The introduction of legislation that explicitly permits PLS products is likely to be an elaborate process, not only because of the normal government’s bureaucracy but also due to resistance that should be expected from various interest groups. Literature identifies state-sponsored lotteries, in particular, as potential fierce opponents to the promulgation of legislation that would enable the introduction of widespread PLS products (Gabhart, 2019; Tufano et al., 2008; Watford, 2014).

2.4.4. A South African Experience with Prize-linked Savings

South Africa has had only two prize-linked savings products that are documented in the academic literature. The first product that was introduced in March 1977 and made available

to household investors as from 01 October 1977 were the Defence Bonus Bonds, issued by the Reserve Bank (South African Reserve Bank, 1977). They were aimed at raising 184 million US dollars towards the national budget presented by the then Finance Minister Owen Horwood (Cherry, 1977). These bonds were issued at Post Offices in units of R5, and participated in a monthly draw for Prize Bonds. The interest earned on the Defence Bonus Bonds and the capital amount of prizes allocated in the form of Prize Bonds were exempted from income tax (South African Reserve Bank, 1977). The second PLS product in South Africa is the Million-a-Month Account (MaMa) that was launched in 2005 by First National Bank (Cole et al., 2008, 2016; Gabhart, 2019; Tufano et al., 2008), which is discussed in detail below.

There is a fundamental difference between the two South African PLS products mentioned above, which is worth noting. The Defence Bonus Bonds were introduced to raise funds for the government fiscus, specifically military funding (South African Reserve Bank, 1977), not to stimulate and improve household savings for investments in the economy or to reduce financial fragility for households, whereas the Million-a-Month Account (MaMA) was launched with a stated intent (albeit a secondary one) of improving the level of household savings among low income earners (Cole et al., 2008; Gabhart, 2019; Kearney et al., 2010). It is for this key difference in the purposes of these two PLS products that this paper only focusses on the analysis of the MaMA experience, and not the Defence Bonus Bonds.

FNB first conceived its PLS account around 2002, and finally launched it in March 2005 (Cole et al., 2008). The PLS account was aptly called the Million-a-Month Account, and was designed as an innovative response to primarily the following two challenges:

- i. a *business imperative* for FNB to increase the bank's deposits, as FNB lagged the then other three large banks in South Africa in deposits and market share. FNB launched MaMa as an effort to increase its deposit base among low-income and unbanked individuals (Cole et al., 2008, 2016).
- ii. a *social responsibility* commitment, by South African banks through the Financial Sector Charter (FSC), to improve financial inclusion by increasing the percentage of low income households with access to bank savings products from 28% in 2003 to 80% by 2008 (Kearney et al., 2010). The industry-wide response was to create a basic low cost transactional account that was called Mzansi account, which was introduced in 2004 (Kostov et al., 2015; National Treasury South Africa, 2020). In addition to

offering the mandatory Mzansi account, FNB innovated the MaMa product and launched it in 2005 as their strategic differentiator.

The empirical study conducted by Cole et al (2016) shows that MaMa participants did increase their overall level of savings, which is in line with the results of the lab experiments by both Atalay et al. (2012) and Filiz-ozbay et al. (2013). These results are encouraging in that they point to a positive likelihood that widespread PLS products, with a large take up by non-savers, could make a meaningful contribution towards raising the national household savings rate and reduce financial fragility for low income households.

2.4.5. Legislative hurdle for PLS products in South Africa

The National Lottery Board, despite not having objected to FNB's MaMa product when they were consulted before its launch, decided to approach the courts to halt the PLS scheme on the basis that it was in violation of the National Lottery Act as an illegal lottery (Cole et al., 2008, 2016; Gabhart, 2019; Kearney et al., 2010). The National Lottery Board was successful in getting the MaMa scheme declared to be illegal (*National Lotteries Board vs. Firstrand Bank Limited*, 2006). FNB took the matter to a higher court, the Supreme Court of Appeal, for review. FNB lost the appeal (*Firstrand Bank Limited vs. National Lotteries Board*, 2008). FNB decided not to pursue the matter any further, but folded the PLS scheme in compliance with the court's ruling.

The merits of the case are not for review in this research study when considering the research questions that this dissertation seeks to answer. However, it is relevant to point out that:

- The National Lottery Board argued that FNB's Million-A-Month-Account was not a promotional competition as contemplated by section 54 of the Lottery Act (*National Lotteries Board vs. Firstrand Bank Limited*, 2006).
- FNB intentionally decided not to design the MaMa product as a promotional competition because they sought to allow FNB employees to participate in the MaMa savings scheme (Cole et al., 2008).

The decision by FNB's Investment Product House against using a promotional competition to launch their MaMa scheme, despite the legal ambiguities of PLS products in South Africa, proved to be fatal to their PLS venture. The court judgment points to this fact by stating "The only commercial lotteries that are permitted are 'promotional competitions' – lotteries that are

conducted ‘for the purpose of promoting the sale or use of any goods or services’” (*Firststrand Bank Limited vs. National Lotteries Board*, 2008, p. 5).

2.5. Market Concentration, Competition, and Innovation

In 2005, when FNB launched their MaMa scheme, the level of market concentration for the banking sector in South African was high (Okeahalam, 2001; Simatele, 2015). A study by Simatele (2015), where he uses the Panzar-Rosse approach to bank level data to assess the competitive environment in the South African banking industry between 1997 to 2014, finds that the market structure for the South African banking industry is monopolistically competitive. The market concentration ratio (C_4^1 ratio) of the South African banking sector is over 80% (Simatele, 2015), which suggests low levels of competition (Bikker & Haaf, 2002; Khan et al., 2017).

Another study of the South African banking sector found that the top four banks have approximately 89% of retail deposits (Okeahalam, 2001). Okeahalam (2001) concludes that the high concentration in South African banking sector leads to comfortable returns and reduces the incentive for banks to seek markets that are considered difficult, such as the low income market .

Bikker and Haaf (2002) conducted an empirical study of the relationship between market concentration and competitiveness in the banking sector of 23 countries, which confirmed the conventional view that high industry concentration impairs competitiveness. In turn, competition impacts on efficiency, quality and innovation by industry participants (Simatele, 2015). This result is also supported by a different study conducted by Khan et al. , which focuses on empirically testing the impact of bank concentration on competition in the Association of South East Asian Nations.

The relationship between innovation and market concentration is not clear cut, with several studies arriving at different conclusions. A general definition of innovation identifies innovation as the “creation of a new product or service or an improvement of an existing product or service” (Taylor, 2017, p. 1). Eminent early academic work around innovation was

¹ C_N ratio is an industry concentration ratio, which measures the percentage of market share taken up by the largest N firms in each industry. In this case, C_4 measures the market share of the four largest banks in South Africa.

arguably produced by Schumpeter, dating back to 1950. Schumpeter's views on the definition of innovation is summarised into the following five categories, according to Śledzik (2013, p. 90):

1. introduction into the market of a new product or a new form of an existing product;
2. adoption of new and unproven methods of production or sales or marketing of a product;
3. carving out of a new and unexpected market for an existing product;
4. establishing new sources of supply of raw material or semi-finished goods as inputs, thus redefining the supply chain;
5. redefining or creating a new industry structure.

Several studies of the relationship between market concentration, or competition, and innovation have been published since the influential works by Schumpeter. The impact of market concentration on innovation has been shown by a number of empirical studies to be non-positive. There are several studies that found the relationship between market concentration and innovation to be non-significant, while others confirmed it as negative (Vossen, 1999). Aghion et al (2005) investigated the relationship between product market competition and innovation using panel data of publicly traded manufacturing firms in the United Kingdom, and their results predict an inverted-U pattern. They explain that both industry leaders in technological advancement and the followers can innovate, with innovations by leaders and followers happening in a step-by-step fashion, and the incentives to innovate depending upon the difference between post-innovation and pre-innovation rents of incumbent firm (Aghion et al., 2005). In the Aghion model, competition may increase innovation activity for expected market rents. This increasing part of the inverted-U is referred to as the "escape competition effect". The same model also predicts that intense competition may reduce incentives to innovate for laggards, resulting in overall reduction in innovation activity – which is referred to as the "Schumpeterian effect". The "escape competition effect" and the "Schumpeterian effect", taken together, produce an inverted-U pattern of innovation activity in a particular industry. The inverted-U pattern showing the relationship innovation and competition (Aghion et al., 2005; Bos et al., 2013; Flath, 2011; Hashmi, 2013) is presented as Figure 2 below, Adapted from Aghion et al. (2005).

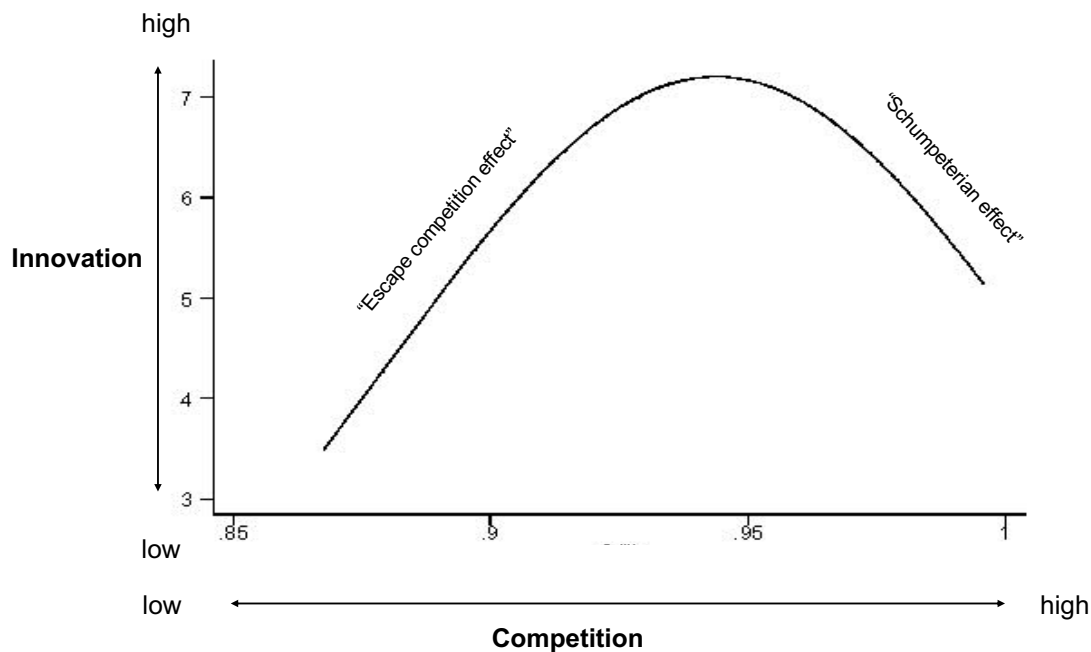


Figure 2: Inverted U model

Flath (2011) conducted a study on market concentration; price margins; and innovation using 74 Japanese manufacturing industries between 1961-1990, and finds that the relationship between concentration and innovation is U-shaped, from concentration to innovation.

Hashmi (2013, p. 1666) presents empirical evidence that the relationship between competition and innovation in “the U.S. data is mildly negative and not an inverted-U as in the U.K. data” used by Aghion (2005). He explains the conflicting results using a partial equilibrium industry model, with an assumption that the U.K. manufacturing industries are more level in their technological competitiveness than their U.S. counterparts. The study to re-examine the inverted-U relationship model, supports the original Schumpeterian hypothesis that the less competitive industries are more innovative, while also acknowledging the validity of the inverted-U model under certain conditions (Hashmi, 2013).

Bos et al (2013) undertook to review the role that innovations play in helping banks In the U.S. to minimize costs, with an outcome that suggests that the relationship between competition and innovation in the US banking industry takes the form of an inverted-U. Their analysis further

indicated that deregulation of banking between various states (within the U.S.) affected competition negatively, on average, and reduced innovation (Bos et al., 2013).

Schumpeter credits innovation to monopolistic market structure, where large firms have the most incentive to innovate for better rents. In his earlier work, he had argued for entrepreneurial and small scale firms as the driving force of innovation. Competitively levelled industries, where companies have more or less the capabilities in technology and expertise, demonstrate more innovation activity for product market competition than industries where there are clear leaders and follower (Aghion et al., 2005).

A study of mobile applications adoption by 694 U.S. commercial banks provides evidence that the adoptions of mobile banking applications by local banks encourages competitors to embark on or adopt similar innovations, supporting the neo-Schumpeterian hypothesis and the importance of market structure or level of market concentration (He, 2015). Innovation proximation is strongest in markets with high market concentration, which are characterised by limited or no price competition (He, 2015).

Aghion et al. (2005, pp. 710–711) point out that economic theory often supports the Schumpeterian argument of a negative effect of competition on innovation in a high market concentration setting, while Hashmi (2013, p. 1653) argues that empirical work typically finds a positive effect.

2.6. Business Model Innovation

Academic research interest in business model innovation (BMI) seen in the fields of science and business management has increased tremendously in the last two decades, particularly in the context of effective and impactful innovation (Wirtz & Daiser, 2018). BMI involves making changes to an existing business model or designing and implementing a new business model altogether (Wirtz & Daiser, 2018). BMI enables organisations to respond quickly to changes in market conditions (business agility); maintain a sustainable competitive advantage (Wirtz & Daiser, 2017, 2018); and deliver most impact across multiple dimensions including environmental, social and governance – often referred to as ESG or sustainability (Geissdoerfer et al., 2017).

It is prudent to first establish a common understanding of what a *business model* is, before delving into business model innovation. There are various definitions found in scholarly literature, including the following:

“a business model describes the rationale of how an organization creates, delivers, and captures value.” (Osterwalder & Pigneur, 2010)

“the business model can be defined as a unit of analysis to describe how the business of a firm works.” (Frankenberger et al., 2013)

A business model outlines the logic and inputs employed to create and deliver value to customers, alongside revenues; costs; and profits associated with the delivery of valued products and services (Teece, 2010). Osterwalder & Pigneur (2010) developed a novel way of describing a business model by distilling it into nine building interconnected components that together define how a business or organisation creates, delivers, and captures value. These nine building blocks together form what is known as a business model canvas (Osterwalder & Pigneur, 2010), as illustrated by Figure 3 below.

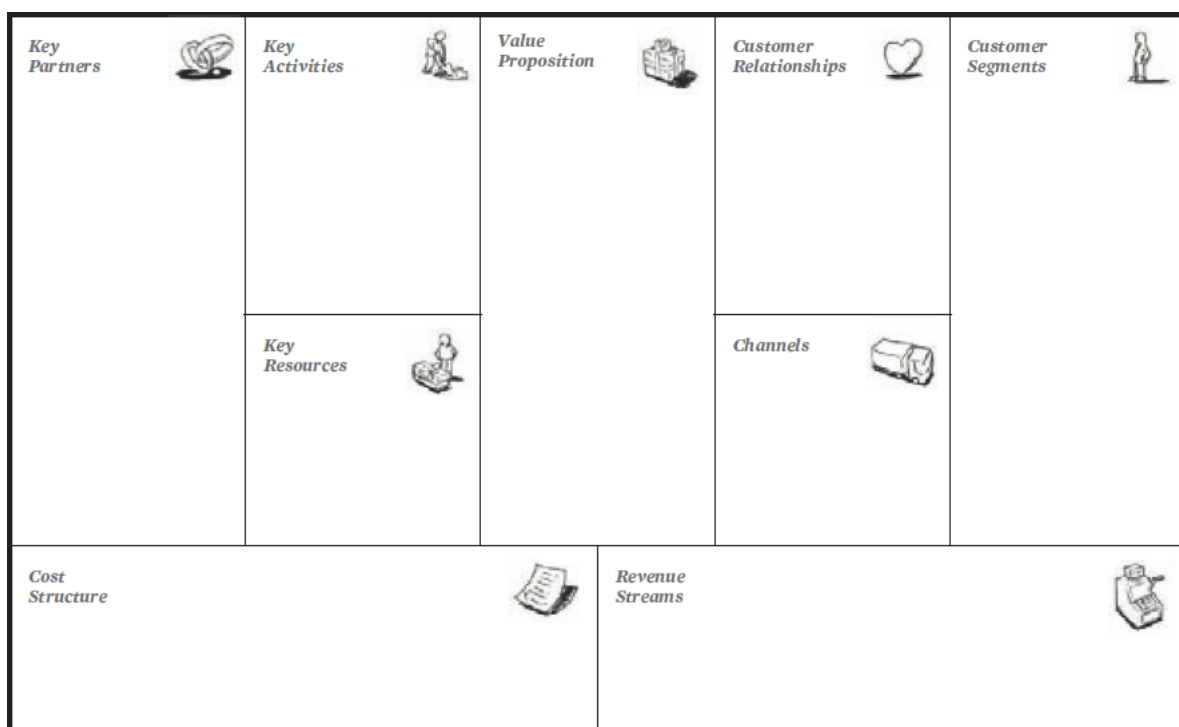


Figure 3: Business Model Canvas. Source: (Osterwalder & Pigneur, 2010)

The building blocks of the business model canvas (Osterwalder & Pigneur, 2010) are defined briefly below:

- *Customer segments.* To clearly define one or more customer groups that the organisation serves or provides value to. A customer group must have common characteristics such as value offer; distribution channels they are reached through; and relationship types they require. Customers are central to all business models (Blank, 2013; Osterwalder & Pigneur, 2011; Teece, 2010).
- *Value proposition.* To describe a bundle of products or services required by the identified customers, and for which customers are willing to pay.
- *Channels.* To identify how to communicate and reach customers for the delivery of the value proposition (products or services).
- *Customer relationships.* To clarify the types of relationships that a customer segment expects and are necessary. There could be multiple relationships for a customer segment, depending on the motivation (e.g. customer acquisition versus retention).
- *Revenue streams.* To identify different payments that customer segments are to make for products and services offered.
- *Key resources.* To determine critical assets (physical, financial, intellectual, or human) that are required in order to make the business model viable. This includes creating products and services, delivering the value proposition to customers, developing and maintaining required relationships, integrating or interacting with key partners, and operating the business in general.
- *Key activities.* To specify what the company must do to turn resources into products and services for delivery to its customers.
- *Key partnerships.* To identify the network of suppliers and partners required for the business model to work.
- *Cost structure.* To describe all necessary costs incurred to operate a business model, which may be fixed or variable.

It is possible to fuse the non-profit purpose of a business (e.g. social or environmental impact) with the profit core of the business model, as Osterwalder and Pigneur (2011, p. 4) point out that “the secret is to weave purposeful impact into the DNA of a business model – but without sacrificing profits”. They warn that the process of integration non-profit and for-profit agendas into a business model is not easy, but business model innovation has a potential to bring about

systems-level change necessary to solve wicked problems such as sustainability, inequality and poverty (Osterwalder & Pigneur, 2011). This implies that the concept of *inclusive innovation* is equally relevant to commercial enterprises as it is to social enterprises and social entrepreneurs.

Amit & Zott (2012) define the business model as a system of interconnected and interdependent activities that determines the way the company “does business” with its customers, partners and vendors, as a clearly defined and managed activity system. They identify content; structure; and governance as design elements that can be changed or introduced to by achieve business model innovation (Amit & Zott, 2012), explained as follows:

- *Content* - by adding novel activities into the value creation activity system. For example, a few decades ago IBM shifted its focus from being a supplier of hardware to becoming a service provider. They launched a range of new activities in consulting, IT maintenance and other services, effectively changing the content of their value proposition to customers.
- *Structure* - by linking activities in new, unique, and better ways.
- *Governance* - by changing one or more parties that perform any of the activities to achieve a better outcome.

A change in one or more of the nine building blocks of a business model constitutes some form of business model innovation. Business model innovation is about developing a new approach for creating value, for companies, customers, and society, which encourages systemic and holistic thinking, instead of isolated individual choices, and maximises impact for stakeholders (Amit & Zott, 2012; Osterwalder & Pigneur, 2010).

The general observation about business model innovation as a process is that it involves iterative designing and prototyping; it obsesses with customer feedback to refine or pivot initial designs; and it takes a system-level view in terms of scope (Blank, 2005, 2013; Osterwalder & Pigneur, 2011).

2.6.1. BMI Processes, Tools and Frameworks

Entrepreneurs and managers require relevant frameworks and tools to aide them in their BMI designs and implementations (Wirtz & Daiser, 2017, 2018). It is therefore necessary to explore

the various frameworks and tools that may be useful for the PLS business model innovation efforts for the re-introduction of PLS products in South Africa.

Frankenberger et al (2013) set out to derive a framework that can support managers in innovating their companies' business model. They conducted a qualitative case analysis study of 14 cases of past business model innovations that were collected as part of a two-year research project.

The resulting framework which they referred to as the '4I-framework', comprises of four phases of the innovation process, namely Initiation; Ideation; Integration; and Implementation. The four phases are executed sequentially during the business model innovation process, but they are importantly iterative within the design mega phase (consisting of Initiation; Ideation; Integration) and between design and Implementation. Figure 4 below presents the 4I-framework (Frankenberger et al., 2013).

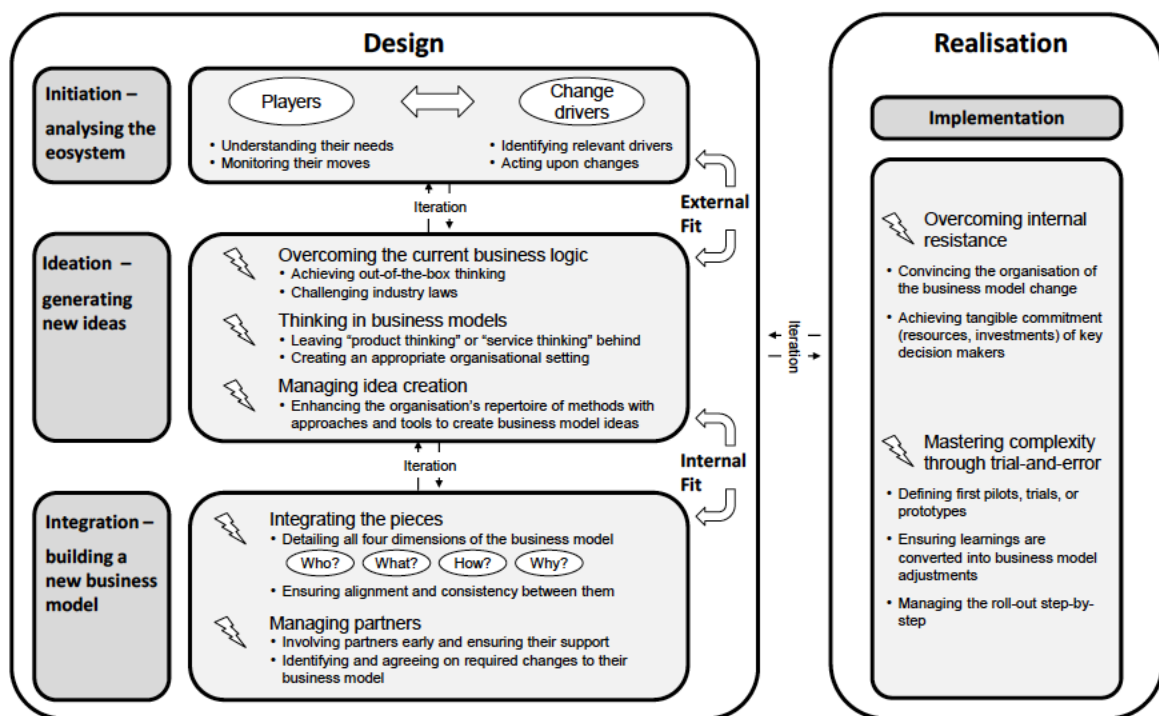


Figure 4: The 4I-framework for Business Model Innovation. Source (Frankenberger et al., 2013)

Wirtz and Daiser (2018) conducted a comprehensive and systematic review of BMI processes defined in the extant academic literature, which incorporated work done by Frankenberger et al. (2013), and aggregated the insights gained into a generic BMI process that is a valuable starting point for BMI practice and further research. Their generic BMI processes comprise of

seven phases, namely Analysis; Ideation; Feasibility; Prototyping; Decision-making; Implementation; and Sustainability. Figure 5 below, adapted from (Wirtz & Daiser, 2018), presents the generic BMI process details with suggested specific considerations for PLS business model innovation in South Africa.

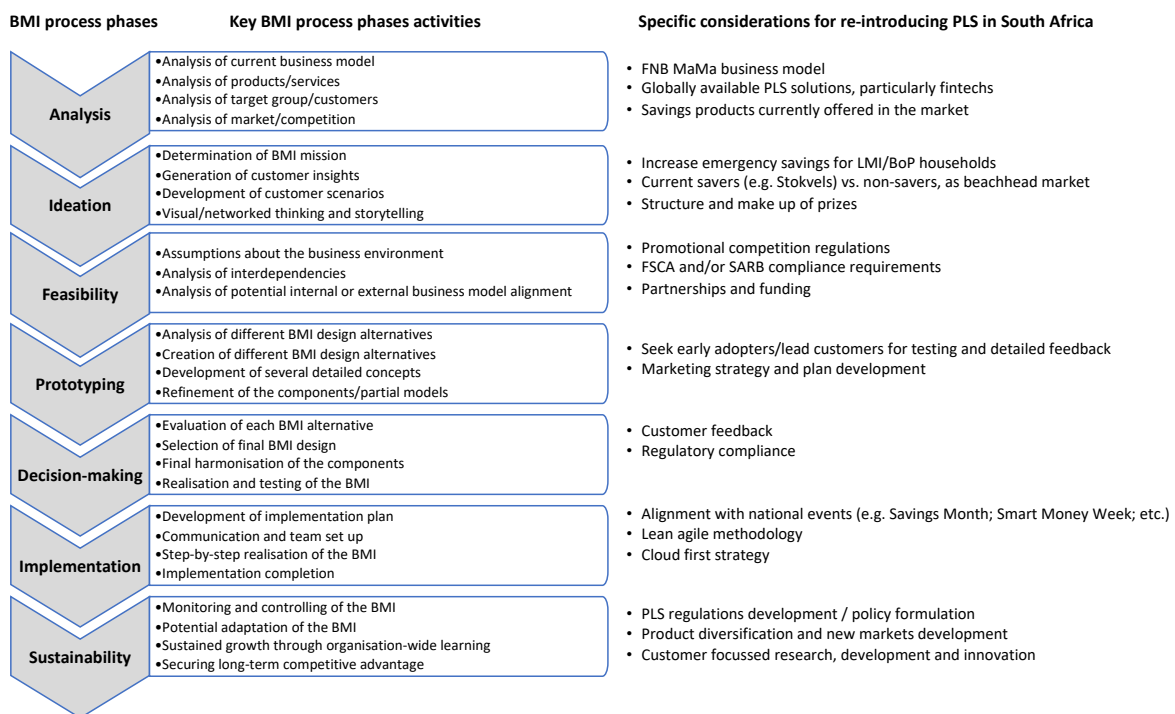


Figure 5: Generic BMI Process with key activities - adapted from (Wirtz & Daiser, 2018)

Sustainability, triple bottom line and ESG are similar concepts that are dominating the business and investment management discourse worldwide. Organisations thrive to address not only financial performance factors that are critical to investors and shareholders, but also the environmental, social and governance concerns that define the context within which organisation have to survive and grow in the long term (Billio et al., 2021; Joyce & Paquin, 2016; Park & Jang, 2021; Young & Reeves, 2020). Business model innovation needs to integrate sustainability or ESG dimensions, in addition to the prevalent economic dimension, to maximise its impact and ensure longevity for the organisation (Joyce & Paquin, 2016).

A Triple Layer Business Model Canvas (TLBMC) provides “a practical tool for coherently integrating economic, environmental, and social concerns into a holistic view of an organization's business model” (Joyce & Paquin, 2016, p. 1474). The TLBMC is an extension of the seminal work by Osterwalder & Pigneur (Osterwalder & Pigneur, 2010, 2011), which

adds environmental and social business model canvases to produce what I refer to as a business model canvas trifecta.

While the business model canvas encourages horizontal coherence and systems thinking alignment across the business organisation, TLBMC adds vertical coherence to ensure alignment between value creation for financial/economic, environmental and social purposes, as illustrated in Figure 6 below (Source: (Joyce & Paquin, 2016)).

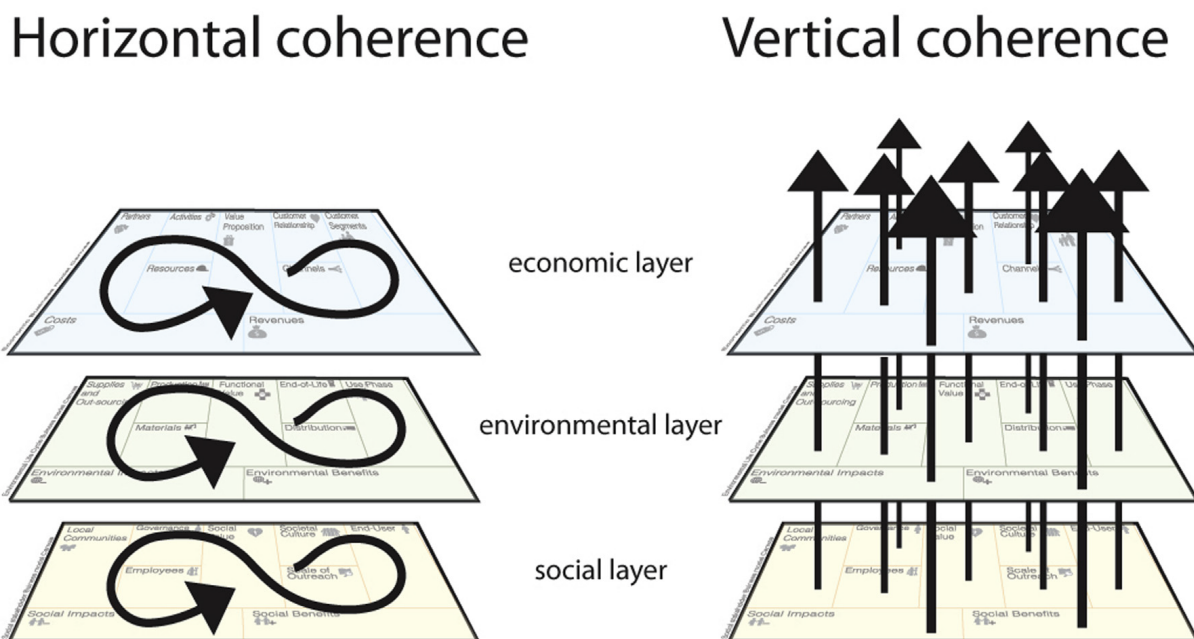


Figure 6: Horizontal and vertical coherence created by the TLBMC. Source (Joyce & Paquin, 2016)

Realising sustainability goals requires more than just technology, but innovation at business model level (Geissdoerfer et al., 2017). Geissdoerfer et al. (2017) developed a sustainability oriented business model innovation framework, called the Cambridge Business Model Innovation Process, to guide implementation process and address the often existing implementation gap between intention and realization. The framework consists of consists of eight sequential but iterative phases, namely Ideation; Concept Design; Prototyping; Experimenting; Detailed Design; Piloting; Launch; and Adjustment & Diversification. The various phases may incorporate several business model and business model innovation tools including the business model canvas (Osterwalder & Pigneur, 2010) for the Concept Design phase. Emphasis on the understanding that iterations and feedback loops between the various phases must be noted, within each business model layer (i.e. economic; environmental; and

social) and across the vertical layers. The Cambridge Business Model Innovation Process framework (Geissdoerfer et al., 2017) is presented as Figure 7 below.

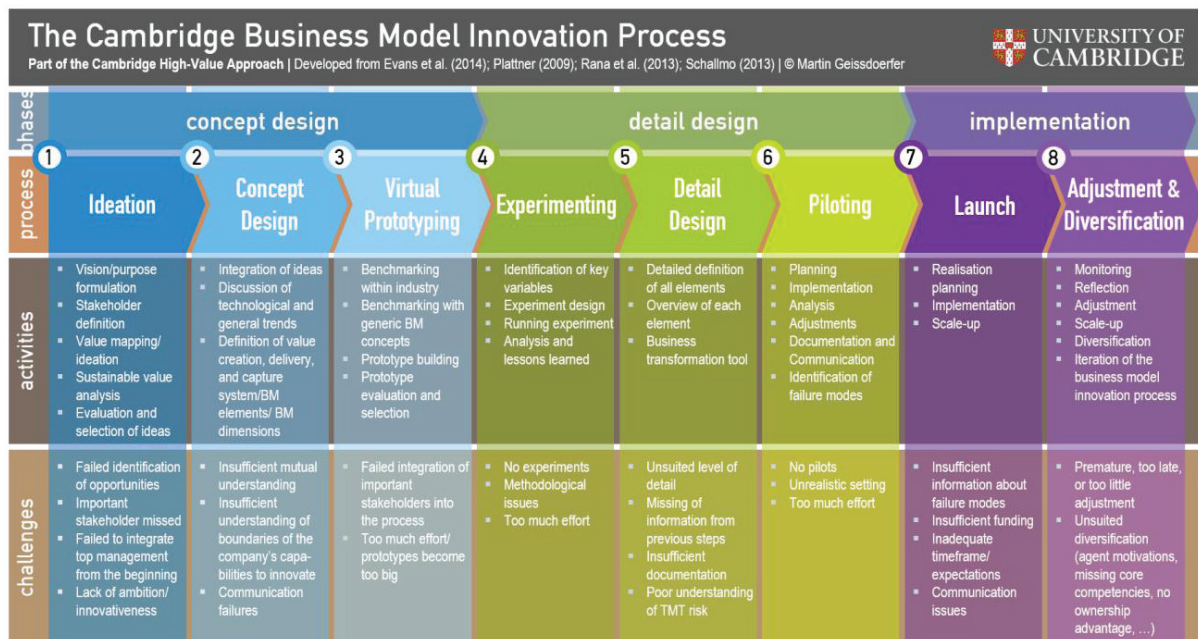


Figure 7: The Cambridge Business Model Innovation Process. Source: (Geissdoerfer et al., 2017)

2.7. Inclusive Innovation

Inclusive innovation is about production and delivery of new solutions (goods and services) that are designed for and incorporate the needs and interests of the often marginalised people, with the primary focus being on the structures and processes required to develop and deliver such innovative solutions (Foster & Heeks, 2013; Heeks et al., 2013, 2014). Inclusive innovation seeks to stimulate growth for those on lowest income levels within a particular society (which may be global). It is also about the inclusion of the marginalised section of society in some aspect of the innovation processes or structures (Foster & Heeks, 2013).

If at the core of inclusive innovation is some involvement of currently excluded groups, then it needs to be understood how, where, and when the target people are to be included in the innovation value chain. To help us locate the participation of the disenfranchised in innovation, Heeks et al (2013) define a “ladder of inclusive innovation”, which has six levels where participation could be located:

- *Level 1 – Intention.* The stated purpose of the innovation is to address a need or problem faced by the excluded group.

- *Level 2 – Consumption.* Innovative goods and services that are accessible to the excluded group, and indeed satisfies their requirements.
- *Level 3 (Impact).* An innovation that has a positive impact on the livelihoods of the excluded group. The impact can be differentiated on a basis of absolute vs. relative notion of inclusive impact of innovation.
- *Level 4 – Process.* The excluded group or some members of the excluded are involved in the development of the innovation. The involvement could be at the level sub-processes such as invention; design; development; production; and distribution.
- *Level 5 – Structure.* An innovation that is created within a structure that is itself inclusive. The underlying institutions, organisations, and relations that make up an innovation system must be inclusive.
- *Level 6 – Post structure.* An innovation that is created within a frame of knowledge and discourse that is itself inclusive.

It is therefore important to be clear about which marginalised, excluded, or underserved group a particular innovation seeks to focus on. Who the marginalised groups are may vary across different countries; societies and context. However, the dominant focus of inclusive innovation is on low income earners and those living below the poverty line – or the ‘bottom of the pyramid’ (Heeks et al., 2013). For example, prize linked savings accounts are often targeted at low-to-moderate income groups who are often financially fragile and excluded in participating meaningfully in financial systems and the economy (Dizon & Lybbert, 2017; Guillén & Tschoegl, 2002). They seek to help alleviate the problem of financial fragility for low-to-moderate income groups (Kowalski, 2015; Tufano et al., 2011).

Financially excluded or underserved individuals, with minimal or no savings and investments, largely fall in the population category referred to as the bottom-of-the-pyramid (Prahalad & Hart, 2002). Inclusive innovation for the purpose of re-introducing PLS products in South Africa would therefore need to consider a business model innovation that can serve the BoP market successfully.

2.8. Conclusion

The country’s economic growth is funded through productive investments that require a healthy level of national savings. In a country that is characterised by persistently low levels

of households savings and a large population of low-to-moderate income earners, such as South Africa, prize-linked savings products could have a positive impact towards improving national savings and ultimately economic growth.

There is a positive correlation between financial literacy and household savings levels. The more financially literate the households are, the more they are likely to save. While there is work done towards improving financial literacy and financial inclusion in South Africa, the literature review shows that there is inadequate coordination and focus to ensure better implementation of the national financial education strategy. More work needs to be done to improve financial education outcomes and raise the level of financial literacy for households in South Africa.

As PLS products are currently prohibited by the Lotteries Act in South Africa, the path towards the re-introduction of prize-linked savings schemes is possible by innovatively leveraging promotional competitions that are permitted under the Consumer Protection Act. PLS products can be an effective mechanism to raise the level of awareness and create excitement about financial savings among low-to-moderate income earners in South Africa. Any future innovation towards the re-introduction of PLS products in South Africa would have to carefully assess and consider the current financial services market structure (i.e., concentration and competition) and make informed decisions about a new business model.

A change in any of the nine building blocks of a business model canvas for a prize-linked savings product would constitute a valid business model innovation. The Cambridge Business Model Innovation Process framework provides a comprehensive guide for potential PLS innovators on how to systematically embark on the business model innovation process required to re-introduce PLS products in South Africa.

The primary customer segment for PLS products is the low-to-moderate income population group. To achieve inclusive innovation, the business model innovation process must be deliberate about involving or co-creating with the LMI customer segment to maximise positive impact on the LMI savers and achieve desired financial inclusion.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction and Overview

This research study used inductive qualitative research, based on case study and content analysis research methods. It sought to develop a theory-based business model innovation framework that could be used for the re-introduction of prize-linked savings products in South Africa, informed primarily by data that is collected through semi structured interviews with selected financial services industry participants.

3.1.1. Case Study Method

The study was guided by the roadmap proposed by Eisenhardt (1989) for building theory from case study research, which synthesizes and incorporates previous work on qualitative methods (e.g., Miles & Huberman, 1984) and the design of case study research (e.g., Yin, 1981, 1984).

Case study is a research strategy that focuses on understanding the dynamics present within single settings. It can use a rich variety of data sources, including interviews, archival data, survey data, observations, and more (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). It is appropriate for exploratory, descriptive, or explanatory research. It is often a preferred research strategy for studies that seek to answer "how" and "why" type questions, which are more explanatory (Rowley, 2002; Yin, 2006).

Yin (1981, p. 97) lists the following as typical case study topics - “organizational decision-making, community studies, innovative projects, family and individual life histories, economic development, and housing structures and markets”. The FNB Million-a-Month-account case was arguably a unique and innovative project on prize-linked savings products in South Africa.

3.1.2. Qualitative Content Analysis Method

According to Erlingsson & Brysiewicz (2017), the research questions that explore human experience can be practically and conveniently studied by analysing textual data collected in individual interviews, focus groups, documents, or documented participant observation.

Qualitative content analysis is defined as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” Hsieh & Shannon (2005, p. 1278). Its primary objective is to

systematically transform copious volumes of textual data, such as transcribed participants' interviews, into a concise and meaningful summary of key results of the research through an abstraction process of coding and categorisation (Erlingsson & Brysiewicz, 2017).

Qualitative content analysis is one of commonly used research methods in qualitative research studies, other than grounded theory and ethnography, for analysing data and interpreting its meaning (Elo et al., 2014; Hsieh & Shannon, 2005). Qualitative content analysis can be used in both inductive and deductive approaches (Elo et al., 2014). In this research study, it was used inductively. Hsieh & Shannon (2005) identify three distinct approaches to qualitative content analysis, namely conventional; directed; or summative, all used to interpret meaning from the content of text data and, hence, adhere to the naturalistic paradigm.

Conventional content analysis is generally used with a study design whose aim is to describe a phenomenon, in this case (il)legalisation of PLS products in South Africa. This type of design is usually appropriate when existing theory or research literature on a phenomenon is limited. Researchers avoid using preconceived categories, instead allowing the categories and names for categories to flow from the data (Hsieh & Shannon, 2005).

This approach requires that direct information from study participants is obtained without imposing preconceived categories or theoretical perspectives. The initial codes and categories are derived directly from research data during data analysis, enabling the research to gain a richer understanding of a phenomenon under study (Hsieh & Shannon, 2005).

3.2. Research Process

The research methodology used for this paper is a combination of case study strategy and qualitative content analysis. It is shaped by the "Process of Building Theory from Case Study Research" as defined by Eisenhardt (1989). The researcher relied on the hands-on guide for doing qualitative content analysis developed by Erlingsson and Brysiewicz (2017) to analyse the research data collected through semi-structured interviews.

Figure 8 below presents the representation of the research process adopted for this research.

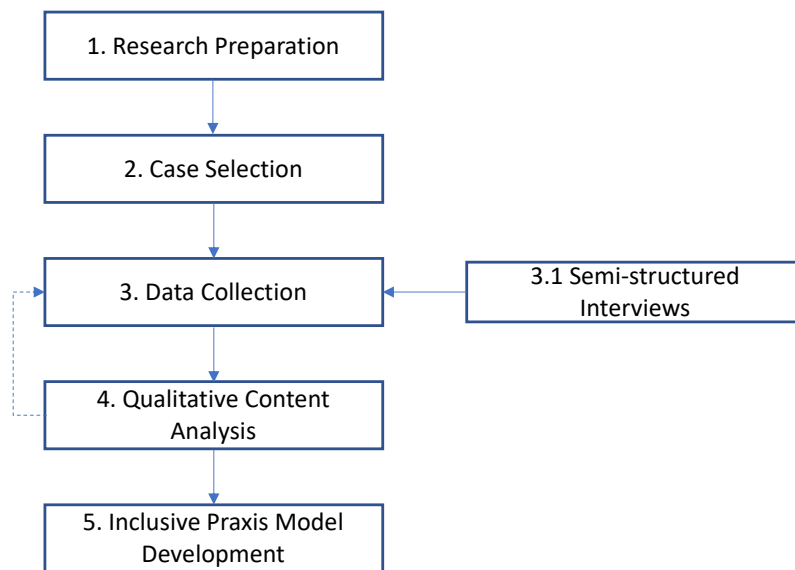


Figure 8: Case Study Content Analysis Research Process

3.2.1. Preparation

Preparation involved conducting a desktop analysis of the available literature and publications that are relevant to prize-linked savings account products in South Africa and elsewhere. The critical aim of research preparation is to help define research questions properly and thus achieve research focus, without which it is easy to become overwhelmed by the volume of data available (Eisenhardt, 1989).

The researcher prepared to embark on the field research by seeking to first gain some broad understanding of prize-linked savings products and the FNB’s MaMa product in depth through desktop research. To this end, the researcher collected and perused the following information:

- Available economic data on the South African economy and related research, particularly the performance on national household savings. Sources of this information include reports and publications by the Reserve Bank research unit and the Investec GIBS Saving Index project (Prinsloo, 2000a, 2000b; Saville et al., 2015; Saville & Macleod, 2019).
- The Harvard Business School case study about FNB’s Million-a-Month-Account product development and implementation (Cole et al., 2008).
- FNB’s Million-a-Month-Account monthly TV show (video) to promote and announce winners (First National Bank, 2005).

- Research publications on prize-linked savings accounts produced by a non-profit organisation called Commonwealth (formally Doorways to Dreams Fund) in the United States of America (Abbi et al., 2012; Tufano et al., 2008).

3.2.2. Case Selection

Selection of cases is a fundamental aspect of building theory using a case study methodology (Eisenhardt, 1989). The scope for this research paper was limited to and specific to the experience of prize-linked savings products in South Africa, and the FNB's Million-A-Month-Account scheme that ran between 2005-2008 in particular.

This research was concerned about gaining an in-depth understanding of why the Million-A-Month-Account scheme was successfully shut down by the National Lottery Board through the judicial courts in South Africa, and how business model innovation might be used to re-introduce prize-linked savings account products in South Africa. On the basis of the research problem statement, FNB's Million-A-Month-Account scheme was selected as the case to be examined in detail for this dissertation. A single case study was appropriate for this study based on the uniqueness of this PLS experience in South Africa (Yin, 2006).

3.2.3. Data Collection

Data collection methods typically used in case studies may include a combination of archives; interviews; questionnaires; and observations, and the nature of evidence may be qualitative or quantitative or both (Eisenhardt, 1989). The choice of data collection tools and protocols is guided by various factors including the types of data to be collected, data sources, who the case participants are, and more.

The data collection method adopted for this case study research is the semi-structured interviews with knowledgeable informants on the research subject (i.e. FNB Million-A-Month-Account and PLS products in general). Eisenhardt & Graebner (2007, p. 28) point out that "interviews are a highly efficient way to gather rich, empirical data, especially when the phenomenon of interest is highly episodic and infrequent". The FNB Million-A-Month-Account experience in South Africa qualifies as phenomenon that is highly episodic and infrequent.

3.2.3.1. Semi-structured Interviews

Semi-structured interviews are conversational in nature, where the interviewer pursues predetermined themes and is free to probe for additional meaning. They fall between structured and unstructured interview formats, with a bias towards unstructured.

Whiting (2008, p. 36) identified the elements below as key features of semi-structured interviews, which are true for the semi-structured interviews conducted for this research:

- “Scheduled in advance at a designated time”.
- “Located normally outside of everyday events”.
- “Organised around a set of predetermined questions”.
- “Other questions emerge from dialogue”.
- “Usually last from 30 minutes to several hours”.

Eisenhardt & Graebner (2007) suggest using multiple and knowledgeable informants who are likely to view research subject from different perspectives, and this mitigates the risk of informant bias that is inherent in data collection using interviews.

The approach adopted for by the researcher for this study is discussed below.

Identifying Interview Participants

Selecting interviewees is a critical step to ensure that the selected group of participants has some shared or related understanding and experience of the research question, and can provide credible information to the study (DiCicco-Bloom & Crabtree, 2006; Turner, 2010). Purposeful sampling was used to maximise the depth and richness of the data by identifying research participants that have intimate knowledge in at least one of the following subject areas: prize linked savings accounts in general; FNB Million-a-Month Account; savings and investments; and national lotteries. It is important to select interview participants who are ‘willing informants’ and knowledgeable about the topic (Whiting, 2008).

The Harvard Business School case study on FNB’s Million-A-Month-Account, which was read in the preparation stage, identifies the FNB team members that conceived, planned, and launched the PLS product. The founding team of the FNB Million-A-Month-Account are the

obvious key informants about the FNB’s MaMa experience, and were therefore selected for in-depth interviews.

Variation sampling was used to ensure that research data were gathered from as multiple and diverse sources as possible. The list of interviews includes professionals in the broader financial services industry; the National Lottery Commission; South African government entities that together form the national the economic cluster. Table 2 below provides the list of participant types and quantities selected for in-depth interviews for this research study.

Table 2: List of participants in semi-structured interviews

Participant Type	Experience / Knowledge Solicited	Number of Participants
First National Bank Executives	A detailed account of the FNB Million-A-Month-Account product, from conceptualisation through to launch and eventual demise.	3
National Lottery Commission Executive	Opinion about prize linked savings products, particularly the FNB Million-A-Month-Account, and the perceived impact on the national lottery.	1
Financial Services Company Executive and Economics Professor	In-depth information about the savings and investments and their role in economic growth; potential for increasing levels of household savings using prize linked savings accounts; and the changes required to make PLS products in South Africa a reality today in the context of FNB MaMa experience.	1
Government Economic Cluster Entity Directors	In-depth opinions about prize linked savings products in general and the FNB MaMa in particular; their potential for increasing levels of household savings; and the changes required to re-introduce PLS products in South Africa.	3
Business Model Innovators in Financial Services (CEO’s)	Approach to business model innovation, particularly in the context of financial services industry regulatory landscape; technology innovations; and customer expectations.	2
Total Number of Participants		10

Interview Preparation

Preparation for the interviews involved scheduling the interview date and time; confirming the venue; and ensuring that the interview participants know what the purpose of the interview is.

The researcher relied primarily on extensive review of the existing literature on prize-linked savings accounts in general, and the FNB Million-a-month product in particular, to attain a level of understanding of the subject area that is sufficient to formulate relevant and rich interview questions.

The research participant consent form was made available in advance for signing by all interviewees.

Conducting the Interview

All interviews were conducted face-to-face at the offices of the participants or their selected venue. While it was possible to conduct telephonic interviews, the researcher preferred to travel to the interviewee for a physically present encounter. The researcher started all interviews by asking the interviewee to talk about their experience; role in and understanding of the FNB MaMa innovation project and/or prize linked savings products in general.

Interview Recording

The researcher used a smartphone (iPhone) to record all of the interviews. Recording of the interview plays an important role in making the data collection process effective, as the recorded interview can be later transcribed verbatim to form raw primary data for the research. Recording also allows the researcher to pay full attention to the interviewee, improving conversational interaction and the queueing of follow up questions. The researcher took care to explicitly obtain permission from the interviewee to record the conversation, and clarified the purpose of the recording.

Interview Transcription

A free web application called oTranscribe² was used to transcribe all recorded interviews. The interviews were transcribed verbatim, as recommended (Whiting, 2008). However, the casual chats and obvious digressions that sometimes occurred during the interviews were excluded.

² See <https://otranscribe.com>

Only conversations that were related to the purpose of the interview were transcribed for content analysis.

3.2.4. Qualitative Content Analysis

Conventional content analysis approach was used to understand and describe the situation about prize-linked savings products in South Africa, and the conventional content analysis method is appropriate when existing theory or research literature on a phenomenon is limited (Hsieh & Shannon, 2005), as it is the case for the research problem for this study.

The steps below describe the qualitative content analysis process that was followed by the researcher. These steps are aligned to the process “from codes-to-theory model” described by Saldaña (2009), that is depicted in Figure 9 below. The analysis was guided by the research questions in terms of what to look for and what to construct (Elo et al., 2014).

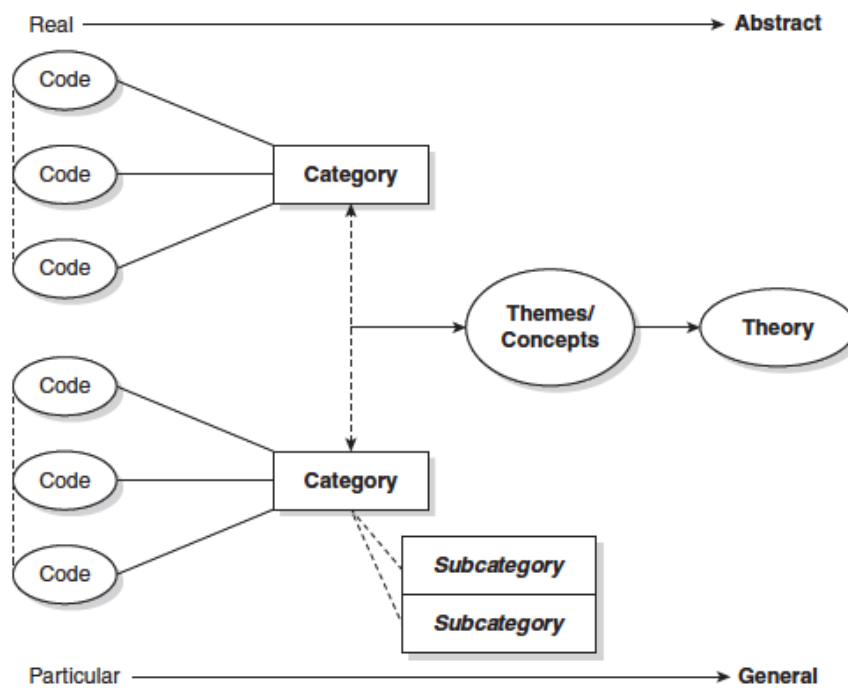


Figure 9: A streamlined codes-to-theory model for qualitative inquiry

Step 1: Data familiarisation – read each interview transcript from start to finish.

All participant interviews were transcribed and loaded onto Atlas.ti tool for analysis. The researcher read through each transcript in full. The reading of the entire transcript served multiple important purposes to help the research process:

- it familiarised the researcher with the data to be analysed;
- it helped the researcher to re-live the actual interview and reflect on it for nuanced insights; and
- it gave the researcher an opportunity to make initial notes about concepts and ideas that the participants expressed.

Step 2: Data coding - label relevant words; phrases; sentences; paragraphs or sections.

Each interview transcript was analysed, picking out and coding pieces of data to generate a list of initial concepts, which are referred to as ‘codes’. Some codes were common between different interview transcripts - indicating common ideas, opinions and experiences among research participants.

Saldana (2009, p. 3) defines data codes as follows: “a code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data.”

The aim of data coding is to identify pieces of data within the interview transcripts that thought of as relevant, interesting in some way, and illuminate latent insights into the research problem. Codes make it easier for the researcher to identify connections or relations between meaning units within the body of research data (Erlingsson & Brysiewicz, 2017).

Step 3: Data categorisation - identify codes that are important and group those that seem to belong together, and assigning an expressive label to each group or category.

The process of sorting codes into categories (i.e. expressive label) must be undertaken carefully and critically by going through each code, comparing and appraising it against others to determine if they belong together. Codes that belong together usually deal with the same issue or express the same behaviour or phenomenon, and so on. A group of codes that belong

together is given a unique category name, which may be a single word or a short phrase. Categories are higher level concepts than codes, existing at a higher level of abstraction. Codes may, for instance, be examples or instances of what the category embodies.

Step 4: Identify emerging theme(s) - identify relations or connections between categories and determine the underlying meaning.

The researcher examined data categories carefully and compared each category with the next to identify any relationship or connection between them. This process is guided by the research questions in terms of what to analyse and what conclusions are relevant (Elo et al., 2014) and the researcher's intuition or insight (Erlingsson & Brysiewicz, 2017).

Step 5: Formulate theory - determine answers to research questions.

This is the final step in the qualitative content analysis process where the researcher synthesised the data categories, themes, and storylines from the participants' interview transcripts (research data) to finally answer the research questions:

- What are the perceived factors that caused FNB's Million-a-Month-account to be discontinued in South Africa?
- How can business model innovation be used to re-introduce prize-linked savings products in South Africa?

The answers to the research questions, particularly the second question, informed the development of an inclusive praxis model (discussed under section 3.2.5 below) as the key requirement of the MPhil in Inclusive Innovation program.

3.2.5. Inclusive Praxis Model Development

The MPhil in Inclusive Innovation dissertation is expected to synthesize theory and practice to inspire and inform innovative practical models that enhance inclusion in social-ecological systems. The outcome of this exercise is known as a 'praxis model'. A praxis is a concept that captures both the reflection and action (Furman, 2012).

To achieve this requirement, the researcher developed a business model innovation framework that could be used to re-introduce PLS products in South Africa to help improve national

household savings rate and achieve better financial inclusion for low-to-moderate income households.

The PLS BMI framework developed by the researcher is informed by the Cambridge Business Model Innovation Process (Geissdoerfer et al., 2017) and Osterwalder's (2010, 2011) business model canvas.

3.3. Research Quality Evaluation

Evaluation of the quality of research output is determined by its trustworthiness. In qualitative research, trustworthiness is expressed through concepts of credibility, dependability and transferability (Graneheim & Lundman, 2004).

3.3.1. Credibility

The concept of credibility deals with the focus of the research and refers to confidence in how well data and processes of analysis address the intended focus. Graneheim & Lundman (2004, p. 110) advises as follows with respect to ensuring research credibility: "Selecting the most appropriate method for data collection and the amount of data are also important in establishing credibility. The amount of data necessary to answer a research question in a credible way varies depending on the complexity of the phenomena under study and the data quality".

This research study uses triangulation of data sources and methods to improve internal validity of the research findings:

- *Data triangulation.* It allows for cross-checking research data from multiple perspectives. Research data was collected from the following multiple sources:
 - Key informants who were part of the FNB MaMa project were interviewed to obtain primary data. The interviewees include Robert Keip, the former CEO of the FNB Investments Product House which developed the MaMa product, and Gusta Binikos who ultimately led the delivery and operationalisation of the MaMa product.
 - Industry participants and experts, outside of FNB, who experienced and witnessed the MaMa implementation, also provided primary data about the case study.

- National Treasury officials who are familiar with FNB’s MaMa product, offered a financial services regulation perspective.
- Prior research conducted on the FNB MaMa project, including works by the National Bureau of Economic Research (NBER) and Doorways to Dreams Fund (now called Commonwealth), was reviewed and incorporated as secondary data.

3.3.2. Dependability

Yin (2006) states that “dependability is it about demonstrating that the operations of a study - such as the data collection procedures can be repeated, with the same results”. The goal of reliability is to minimize the errors and biases in a study (Yin, 2006). To achieve the dependability measure for this research study:

- a comprehensive case database was used to record and store all case data and analysis information. The research tool that serves this purpose in ATLAS.ti, and
- interviews were recorded and transcribed, with the original recordings accessible.

3.3.3. Limitations

The pool of people with rich understanding and intimate experience with prize-linked savings products in South Africa, particularly the FNB Million-a-Month-account is limited. However, the researcher would have preferred to have interviewed a larger number of knowledgeable people to adequately satisfy data saturation requirements. Requests for interviews with professionals at other retail banks in South Africa were unsuccessful.

CHAPTER 4: RESEARCH FINDINGS

4.1. Introduction

This section presents the results from the data collection, content analysis and documents review process that was undertaken, as per the research process defined under section 3.2 (Research Process).

4.2. General Findings

The main purpose behind the conception and launch of the MaMa product by FNB was to grow the bank's market share in retail banking deposits by acquiring new customers, in the form of new savers. FNB had just established a division called Investment Product House, which was setup specifically to grow the size of retail deposits in the bank. FNB lagged the other large retail banks in South Africa (i.e. Standard Bank; Absa; and Nedbank) in deposits and market share, which emphasised the need for FNB to find a compelling customer value proposition to help them grow their retail deposits. This objective for the bank coincided with the drive by the South African government for financial inclusion by requiring the banks to offer products that are accessible to low income and the unbanked population, through the financial sector charter that was introduced in 2002. The financial sector committed itself to partner with government towards implementation of the Government's Strategy for Broad-Based Black Economic Empowerment, recognising that South African society remained characterised by racially based income and socio-economic inequalities that inhibit the country's ability to achieve its full economic potential. In order to contribute towards sustained economic growth, development, and social transformation in South Africa, the financial services sector agreed to put in place strategies that would ensure that the financial sector is more efficient in the delivery of financial services, which enhance the accumulation of savings and directing them to the developmental initiatives of the country.

In designing the new MaMa product, FNB sought to come up with a product that would attract depositors despite the then prevailing low interest rates and a product that would also be accessible to low income earners. The former head of FNB's Investment Product House (IPH) identified the key challenges that had to be overcome in order to attract new savings as: poor culture of savings at household level; high bank charges or fees; low interest rates; and high propensity for consumer spending. The IPH team had to be innovative to overcome these

challenges and successfully increase FNB's retail banking base in the form of new customers and pool of deposited funds.

FNB noted that South African retail banks at the time tended to compete on price with commodity like products, and decided that they had to be innovative and deliver a value proposition for customers that was not just about fixed deposits at better rates than the market. Their quest for a high impact innovation led them to prize linked savings accounts, which exist in different forms and flavours across several countries in Africa; Europe; Asia; North America; and Latin America. FNB took care to customise it's prize linked savings account for local conditions, and marketed it exceptionally well as a Million-a-Month-account.

The regulatory landscape in South Africa was not very precise as to the acceptability of prize linked savings accounts, given their lottery like feature and how tightly controlled the lottery industry is protected through South Africa's Lotteries Act 57 of 1992. FNB consulted with legal professionals on the legality of the would be PLS product, and engaged with the lottery operator and the regulator of the national lottery in South Africa. There was no definitive legal opinion nor protestation from the national lottery industry before FNB launched the MaMa product.

Promotional competitions are permitted in South Africa, and FNB did consider launching the MaMa product as a promotional competition. However, they decided against the promotion competition vehicle because they felt it would prevent their general staff (i.e. staff not directly involved in the operations of the MaMa scheme) from accessing the MaMa product, and they felt that their product did not contravene the Lotteries Act. FNB therefore decided to launch MaMa as an embedded product, where the prize was part of the mechanics of the product, and not a promotional competition.

A financial services industry expert that was interviewed for this dissertation believes that most people in South Africa do not have an understanding and appreciation of role that savings play towards building a country, hence the importance of initiatives aimed at establishing an awareness of the extent and nature of the household savings problem in South Africa.

The research participant is leading a project that set out to identify ingredients that are common to countries that are referred to as 'economic miracles', which are countries that managed to

sustain an average economic growth rate of 7.0% a year for 25 years or more (Saville et al., 2015). These ‘economic miracles’ are diverse in location and character, as they range from Chile in Latin America to Estonia in Eastern Europe, to Taiwan in Southeast Asia, and include Botswana in Africa. The outcome of this project identified six (6) ingredients that are key for sustained high economic growth, namely: elevated saving and functional investment; education; healthcare; demography; economic integration and connectedness; and policy stability. Out of these six ingredients, the participant notes that the evidence suggests that there are two ingredients that stand head and shoulders above the rest, which are economic integration and connectedness (i.e. functional connectedness to others through trade relationships; capital relationships; information and knowledge data exchange; and the movement of people across borders) and elevated saving and investments.

He believes that it is therefore important to establish awareness and economic literacy in South Africa so that people understand the role that saving and investment play in stimulating and fuelling sustainable economic growth in a country.

Factors contributing to low national households savings.

The research participant brought to sharp focus how dire the situation is in South Africa regarding low household saving rate levels by pointing out that the fourth quarter of 2018 was the lowest quarterly savings rate that South Africa has had in 12 years. For the whole of 2018, it is the lowest annual savings rate South Africa has had since 1949. The persistent low household savings rate problem is attributed to deep structural ailments in the South African economy, in the form of deeply entrenched income inequality and deeply entrenched unemployment. The third factor that was identified is the geographic and market structure of apartheid, which still prevails today.

Entrenched unemployment is an obvious killer of savings. One needs to have some income in the first instance to be able to save some of it. For those who are employed, entrenched income inequality may be a culprit that leads to poor savings culture among employed South Africans. This is captured in the interview extract below.

“In an environment of income inequality, one of the big behavioural biases is to spend that you can display that you are keeping up.” Code 18:11

Geographic and market structure of apartheid translates into a lot of spending being entirely misallocated. For example, a large number of population lives in townships that are far from places of work, resulting in a significant portion of their income being spent on transport. This erodes disposable income that could potentially go into savings. Interview coded text below refers.

“I think there is a third aspect, that there is a third hand to my argument, and that is the geographic and [market] structure of apartheid are still very much with us. That translates into a lot of spending being entirely misallocated. You come from Umlazi. If you get a job in Durban, how much of your typical income converts to transport spending?” Code 18:12

Other important factor that limits South African households from saving or investing is low financial and economic literacy among a large section of the population in South Africa, according to the research participant as captured in the interview quote below.

“Financial literacy in South Africa is low. I would argue that economic literacy is even lower. So if you talk to people about what is South Africa's savings rate, or why should a country save, there is... I'm gonna be grand and sweeping, but I would suggest there is almost no understanding, appreciation of the role that savings plays in building a country.” Code 18:1

A solution to the national households savings rate challenge

Besides the structural ailments that impede economic growth in South Africa, which need to be addressed but are beyond the scope of prize linked savings accounts that this research is about, the participant make the following two recommendations that would help solve the households savings problem are:

- i. establish and develop economic and financial literacy among the general South African population; and
- ii. develop innovative route-to-market solutions. Route-to-market solutions refer to mechanisms for saving, which are for those who do have capacity to save and invest but do not know how to go about it or do not have accessible products at their disposal.

There are some good examples of innovative route-to-market examples that are available in South Africa, which are highlighted in the Investec GIBS Savings Index publication (Saville & Macleod, 2019). Some examples are EasyEquities³ and Livestock Wealth⁴. Prize-linked savings accounts could be one of such innovative route-to-market solutions, according to the research participant.

4.3. Review of Publications about FNB’s Million-A-Month-Account

Accessible documents and publications on FNB’s Million-A-Month-Account scheme were collected and analysed by the researcher. This was done prior to conducting semi-structured interviews with participants, as well as during the process of interviewing participants.

The review and analysis of existing literature and publications on the case study was crucial as it assisted the researcher to gain an in-depth understanding of the research subject and the complexities involved. This informed adequately the preparation for research interviews. Some of the documents reviewed also assisted with the identification of key stakeholders to be interviewed. For example, the organogram and names of people from the FNB business unit that developed the business case and eventually managed the Million-A-Month-Account program is found in the Harvard Business School Publishing case document (Cole et al., 2008).

Table 3 below presents the list of key documents reviewed in preparation for data collection through semi-structured participant interviews.

Table 3: Publications reviewed prior to participant interviews

Publication	Key Findings
First National Bank's Golden Opportunity. Harvard Business School Case Study N9-208-072 (Cole et al., 2008)	In August 2004, FNB had to make a decision on whether to launch a new savings product that was conceptualised and proposed by the Investment Product House (IPH) under the leadership of its CEO Mr. Robert Keip. The new savings product plan was codenamed the ‘The Golden Opportunity’. The proposed new savings account was based on the concept of “prize-linked savings”, which FNB had investigated across the world and particularly

³ See <https://www.easyequities.io>

⁴ See <https://livestockwealth.com>

Publication	Key Findings
	<p>focused on the Mashreq bank’s Mashreq Millionaire account in the United Emirates. The envisaged product aimed to offer savers an opportunity to win a large cash prize every month, in lieu of a small interest rate that is typical of traditional savings account. This new savings account was expected to be an innovative source of new cash deposits and new customers for the bank, which was at the time struggling to win retail market share against South Africa’s other large banks.</p> <p>The case study quotes Robert Keip as having states that they hoped that the new product would help FNB “to increase the number of retail deposit accounts and raise deposit balances at a profitable interest rate margin...to fill a gap in the market...with a simple and exciting savings solution unique in the South African market.” (Cole et al., 2008, p. 10).</p> <p>Researcher’s initial thoughts upon reading the HBS case study and before conducting the research interviews:</p> <ul style="list-style-type: none"> - The issue of low national household savings rates in South Africa is noted as a policymakers’ concern, not the banking sector’s. - Financial inclusion was highlighted as a government priority, and not a banking sector’s primary concern. - FNB’s main priority was the business mandate to get deposits into the bank and gain market share against its three main competitors. - FNB wanted its employees to be able to use the product, despite the normal practice of excluding employees from participating in corporate promotions. <p>Key people mentioned in the HBS case study, who are potential primary interview participants for the researcher:</p> <ul style="list-style-type: none"> - Robert Keip, head of the Investment Product House (IPH). The IPH was responsible for the development and implementation of new retail investment products for the bank. - Michael Jordaan, CEO of First National Bank’s Retail Customer Solutions division, who made the final decision to proceed with the launch of the Million-a-Month-account. - Gusta Binikos, a marketing expert who was to lead the Million-a-Month-account implementation team.
Million-a-Month-account live draw video - national	The draw of MaMa lucky winners was televised on SABC 3, a national TV station accessible to everyone with TV set (free-to-air, not pay-per-view). This

Publication	Key Findings
<p>television recorded broadcast</p>	<p>made the live draw accessible even to low income households. The following is noted from the TV advert:</p> <ul style="list-style-type: none"> • The draw was presented in a way that accentuates banking security and the integrity of the random selection of the winning account numbers. • The suspense and excitement that is usually associated with a lottery draw was palpable. • The messaging was clear to viewers on how to participate and stand a chance to win big: <ul style="list-style-type: none"> ○ Open a Million-A-Month-Account at any FNB branch with just A R100 deposit. ○ There is no risk as your money is guaranteed and can be withdrawn after giving 32-day notice. ○ You could be a R1 million winner. ○ You have everything to win, and nothing to lose.
<p>FirstRand and FNB Annual Reports (First National Bank, 2007; FirstRand Integrated Financial Services, 2006)</p>	<p>FNB noted the success of the Million-a-Month Account (“MaMa”) in their 2006 annual financial statement, pointing to the customer base that increased by over 400 000 accounts.</p> <p>In 2007 financial statement, FNB lauds the Million-a-Month Account for its ability to encourage and entrench a culture of savings against the background of South Africa’s household saving rate was just 0.2% that year. However, the National Lottery Board argues that the MaMA savings offering constitutes an unlawful lottery.</p>
<p>Judgment by The High Court of South Africa in the matter between The National Lotteries Board & FirstRand Bank Limited (<i>National Lotteries Board vs. Firstrand Bank Limited</i>, 2006)</p>	<p>The application to the High Court by the National Lottery Board sought in the main:</p> <p>“that it be declared that the competition that is being conducted by the respondent for the purpose of promoting the use of its short term investment product known as "the FNB Million-a-Month account" and in terms of which account holders stand a chance of winning cash prizes in excess of R1 million every month ("the competition") is unlawful in terms of sections 56(b) and/or 57(1)(b) of the Lotteries Act 57/1997” (<i>National Lotteries Board vs. Firstrand Bank Limited</i>, 2006, p. 1)</p> <p>The court found in favour of the National Lottery Board, with a ruling that the FNB Million-a-Month-account “is unlawful in terms of section 56(b) and 57(1)(b) of the Lotteries Act 57 of 1992.” (<i>National Lotteries Board vs. Firstrand Bank Limited</i>, 2006, p. 16)</p>

Publication	Key Findings
Judgment by The Supreme Court of Appeal (SCA) South Africa in a matter between FirstRand Bank Limited and The National Lotteries Board (<i>Firstrand Bank Limited vs. National Lotteries Board</i> , 2008)	FNB appealed the High Court judgment that was in favour of the National Lottery Board’s application. Salient points from the judgment by the Supreme Court of Appeals are: <ul style="list-style-type: none"> • The ruling by the High Court was upheld by the SCA, confirming that FNB’s Million-A-Month-Account was indeed an illegal lottery. • Judge Nugent stated that “The only commercial lotteries that are permitted are ‘promotional competitions’ – lotteries that are conducted ‘for the purpose of promoting the sale or use of any goods or services’ – if they comply with prescribed conditions, one of which is that they may not be ‘substantially similar’ to the National Lottery.” (<i>Firstrand Bank Limited vs. National Lotteries Board</i>, 2008, p. 5)

The review of the publications that was undertaken before the research interviews provided a good sense of what FNB sought to achieve with their MaMa product, and how it actually performed in terms of success. The legal challenges that emanated from the Lotteries Act 57 of 1992 are also understood to firmly ban prize-linked savings products in South Africa, at least in the format or design that FNB adopted for the Million-a-Month-Account.

4.4. Research Interviews Results

The results obtained from research interviews are presented as a consolidated analysis of perspectives from the diverse group of research participants with respect to the two research questions.

4.4.1. Answers to Research Question 1 (FNB MaMa’s Demise)

The obvious factor that was identified by all research participants as the culprit for the illegalisation of the MaMa product is the Lotteries Act itself, therefore *legislation*. The FNB participants’ view was that the act is ambiguous and, by and large, badly written. It is for this reason, they argue, the National Lotteries Board and the attorneys that they consulted prior to the launch saw nothing wrong with the product design – until the National Lottery Board changed their mind about six months after the product was launched. The lottery operator did not challenge FNB’s product because of the ambiguity in the piece of legislation, but they did

so because of the success the FNB prize-linked product that seemed to threaten future revenues of the national lottery.

There was also no collaboration at financial services industry level that sought to ensure that prize-linked savings products in general, not just FNB's MaMa product, were explicitly legalised in South Africa by addressing any ambiguities that may have existed in the Lotteries Act. Apparently other banks worked against FNB behind the scenes by lobbying the Reserve Bank to question FNB about paying zero percent interest rate on account balances, which led research participants from FNB to also blame the fate of the FNB MaMa product on *sabotage*, as one of FNB's research participants is quoted below.

“we are up against other banks that were lobbying [the Reserve Bank], saying how could they [FNB] do this” Code 2:8

The Director of Savings at National Treasury, one of the research participants, stated categorically that South Africa has a poor household savings rate, and agrees that prize-linked savings accounts could be part of a solution.

“I think we do have a crisis in the savings space, particularly with regards to households. So I think we need to find ways of improving household rates in many ways. One avenue we [National Treasury] did consider, well I suppose it's still on the table, is prize-linked savings account.”

A key contributor to the low levels of household savings in South Africa, according to research participants from National Treasury, is *low financial literacy* among the majority of the population and *lack of credible, independent, and free financial advice* that is available to the mass population.

The National Treasury participants put the demise of the FNB MaMa to two factors, namely *lack of enabling legislation* and *perceived profiteering by FNB*. They argue that the Lotteries Act was not clear enough about whether PLS products were permissible or not. It also seemed to them that FNB was profiteering, by only guaranteeing savers a negligible interest rate of 0% (and later 0.25%), which led to National Treasury being reluctant to support FNB's cause.

The lack of enabling legislation for prize linked savings accounts is seen by National Treasury interviewees as the critical factor that killed FNB's MaMa scheme. The inaction by government to remedy the legislative quagmire that confronted FNB in 2006-2008 may be due to perceived profiteering by FNB – see interview quote below.

Perceived profiteering (unfairness of the scheme)

“So one of the arguments, if I may recall well, was that the financial institutions, FNB in this particular case, was benefiting a lot more than the clients were.” Code 14:18

The Financial Sector Conduct Authority (FSCA) participant identified fear of *lottery cannibalisation* by the National Lottery Board, and territorial issues that exist between the DTI and National Treasury as potential causes the MaMa product being illegalised and discontinued in South Africa.

The fear of lottery revenue cannibalisation emanated from the success of the MaMa program, with the National Lottery Board perhaps worrying that the large take up of the prize-linked savings accounts might have been attracting lottery players away from gambling, and thus a risk on national lottery success. The DTI, as the custodian of the Lottery Act, and National Treasury as the department responsible for policies aimed at stimulating savings and investment in the country, had an opportunity to jointly find a solution that would enable the national lottery and prize-linked savings products in South Africa to coexist. However, this was a non-starter because of the historically poor working relationship between these two departments. They are said to be sensitive about each other's territory of responsibility, which could have played a part in National Treasury not stepping up to engage the DTI to find common ground that would enable PLS products and the national lottery to co-exist in South Africa.

The NLC Regulatory Compliance executive is certain that FNB's MaMa product had to be halted because:

- i) It violated the National Lotteries Act;
- ii) It was a direct competition to lottery, while the national lottery is supposed to enjoy a legalised monopoly status; and
- iii) It seemed that FNB was profiteering from the MaMa scheme.

Violation of the National Lottery Act

“With FNB, from our side, to say it's not a promotional competition, it is a lottery because it's running indefinitely, where the prizes are determined by lot or chance. So then it's a savings and there is monthly prizes that are won, but eventually it would be a type of a lottery. If you were to allow that to happen, then it brings competition to the national lottery. You see.” Code 15:20

Direct Competition and Profiteering

The then National Lottery Board viewed FNB's Million-A-Month-Account as direct competition to the national lottery, and thus in violation of the Lotteries Act. The Lotteries Act guarantees a monopoly to the national lottery operator. Secondly, the MaMa product was seen by the National Lottery Board as a profit making scheme for the bank at the expense of national lottery revenues that are meant to fund good social causes for the benefit of communities in South Africa. The coded excerpt from the interview transcript captures this view of the NLC research participant.

“So, with FNB, it was running indefinitely and they were making money. And then it was an issue of now you have a national lottery [where you could] win millions, and then you have FNB's Million-a-Month-account... it would appear as if there is direct competition to the national lottery. Hence we said it is not a promotional competition; it is rather a lottery.” Code 15:7

Noting that other banks in South Africa might have approached the South African Reserve Bank to complain about FNB's MaMa, the financial industry expert interviewee puts the demise of the MaMa scheme to market concentration as one of key factors. He laments that other banks were caught flat-footed when FNB suddenly launched MaMa to a resounding excitement from the public, and they responded by trying to find ways to 'kill' the competition rather than come up with their competing and innovative alternatives. Market concentration effectively inhibited innovation at industry level, as he puts it in the coded interview extract.

“And if South Africa did not have that [market] concentration, may be FNB as a much smaller bank in an industry where you perhaps have 20 or 30 banks of similar sizes, FNB might have been able to get much further down the track.” Code 18:10

The interviewee treated the question of legislation ambiguity as trite, hence he focussed on how the financial services industry reacted in order to deal with the situation that would obviously influence the financial services industry rather than just FNB. As stated above, he identified market concentration, and its impact on competition and innovation, as a factor that contributed negatively and led to the failure of FNB’s MaMa scheme.

Ultimately it is the apparent violation of the Lottery Act, together with the banking sector market structure that limits collaborative innovation, that led to the demise of FNB’s MaMa product and prize-linked savings products in general in South Africa.

4.4.2. Answer to Research Question 2 (PLS Business Model Innovation)

Besides identifying the need to have a change in legislation to explicitly legalise prize-linked savings products in South Africa, research participants also made some suggestions for a new PLS type product that could be successfully introduced into the South African market. They advocated for the use of *mobile applications (technology)*; *behavioural economics*; and *multi-stakeholder collaboration* to be incorporated into designing a solution.

“Perhaps there needs to be more collaboration on product designs” Code 3:5

“Because we know psychologically, so that psychological aspects - how do we turn that into these nuggets that we attract people for, using price? Because there we used price with a 48 hour notice period. And you need to use that, then combine it with App based technology, you know, how you can utilise that account, and the behavioural tricks and you'll actual stand, then you can re-introduce something totally different for this modern age, ja. But behavioural economics will play a, you need to understand it plays a big role with that.” Code 3:13

Mobile applications technology and behavioural economics or science, such as the use of artificial intelligence; big data analytics; and blockchain, were not as mature during the MaMa period (2003-2008) as they are today. These technologies present a sound basis on which to re-design the business model for a prize-linked savings scheme. Multi-stakeholder collaboration is suggested in the context of legislative or policy changes that are necessary for a sustainable re-introduction of PLS products in South Africa, which require common ground among industry stakeholders.

In addition to employing technology innovation; behavioural sciences; and multi-stakeholder collaboration when re-introducing new PLS products in South Africa, FNB's research participants also advocated the following ideas be considered:

- The existing phenomenon of people mobilising themselves to save (and potentially invest) as a community, such as stokvels.
- Product marketing is key, and therefore a focus on innovative marketing approaches for PLS products is necessary.
- Leverage social media or “word-of-mouth” to spread product awareness and induce excitement among potential customers.

Saving as a community

A banking executive responsible for the saving and investments division within FNB advocated for harnessing the power of saving as a community, leveraging the success of stokvels in South Africa and coupling that with innovative products designs. This is captured in the direct quotes below.

“I'm also seeing is that the young generation who've grown up with stokvel, who have now gone to university, and are in the financial sector and corporates etc, they are thinking of the concept of stokvels now to pool and buy property, to buy stocks, and to invest differently.” Code 3:7

“We've got evidence in our communities everywhere to show that in communities, the community saving actually is a big driver and shows how people find the means to save. I mean, you could go and there is a lot of research done on stokvels on saving that you could tap into.” Code 3:19

Innovative marketing

When FNB introduced their MaMa product in 2005, they knew that aggressive marketing was essential. They accordingly appointed a seasoned marketing executive as the CEO of the MaMa business unit within the bank. This former CEO emphasizes the importance of innovative marketing, and maintains that it would be equally relevant today if a PLS product were to be re-introduced in whatever form.

“part of it was product design, the other part was marketing. I think we were much more successful at the marketing than the Lottery Board was. We had a very innovative marketing approach, and I think that started to create a bigger picture.” Code 1:26

For the re-introduction of prize linked savings accounts, research participants from the National Treasury argue that:

- Legislation change is necessary and needs to be approached collaboratively among various stakeholders, with the DTI being a key stakeholder as the custodian of the National Lottery Act.
- Financial education and financial literacy programs must form part of the solution, with the impact of implemented initiatives measured and monitored.
- A pilot approach would be preferred, providing an opportunity to prove efficacy and impact of prize linked savings accounts before a full implementation is undertaken.
- The private sector has better capacity to drive this change.
- Free and independent financial advice must be made available to the general public, with the South African Savings Institute capacitated to play this role.

The interview extracts below capture the recommendations by National Treasury towards the re-introduction of PLS products in South Africa.

Multi-stakeholder collaboration towards legislation amendment

“So in order to get that going, we need the DTI; we need the National Lotteries Board. The DTI in particular, to amend the legislation. But whether that legislation would be amended to open up the market for private sector institutions and government to play

into, or government doesn't participate and just lets the private sector run with it - I don't think it's necessarily going to be a problem.” Code 14:17

Financial advice and financial literacy

“I think, I would say South Africa, given the disparities in education level of maturity of people, I think there is a need for an institution that would give free [financial] advice.” Code 14:14

The amendment of legislation is a necessary step that must be undertaken by multiple stakeholders including National Treasury; the Department of Trade and Industry; and the National Lotteries Commission (formerly known as National Lotteries Board), to lay a sustainable foundation for the re-introduction of PLS products in South Africa. National Treasury participants also advocate for free and independent financial advice to people with limited financial literacy, as part of a broader strategy towards increasing the level of saving by households in South Africa.

The research participant from the FSCA also believes that the re-introduction of PLS products must aim to instil a savings culture through behavioural economics principles and techniques. The majority of households in South Africa are prone to spending. Therefore a culture change is required to be able to convert spenders into savers. The field of behavioural economics should play an influential role when designing new PLS products, as the interviewee recommends in the quote below.

Behavioural economics

“I think you actually need a prize-linked [savings], the more I think about it, and you see it's more the behavioural - and US academics would know this - prominently drive towards behavioural economics and analysis of how human beings behave.” Code 13:20

He also argued for the incentivisation of households to save through a compelling product design, such as integrating the existing tax free savings accounts (TFSA) with a prize element to launch a prize-linked tax free savings product. Tax free savings accounts have been a success

in South Africa since they were introduced about four years ago. However, their catchment population is limited to the middle class and the affluent. An innovative product design that incorporates the strengths of a tax free savings account and prize-linked savings account could be a winning formula, as the FSCA participant suggests in the quote below.

Prize-linked tax incentivised saving product

“As you should be aware, the tax free savings are literally what now, three years old? Because I think you need to couple it with the prize-linked saving product. So that whatever you put in there, you also know it's tax free. It's an additional incentive, in addition to you being able to win.” Code 13:17

In addition to attending to the legislation amendment, the research participant from the FSCA believes that a new business model required to successfully re-introduce PLS products in South Africa must blend behavioural economics principles and policy-based incentives such as tax free savings.

The NLC's Regulatory Compliance Executive Manager, another research participant, believes that prize linked savings products could be re-introduced in South Africa under the current regulatory framework, if they are run as promotional competitions. Otherwise, a legislation amendment would be necessary if they were not classified as a promotional competition.

Promotional competitions are permitted under the Consumer Protection Act of South Africa. She cautions that such promotional competitions must have a start and an end date, as per the regulation. There is, however, no restriction in terms of what and how much prizes could be.

“What I would see as a possible immediate solution, as you say it was a good scheme from FNB, they can run it as promotional competition, within three [months] ninety days or whatever period to say open a savings account, stand a chance to win. It has a start and an end period. Ideally they can run it every two years, they can run it every three years; every year what have you.” Code 15:19

The financial services industry expert suggested the following three considerations for a business model innovation that can be used to re-introduce PLS products successfully in South Africa:

- i. PLS product design must fuse latest mobile application based technologies with behavioural science to deliver an innovative PLS product.

“what our work in the field suggests is that saving is a learned behaviour. If South Africa's saving rate is zero, the learned behaviour then is approximately zero. And through something like a prize-linked savings, you can establish a pattern of every week you don't go to a lottery terminal, instead every week you make - well 2007 that wasn't the world, but now you would have an App on your phone, and you make a R2 or R5 or R10 contribution to a savings account. The thrill, the prospect, the hope - so all of the behavioural elements are still there, that you have an asymmetrical payoff profile.” Code 18:8

- ii. Multi-stakeholder collaboration to address factors that limit household level savings, including financial and economic literacy and route-to-market innovations.

“I would suggest what his [the President of South Africa] urge should be, should be about communication. And this economic and financial literacy isn't hard. It requires regular messaging, and the regular messaging is in each address he makes, it could be government isn't gonna solve this, because government can't solve this. And big business isn't gonna solve this, because big business - there isn't enough of it. We have to solve it, and here is how we solve it. Now it's a collaborative effort that starts to join the economic and financial literacy.” Code 18:19

- iii. Having non-banking entities design and deliver the new PLS products.

“I think the second point is that you also, you make me wonder if there isn't another [way] that you could achieve something similar, without it being bank based. That is it doesn't have to be deposit taking. Just a thought!” Code 18:9

The Investec Gibbs Savings Index publications identify prize-linked savings as one of existing microeconomic solutions to a complex low household savings challenge – all of which have a strong use of behavioural economics principles and technology (Saville et al., 2015; Saville & Macleod, 2019).

Research participants who are CEO's of fintech companies suggested that a technology enabled business model must be adopted, with a hawkish focus on lowering customer acquisition cost and ensuring that the technology platform is scalable. Fintech companies have experience in entering unchartered territories, where regulation either does not exist or is unclear. Based on this experience, they also suggest that the business model must factor in proactive engagement with the legislators and regulators in order to help shape how prize-linked savings products must be legalised and regulated.

Customer acquisition cost

Short-term savings is a low margin business, which requires high volumes and efficient management of costs. Both executives raised this point very clearly as an important area that the business model innovation for prize-linked savings needs to attend to closely. Their comments in this regard are shared below.

“First, it’s your cost of customer acquisition. You can’t build a low cost anything if you don’t have a low cost of customer acquisition. The biggest failing of most fintechs is they never, they don’t get their customer acquisition cost right. That’s the key. You’ve got to acquire customers cheaply, and the secret ingredient there is that your customers have to be your marketing currency.” Code 17:12

“Our cost of acquisition of customers is low, and we are driving it down even further.”
Code 16:28

Platform scalability

Linked to the volumes factor as required by the low margin/high volume business, platform scalability is also important. It must be able to handle millions of customers interacting with their accounts. EasyEquities’ CEO captured this point as per the coded text below.

“The second one is that your platforms have to scale, and the costs can’t scale with them. So as you get bigger and better, your cost of servicing your customers must get lower and lower.” Code 17:14

Proactive engagement with regulators

Lastly, Centbee’s CEO recommended that there must be proactive engagement with regulators in order to influence and shape the regulation landscape for the new business model.

“Although we operated in a free opportunity, we have self-imposed constraints as to how do we behave because we were alert to regulatory risk. That’s how we’ve approached the regulatory space. We’ve now spent a lot of time consulting back to the regulator, saying – to be regulators, this is how we would like to be regulated.” Code 16:26

4.5. Data Content Analysis Results

The results presented in section 4.4 (Research Interviews Results) provide information obtained from the research participants during the semi structured interviews. This section proceeds to present the content analysis of the data collected, for theory formulation and/or development of a BMI framework for re-introducing PLS products in South Africa.

A total of ten (10) in-depth interviews were conducted with participants who have expertise in financial services; national lottery and related regulations; economics and economic development; prize linked savings products in general; and the FNB Million-A-Month-Account. The transcripts of these semi-structured interviews form the core empirical data that were analysed to identify ideas; concepts; and insights that could contribute towards explaining the research problem and finding answers to the research questions. The content analysis results are presented below.

4.5.1. Coding

Codes in qualitative data analysis are concise and descriptive labels for the specific parts or extracts from the data under scrutiny (sometimes referred to as “meaning units”) (Graneheim & Lundman, 2004). Saldaña (2009, p. 3) defines a code as “a word or short phrase that

symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data”. They help the researcher reflect on the data and they make it easier to identify connections between meaning units and the whole data (Erlingsson & Brysiewicz, 2017).

An example from this study, *multi-stakeholder collaboration* and *financial literacy* were identified as codes from the following text from a transcribed interview:

“Then it takes us to our opening conversation. You need someone like SASI. Look, and the financial sector is fairly in the country and of course they need to pick their battles too. I would still, if I was them, I would still get them together. So you would need ASISA, you would then need the Banking Association, to come together and make a case to DTI.”

- **Multi-stakeholder collaboration**

“One is about just financial literacy. If you ask a person, forget about African Bank, if I speak to my clients, and I ask them: What is the cost of their investment products, of their savings products? They don't know.” – **Financial literacy**

The data coding exercise resulted in a total of 150 initial codes from the 10 interviews transcripts. Data coding was done using Atlas.ti as the qualitative data analysis tool, and the full record of data was archived in this tool for future reference. A sample of level 1 codes and their respective quotations is presented in Appendix B, and a snapshot of the Atlas.ti tool showing a list of codes and a transcript under review is shown as Figure 10 below.

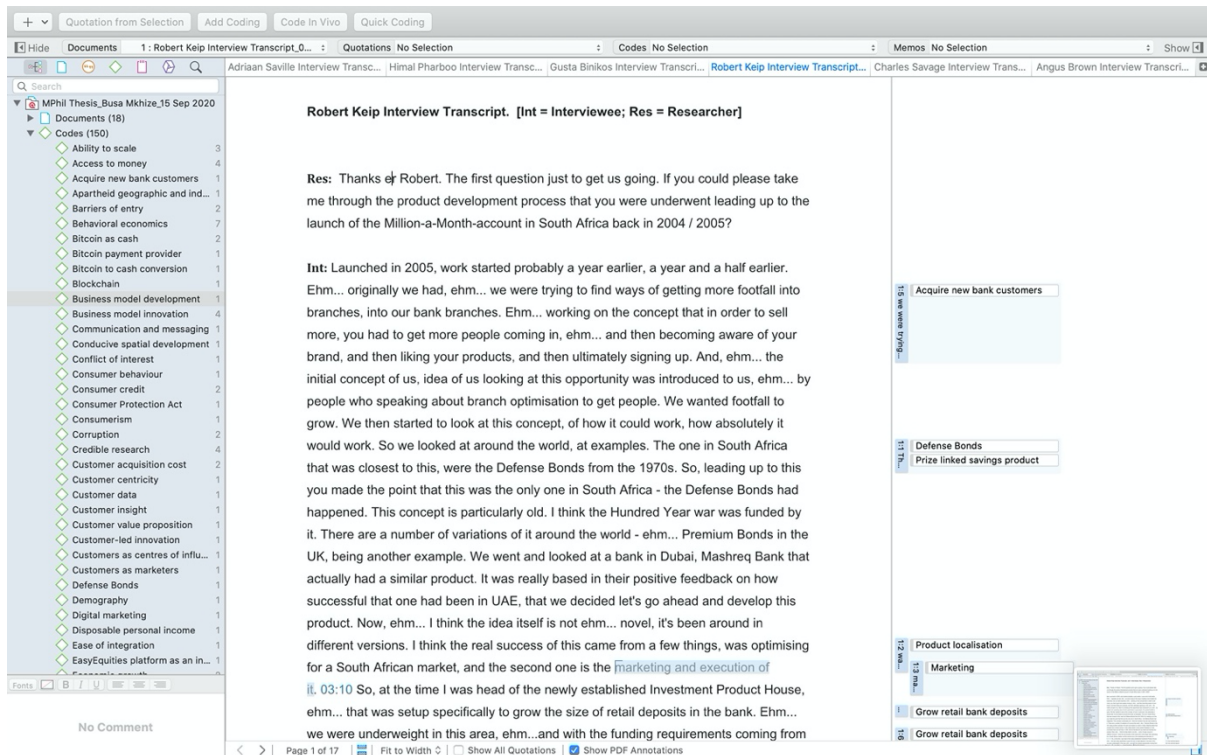


Figure 10: Script Analysis and Coding Snapshot from Atlas.ti

4.5.2. Categorisation

The progression process from codes to categories in the data analysis process is about data abstraction, where lowest or first level meaning units represented by codes are grouped together according to some common theme or meaning or relationship among them. The first level codes grouped together by a shared higher meaning, or if they are related to each other through their content or context, to form a *category* (Erlingsson & Brysiewicz, 2017; Graneheim & Lundman, 2004; Saldaña, 2009).

With a total of 150 “meaning units” identified in the research data, the researcher embarked on an analytical synthesis process to reduce the number of codes down to a manageable few categories using a process of abstraction. Each code was compared to the rest to determine similarities in concept or idea or meaning. In qualitative research, this is referred to as *constant comparison*. The end result of this exercise are higher order categories, with at least one code belonging to each category.

The analysis and comparison of 150 coded “meaning units” resulted in seven (7) categories, namely **financial knowledge; financial inclusion; economic transformation; multi-stakeholder collaboration; enabling regulatory environment; innovation; and product development**. The categorisation process followed is briefly explained below, using Financial Knowledge as an example category:

‘Financial Knowledge as a category was arrived at by grouping together four codes (i.e. financial literacy; economic literacy; financial education; and awareness about role of savings;) that have similar meanings and/or purposes. The logical reasoning is as follows - using financial education, the level of financial and economic literacy among people can be raised. Higher and acceptable levels of financial and economic literacy implies awareness about role of savings. People who have high financial and economic literacy, and are aware about role of savings, have financial knowledge.

A table of categories that shows some of its constituent first level codes is included as Appendix C.

4.5.3. Emerging Themes

The final step of content analysis process is to identify major themes that contribute towards understanding the phenomenon under research and helps answer the research questions. On closer analysis of the seven categories, presented in the previous section, and the broader context elucidated from literature review and public discourse, the researcher identified the following themes that provide guidance towards answering the question of re-introducing prize-linked savings products in South Africa:

1. *financial knowledge* - limited financial knowledge inhibits growth in household savings and investments.
2. *enabling regulatory environment* – PLS products can only be successful if they comply with existing regulations, particularly the lottery related regulations.
3. *multi-stakeholder collaboration* – the ecosystem within which PLS products need to thrive requires effective collaboration among various stakeholders.
4. *business model innovation* – innovation at business model level is necessary for a successful re-introduction of PLS products in South Africa.

Figure 11 below, adapted from Erlingsson & Brysiewicz (2017, p. 94), illustrates how the content analysis process was conducted for this research, from identifying *meaningful units* of raw data extracted from interview scripts, up to the highest level of abstraction where interpretation in the form of *themes* was reached.

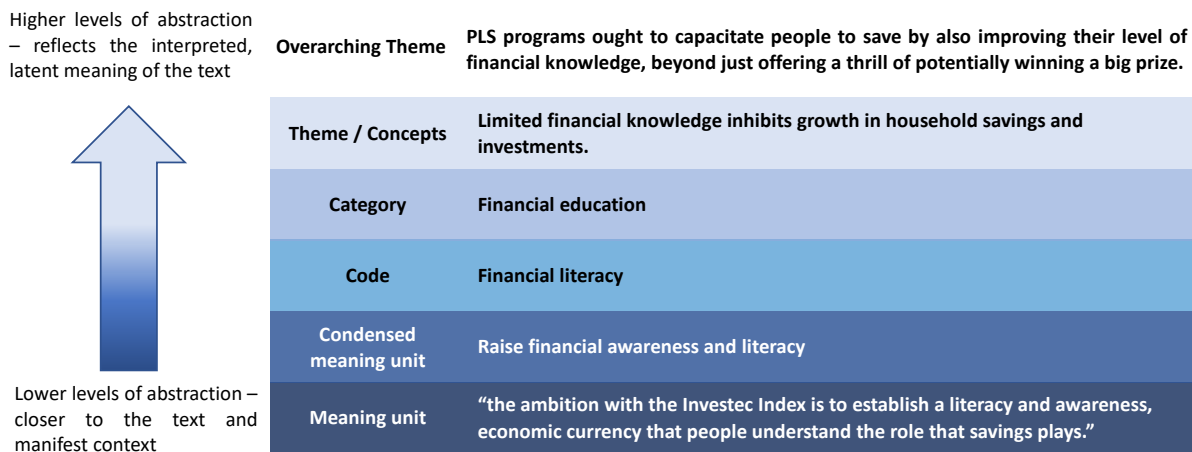


Figure 11: Content analysis process

Each of the four major themes that emerged from the research data analysis is reflected upon in the sub-sections below.

4.5.3.1. Enabling Regulatory Environment

The Supreme Court of Appeal ruling in 2008 condemned FNB’s Million-A-Month-Account, and consequently prize linked savings products in general, as an illegal lottery in terms of the National Lottery Act of 2003. This was common cause to the researcher, and therefore it was expected that the regulatory environment would emerge as one on the core variables. However, it was instructive to dig deeper into the events and decisions taken prior to the launch of the MaMa product and during the life of the program. The researcher highlights the following findings relating to the Enabling Regulatory Environment:

- i. FNB decided to proceed with the launch of their new PLS product despite the obvious legal uncertainty regarding whether the product violated the national lottery act or not. The decision was risky, as it was proven as such very shortly after the product launch.
- ii. FNB deliberately decided against structuring their product as a promotional competition, which could have been a viable interim solution while explicit PLS regulations were being formulated and introduced. This decision was taken just to

ensure that FNB employees could participate in the program, which was short-sighted when considering the main purpose for introducing MaMa in the first place.

The regulatory environment would have to be addressed decisively for PLS products to be successfully re-introduced in South Africa.

4.5.3.2. Multi-stakeholder Collaboration

Lack of sufficient and effective multi-stakeholder collaboration was surfaced by most research participants (7 out of 10) as a key contributor towards the demise of FNB's Million-A-Month-Account, and therefore prize linked savings products in South Africa.

The below key observations from the research data that point to lack of multi-stakeholder collaboration and how it ultimately impacted negatively on FNB's MaMa success:

- i. An enabling regulatory environment for PLS products was not an FNB matter only, but a banking or financial services sector issue. However, FNB did not engage the other banks or industry associations such as the Banking Association South Africa (BASA) to collectively lobby for legislative clarity regarding PLS products versus national lottery restrictions. They attempted to deal with this matter alone, all in the name of being first in the market with the newly conceived exciting product and capture the bank deposits market share.
- ii. While FNB tried to engage the Savings Institute South Africa (SASI), they quickly dismissed them as ineffective and just a talk shop. Collaboration requires mutual respect and trust between all parties involved. It does not appear that FNB saw SASI as worthwhile stakeholder to collaborate with to lay a good foundation for the PLS products in South Africa to thrive.
- iii. There is apparent evidence that other banks lobbied regulators (at least the Reserve Bank) to act against FNB, claiming that the product was exploitative in that it did not pay guaranteed interest to savers (MaMa initially offered 0%, which was later changed at Reserve Bank's request to a 0,25% interest rate). The banking sector did not see the opportunity to respond with their own innovations to FNB's MaMa, but sought to sabotage them instead. An opportunity for multi-stakeholder collaboration to ensure that PLS accounts were explicitly legalised in South Africa was missed.

Research participants pointed out the required change of legislation to explicitly legalise PLS products would require close and effective collaboration among various stakeholders, particularly the Department of Trade and Industry and National Treasury officials. The big challenge of low financial literacy levels for most low income earners and non-savers requires government; private sector (e.g. financial services sector participants); non-government organisations to drive nationwide financial and economic education programs in a purposeful and coordinated fashion.

Multi-stakeholder collaboration is indeed a key requirement for a successful re-launch of PLS products in South Africa.

4.5.3.3. Financial Knowledge

Financial literacy and competence to make sound financial decisions about savings and investments came out strongly from research participants as an area that needs attention if any intervention to raise national household saving rate were to be successful. Economic literacy is also noted by the participants as necessary, in the context of understanding the role that savings playing in building the economy of a country.

It is due to this highlighted lack of financial competence by a significant population in South Africa (and arguably in most countries) that some research participants advocated for the establishment of an independent entity to provide free financial advice to the mass population that needs it. The South African Savings Institute was identified by research participants from National Treasury and the FSCA as an ideal entity to serve the purpose of providing free independent financial advice, backed by credible research capabilities.

Financial knowledge as a broad concept that emerged from the data analysis, encompasses financial literacy and economic literacy. It espouses a society where general households have and an “understanding of how to budget strategically, use credit, save to build personal wealth, and shop for and choose suitable financial products” (Leumann et al., 2016).

4.5.3.4. Business Model Innovation

The current and persistent low interest rates climate makes bank savings products not particularly attractive to a low income groups and non-savers in the short term, and therefore a difficult proposition for encouraging households to save more. With financial literacy or financial competence also low among a large population of South Africa, it also a challenge to get individuals and households to understand the value of saving and investing for the long term (Saville et al., 2015).

The field of behavioural economics is emerging as an interesting avenue to offer ideas and approaches for influencing positive savings behaviour, which can be integrated into savings product design. Technology innovations, particularly in the area of information technology and communications, presents opportunities for creative construction of mechanisms and tools for access to and transacting in savings and investments. Mobile applications, integrated platforms, artificial intelligence, data science, and social media are examples of such technologies that should be considered when designing a prize linked savings account product. The scope of prizes offered through prize linked savings accounts is unlimited, thus presenting an opportunity for partnerships between financial services and other sectors in crafting savings account products that appeal to the target population with low household savings.

The factors raised above provide an argument for innovation at business model level. New and exciting business models are required to sustain the drive to increase household savings rate at a scale that has impact on the national economy. Osterwalder and Pigneur (2011) define business model innovation as a new approach towards creating value for stakeholders (companies, customers, and society), which can be achieved by adding new activities, linking activities in novel ways or changing which party performs certain key activities (Amit & Zott, 2012). The re-introduction of prize linked savings accounts in South Africa must:

- have a clear and compelling value proposition that is attractive to potential savers during the current tough economic climate and beyond,
- redefine the prize-linked savings account value chain in terms of actors and participants in a way that mobilises multiple stakeholders to collaborate in legislation reform and financial education, and

- take advantage through innovation of current and emerging technologies such artificial intelligence, cloud computing, mobile applications, blockchain, and big data analytics.

4.6. Conclusion

The results from the review of documents and publications about the FNB Million-A-Month-Account point to the apparent infringement on the National Lotteries Act as the reason for the demise of FNB's prize linked savings accounts. While not everyone agrees that the product violated the regulation, the rulings by the High Court and the Supreme Court of Appeal stand as an impediment to the re-introduction of prize linked savings accounts in South Africa.

In-depth interviews with 10 participants reaches the same conclusion that legislation was the main culprit for the illegalisation of FNB's MaMa product, but they also point out other important factors such as industrial concentration. Research participants are also convinced that prize-linked savings schemes would benefit South Africa in as far as addressing the persistent low domestic savings rate for households, with business model innovation as the most plausible route towards re-introducing PLS products in South Africa.

The answers to the research questions based on results from the analysis of the research data and existing publications are presented in the results summary table (Table 4) below.

Table 4: Summary of Answers to the Research Questions

Research Questions	Answers from research participant interviews	Answers from available publications
<p><u>Research Question 1 (RQ1):</u> What are the perceived factors that caused FNB’s Million-a-Month-account to be unsuccessful in South Africa?</p>	<p>Research participants provided the following answers to the first research question:</p> <ul style="list-style-type: none"> • Violation of the Lotteries Act or lack of enabling legislation for prize linked savings accounts. • Alleged corruption and sabotage. • Perceived profiteering by FNB (i.e. paying negligible interest rate to depositors) • Fear of lottery cannibalisation by the National Lottery Board • Territorial issues between the DTI and National Treasury, which prevented them from collaborating to address legislative challenges for prize linked savings accounts. • Industry concentration, which inhibited innovation. 	<p>All publications reviewed conclude that it is just legal/regulatory factors that collapsed an otherwise very successful prize-linked savings program.</p> <p>There are no other factors identified.</p>
<p><u>Research Question 2 (RQ2):</u> How can business model innovation be used to re-introduce prize-linked savings products in South Africa?</p>	<p>Research participants provided the following answers to the second research question:</p> <ul style="list-style-type: none"> • Multi stakeholder collaboration towards legislation amendment to legalise prize linked savings accounts, led by the DTI and National Treasury. • Introduce prize linked savings accounts as a Promotional Competition. • Incorporate the use of mobile applications technology; behavioural science; and multi stakeholder collaboration into product design. • Ensure technology platform scalability, and strive for minimal customer acquisition costs. • Address low levels of financial literacy and provide free independent financial advice, particularly to low income earners and non-savers. • Having non-banking entities design and deliver the new PLS products (e.g. Fintechs) • Proactive engagement with regulators to ensure progressive and enabling legislation. 	<p>The second research questions has never been explored before, hence there were no identified answers proffered on available publications on prize-linked accounts in South Africa.</p>

CHAPTER 5: DISCUSSION

5.1. Introduction

This chapter discusses the synthesis of the results of this research, which are in section 4, together with the researcher's proposed business model innovation framework and a conceptual business model for re-introducing PLS products in South Africa

Section 5.2 discusses answers to the first research question: *What are the perceived factors that caused FNB's Million-a-Month-Account to be discontinued in South Africa?*

Section 5.3 addresses the second research question: *What type of business model innovation is required to assist with the re-introduction of prize-linked savings products in South Africa today?*

Section 6.3 systematically consolidates the results of the two research questions to propose and discuss a PLS business model innovation framework for South Africa, and a conceptual business model presented in the form of a business model canvas. This serves as a practical contribution to guide the implementation of a new PLS business model innovations in South Africa.

The chapter ends with concluding remarks under section 5.4.

5.2. Factors that contributed to the discontinuance of FNB's MaMa

The factors discussed below were identified by research interlocutors as the cause for the illegalisation and ultimate discontinuation of FNB's MaMa in South Africa. A concise summary of each finding is provided below, and there is a discussion of whether the findings are consistent or inconsistent with prior studies, theory, and experience recorded elsewhere.

5.2.1. Prohibitive Legislation - The Lotteries Act

Most research interviewees pointed to the Lotteries Act as an important factor that stood in the way of FNB's prize linked account succeeding in the South African market, with the ruling of the High Court and affirmation of that ruling by the Supreme Court of Appeal as evidence. It must be noted that most interlocutors stated that they do not agree with the court ruling,

however the judgment effectively etched case law that the Million-a-Month-Account and similar prize linked savings accounts are an illegal lottery in terms of the South Africa's Lotteries Act No. 57 of 1997.

A concise summary of the Supreme Court of Appeal's judgement (*Firststrand Bank Limited vs. National Lotteries Board*, 2008) is as follows:

- “A lottery for purposes of the Lotteries Act is a lottery as ordinarily understood but extended to include ‘any game, scheme, arrangement, system, plan, promotional competition or device for distributing prizes by lot or chance...’” (*Firststrand Bank Limited vs. National Lotteries Board*, 2008, p. 5).
- “Unauthorised lotteries are prohibited by s 56 and the conduct of a lottery is made an offence by s 57” (*Firststrand Bank Limited vs. National Lotteries Board*, 2008, p. 5).
- “The key to determining whether a lottery is unlawful is s 63, which allows lotteries that lack a ‘subscription’” (*Firststrand Bank Limited vs. National Lotteries Board*, 2008, p. 5). Section 63 “reads as follows: ‘Nothing in this Act shall apply in relation to any lottery...in respect of which there is no subscription.’” (*Firststrand Bank Limited vs. National Lotteries Board*, 2008, p. 5).
- FNB's case rested on their argument that no subscription was paid by MaMa holders, as their deposits remained theirs and could be withdrawn by giving the bank a 32 day notice. Effectively, “nothing is lost or put at risk by the customer who pays money for deposit to the account” (*Firststrand Bank Limited vs. National Lotteries Board*, 2008, p. 9).
- The judge finds differently to FNB's position. He states that “the unavoidable consequence of making the payment is that possession is lost to the depositor and acquired by the bank – irretrievably for the period that it remains with the bank” (*Firststrand Bank Limited vs. National Lotteries Board*, 2008, p. 13). He therefore sees that as indeed a consideration.

This finding is consistent with other studies that explore the legality of PLS products, particularly in the United States. For example, a paper that analyses various PLS models and explores opportunities to reproduce such programs nationwide in the US observes that “lottery prohibitions remain a significant barrier to PLS programs in the absence of specific authorizing legislation, [and that] the success of PLS programs will require potential vehicles to obey and

possibly change the applicable legal rules” (Watford, 2014, p. 923). A study by Kearney et al (2010) which describes prize-linked savings products and argues for their potential popularity in the United States, and especially to low and moderate income non-savers, also highlights that legislation in the US was prohibitive and required that PLS products be structured as a sweepstakes with ‘no purchase required’.

In order to deal with the lottery regulatory challenges for prize linked savings products, the State of Delaware in the US had to legislatively declare that prize-linked savings are not a lottery. In their House Bill No. 31 that was enacted in 2017 (Bishop, 2018), the State of Delaware declares that:

"A savings promotion raffle that conforms with the requirement of Section 933 of Title 5 is not gambling and does not constitute a lottery unless the chance to win a prize requires consideration. The deposit of a specified minimum amount of money in a savings account or other savings program that results in an entry in a savings promotion raffle is not consideration."

At the time when MaMa was launched in South Africa, promotional competitions were regulated by section 54 of the Lotteries Act of 1997. The Lotteries Act defines a promotional competition as “a lottery conducted for the purpose of promoting the sale or use of any goods or services” (Lotteries Act No. 57, 1997, p. 4). Promotional competitions are explicitly permitted under section 54 of the Lotteries Act, provided that they comply with prescribed conditions, one of which is that they may not be ‘substantially similar’ to the National Lottery (Firststrand Bank Limited vs. National Lotteries Board, 2008; Lotteries Act No. 57, 1997).

The Supreme Court of Appeal judgement (*Firststrand Bank Limited vs. National Lotteries Board*, 2008) points out that there are only other four types of lotteries that are that are permitted under very restrictive conditions. These include private lotteries; society lotteries; and promotional competitions (Firststrand Bank Limited vs. National Lotteries Board, 2008). Promotional competitions prove to be significant, as this research study shows, and they are discussed below.

Louw (2012), a retired South African advocate, published an article where he argued that the Supreme Court of Appeal erred in their ruling against FNB’s MaMa because he believes that

the FNB scheme was a promotional competition. However, FNB did not market the product as a promotional competition nor use the promotional competition angle to defend against the lawsuit brought by the National Lotteries Board. Louw (2012, p. 10) believes that “FNB was badly advised to rely on the absence of subscription argument and should, at the very least, have raised the exemption argument in the alternative”.

FNB did consider positioning their MaMa product as a promotional competition, but ultimately decided against that approach because they believed that it would have ruled out FNB’s staff and their relatives from saving using this product. This is according to the rules of promotional competitions in South Africa (and in most countries), where staff and their immediate relatives are not allowed to participate in competitions run by their employer. This decision proved to be a fatal blow to FNB’s prize linked savings account and the future of similar products in South Africa.

5.2.2. Market concentration as an inhibitor to innovation

A financial services industry expert interviewed for this research argued that market concentration might have caused other banks to miss the opportunity for innovation and multi-stakeholder collaboration that was required to ensure that PLS products were explicitly legalised in South Africa. The research findings show that some of FNB’s competitors sought to convince the Reserve Bank to raise issue with FNB about their no interest paid PLS account on the basis that it was unfair to consumers or it was an unjust act of profiteering by FNB. The argument is that the banking sector did not take time to:

- consider a financial sector view that PLS products might benefit the industry and the economy as a whole by enticing non-savers into the financial system for financial inclusion and improvement of the domestic household saving rate in South Africa.
- develop their own innovative PLS products to compete with FNB’s MaMa, while collaborating to addressing the legislative hurdles posed by the Lotteries Act.

South African banking industry has a high level of market concentration (Okeahalam, 2001; Simatele, 2015), with a monopolistic competition footprint. According to Okeahalam (2001), the high concentration in South African banking sector leads to comfortable returns and reduces the incentive for banks to innovate to capture market rents in seemingly unattractive and/or difficult market segments. The South African banking sector has over the years concentrated its services to middle-upper income consumers and corporate business, with

minimal attention to millions of low income groups (Ismail & Masinge, 2012). This phenomenon may explain why the South African banks did not get out of their comfort zones to get PLS products legalised in South Africa because:

- PLS products are believed to be popular among low income earners and those with a propensity to gamble or play the lottery. This market segment may be categorised as the bottom or base of the economic pyramid, which is not particularly easy to make profits from using traditional business models.
- The lottery industry in South Africa and worldwide enjoys a protected monopoly status, and arguably political support, which increases barriers of entry.

Due to high market concentration presenting challenges for market share growth in the retail bank deposits space, FNB had an incentive to innovate by developing a MaMa product to attract new depositors into the bank. FNB innovated to escape the intense competition for market share in retail banking, in line with escape competition effect argument (Aghion et al., 2005). Other banks reacted in a non-innovative manner, in the face of competition from FNB's new and successful product, which is consistent with the Schumpeterian effect (Aghion et al., 2005).

It may seem obvious that the other banks should have collaborated with FNB to push for legislation amendment to explicitly permit PLS products in South Africa, as this would have benefited the financial sector and the economy as a whole (from a savings and investment perspective). However, trying to get savings up at the bottom-of-the-pyramid, when there is very high unemployment rate and high inequality, is a daunting challenge. It seems that banks did not find encouragement to tackle this problem, particularly where there is high market concentration with comfortable returns for the incumbents.

5.2.3. Poor cooperation and collaboration between state entities

The government mandate for encouraging and enabling national investments in South Africa is split between the Department of Trade and Industry (DTI) and the National Treasury. Simplistically, the DTI is responsible for investments in large scale economic infrastructure projects, while National Treasury is accountable for savings and investments in financial and capital markets. The savings part of the investment equation is only explicit in the case of the National Treasury, which has a division that monitors the national savings rate and is charged with formulating policy interventions (e.g. Tax Free Savings Accounts). Savings are necessary

irrespective of whether they are intended for investment in financial markets or directly in infrastructure projects or manufacturing ('bricks and mortar' investments). This shared responsibility implies a need for effective collaboration between the two departments to be able to deliver optimally on the national savings and investment goals.

With reference to the FNB MaMa case study, the main actors are FNB and the National Lottery Board and they are regulated by National Treasury and the DTI respectively. Both departments had some issues and/or reservations about FNB's MaMa scheme. The National Lottery Board, a DTI entity, saw MaMa as a threat to the national lottery revenues and a violation of the Lotteries Act. National Treasury saw it as potentially unfair profiteering by FNB because of the zero interest rate paid on MaMa deposits (0% initially, then 0.25% later). However, they never engaged to discuss how to best handle the new innovation by FNB in the interest of South Africa's national household savings rate that was a known concern even back in 2005.

Research interlocutors, particularly those from National Treasury, raised as an issue the lack of effective collaboration between the DTI and National Treasury on policy matters and that the departments are more territorial than cooperative. This study did not find any evidence that these two departments discussed the MaMa matter prior or during the court challenge between the National Lottery Board and FNB, despite this matter affecting the mandates that the two departments are responsible for – namely improving national savings and investments, and national lottery revenues for investment in worthy causes. At the very least, the two departments could have discussed what needed to be done or changed for the PLS products (e.g. FNB MaMa) to coexist with the national lottery as it was known to be possible in other countries such as United Kingdom, Sweden, Kenya, and others.

5.3. Business Model Innovation for PLS Products in South Africa

This section discusses the areas identified by this study as critical for business model innovation that is needed to successfully re-introduce PLS products in South Africa. The various pieces of the PLS business model innovation puzzle that were surfaced in the data analysis of this study are the following:

- i) *Prize-linked savings legislation design and implementation.* The new legislation could be developed while exploiting the provision for authorised promotional competitions under the Lotteries Act and the Consumer Protection Act to offer PLS products legally.

- ii) *Innovative PLS products* that take advantage of available ICT innovations and breakthroughs in the adoption of behavioural economics in the financial services sector; and
- iii) *Cross-sector partnerships* necessary to realise financial inclusion goals through financial education initiatives and provision of free independent financial advice to low income households.

The primary reasons why business model innovation is necessary for the re-introduction of PLSAs in South Africa are, first, the legislative landscape that was altered by the Supreme Court of Appeal's ruling against FNB's MaMa product in 2008; second, the technological developments and financial sector regulatory or policy changes that have occurred since 2008 when FNB's MaMa last existed; and lastly, the multi-stakeholder collaboration requirement to deliver on the broader financial inclusion challenge.

It is worthwhile to note that FNB's MaMa was conceived and introduced into the market as an innovative product (Gabhart, 2019; Kearney et al., 2010), rather than a business model innovation. The business model innovation approach is fundamentally different from product innovation, which is what FNB's MaMa offering was.

5.3.1. PLS Legislation Requirement

As Watford aptly states that “an explicit authorization of PLS programs is still prudent” (2014, p. 937), it would be necessary for new legislation to be introduced to permit PLS schemes in South Africa.

The March 2008 judgment by the Supreme Court of Appeal sets a precedent that effectively outlaws similar prize linked savings schemes in South Africa. The results of this study conclude that a formal process to pass a bill that will legalise PLS products in South Africa is necessary, given the standing court judgment against FNB's MaMa. An explicitly authorising legislation for prize linked savings accounts is prudent, and it will allow for mechanisms that enable regulators to provide desirable oversight to ensure protection of consumers and attendance to any unintended consequences that PLS schemes might have.

It is important for the financial sector entities and PLS advocates to become directly involved in the legislative process by drafting and proposing their own compromise bill, and to educate

policymakers about the potential benefits of prize-linked savings (Watford, 2014). Such a bill needs to balance the urgent need to increase the households saving rate in the country against minimising a potential threat to the success of the national lottery. Trust and a win-win scenario between PLS proponents and state lottery defenders can be achieved through multi-stakeholder collaboration.

This study identifies the following stakeholders as key participants required to successfully pass a bill to legalise PLS products in South Africa: National Treasury; Department of Trade, Industry and Competition; National Lottery Commission; Association for Savings and Investment South Africa (ASISA); the Banking Association South Africa (BASA); Financial Sector Conduct Authority (FSCA); South African Savings Institute; and relevant labour unions.

When the US was faced with a similar situation where lottery laws prohibited PLS schemes, they introduced the American Savings Promotion Act to explicitly permit savings promotion raffles in recognition that “encouraging personal savings is in the national interest of the United States” (American Savings Promotion Act, 2014).

There is an important difference in how lotteries are legislated in the US versus South Africa. In South Africa, there is one Lotteries Act that is applicable nationally, across all provinces. Each of the 52 states in the US has its own lottery law, and therefore the American Savings Promotion Act has to be promulgated by each state that wishes to permit PLS products in its jurisdiction. Below are some legislation amendment approaches from the various states in US in their legalisation of PLS products (Watford, 2014, pp. 933, 936), which could provoke ideas for South African legislators and relevant stakeholders to consider:

- Maine explicitly exclude "savings promotions raffles" from the definition of "games of chance," which are otherwise prohibited.
- Nebraska inserts "savings promotion raffles" into the definition of "gift enterprise"- a term used to describe conduct that does not fall under the prohibition on gambling.
- Connecticut, Maryland, Michigan, North Carolina, Rhode Island, and Washington states directly authorize credit unions to conduct savings promotion raffles, while imposing certain requirements on their operation.
- Certain states have adopted mechanisms for governmental oversight of PLS programs. Watford (Watford, 2014, p. 945) advocates for policymakers to “empower a designated

executive agency to monitor savings promotions and to issue cease and desist orders for violations of statutory requirements”.

The Financial Sector Conduct Authority (FSCA) is part of the Intergovernmental Fintech Working Group (IFWG), which includes representatives from National Treasury, Financial Intelligence Centre, National Credit Regulator, South African Reserve Bank, South African Revenue Service and Competition Commission. All these entities fall under the executive authority of either the Finance Ministry (National Treasury) or Department of Trade, Industry and Competition (DTIC), who would be required to work collaboratively towards legislating PLS products in South Africa.

The IFWG aims to understand the growing role of fintechs and innovation in the South African financial sector and to explore how regulators can more proactively assess emerging risks and opportunities in the market. The Innovation Hub Regulatory Sandbox, under the auspices of the IFWG, presents an opportunity for a multi-stakeholder collaboration to pilot a regulatory framework for PLS products in South Africa, which could practically inform the legislation change necessary for a harmonious co-existence of the national lottery and prize-linked account in South Africa.

While the PLS legislation process is underway, which is likely to take a few years for a bill to be passed in parliament, promotional competitions as contemplated under the Consumer Protection Act and section 54 of the Lotteries Act could be exploited to pilot new PLS products in South Africa. More discussion on promotional competitions as a viable interim solution is discussed below.

5.3.1.1. Prize-linked Savings as a Promotional Competition

PLS products can be introduced today in South Africa as promotional competitions, albeit as a transition towards explicit legalisation of PLS products to coexist with the national lottery. Section 54 of the Lotteries Act of No. 57 of 1997 permits promotional competitions that comply with specified requirements. Additionally, section 36 of the Consumer Protection Act spells out the requirements under which promotional competitions can be legally conducted in South Africa, to promote and protect the economic interests of consumers.

Watford (2014, p. 929) advises that “PLS advocates must carefully consider the effectiveness of pre-existing state legislation authorizing PLS contests”, which warrants a close look at how promotional competitions that are permitted under the Lotteries Act and the Consumer Protection Act could be leveraged towards re-introducing PLS products in South Africa.

The US adopted a similar approach where Credit Unions that were permitted to run promotional competitions did so for PLS products, while undergoing the lengthy process of developing and promulgating the American Savings Promotion Act to explicitly legalise PLS products.

Promotional competitions for savings products should not necessarily be limited to private sector entities, such as banks and fintech companies, but can include products offered by government institutions. For example, National Treasury could imitate the Premium Bond Program in the United Kingdom by offering their RSA Retail Bonds through a lottery-like promotional competition, thus combining the excitement of a lottery with the security of investing in a National Treasury backed financial product (Watford, 2014)

While promotional competitions in South Africa have some limitations, they do present an avenue for a well-crafted business model for PLS products to be implemented within the existing legal framework.

5.3.2. PLS Innovation through technology and behavioural economics

While the removal of legal barriers for PLS products in South Africa is a critical first step, this research study also reveals the importance of innovation for a sustainable and scalable take up of PLS products. This section discusses innovation from three perspectives, namely the use of current and emerging technologies; incorporation of relevant behavioural science and behavioural economics principles; and leveraging of strategic partnerships for mutual benefit. The discussion is structured such that it recaps the findings from the research data analysis; references academic literature that supports research findings or provides additional insight for consideration; and also provides references to existing case studies where similar innovations have been implemented.

5.3.2.1. Technology innovation

Research participants recommended that product designs for new PLS scheme must consider the prevalence and reach of mobile technology applications; use of artificial intelligence to monitor and factor in consumer behaviour; and advances in social media technology as a “word-of-mouth” mechanism for product awareness and sharing of customer success stories (e.g. PLS winners). The use of technology by banks to develop new products and to respond positively to changing customer needs has been argued for in several studies (Chen et al., 2019; Ismail & Masinge, 2012; Kimble & Milolidakis, 2015; Parameswar et al., 2017). The Industrial Credit and Investment Corporation of India Bank (ICICI Bank) is recognised for gaining a leadership position in the market by “strategically using technology to broaden its reach to under-served consumers in rural communities with innovative products, financial literacy outreach, and efficient modes of product delivery” (Parameswar et al., 2017, p. 6).

It was also suggested by some participants that PLS products could be re-introduced by a non-bank entity such as a ‘fintech’. Fintechs are broadly defined as a companies that use digital technologies to enable innovative business models for the delivery of financial services (Chen et al., 2019; Imerman & Fabozzi, 2020; Varga, 2017; Zhao et al., 2016).

Chen at al. (2019) identify categories of technologies that are applicable in fintech as cybersecurity; internet-of-things (IoT); blockchain; data analytics; robo-advising (artificial intelligence); peer-to-peer transactions; and mobile transactions. A recent study by Chen et al. (2019) shows that blockchain; internet-of-things (IoT), and artificial intelligence innovations are most valuable fintech innovation types based on the valuation of patent filings. It supports a conclusion by a different earlier study that a widespread adoption of blockchain in finance and other business sectors will lead to many business innovations (Zhao et al., 2016).

The analysis of this dissertation points to blockchain; artificial intelligence; mobile applications and cloud computing as enabling technologies that could play a pivotal role towards the delivery of new PLS products – as discussed below.

Blockchain “is a technology to secure integrity and reliability of transaction records without trusted 3rd service provider, by having all the participants in the network create, record, store and verify transaction information jointly, and maintaining a decentralised ledger” (Zhao et al.,

2016, p. 336). Zhao et al (2016, p. 7) put it succinctly by stating that “the essence of blockchain lies in its ability to support trustworthy transactions via networked computation in place of human monitor and control”. The transfer of digital money using blockchain technology via decentralised networks can be in the forms of business-to-business, business-to-consumer, consumer-to-consumer and peer-to-peer (Batiz-Lazo and Efthymiou, 2016; Pieters and Vivanco, 2017; Vranken, 2017).

Pooltogether, launched on the 24th of June 2019, is the first example of the use of blockchain for a development of a prize-linked savings product. The Pooltogether application was developed on Ethereum (blockchain), and also accepts cryptocurrency tokens as deposits to participate in the savings lottery. Participants deposit their blockchain native assets like Ethereum or any other supported token into a pool, and for every deposited US dollar worth of cryptocurrency tokens, a lottery ticket is allocated to the depositor. A “pool” is essentially a smart contract between the issuer and depositors. Pooltogether invests all the deposited money in risk-free DeFi (Decentralized Finance) products. Interest that is accrued over a specified period is subsequently rewarded to one lucky lottery winner. Everyone’s deposited money is returned to them in full after the lucky draw is concluded at a specified date.

Artificial intelligence (AI) or machine learning is also expected to play a bigger role in consumer finance. AI could be used to analyse financial decisions (e.g. how much to save, when to save, when to withdraw savings; etc.) by considering all available behavioural variables. This would assist the PLS products suppliers to predict what their books of deposits might look like under various scenarios (e.g. prize sizes on offer; prevailing interest rates; socio-economic events; social media discourse; etc.) and respond proactively.

AI could also be used to recommend financial literacy courses or financial education content for PLS users, based on observations about their level of financial competence. Gamification provides a creative way for determining peoples financial literacy level, where the various levels of the game require a certain level of grasp of financial concepts. Artificial intelligence could for instance consider a person’s score in some financial literacy gaming application, together with actual financial choices the person has historically made, to identify financial and economic literacy courses that they require to improve financial knowledge.

Research study shows that fintechs could have a positive role to play in the introduction of innovative PLS products. Fintechs are partly defined by the use of mobile and web applications

to access financial services. The PLS products that have been launched in the US since the enactment of the American Savings Promotion Act have mostly been in a form of mobile applications. Some examples of fintech initiatives in the PLS space in the US include Billinero⁵ (which is powered by Centier Bank in Indiana, USA), Pooltogether⁶, and PrizePool⁷.

Mobile phones and use of mobile applications in South Africa is prevalent, and this research suggests that a new PLS innovation in SA could be best delivered in a form of a mobile application. The use of behavioural finance, artificial intelligence, and big data analytics is already present in the South African banking sector, with Discovery Bank (Hyland et al., 2021) as a prime example.

5.3.2.2. Behavioural Economics

Interest in behavioural sciences in the field of finance or banking has increased substantially over the past decade, in South Africa and globally. It was no surprise when more than one research participants opined that behavioural finance ideas should be considered when designing new PLS products for South Africa.

Behavioural economics can be simplistically defined as a mixture of psychology and economics that has found tremendous interest in the world of finance and banking (Thaler, 2016). Colin Camerer puts it as “being open- minded about what variables are likely to influence economic choices” (2019, p. 588).

There are at least three concepts that are important in behavioural economics that would be of interest in the PLS product design, namely overconfidence; loss aversion; and self-control (Thaler, 2016). Overconfidence by people in their abilities leads them to overestimate their chances of success. Loss-aversion refers to the observation that people have a stronger fear of pain than desire for pleasure. Self-control speaks to people’s bias for enjoyment now over delayed or future gratification.

Another concept that would be of interest is the “availability heuristic”, where people estimate the frequency or likelihood of some event based on how easily they recall instances of that

⁵ <https://billinero.com>

⁶ <https://pooltogether.com>

⁷ <https://getprizepool.com>

event (Thaler, 2016). This hypothesis is attributed to research by Kahneman and Tversky. This observation could inform how PLS wins by participating savers are published and marketed widely, such that other potential savers fancy their likelihood of winning PSL prizes too.

The combination of the power of technologies, such as artificial intelligence and machine learning, with behavioural economics concepts could result in significant innovations. AI can be helpful in “making inferences about what a person wants and what a person will do” (Camerer, 2019, p. 603), which can in turn be used to help PLS customers with their saving and investment decision making – through financial education and timely “nudges”.

The question that designers of PLS business models need to ponder is how their PLS products could ethically exploit these human behavioural traits for the financial wellbeing of households.

5.3.3. Cross-sector and Multi-stakeholder Collaboration

Research results highlight the need for cross-sector and multi-stakeholder collaboration to achieve regulatory harmonisation that is required for PLS schemes to be implementable in South Africa. Furthermore, such collaboration is also required to achieve financial inclusion through financial education and provision of free and independent financial advisory services to the low income population. The role of cross-sector and multi-stakeholder collaboration for financial literacy and financial advisory is discussed in the sub-sections below.

5.3.3.1. Financial Literacy

Research participants lamented how the majority of South Africa’s population lacks financial literacy and called for financial education to be included as a complementary intervention within a PLS business model innovation for the re-introduction of PLS schemes in South Africa.

Financial and economic education is considered one of key demand-side initiatives for achieving financial inclusion by helping and enabling individuals and households to access and use appropriate financial products (Atkinson & Messy, 2013). A project undertaken by the OECD International Network on Financial Education (INFE) on the role of financial education in financial inclusion concluded that “low levels of financial inclusion are associated with lower levels of financial literacy” (Atkinson & Messy, 2013, p. 3). The G20 (an international

forum for the governments and central bank governors from 19 countries and the European Union), of which South Africa is a member, identifies nine (9) Principles for Innovative Financial Inclusion⁸. The nine principles for innovative financial inclusion include innovation (technological and institutional); empowerment through financial literacy and financial capability; cooperation (accountability and co-ordination within government, as well as partnerships); and knowledge (for data and evidence based policy making). These principles could be useful anchors for the re-imagination and introduction of innovative PLS products in South Africa.

In South Africa, the priority areas for national financial stability are managed by different government departments and entities as follows: *consumer protection* (Department of Trade Industry and Competition, National Consumer Regulator); *financial inclusion* (National Treasury, Financial Sector Conduct Authority); *financial education* (National Treasury, Financial Sector Conduct Authority). Collaboration and co-ordination across government authorities and private sector stakeholders is key (Atkinson & Messy, 2013), but this research study has found that this is currently weak in South Africa as the relationship between National Treasury and the Department of Trade Industry and Competition is characterised as “territorial” rather than collaborative. Perhaps a PLS business model innovation that includes financial education components might serve as catalyst to bring about the required cooperation between the two key government entities that are directly responsible for South Africa’s economic and financial stability.

Increasing the level of financial inclusion bears a moral responsibility to equip the newly included population group with financial and economic knowledge that will enable them to make informed choices and decisions about their limited financial resources. Policymakers and corporates in the financial services sector need to collaborate to achieve tangible and positive financial literacy outcomes for households, especially the youth majority in South Africa. The latest OECD publication on financial literacy analytical and assessment framework states that “a lack of financial literacy leaves people ill-equipped to make appropriate financial decisions, which could, in turn, have tremendous adverse effects on both personal and, ultimately, global financial resilience” (OECD, 2019, p. 7). There is evidence in South Africa where financial liberalisation and credit extension to consumers without appropriate checks-and-balances

⁸ <http://www.g20.utoronto.ca/2010/to-principles.html>

resulted in extremely high levels of indebtedness among households, particularly among low-to-moderate income groups, an issue that was raised poignantly by research participants from the National Treasury. It is one of the reasons that the notion of having financial literacy and free financial advice interventions as part of the PLS scheme delivery model emerged from the discussions with research participants.

The use of digital technologies in financial services, or fintech, is widespread and increasing in South Africa and globally. Young people are at the forefront of embracing fintech services, with an estimated 37% of 18-24 year-olds and 48% of 25-34 year-olds who are active users of fintech services on a regular basis across the G20 economies (OECD, 2019). Digital platforms present an effective and scalable mechanism for delivering financial literacy content and personalised financial advice (OECD, 2021). It is therefore practical to consider including a component for delivery of financial literacy content within a PLS mobile or web application platform.

5.3.3.2. Free and independent financial advice

As a complement to basic and critical financial literacy, low-to-mid income groups would derive significant benefit from free and independent financial advice. This observation came strongly from the FSCA and National Treasury interlocutors.

PLS customers could be connected with accredited and trusted financial advisors that offer free and independent financial advice. This could be done within the PLS Platform, connecting users with professionally accredited financial advisors, and perhaps also incorporating the fast developing AI enabled robotic advisory technology.

5.4. Conclusion

The research discussion is concluded and summarised by the following implementation statements that the researcher believes must be considered and incorporated in a new PLS business model innovation for South Africa:

- **Implementation statement 1** – Innovators can exploit the existing legislation of promotional competition to avail PLS products through business model innovation and entrepreneurial bricolage⁹.
- **Implementation statement 2** - PLS business model innovations must be piloted to demonstrate the impact of PLS schemes on the level of household savings and the national lottery in South Africa.
- **Implementation statement 3** - A financial inclusion agenda through financial literacy and financial capability initiatives must be incorporated into PLS business model innovations for South Africa.
- **Implementation statement 4** - Existing innovative technologies must be leveraged to accelerate reach and scale of PLS business models.

The next chapter concludes this dissertation and articulates recommendations for future research related to the research topic of PLS business model innovation in South Africa.

⁹ Bricolage is the ability of the firms “to create something from nothing by exploiting physical, social, or institutional inputs that other firms rejected or ignored” (Baker & Nelson, 2005, p. 1).

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The research problem of this dissertation is concerned with the current prohibition of prize-linked savings products in South Africa, flowing from the ruling by the Supreme Court of Appeal that FNB's MaMa was an illegal lottery (*Firststrand Bank Limited vs. National Lotteries Board*, 2008). The study sought to discover in detail what the factors that led to FNB's MaMa being deemed illegal are, in order to understand what needs to be changed or how those factors could be addressed to be able to re-introduce PLS products in South Africa without flouting existing regulations. The second aim of the study was to also explore the potential role of business model innovation in the re-design and implementation of PLS products in South Africa and, in this regard, make a practical contribution in the form of an '*inclusive innovation*'.

This research study draws the empirical evidence required to answer the research questions from the real experience of the FNB's MaMa program in South Africa, in the form of a case study, and from perspectives of current stakeholders in the ecosystem such as National Treasury; Financial Sector Conduct Authority; National Lottery Commission; and an economics professor with extensive industry experience in investment and asset management. In-depth interviews were conducted with the original executives that designed and implemented FNB's MaMa program, as well as executives from various entities in South Africa's financial services ecosystem that have personal and professional experience on the topic of household savings in general and prize-linked savings in particular. Founders of two fintech start-ups were also interviewed to provide their perspectives on business model innovation in the fintech space in South Africa.

This chapter revisits the two research questions that this study sought to answer, and then discusses the conclusions that are reached for each of the research questions and the contribution that this research study makes. It also makes some broad recommendations and suggestions for further research, which would be complementary to the entrepreneurial efforts to re-design and implement new PLS business model innovations in South Africa.

6.1. Research Question 1 – Barriers to FNB’s MaMa

RQ1: What are the perceived factors that caused FNB’s Million-a-Month-account to be discontinued in South Africa?

As prior research (Gabhart, 2019; Watford, 2014) concludes, PLS cannot thrive in an environment that does not have explicit legislation that addresses the often existing contention with national lottery interests. Legislation ambiguity regarding PLS products in South Africa led to the demise of FNB’s Million-a-Month-Account scheme. A key conclusion in this regard is that a process to design and implement explicit PLS legislation is necessary in South Africa. While promotional competitions do enable some form of PLS implementation, but this comes with administrative costs and inefficiencies, and a risk of being hauled before courts by the National Lottery Commission for one reason or the other.

Secondly, high market concentration has negative impact on how competition responds to innovation (Aghion et al., 2005; Bikker & Haaf, 2002; Bos et al., 2013), as shown in the case of FNB’s MaMa innovation in 2005-2008. The level of market concentration in the South African banking sector was very high during the period when FNB’s MaMa was introduced (Okeahalam, 2001; Simatele, 2015). The competing banks responded negatively to FNB’s innovative savings product, MaMa, instead of coming up with their own competing innovations and collaborating to influence the regulatory environment in their favour. It would seem therefore that a non-traditional banking entity, such as a fintech, may be better positioned to lead the re-introduction of PLS products, given the structure of the banking sector in South Africa.

The regulatory challenges that were encountered by FNB’s MaMa program still exist, but they are surmountable through proactive engagement and collaboration with the regulators and business model innovation. Given extensive evidence that prize-linked savings do benefit the often financially vulnerable low-to-moderate income households (Cole et al., 2016; Kowalski, 2015), finding ways to do away with regulatory barriers for PLS products in South Africa is highly desirable from a socio-economic impact point of view.

6.2. Research Question 2 – Business Model Innovation

RQ2: How can business model innovation be used to re-introduce prize-linked savings products in South Africa?

The second research question forces us to look at prize-linked savings products from a business model perspective. This is crucial given that the re-introduction of PLS products in South Africa seems best suited for a fintech start-up, according to the findings of this research. Any start-up business has to think about and design its business model. A business model innovation process for the re-introduction of PLS could be aided by the PLS Business Model Innovation Framework and the Business Model Canvas that are presented in section 6.3 and Appendix E – PLS Business Model Canvas, respectively.

Some considerations for an impactful implementation of a business model innovation for PLS re-introduction in South Africa are to:

- innovate and launch new PLS products within the limitations of existing regulations, while actively collaborating with regulators to challenge the existing boundaries and redefine a new regulatory regime. A starting point in this regard could involve working with the Intergovernmental Fintech Working Group (IFWG) through their Innovation Hub, which is a collaborative effort with participation from the Financial Sector Conduct Authority; Financial Intelligence Centre; National Credit Regulator; South African Reserve Bank; South African Revenue Service; Competition Commission; and National Treasury.
- broaden the scope of the PLS business model to include interventions required to achieve financial inclusion in South Africa, which are financial literacy and free financial advisory for low-to-moderate income individuals. The financial inclusion agenda strengthens the prospects of long term sustainability for the new PLS venture.
- Refine the business model as new PLS regulations are promulgated.

The PLS business model innovation proposed in this dissertation attends to the topical issues of sustainability that are espoused under the ESG movement, which makes it likely to appeal and find support across a diverse range of stakeholders.

6.3. Prize-Linked Savings BMI Framework for South Africa

This section presents inclusive innovation contribution that this MPhil research dissertation makes, the praxis model, in the form of a PLS Business Model Innovation Framework and a Business Model Canvas for a PLS platform that could be used to re-introduce PLS products in South Africa. This framework is based on the Cambridge Business Model Innovation Process (Geissdoerfer et al., 2017), that is integrated with the Business Model Canvas (Osterwalder, 2004; Osterwalder & Pigneur, 2010, 2011) and the Customer Development Model (Blank, 2005).

The proposed Prize-Linked Savings Business Model Innovation Framework for re-introducing PLS products in South Africa is illustrated in Figure 12 below, and discussed in the subsections that follow.

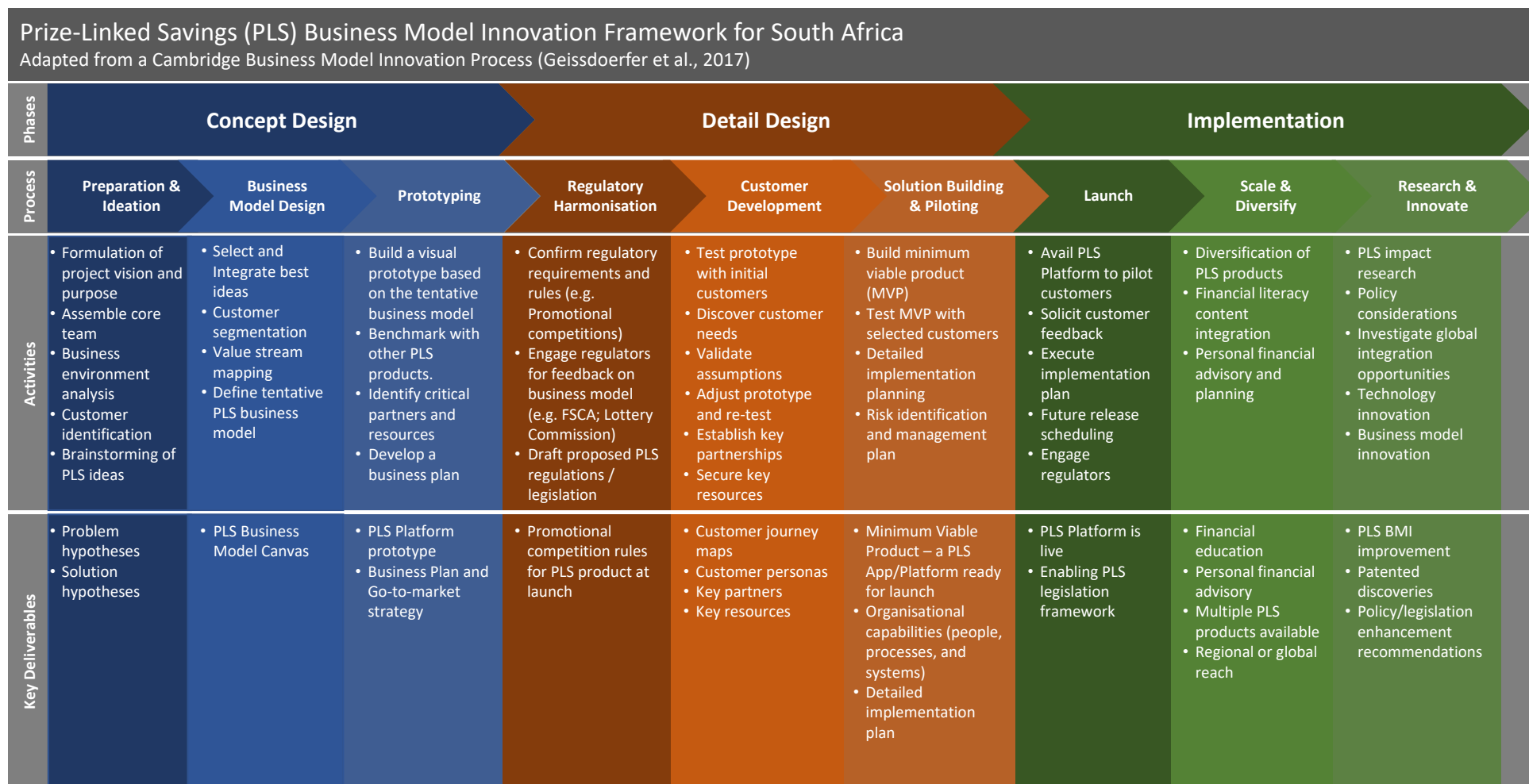


Figure 12: PLS Business Model Innovation Framework for South Africa

6.3.1. Concept Design

The concept design phase consists of three major processes or activities, namely ideation; business model design; and prototyping, which are discussed below.

However, before the ideation activity could be undertaken, some project initiation process is necessary. Project initiation process is concerned primarily with scanning and analysing the environment within which the PLS business model innovation is to operate, in order to understand the needs of key stakeholders and identify change drivers that may affect their needs. As Osterwalder & Pigneur (2011, p. 13) put it, “business models are designed for and executed within specific environments”.

The results of this research underscores the necessity and importance of multi-stakeholder collaboration if PLS schemes are to be successful and help achieve financial inclusion in South Africa. Research participants emphasised multi-stakeholder collaboration in various contexts, including the navigation of PLS legislation requirements; financial literacy programs; and financial products innovation. A deliberate ecosystem level assessment at concept design stage of the PLS business model innovation process will help surface the relevant stakeholders that are required to collaborate for a successful implementation of PLS schemes in South Africa. The expected outcome of this activity is a comprehensive stakeholder map that identifies key stakeholders that need to cooperate and collaborate to make PLS business model innovations successful in South Africa.

A number governments (e.g. Mexico; Pakistan; India; Kenya; Ghana; Brazil; Peru; United Kingdom; Indonesia; United States; et al) are integrating their policy responses to the “financial inclusion and financial education needs of their populations through co-ordinated strategies designed to tackle both demand and supply-side barriers to financial inclusion and low levels of financial literacy” (Atkinson & Messy, 2013, p. 21). The PLS business model innovation must therefore consider carefully how it intends to address the demand and supply-side barriers for financial inclusion and position PLS schemes as a financially inclusive saving and investment vehicle for the bottom-of-the-pyramid market. The business model innovation initiation phase as defined by Frankenberger et al. (2013) is particularly useful in this regard, as it speaks to the identification of changer drivers (the flipside of barriers) in relation to needs of the players in the ecosystem. It would be beneficial if a detailed analysis of causes and

drivers for the low household savings rate problem in South Africa were to be undertaken during the initiation phase, capturing both the demand and supply side of financial inclusion.

PLS products appeal broadly to non-savers or households with limited savings, who typically are low-to-moderate income households (Kearney, 2005; Kearney et al., 2010; Kowalski, 2015; Tufano et al., 2008). Therefore new PLS schemes are expected to be an inclusive innovation that would be able to serve the bottom-of-the-pyramid customers in a way that increases the level of financial inclusion in the economy.

Prahalad & Hart (2002, p. 2) define the bottom-of-the-pyramid opportunity as “selling to the poor and helping them improve their lives by producing and distributing products and services in culturally sensitive, environmentally sustainable, and economically profitable ways”. I wish to define the BoP opportunity in the context of the potential role of PLS schemes in South Africa’s household saving and investment challenge as:

“to attract low-to-moderate income households into the productive financial system and help them save and invest without barriers to achieve their financial security and stability in culturally sensitive, environmentally sustainable, and economically profitable ways.”

The results of the project initiation process should provide a solid basis on which the project team can dive into a rigorous BMI ideation process and come out with ideas that are informed and responsive to the idiosyncrasies of the South African market, with full appreciation of the BoP market requirements.

6.3.1.1. Ideation

The scope of ideation for business model innovation must be expected to be informed by what constitutes a business model in the first instance, and business model innovation in particular. I discuss below areas of scope for ideation that I suggest are significant for PLS business model innovation, which are:

- target market and customer segmentation, in the context of financial inclusion and inclusive innovation in general;
- business model content, governance, and structure - as defined by Amit & Zott (2012);
and

- lastly, the technological innovation opportunities and route-to-market options for new PLS schemes in South Africa.

Market Segmentation and Customer Definition

As discussed in earlier sections, PLS products appeal to low-to-moderate income earners; non-savers or those who do not have regular saving habits; highly indebted individuals; lottery players or gamblers; as well as those with optimistic expectations about their future (Cole et al., 2016; Kearney et al., 2010; Kowalski, 2015; Maynard, 2006; Tufano et al., 2008) . A significant portion of this generalised population is part of the bottom-of-the-pyramid market. However, the BoP population is not homogeneous, and thus requires careful segmentation in order to identify and understand the challenges and needs of target customers. It is useful to first establish a working definition of South Africa’s BoP market before attempting to segment the market that would be targeted for PLS adoption.

In their seminal publication about the untapped economic opportunities among low income and poor people, Prahalad and Hart (2002) defined the BoP market as the section of the population whose annual per capita income based on purchasing power parity in U.S. dollars, is less than \$1,500, which is the minimum considered necessary to sustain a decent life. However, a literature review in a recent publication by Lappeman et al. (2019) shows that poverty benchmarking and the actual size of the BoP segment, including South African BoP, vary significantly. Some studies identify the lowest tier of the economic pyramid in South Africa as households with a combined income of less than R6000 per month, constituting approximately 70% of South Africa’s working population (Lappeman et al., 2019). The determination and approximate sizing of the South African BoP market for this research study is based on the benchmark referred to by Lappeman et al. (2019).

There are several ways to classify market segments, including niche; mass; and segmented markets (Osterwalder & Pigneur, 2010). While the 70% of South Africa’s working population that is at the bottom of the economic pyramid may have much in common from the point of view of the mechanics of PLS products (e.g. low income and a desire to win), it is a segmented rather than a homogenous mass market group. The “segmentedness” of this market may lie primarily in the types of prizes that certain sections of this BoP population would value the

most. For example, winning a family weekend holiday valued at ten thousand rands (R10 000) may appeal more to a moderate income household rather than a low income one that may prefer cash.

The ideation process for a new PLS business model innovation that targets the BoP market must carefully segment the low-to-moderate income population and identify a compelling value proposition for each segment, with financial inclusion and maximisation positive socio-economic impact as a long term purpose. Customers for PLS products must be a central persona around which to assess the ecosystem and understanding their needs. Osterwalder and Pigneur (2011, p. 6) assert that “customers are the heart of any business model”. Customer identification and intimate understanding of customer’s needs is widely acknowledged in business and academic literature as a starting point for establishing (and innovating) a new business venture (Blank, 2005; Frankenberger et al., 2013; Morris et al., 2005; Osterwalder & Pigneur, 2010, 2011).

Business Model Content, Governance, and Structure

According to Amit and Zott (2012), a company’s business model is characterised by its content, structure and governance as key design elements. Content BMI is achieved when novel activities are added to the business model. Structural BMI requires that existing business activities are linked in novel ways, resulting in a new (improved) activity system. Governance BMI is a result of changing at least one of the parties that perform activities in a business model in order to achieve superior results.

Prize-linked savings products are financial assets that do not earn the depositor a traditional interest rate, but preserve depositors’ principal and provide randomized variable returns as winnings to depositors that are selected through periodic lottery-like random drawings (Pfiffelmann, 2013). Taken directly from the PLS product definition, there are at least three main elements that need to be considered when designing a PLS scheme, namely prizes (what and how much); interest rate payable to depositor; prize drawing process (e.g. fairness and auditability, fanfare, marketing considerations, etcetera).

PLS products usually offer cash prizes, with a large grand prize and a tail of a number of smaller prizes. Questions about the size of the grand prize, smaller prizes that constitute the tail of

winnings, and the number potential winners for each draw are critical. Ideas about these issues would determine the level of success that new PLS schemes are likely to achieve. FNB's MaMa, for instance, had a grand monthly prize that was set at one million rands and a tail of several R100 000s, R10 000s, and R1000s. The MaMa product design was a success for FNB back in 2005-2008, but it is not necessarily the only PLS product design that could have worked then nor the one that would appeal to South Africans today. The way the prize element of a PLS product is designed affects its attractiveness to potential depositors (Pfiffelmann, 2013). The research suggests that product designers must consider both prize sizes and prize frequency (i.e. daily; weekly; month; etc.) as a payoff structure that will generate and sustain the interest of customers (Guillén & Tschoegl, 2002; Maynard, 2006).

Ideas and decisions taken about new PLS products in as far as prizes offered; interest rates and fees; and the process of awarding prizes; will together determine how innovative the new PLS business model is from a *content* perspective. Some identifiable examples of PLS business model innovations that exploited governance and structure dimensions are:

- *Governance* example – a separation of the issuance and promotion of a PLS versus the actual banking of the deposited funds. For instance, a PLS product could be issued and promoted by a fintech company while the underlying bank account is managed by a licenced retail bank. Examples of this type business model are Yotta¹⁰ and PrizePool¹¹ who both partnered with Evolve Bank & Trust as their licenced and FDIC insured bank to deliver prize-linked savings accounts in the US.
- *Structure* example – the delivery of financial and economic literacy content (financial education) would introduce other participants in the PLS business model activity system. Qualified, accredited (e.g. FSCA accredited), and independent entities could develop, quality assure, and deliver financial education content as part of the PLS business model innovation for the South African market. An example of a similar business model innovation is EasyEquities, which integrates free educational resources through partnerships into their value proposition.

It is possible for a PLS business model innovation to incorporate all these three dimensions of business model innovation, namely content; governance; and structure.

¹⁰ See <https://www.withyotta.com>

¹¹ See <https://getprizepool.com>

Technology and route-to-market considerations

Mobile banking application technologies available today present opportunities that FNB MaMa could not exploit in years 2005-2008, which may have structural business model innovation implications. A customer could open a PLS account using a mobile application, including the fulfilment of know-your-customer processes. There are various options for customers to deposit funds into their PLS accounts, such as making deposits at participating retail stores. The advent of open banking makes various banking business models possible.

People often save for something, other than just a rainy day or an emergency. The new PLS product could be more than just a bank account with a chance to win, as FNB MaMa was, but a PLS product could also help savers acquire or realise the “something” that they are saving for in some value adding way (e.g. easier; cheaper; conveniently; etc.). The ideation process needs to explore and flesh out how the acquisition and realisation of the “something” could be achieved better by using a new PLS business model. This has a potential for PLS business model innovation across content or structure or governance (Amit & Zott, 2012). For example, some people may save for a home loan deposit to use when buying a new house. A new PLS business model may facilitate the actual home loan origination process when a depositor is ready to withdraw his or her funds for that purpose, taking advantage of economies of scale to find the depositor the best home loan rate available in the market and making the process of securing a home loan as convenient as possible for the customer. If this new value proposition were to be added to a new PLS scheme, it would constitute business model innovation across all three dimensions (i.e. content, structure and governance). The integration of processes required to make this example feasible is dependent on various technologies that exist today, and future innovations.

All of the available options for ideation discussed above have the potential to change the business model that was the basis for FNB MaMa product, and usher in interesting PLS business model innovations in South Africa.

6.3.1.2. Business model design

The business model design phase is about selecting promising ideas, the output of the ideation phase, and developing them into a fully integrated and viable business model (Frankenberger et al., 2013). This section discusses how this might be achieved using the business model

canvas (Osterwalder & Pigneur, 2010) as a business model design tool for a new PLS business model innovation for South Africa. A business model canvas helps us visualise the new PLS business model and ensures that sufficient attention is paid to the integration of the business model building blocks.

As stated in earlier sections of this dissertation, the re-introduction of PLS products in South Africa should also have a socio-economic impact agenda, an inclusive innovation purpose, and not just a profit motive. It is therefore crucial that the PLS business model aligns its revenue/cost optimisation with inclusive socio-economic impact maximisation. To achieve this, Osterwalder and Pigneur (2011, p. 4) suggest that business model designers must “weave purposeful impact into the DNA of a business model”, using the business model canvas as a design tool to maximise both profit and purpose.

The ideas that emerged during the research process for this dissertation are used to discuss a business model design process for a PLS business model innovation that could be successful in South Africa today. The subsections below are arranged according to the business model canvas building blocks, ending with a discussion of a complete business model canvas, that the researcher puts forward as a tentative PLS business model innovation for new PLS products in South Africa.

6.3.1.2.1. Customer Segments

Knowing who the customers are that the PLS innovation is targeting cannot be over emphasised. A target market is best identified by the definition of customers and their needs. As Morris et al. (2005, p. 730) point out that the "failure to adequately define the market is a key factor associated with venture failure".

There are three distinct but interconnected customer segments that the new PLSA business model could focus on, namely low-to-middle income (LMI) individuals and households; financial services companies (e.g. Banks); and financial advisors.

LMI Individuals and Households

The research indicates that PLS products appeal the most to low and moderate income groups (Guillén & Tschoegl, 2002; Kearney et al., 2010; Kowalski, 2015; Tufano et al., 2008), and

arguably they also have highest socio-economic impact among the LMI section of the population. It therefore makes sense to define one of the targeted customer groups for the new PLS business model innovation as LMI households, which may be further segmented for specific PLS product designs. It is no surprise that members of the original team that developed and launched FNB’s MaMa, who were key research informants interviewed for this dissertation, also confirmed that MaMa was conceptualised for the low income earners and unbanked individuals in South Africa.

Figure 13 below presents a suggested representation of the LMI population in South Africa, informed by research conducted by Lappeman et al (2019).

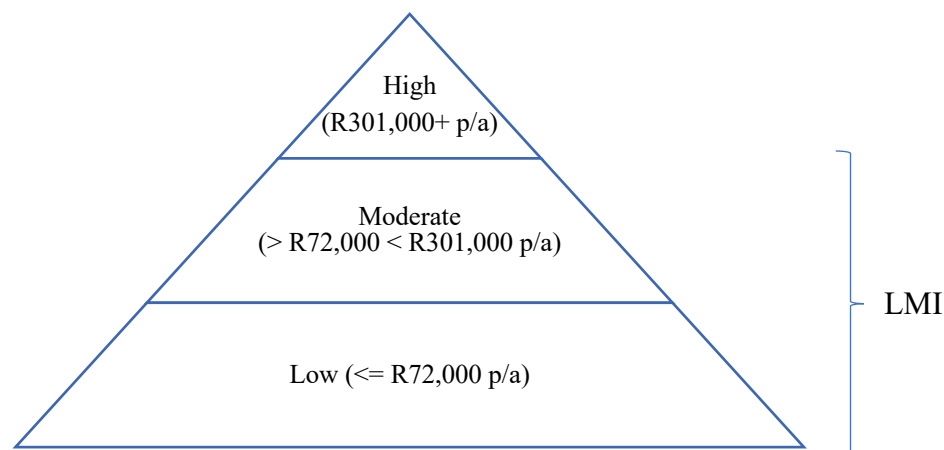


Figure 13: Household Income Pyramid for South Africa

Statistics South Africa (2011) tells us that the size of the LMI population in South Africa is just over 77% of the working population of South Africa, based on the census conducted in 2011. This constitute a large population of households that could benefit from PLS schemes.

Financial Services Companies

In 2002, the South African financial services sector committed itself in the form of a financial sector charter, drawn up in consultation with NEDLAC¹², to contribute towards sustained

¹² National Economic Development and Labour Council. NEDLAC is “the vehicle by which Government, labour, business and community organisations seek to cooperate, through problem-solving and negotiation, on economic, labour and development issues and related challenges facing the country.”

economic growth, development and social transformation in South Africa. Included in the financial services charter is a commitment “to annually invest a minimum of 0.2% of post tax operating profits in consumer education. Consumer education will include programmes that are aimed at empowering consumers with knowledge to enable them to make more informed decisions about their finances and lifestyles” (Financial Sector South Africa, 2002, p. 10). To date, a substantial investment is made by various financial sector companies in financial literacy programmes. However, the findings of this research suggests that there is an need to ensure that these programmes are directed optimally to achieve desirable impact. The levels of financial literacy among the adult working population in South Africa is said to be still very low, despite the financial education investment that has been made since the inception of the financial services charter in 2002.

The business model for the new PLS platform presents an opportunity for financial services entities to channel their financial literacy programs directly to LMI individuals who are using the PLS platform. If there are 1 million depositors on the PLS platform, for instance, that would be the size of the target market for financial literacy content provided by financial services sector entities as part of their financial sector charter commitment or their strategic corporate social investment.

Financial services entities are therefore a viable customer segment in a PLS business model, for their financial inclusion endeavours.

Financial Advisors

One way the PLS business model could help deliver free and independent financial advice to those who need the most, the LMI individuals, is by connecting vetted and qualified financial advisors with PLS product users. Benefits for LMI individuals is primarily easy access to trusted and independent financial advisors for free services, and perhaps even paid-for advanced or more comprehensive services when desired. A freemium model for financial advisors could be a viable possibility. Financial advisors can also play a role as customers and/or partners in a new PLS business model.

6.3.1.2.2. Value Proposition

The PLS value proposition for the low-to-moderate income population in South Africa could include the following:

- A chance to win big, by saving on the PLS mobile platform. The potential winnings could be both cash and non-cash prizes.
- Be finance “smart”, thanks to free financial literacy/education content available on the PLS mobile platform and free financial advisory services from trusted and independent financial advisors available on the PLS platform.
- Deposited funds are safely secured at a registered bank and are available on-demand.

The value proposition for financial services providers is the ability to publish their financial education content on the PLS mobile platform, and reach a targeted and well defined user base of LMI individuals who are savers on the PLS platform. This would help financial services providers (e.g. banks) to achieve their financial sector charter commitments or strategic corporate social investment plans in a measurable and impactful way.

PLS mobile platform could link financial advisors with a large base of LMI individuals for their services, both free and paid-for services. It could be great platform for financial advisors to profile themselves positively, enhance their individual brand, and ultimately win long lasting relationships with customers.

6.3.1.2.3. Channels

The primary interface with customers for the delivery of the value proposition is the PLS platform application, which would be accessible as a mobile application over a smartphone and a web portal. Social media channels (e.g. Instagram; Facebook; Twitter) could be used for digital marketing. Live prize draw broadcasts on social media platforms are also possible, with the potential to reach viewers widely in real-time.

Experimentation and customer feedback will be critical to help make sure that the selected channels work for the customers and are as effective as possible.

6.3.1.2.4. Customer Relationships

There are various categories of customer relationships that the new PLS business model could consider, in various combinations for each customer segment served. Pigneur & Osterwalder (Osterwalder & Pigneur, 2010) identify personal assistance; dedicated personal assistance; automated services; self-service; community; and co-creation as unique categories that could co-exist in a business model.

For a digital mobile platform, as proposed in this dissertation for a PLS offering in South Africa, a choice of customer relationship management formats must be at least suited for the prevailing digital banking experience in South Africa. Digital-first and mobile-first banking seems to be one of key digital transformation trends in South African banks, which includes website based internet banking, smartphone banking application, and USSD banking (C. Louw & Nieuwenhuizen, 2020). This points to customer relationships that should include automated services and self-service, perhaps in addition to some form of personal assistance (where person-to-person communication occurs in some way).

Relationship management for the three identified customer segments is expected to be varied:

- Low touch and mostly digital interaction can be adopted for LMI individuals (who can be millions in numbers). Personal assistance could be provided via an omnichannel cloud contact centre.
- High touch personal assistance and mostly digital engagement could be suitable for financial advisors who are of the PLS business model.
- Personal key account management approach might be more effective financial services providers, who are likely to each have unique and detailed requirements for integration between the PLS mobile platform and their banking systems.

6.3.1.2.5. Key Resources

There are three critical resources that the proposed PLS business model requires to successfully deliver the value proposition to the identified customer segments, namely the PLS digital platform; prizes (cash and/or non-cash); and treasury management systems.

PLS digital platform

This research advocates for the exploitation digital technologies, including mobile applications; artificial intelligence; and cloud computing to introduce new PLS products in South Africa. This is influenced by the current digital transformation revolution in financial services, among other industries, characterised by innovative fintech start-ups. The PLS digital platform is a defining resource for the proposed PLS business model innovation. The business model innovation in this instance, as a PLS Platform, is expected to involve a significant amount of technology engineering or even innovation, bringing together functionality that may include behavioural analytics; artificial intelligence; robo-advisory; cloud computing; and more.

Prizes (cash and/or non-cash)

National Treasury, whose directors participated as research interviewees for this dissertation, recalled that they could not proceed to pilot a prize-linked savings account offering that they wished to introduce, because of lack of capital. Funding for prize winnings is a fundamental resource for any PLS scheme. Simply put, there is no PLS scheme without prizes.

As from September 2007, FNB's MaMa program offered monthly prizes that comprised of a R1 000 000 grand prize, four prizes at R100 000 each, twenty prizes at R20 000 each, and two hundred prizes at R1000 each. The total capital required to fund these prizes on a monthly basis amounted to two million Rands, which translates to a 24 million Rands commitment for prize winnings per annum.

The business model design for the new PLS innovation must consider that the capital required to fund prizes is a resource that is required constantly, as long as PLS products are on offer.

Treasury and investment management systems

PLS business models generate revenue from interest earned by investing deposited funds elsewhere, as per normal business of banking. The new PLS business model for South Africa has a potential of raising billions of rands in savings deposits from over a million individuals, if we use FNB's MaMa success as a reference point.

The complexity of monitoring and managing thousands or even millions of daily deposits and withdrawals, and managing invested funds, requires sophisticated treasury and investment management systems. The financial viability and economic value of a PLS business model is dependent on this capability.

6.3.1.2.6. Key Activities

A primary objective of a sustainable business is to create value for its identified customers and generate desirable outcomes, such as profits; business growth; and goodwill, for the relevant stakeholders. Key activities in a business model serve the purpose of executing this primary objective of a business. Business model activities are essentially the “engagement of human, physical and/or capital resources of any party to the business model (the focal firm, end customers, vendors, etc.) to serve a specific purpose toward the fulfilment of the overall objective” (Zott & Amit, 2010, p. 217). These are the activities without which the business model value proposition cannot be delivered.

The PLS business model innovation suggested by the findings of this research requires the following key activities: PLS digital platform management; management of cash deposits; fair and transparent randomised selection of winning tickets (depositors); acquisition of new or additional savings deposits (and business development in general); and research and innovation.

PLSA digital platform management

The PLS digital platform would be effectively the physical form of the business model innovation for the re-introduction of prize linked savings products in South Africa. It is a critical resource, as mentioned earlier, that requires continuous development and management. The sub-activities associated with this key activity include software development; physical IT infrastructure deployment and maintenance; management of service or operational level agreement (SLA/OLA); software version upgrades; cyber threat prevention; user experience management and improvement; data protection; and more. These various sub-activities may be performed internally, by business partners, outsourced, or a combination of these operational governance options to achieve an optimal business operating model.

Management of cash deposits

If the PLS digital platform owner is not a registered bank, but an entity such as a fintech, then the FSCA regulations require that client's funds are deposited into a separate account designated for that client at a bank. This is according to the custody of products and funds section under the South African Financial Advisory and Intermediary Services Act 37 of 2002.

Millions of LMI individuals as users of the PLS digital platform would translate to millions of bank accounts that have to be opened with South African registered banks, which need to be managed. The depositors book generated by the PLS platform has a potential to be large over time (in excess of a billion of rands), but also there would be some early cash withdrawals rather than the desired holding of savings over a longer period. The extent of cash withdrawals in terms of frequency and amounts is not easy but crucial to predict and manage, as this affects the balance sheet and liquidity requirements.

Suggested focus areas under the key activity of managing user deposits on the PLS digital platform include but not limited to:

- Understanding the demographics and behaviour of depositors on the PLS digital platform. Data analytics, machine learning and artificial intelligence technologies can assist in this regard.
- Understanding the likely impact that future deposits and withdrawals will have on the balance sheet, and determining how available cash can therefore be best leveraged to generate revenue.
- Perform treasury and investment management functions to balance liquidity and capital investment priorities.

Management of cash deposits is a critical activity for both regulatory compliance (for Financial Advisory & Intermediary Services) and revenue optimisation requirements.

Fair and transparent distribution of prizes

The process for awarding prizes needs to be seen as fair and transparent, as this will enforce the belief by depositors and potential savers that they have a chance of winning. The process must be auditable to assure regulators that the winners are selected randomly, without any

intended or unintended bias. Most of this work is expected to be undertaken when the prize awarding process is being designed and implemented. However, a regular review of controls and checks-and-balances in the prize awarding process is desirable.

The prize awarding process generates excitement and gets people to talk about PLS products and individual savings in general. It must be a fanfare that attracts new PLS depositors every time it gets underway. This is emphasised by the former FNB marketing executive and CEO of the FNB MaMa program, noting the importance of public excitement as a critical part of a PLS scheme marketing strategy. This key activity is likely to be performed at least once a month. It is an identifying and visible feature of a PLS program.

Acquisition of new customers and savings deposits

Sales and business development is important. Typically, banks attract deposits from the people either by means of offering interest on deposited funds or convenient facilities for transacting (e.g. payments; withdrawals; transfers; and making deposits).

Building the deposit book and increasing the number of users of the PLS digital platform is a key activity that is at the heart of the business model, as without it the business venture will not be viable and sustainable.

The prospect of winning for depositors is a draw card that needs to be marketed intelligently and aggressively for PLS schemes. Other services such as free financial advisory service and financial education content enhance the value proposition for potential depositors.

6.3.1.2.7. Key Partnerships

The foundation of a PLS product is a bank account into which funds are deposited. Taking of cash deposits from customers is a regulated function that is limited to registered banks or licensed financial service providers. Banks that are registered with the Reserve Bank are the only authorised deposit takers in South Africa in terms of the Banks Act. The banks therefore have an important role to play as customers and/or partners in a new PLS business model for it to be viable.

It would therefore be necessary for a non-bank entity such as a fintech to have some partnership with a bank or multiple banks to be able to legally fulfil the deposit taking function. Examples of fintechs that have partnered with banks for the provision of PLS products in the United States include Billinero who partnered with Centier Bank, PrizePool and Yotta who partnered with Evolve Bank & Trust.

The other key element suggested for a new PLS offering is the attendance to the financial literacy challenge, and provision of free financial advice. Provision of financial education and financial advice to a large and diverse population is a significant undertaking, and it may be necessary and advisable for the PLS fintech to partner with financial education content providers and accredited financial advisors.

6.3.1.2.8. Cost Structure

Cost structure accounts for on-going significant operational costs, and not once-off implementation costs or infrequent ad-hoc costs.

The technology platform for the delivery of the new PLS business model is critical and will require investment in the technology and skills for engineering and maintenance. The range of technologies that would make sense to consider include cloud computing; artificial intelligence; and data analytics. PLS platform management is one of significant cost items for the PLS business model innovation.

Most research papers on PLS implementations note the importance of extensive marketing to ensure program success. FNB MaMa's success was also attributed to their investment and focus on marketing. Therefore a marketing budget is also expected to be a significant cost item in the PLS business model.

Lastly prizes constitute an important and predictable cost that is necessary for a PLS business model to be functional.

6.3.1.2.9. Revenue Streams

The business value of offering PLS products is to raise cash deposits (savings), which the business (e.g. bank) could use to invest for revenue and profit generation. Returns are made from investments. Investments are funded through cash deposits made by savers. This is the

fundamental business reason why savings are important, and why banks would incentivise depositors to give them their cash as savings. A primary revenue stream for the proposed PLS business innovation therefore is a return on invested capital (ROIC), where savings pools are put to work to generate revenues for the PLS business.

Secondary revenue sources are fees charged for financial literacy content publishing (paid by content owners or financial services companies) and financial advisory fees (under a freemium model).

Financial services companies, such as banks and insurance companies, are required by the South Africa's financial sector charter to annually invest a minimum of 0.2% of post-tax operating profits in consumer education programmes that are aimed at empowering consumers with financial knowledge to enable them to make more informed financial decisions. The PLS digital platform could be an ideal avenue for the financial services sector to channel their required investment in financial education.

The proposed PLS business model innovation calls for free and independent financial advice for the LMI population using the PLS digital platform. There is a possibility that financial advisors who participate in the PLS digital platform, could adopt a freemium model. The freemium model would allow financial advisors to offer free and independent financial advice to PLS depositors up to a certain minimum level, and also offer more complex and personalised financial advice to the same population for a negotiated fee. For example, a financial advisor could assist for free a PLS depositor to decide how much of the R200 per month to save in savings product that would allow immediate withdrawal (for an emergency) versus a 90-day notice account, given the personal profile and circumstances of that PLS depositor. The same PLS depositor could later on request for financial advisory services to invest in life insurance or do estate planning. This may attract a percentage fee on the life insurance premium payable to the financial advisor. The PLS digital platform could also charge the financial advisor a fraction of that annuity income, as part of the standard contractual arrangement for being a PLS digital platform financial advisor.

Revenues for the proposed PLS business model innovation can be generated from interest earned on invested deposit pools (ROIC); fees payable by financial services companies that

use the PLS digital platform for their financial education programmes; and a portion of fees earned by financial advisors on the platform.

6.3.1.2.10. PLS Business Model Canvas

With all the building blocks of a business model canvas having been discussed in the preceding section, a business model canvas that captures or illustrates a PLS business model innovation for South Africa can be put together. The type of business model that emerges from the research conducted is a multi-sided platform that brings together interdependent groups of customers for reinforcing mutual benefit. The main customer segments that are required to make the multi-sided PLS platform work are low-to-moderate income depositors (savers), on a mass scale, various financial services entities, and financial advisors. The core of the relationship that is enabled between these three customer segments is shown through the value proposition-to-customer-to-revenue cycle that is depicted as Figure 14 below.

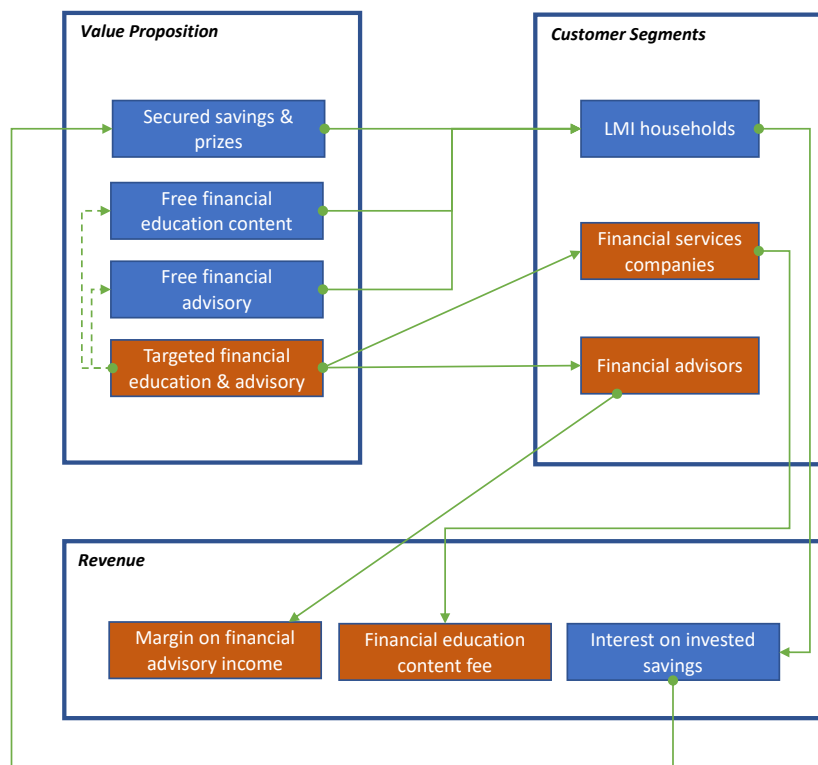


Figure 14: Value creation between PLS savers and financial services entities

The value proposition for *Financial Services Companies* is that the PLS Platform gives them the ability to provide financial education, as per Financial Services Charter obligations, to a large base of low-to-moderate income individuals. There are several benefits that could accrue to the financial services companies, including ease of delivery of financial education content

through a digital platform; impact measurability; traceability and auditability; and more. Financial services entities, particularly banks, also stand to benefit from the actual deposits coming through the PLS Platform, as well as the purchase of other financial products as PLS participants become more financial literate and savvy due to financial education and advisory provided on the PLS platform.

Financial Advisors have an opportunity to provide financial advice, either for free or at a fee, to this defined and captive mass customer base. Free service would benefit financial advisors through positive profiling and branding, which in turn positions them well for paid-for services that PLS Platform users may procure in the future.

For the *LMI savers* customer segment, the value proposition is first and foremost the lure of PLS products – which is no loss savings and a thrill of a potential windfall (and smaller frequent prizes). In addition to the classic PLS value proposition, savers on this proposed PLS Platform would benefit from free financial education content and financial advice.

The resulting business model canvas is presented in full under Appendix E – PLS Business Model Canvas, as a representation of the *inclusive innovation* that this MPhil research dissertation has produced in addition to the overarching PLS business model innovation framework presented in section 6.3.

6.3.1.3. Prototyping

Prototyping helps the innovation team to actualize the business model concept, benchmark against similar business models or products, refine and communicate it better to various stakeholders (Geissdoerfer et al., 2017). The key outcome of the prototyping activity would be a tangible working prototype that can ably demonstrate how the proposed PLS business model innovation will deliver the value proposition to targeted customer segments.

The prototype will particularly assist in communicating with the following stakeholders for their support and approval:

- Regulators – to confirm regulatory requirements and compliance with existing legislation for the PLS innovation under development;
- Potential partners that are required to make the business model work, such as banks; and

- Investors or funders – to secure key resources required to fully develop a compelling PLS value proposition.

A working prototype provides a trigger to transition the business model innovation process from conceptual design to detail design.

6.3.2. Detail Design

The detail design phase must be concerned with the full development of the PLS business model, covering all aspects of the business model canvas and business architecture necessary to operationalise a new PLS business model innovation for South Africa. The process and activities envisaged for the detailed design phase of the PLS business model innovation are discussed in the subsections below.

6.3.2.1. Regulatory harmonisation

FNB's MaMa was discontinued in 2008 precisely because of FNB's failure to adequately attend to the ambiguous regulatory terrain between the national lottery and prize-linked savings products. The findings of this research emphasise the fact that the ruling by the Supreme Court of Appeal that FNB's MaMa violated the Lotteries Act is an impediment to a successful re-launch of another PLS scheme in South Africa, and it needs to be dealt with in a deliberate and collaborative manner. It is therefore a critical process to find harmonisation between existing regulations such as the Lotteries Act and Consumer Protection Act and the new PLS business model innovation. Practical possibilities towards achieving regulatory harmonisation include:

1. Designing a PLS business model that complies with existing legislation by exploiting the promotional competitions provisions in the relevant legislation.
2. Proactively facilitating the development and promulgation of a new piece of legislation that explicitly legalises PLS products in South Africa while addressing concerns of the national lottery stakeholders, as part of the continuous business model innovation process.

Legislation on promotional competitions does provide an avenue for PLS schemes to exist, but also poses some administrative challenges that a new PLS business model would have to deal with. The Consumer Protection Act places several administrative responsibilities on the promoter, including that the promoter must:

- “prepare competition rules before the beginning of the competition” (The National Consumer Protection Act 68 of 2008, 2009, p. 80);
- “make the competition rules available to the National Consumer Commission and to participant, on request and without cost” (The National Consumer Protection Act 68 of 2008, 2009, p. 80); and
- “retain a copy of the competition rules for the prescribed period after the end of the competition” (The National Consumer Protection Act 68 of 2008, 2009, p. 80).
- Ensure that the promotional competition has a start and an end date. It can just run indefinitely. However, a “new” PLS promotional competition can be started immediately after the preceding one ends.
- be ready to comply with audit and reporting requirements, as prescribed from time to time by the Minister of Trade, Industry and Competition

The current legislative prohibitions on prize-linked savings products limit the avenue for a PLS innovation to some form of a promotional competition, at least as transitory solution. Therefore, one of the key deliverables to come out of this phase is a *PLS promotional competition rules* document.

A long-term solution towards creating an environment where PLS innovations could thrive in South Africa lies in the introduction of explicit and supportive legislation and policy on prize-linked savings products. Issuers and promoters of PLS products have to play an active role in facilitating the process of developing new legislation and policy framework for encouraging household savings in South Africa through prize-linked savings instruments, among others such as tax free savings accounts. This important exercise must be well integrated into the BMI process as a continuous and involved process of harmonising the regulatory landscape among competing interests such as national lotteries and promotional competitions. The major outcome from the regulatory harmonisation process is a new piece of legislation for prize-linked savings promotion in South Africa.

6.3.2.2. Customer development

The customer development process plays an important role in providing feedback directly from customers about the new business model. It is concerned with a deliberate search for a business

model that works (Blank, 2013), by refining or pivoting the business model that would have been designed during the concept design phase.

Practically, the developers of the a new PLS business model would have to find a sample population of PLS scheme early adopters (customers) to work closely with to effectively test and re-design the new PLS business model innovation. The type of customers who would participate at this stage are those who believe in the business idea and see the potential of a PLS scheme in addressing their immediate needs. This will help the founding team to gain a good understanding of the needs of the customers, to be satisfied by a PLS platform, and find out if the PLS business model design solves a real problem for customers and creates value.

The customer development process can also be used to estimate the size of the PLS market, determine costs of entry and develop cost effective customer acquisition strategies. As a precursor to starting the process of building the actual PLS product or service, the customer development process should also include establishing the partnerships that are necessary for the business model to work, and confirming where and how the key resources that are required will be sourced.

6.3.2.3. Solution building

Solution building is about developing a PLS solution that is ready to be launched in the market, a tangible value creating product or service that customers could interact with. Blank (2013) advocates for a “lean start-up” methodology that emphasises experimentation over an elaborate business planning process, early and frequent customer feedback over intuition, and a phased iterative build as a way to introduce business model innovations into the market.

The key deliverables from the previous stages, including the PLS business model concept design (represented with a business model canvas); PLS business model prototype; regulatory compliance artefacts such as PLS promotional competition rules; and critically the first hand customer feedback, must all come to bear as the foundation on which a working solution is built. The expected form factor for a PLS business model innovation build is a functional PLS platform. This can be developed by adopting agile development principles to produce a minimum viable product of a PLS scheme, as an innovative business model that is ready for launch during the implementation phase.

Successful implementation requires that sufficient organisational capabilities are put in place. Organisational capabilities referred to are skilled people with clearly defined roles; business processes; and enabling technology systems. Before launching the new PLS solution fully into the market, piloting it with an identifiable subset of the target market would be beneficial as a trial run that puts organisational capabilities to the test and help prepare the new entity for large scale operations.

6.3.3. Implementation

The implementation phase captures the fanfare of new market launch activities and the behind-the-scenes operational activities of delivering promised value to customers and other stakeholders. Mobilisation of the first early adopters of the new PLS offering as advocates and marketers of the new innovation using social media, as a “word-of-mouth”, could go a long way towards making the initial launch successful.

6.3.3.1. Launch

The launch of a new PLS product or service as a new business model innovation requires creative and effective marketing, backed by flawless execution of the value creation processes that are defined by in the business model.

The preparation and planning for the launch of a new PLS scheme, since the much-liked FNB Million-a-Month-Account, must draw extensively and creatively from the available marketing research and strategies. Literature suggests that not all PLS schemes are equal. Some are more popular with depositors. The Swedish and UK lottery bond programmes are an example of most popular and most-purchased prize-linked savings products in Europe, which can be explained by their design, cultural nuances and the issuers’ approach to advertising (Pfiffelmann, 2013). Guillén & Tschoegl (2002, p. 222) assert that “a bank that advertises winners more frequently than its competitors may benefit from such effects”. Knowing the importance of persistent and creative marketing for PLS products, designers of an innovative business model for the re-introduction of a PLS scheme in South Africa need to be conscientious about their marketing strategy and execution thereof. How the marketing and publicity of a new PLS platform is managed for the launch will matter significantly.

The theme of multi-stakeholder collaboration that emerged strongly from the research must be visible from the onset, as part of the new PLS business model innovation launch. There are

opportunities to partner with the South African Savings Institute and/or the Financial Sector Conduct Authority to launch during their July Savings Month or Money Smart Week South Africa respectively. This partnership would have a potential to leverage the significant publicity that these two national savings and financial literacy campaigns generate annually.

6.3.3.2. Scale and diversify

The potential size of the low-to-moderate income household market in South Africa covers more than 70% of the total population. It may be impossible or very difficult to get even one million savers on the PLS platform within the first year of launch. However, a goal that needs to be planned for is to scale up and the largest possible size of the available LMI population, and turn them into ardent savers using PLS products.

As the founding CEO's of EasyEquities and Centbee warned during research interviews, the operational costs (including customer acquisition costs) should not scale proportionally as more customers come on board. Therefore scalable capabilities in technology and processes must be put in place early on and managed carefully, to ensure that operational costs per customer on the PLS platform decrease as more customers come on board.

Diversification of products and services offered is also an important consideration as a strategy for sustainable growth. This includes a variety of PLS products aimed at specific customers segments; a range of financial literacy content and gamification; on-platform financial advisory services (free and paid for); extended geographical reach (going global); and more.

6.3.3.3. Research and innovation

The purpose of PLS business model innovation in South Africa, as envisaged in this research, is to significantly raise the national level of household savings; broaden and deepen financial inclusion; and lessen financial fragility at household level. This will require dedication to research and innovation in various domains, including but not limited to behavioural economics; technology; policy and regulation.

Business model innovation is iterative and continuous, as customer needs change or become better understood; new technologies to enable value delivery are discovered; and the regulatory environment evolves.

6.4. Research Contribution

This dissertation makes valuable contribution in two ways, namely

- i) As far as could be determined, it is the first formal study of the FNB's MaMa program that examines the primary causes for its ultimate discontinuation, which is necessary if barriers to the re-introduction of PLS products in South Africa were to be successfully address. All other studies evaluate the success that the MaMa had during the period that it was available.
- ii) It may also be a first formal study, if not one of a very few, that approaches the review of prize-linked accounts from a business model innovation perspective. This is insightful in a sense that a business model view engages with the entire ecosystem and shines light to both internal and external risks and opportunities that PLS products may encounter.

The MPhil Inclusive Innovation programme that this dissertation is for requires that the research study also contributes some "inclusive innovation" artefact that could be implemented to realise the envisaged inclusive positive impact in society. To this end, this study contributes a PLS Business Model Innovation Framework (refer to section 6.3) and a PLS Business Model Canvas (refer to Appendix E – PLS Business Model Canvas) that could be implemented to re-introduce PLS products in South Africa for inclusive socio-economic impact. The intended positive socio-economic impact includes deeper financial inclusion; better financial security (or reduced financial fragility) for low-to-moderate income households; and an improved overall household savings rate in South Africa.

6.5. Recommendations

Two recommendations that are based on the outcomes of this research study are made, one for entrepreneurs or organisations and the other for policy makers.

Entrepreneurs or organisations should consider starting up a fintech company to re-introduce PLS products under existing promotional competition provisions, in partnership with a licenced bank(s). This study provides such a start-up with a detailed PLS business model innovation framework and a business model canvas to use as a starting point and a guide throughout the innovation process.

Simultaneously, it is recommended that the regulators such as the FSCA and the NLC must collaborate with the PLS start-up(s) to examine the efficacy of legislative provisions for promotional competitions in enabling PLS schemes to thrive and have desired impact, and also work towards a design of a new legislation to explicitly permit prize-linked savings products in South Africa. The “live experiment” that the PLS start-up(s) could be viewed as would provide invaluable data for policy makers to make informed decision about legislative requirements for successful PLS programs in South Africa.

6.6. Further Research

Research into the three areas discussed below could provide desirable support to the implementation effort and policy formulation for the re-introduction of PLS products in South Africa.

6.6.1. PLS impact on household savings and the lottery

There is no formal evaluation of the impact of PLS schemes on the household savings rate and on the lottery that has ever been conducted in South Africa. The recommended re-launch of a PLS scheme using existing promotional competition provisions, provides an opportunity for running a formal research study to assess the impact that the proposed PLS business model innovation has on household savings rates. The same research study could also determine if and to what extent PLS products have an effect on the demand for the national lottery.

The outcome of the study would provide empirical evidence that could be used in favour of or against PLS schemes, and influence government policy with regards to passing a new bill to enable prize-linked savings products in South Africa.

Prior researchers on PLS products have recommended similar further studies to answer a key question of “whether PLS would increase overall household savings, and if so, would it draw funds away from consumption, gaming or some other” (Tufano et al., 2008, p. 4), and to provide evidence-based research that will enable policy makers to address legal and regulatory concerns by “establishing robust causal effects of offering PLS products through a randomised field experiment” (Kowalski, 2015, p. 146).

6.6.2. Banking sector concentration and BoP innovation

This dissertation discussed the potential impact that market concentration in the banking sector might have had in determining how the other banks reacted the FNB's MaMa innovation. While this research study did not gather sufficient data to make conclusive findings in this regard, some research interlocutors pointed to high banking sector concentration contributing towards lack of innovation (on PLS) by other banks. This observation is supported by available research studies (Bos et al., 2013; Okeahalam, 2001; Simatele, 2015).

A research study to look at the impact of market concentration in the banking sector on innovation for low-income customers (banked or unbanked) in South Africa would also be useful to banks and policy makers. For banks, the outcome of the study could inform how they focus their RDI efforts towards innovations to better serve low-to-moderate income population groups and derive more commercial benefits from the BoP market. There has been limited, if any, significant innovation in the banking sector that is aimed directly at improving financial outcomes and wellbeing for the bottom-of-the-pyramid market in South Africa.

Policy makers would have a keen interest on whether a policy intervention is necessary, and what such policy intervention might be.

6.6.3. Prize-linked savings and behavioural economics

Behavioural economics is now playing a significant role in the design and delivery of financial and banking products globally, including in South Africa (Hyland et al., 2021) . It is no surprise that the potential role of behavioural economics in the re-imagined PLS products also emerged in this research study as a notable theme for PLS business model innovation in South Africa.

A rigorous research study on how behavioural economics could enhance prize-linked savings products for better financial outcomes and impact on the targeted customer segments, including the BoP market, would be valuable to implementers of PLS in South Africa. The scope of the recommended research study could cover both emotional (i.e. self-control; overconfidence; and loss aversion) and cognitive (i.e. herding effect and mental accounting) biases (Hyland et al., 2021; Thaler, 2016). An exploration of the use of incentives versus nudges (Hyland et al., 2021; Thaler & Sunstein, 2021) could also be informative.

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APPENDICES

Appendix A – Research Participation Consent Form

Researcher:

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Title of Research Project:

How to contribute towards increased levels of household savings in South Africa to achieve a positive impact on inclusive economic growth, using prize linked savings products.

By filling out this consent letter answering the questions put to me, I agree to participate in this research and that I have been notified that:

- This research has been approved by the Commerce Faculty Ethics in Research Committee.
- Participation in this research is voluntary. I can choose to withdraw from the research at any time.
- The interview will take approximately one hour to complete.
- All information provided will be treated as confidential and used for the purposes of this research only.

Name of Participant : _____

Signature of Participant : _____

Date : _____

Appendix B – Interview Guide

Pre-interview

- Share the research proposal document with the interviewee, for perusal prior to the interview.
- Notify interviewee that the interview will be recorded for transcription and analysis.
- Ensure that the interview venue is conducive for an approximately one hour long conversation, with acceptable noise level for effective recording of the interview.

General Interview Introduction

- Provide an overview of the research problem and research questions.
- Articulate how the interviewee is expected to contribute in the research. What knowledge, experience, and insights is the interviewee expected to share?

Broad Questions for Interviewees

FNB Executives

1. Could you please give me an introduction into your role from the work point of view, and also your familiarity with prize linked savings products in general, and the FNB Million-a-Month-account in particular?
2. Please describe the product innovation and development process that FNB underwent leading up to the launch of the Million-a-Month-account in South Africa back in 2004 / 2005?
3. Can you share the details of the deliberations that the FNB team had internally and externally regarding the regulatory and legal implications that you expected of the MaMa innovation?
4. How did the FNB team decide on the prize-linked savings structure (i.e. prizes; interest rate; frequency of draws; etc.) for the MaMa product? What were the key design considerations?

5. If you were to re-introduce a prize-linked savings product today, how would you go about doing it such that pitfalls that killed FNB's MaMa product are avoided?

National Treasury / FSCA

1. What is the role of the National Treasury/FSCA, your department, with respect to the national household savings rate level in South Africa?
2. What is your understanding of prize-linked savings products in general, and FNB's Million-a-Month-account in particular? Why do you think FNB's MaMa failed or what are the underlying reasons behind its illegalisation?
3. What is the process that would have to be followed to get prize-linked savings accounts back into the market, and who are the stakeholders that would need to be involved for it to be successfully relaunched?
4. I would like to explore with you the role of the South African Savings Institute, broadly in as far as dealing with the issue of persistently low household savings rates in South Africa. What role does SASI play in helping South Africa address the low household savings challenge? Is there any collaboration between SASI and National Treasury or the FSCA?

National Lottery Commission

1. Could you please give me your general attitude towards prize-linked savings products? What are your thoughts?
2. Why would the National Lottery Commission want to prohibit prize-linked savings in South Africa when they seem to present a credible opportunity to help South Africa deal with the low household savings problem that limits the country's much needed economic growth?
3. What would be the National Lottery Competition's position if government were to say let's amend the legislation to permit prize-linked savings accounts in South Africa?
4. What is the process that would have to be followed to get prize-linked savings accounts back into the market, and who are the stakeholders that would need to be involved for it to be successfully relaunched?

Capital Markets/Financial Services Expert

1. What is the expected role of the Investec Gibbs Savings Index that you are spearheading in as far as helping South Africa achieve higher level of household savings rate?
2. What are your thoughts regarding the level of coordination and collaboration within the financial services sector, and between the sector and government, to work towards improved household savings behaviour?
3. What needs to be done to re-introduce prize-linked savings products in South Africa as an effort to increase the level of household savings, considering both macro and micro economic contexts?

Executives of fintech companies

The discussion that I would like us to have is less about the challenge of low household savings and investments in South Africa, but more on gaining a better understanding your business model and the innovation.

1. Could you please tell me more about your company, the fintech entity? What are you trying to achieve, your value proposition, and your business model?
2. Did you encounter any regulatory challenges, given the nascence of your business model? What challenges did you have to deal with? How did you address these regulatory challenges and how did they influence the way you innovated your business model?
3. What are the lessons, pitfalls to avoid, that would have to be considered if a prize-linked savings business model innovation were to be developed and introduced to the South African market?

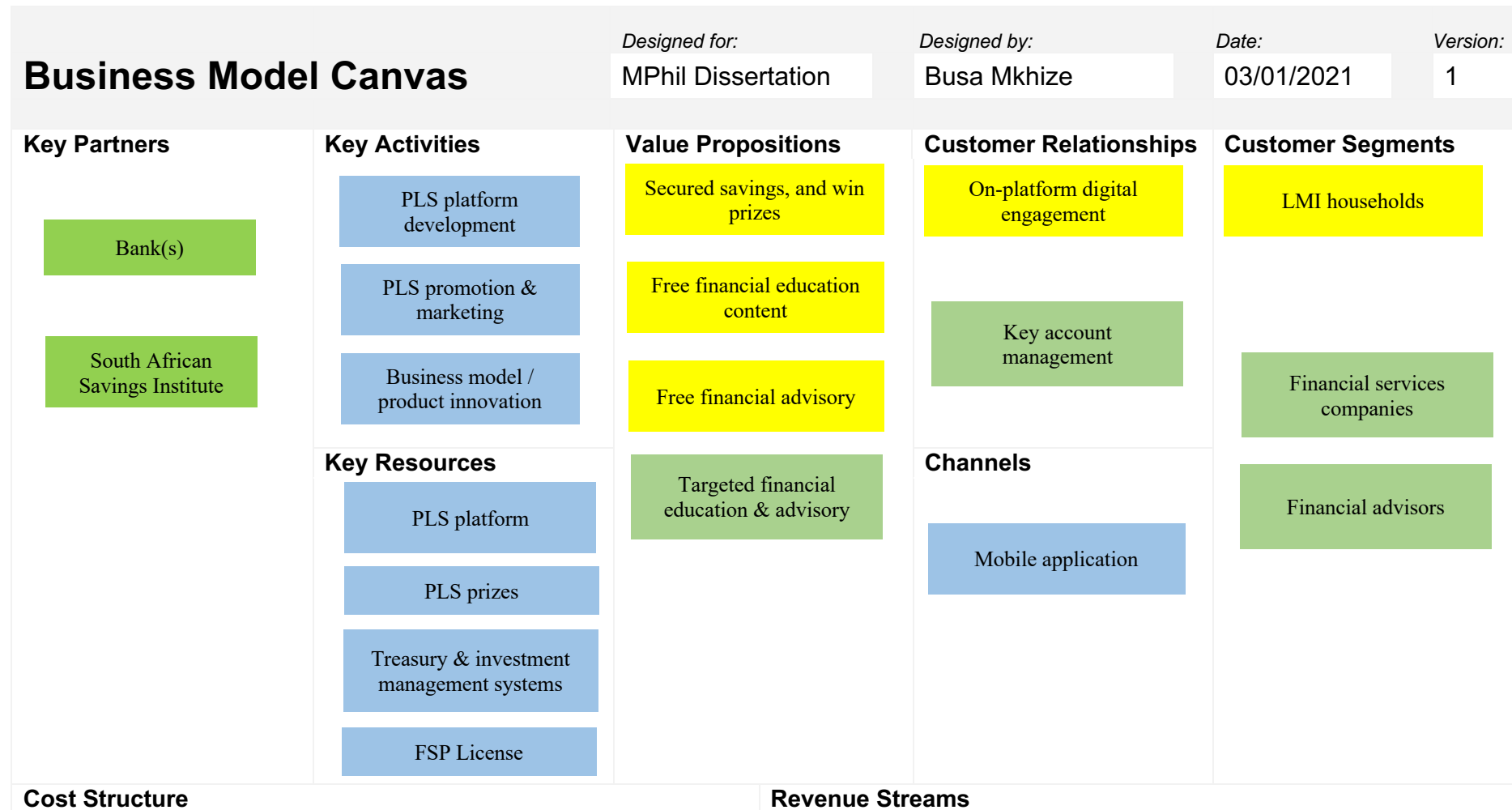
Appendix C - Sample of Level I Codes

Meaning Units (Raw Data Extracts)	Codes
<p>One is about just financial literacy. If you ask a person, forget about African Bank, if I speak to my clients, and I ask them: What is the cost of their investment products, of their savings products? They don't know.</p>	<p>Financial literacy</p>
<p>It's establishing this economic and financial literacy. That's one thing that can be done. Whose job is that? Government; policy makers; business; NGOs; homes; schools. I think that's one aspect.</p>	<p>Economic literacy Financial literacy</p>
<p>So in one part, this work on the Investec Gibbs Savings Index, is to translate these findings into the public domain, and get people aware, and through that establish some economic literacy.</p>	<p>Awareness about role of savings Economic literacy</p>
<p>I think I would say South Africa, given the disparities in education and level maturity of people, there is a need for an institution that would give free advice. Or if you go to a financial advisor, you have to pay first thing, and secondly they tend to advise for their own benefit because they channel you into products where they know they would get commission. So unlike this UK institution I'm referring to, it gives free advice. So ideally, government ought to be funding SASI</p>	<p>Financial Education</p>
<p>Effective cross sector and multiple stakeholder collaboration was evident in the Tax Free Savings products initiative.</p>	<p>Multi-stakeholder collaboration</p>
<p>Then it takes us to our opening conversation. You need someone like SASI. Look, and the financial sector is fairly in the country and of course they need to pick their battles too. I would still, if I was them, I would still get them together. So you would need ASISA, you would then need the Banking Association, to come together and make a case to DTI.</p>	<p>Multi-stakeholder collaboration</p>
<p>So, and this is where it gets a bit tricky because then you get into territorial issues. The lottery is under the DTI. It then means you need that coordination between Treasury and DTI, if Treasury buys into it. And I think Treasury will buy into it. But DTI might have a different take on it coz they might feel this could end up cannibalising the lottery.</p>	<p>Lack of cooperation Territorial issues</p>
<p>In terms of collaboration between the departments, look there is no formal avenue where there is collaboration. I think what we would want to see is the savings number being sufficiently big, so that people can - well whatever you define investment - it should be enough to cover all aspects of investment. But I think in this particular case of prize links savings, if we had gone ahead we would have had to approach the DTI specifically so that we could achieve the prize linked savings account and not fall foul of the legislation.</p>	<p>Multi-stakeholder collaboration</p>
<p>If you feel you need to be safe, then you need the legislative amendment, but then it means the DTI, finding a way to soften the DTI subcommittee and probably even the Finance one. An I think you will find sympathy, no one would dispute the savings problems. The way you can couple it with the members is again this Inclusion</p>	<p>Legislation change</p>
<p>It was an issue of now we have a national lottery win millions, and then you have FNB Million-A-Month Account. So then it's like then just from the face of it, there is direct competition to the national lottery.</p>	<p>Threat to National Lottery</p>

Appendix D - Sample of Level II Codes (Categories)

Meaning Units (Raw Data Extracts)	Codes	Categories
<p>Financial literacy in South Africa is low</p> <p>One is about just financial literacy. If you ask a person, forget about African Bank, if I speak to my clients, and I ask them: What is the cost of their investment products, of their savings products? They don't know.</p> <p>It's establishing this economic and financial literacy. That's one thing that can be done. Whose job is that? Government; policy makers; business; NGOs; homes; schools. I think that's one aspect.</p> <p>So in one part, this work on the Investec Gibbs Savings Index, is to translate these findings into the public domain, and get people aware, and through that establish some economic literacy.</p> <p>It was meant to bring awareness to society around the importance of saving.</p> <p>I think I would say South Africa, given the disparities in education and level maturity of people, there is a need for an institution that would give free advice. Or if you go to a financial advisor, you have to pay first thing, and secondly they tend to advise for their own benefit because they channel you into products where they know they would get commission. So unlike this UK institution I'm referring to, it gives free advice. So ideally, government ought to be funding SASI</p>	<p>Financial literacy</p> <p>Financial literacy</p> <p>Economic literacy Financial literacy</p> <p>Awareness about role of savings Economic literacy</p> <p>Awareness about role of savings</p> <p>Financial Education</p>	<p>Financial competence</p>
<p>Effective cross sector and multiple stakeholder collaboration was evident in the Tax Free Savings products initiative.</p> <p>Then it takes us to our opening conversation. You need someone like SASI. Look, and the financial sector is fairly in the country and of course they need to pick their battles too. I would still, if I was them, I would still get them together. So you would need ASISA, you would then need the Banking Association, to come together and make a case to DTI.</p> <p>So, and this is where it gets a bit tricky because then you get into territorial issues. The lottery is under the DTI. It then means you need that coordination between Treasury and DTI, if Treasury buys into it. And I think Treasury will buy into it. But DTI might have a different take on it coz they might feel this could end up cannibalising the lottery.</p> <p>In terms of collaboration between the departments, look there is no formal avenue where there is collaboration. I think what we would want to see is the savings number being sufficiently big, so that people can - well whatever you define investment - it should be enough to cover all aspects of investment. But I think in this particular case of prize links savings, if we had gone ahead we would have had to approach the DTI specifically so that we could achieve the prize linked savings account and not fall foul of the legislation.</p>	<p>Multi-stakeholder collaboration</p> <p>Multi-stakeholder collaboration</p> <p>Lack of cooperation Territorial issues</p> <p>Multi-stakeholder collaboration</p>	<p>Multi-stakeholder collaboration</p>
<p>If you feel you need to be safe, then you need the legislative amendment, but then it means the DTI, finding a way to soften the DTI subcommittee and probably even the Finance one. An I think you will find sympathy, no one would dispute the savings problems. The way you can couple it with the members is again this Inclusion</p> <p>The Consumer Protection Act is there for promotional competitions. With promotional competitions there is no limit to how much the prize can be, but whatever be in line with your core business and there has when, how long you are running that competition.</p> <p>It was an issue of now we have a national lottery win millions, and then you have FNB Million-A-Month Account. So then it's like then just from the face of it, there is direct competition to the national lottery.</p>	<p>Legislation change</p> <p>Promotional Competition Consumer Protection Act</p> <p>Threat to National Lottery</p>	<p>Enabling regulatory environment</p>

Appendix E – PLS Business Model Canvas



PLS platform
development and
maintenance costs

PLS prizes

Margin on financial
advisory income

Financial education
content fee

Interest on
invested savings