Developing a framework for future business models in the South African banking industry

RS Daniel

orcid.org/0000-0002-5338-2132

Mini-dissertation accepted in partial fulfilment of the requirements for the degree Master of Commerce in Management Accountancy at the North-West University

Supervisor: Prof. SL Middelberg

Graduation: May 2020

Student number: 29805686

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation and gratitude to the people who made this study possible:

- To my mother for all the years of support and encouragement. I could not have got this far without you.

- To Professor Sanlie Middelberg for all your wise words, encouragement and patience throughout this study.

- To all the participants of the study for their valuable time and input.

- To my dearest girlfriend, friends and colleagues: thank you for your guidance and support during this long and sometimes stressful process.

ABSTRACT

TITLE: Developing a framework for future business models in the South African banking industry

KEY WORDS: Business models, challenger banks, disruption, banking, competitive advantage, South Africa

The South African banking industry has not fundamentally changed over many years and has been dominated by five traditional incumbent brick and mortar banks. In recent years Capitec has however been able to cause some disruption to the status quo. As the economy slows down, the South African banking sector experiences pressure on economical and social levels. The market faces widespread disruption due to the entrance of low-cost challenger banks. The incumbents furthermore face many challenges including significant cost bases, rapid technological advances and a generation of digital natives. The challenger banks are digital in nature which means they encounter significantly lower operating expenses and offer enhanced value propositions to South African consumers. The impact of changing consumer tastes and new technologies requires an understanding of the banks' current and future business models. Studies show that successful organisations adapt their business model to adjust to their environment.

The purpose of this study is to evaluate the potential influence of challenger banks on business models of the incumbent brick and mortar banks in South Africa and to develop a framework for the future of their business models. The literature review conducted focuses on research relating to business models, disruption caused by technology and understanding the current South African banking industry. The empirical study is qualitative in nature and six participants from the South African banking industry were interviewed. These participants were selected using non-probability expert sampling and the interviews were semi-structured and conducted face to face. The results of the interviews and the literature review were grouped into common themes in line with the qualitative nature of this study.

The findings indicate that the incumbent brick and mortar banks face disruption across their business models with a view to societal and economic challenges coupled with the arrival of the challenger banks. It is recommended that the incumbent banks should transform their business models to become low cost, customer-centric organisations that leverage IT as a platform. For these transformations to be successful, they need to ensure they have the right talent mix, incentives structure and culture to ensure the given bank's long-term sustainability. The present project culminated in framework that has been developed to represent potential future business models for South African banks.

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER 1

1 INTRODUCTION

1.1 Background to the research area

The banking industry in South Africa is considered to be world class, if not world leading, not least since multiple local banks have won international banking awards over recent years (Ismail, 2017). Currently, the South African banking industry is dominated by five major banks, namely: ABSA, Standard Bank, First National Bank (FNB), Capitec and Nedbank (Anon, 2017) which, for the purpose of the present research, will be referred to as industry incumbents. The local banking industry employs around 180 000 people (BANKSETA, 2016). Capitec is the most recent bank to enter the South African market in the early 2000s, and their success can be measured according to the fact that they have become the most innovative player in the banking industry (Deventer, 2017).

The term “challenger bank” is used to describe any bank that is not recognised as a main high street bank (PWC, 2017). The *Oxford Living Dictionary* (2018a) describes a challenger bank as a relatively small retail bank set up that entertains the intention of competing with large established banks. For the purpose of this study, the phrase “challenger bank” will refer to new market entrants who operate on a fully digital business model leveraging new technologies to create greater customer value as opposed to the traditional “bricks and mortar” business model followed by incumbent banks in South Africa. The phrase “bricks and mortar” will be used, in accordance with definition of the idiom as found in the *Cambridge Dictionary* (2018) to describe a traditional business model of any organisation that conducts business in a physical building rather than doing business only on the internet.

There will be four new banks entering the South African banking industry over the next two years: Bank Zero, Discovery Bank, PostBank and Tyme (Mchunu, 2018). BankZero, Tyme and Discovery Bank are considered challenger banks for the purposes of this study. These banks will likely influence the business models of traditional banks.

A business model, in its simplest form, is designed by choices, and the consequences of those choices (Casadesus-Masanell & Ricart, 2011:104). Demil and Lecocq (2010:234) define a business model as all the choices that a firm makes to generate revenue. According to Teece (2010:179), a business model can be likened to the way an organisation creates customer value through a set of activities within the economic environment in which the organisation operates. Afuah and Tucci (2003:4) describe a business model as that which enables a firm to enjoy sustainable competitive advantage. An organisation's business model needs to effectively support and enable the organisation's chosen strategy.

Society is adopting social media and new technologies at an ever-increasing rate, driven by the millennial generation who are considered digital natives (Accenture, 2016). Millennials, also known as generation Y, involves people born between 1980 and 2000 (Main, 2017). As the new generation's influence in the market increases, organisations will have to adopt new technologies to meet their consumer expectations to retain market share.

With advances in technology driving the shifts in local and global market conditions, there will be an impact on the South African banking incumbents' business models. According to Dan Costin (2016:144), a key point in the digitisation agenda is the customer. Given that millennial customer bases are growing rapidly, organisations need to maintain a clear digital strategy to remain relevant. An organisation needs a business model that is aligned and able to generate value for this new age of customer. Carande and Anzevino (2010:39) propose that understanding the customer is a key aspect when considering a new business model for an organisation. The fact that millennials turn their backs on traditional players (Darolles, 2016:85) creates opportunities for new market entrants, that is, challenger banks.

Markides and Sosa (2013:330) emphasise that in order for new entrants to survive, they need innovative business models. Dan Costin (2016:151) states that "innovation/change is part of the new normality". The *Cambridge Dictionary* (2018) describes disruption as a change to the traditional way in which an industry operated through offering services/products in a new and effective manner. It is therefore fair to assume that a challenger bank that enters the market with an innovative digital business model would disrupt the industry, that is, it would cause market disruption, since it is able to change the way banks create customer value.

The local banking industry incumbents are therefore faced with challenges across the four pillars of their business models (Dan Costin, 2016:148):

(a) Personnel – human capital;

(b) Information, communication and telecommunication (ICT) infrastructures;

(c) Internal procedures and work-flows; and

(d) Communication policy and protocols.

The majority of the challenges facing the South African banking incumbents stem from technological advances as well as societal pressures. Porter (1985) stated more than 30 years ago that technology would be one of the most prominent factors that would change the rules of competition, a notion now confirmed by the very real changes one sees around the bank sector.

Banking industry incumbents have accumulated large amounts of technical debt and invested billions in what has since become legacy information technology (IT) systems that are very complex and offer limited agility. The concept of technical debt is directly linked to that of financial debt, as it involves the future costs of developing and maintaining IT systems (Darolles, 2016:88). Legacy IT systems are described as software, programming languages, application programmes or other technologies that are, simply put, outdated (BusinessIntelligence, 2018). These challenges, coupled with high operating costs, expose industry incumbents to threats from new market entrants who are able to gain competitive advantage through cost advantages and/or product differentiation made possible by new technologies (Porter, 1998).

The theoretical framework adopted for this study is *institutional theory* as this study aims at evaluating the influence of external factors, that is, the entry of challenger banks, on the institutional banking environment in South Africa, focusing on the business models followed by the incumbents.

Institutional theory is an approach to understanding organisations and management practises as a product of social, rather than economic, pressures (Suddaby, 2013:379). In order words, it focuses on how external pressures influence an organisation.

According to Rahal and Vadeboncoeur (2015), institutional theory argues that organisations, just as individuals do, conform to norms. Organisations that have similar purposes form industries, while these industries develop their own norms (Rahal & Vadeboncoeur, 2015). Conformity to these norms becomes one of the factors that shapes the decisions made by management and the direction the organisation takes. The tendency for organisations to conform to industry norms results in isomorphism – a phenomenon where organisations become more similar over time (Rahal & Vadeboncoeur, 2015). Suddaby (2013:381) defines conformity to an institutional environment as the adopting by an organisation of structures, practices and behaviours similar to other leading organisations.

It has been argued that organisations tend to adopt norms and models that are considered "rational"; however, what is considered rational is based, in part, on cultural systems as well as social and historical contexts (Rahal & Vadeboncoeur, 2015). Organisations tend to follow these *rational myths* to gain *legitimacy.* These are generally produced by factors that are external to organisations (Rahal & Vadeboncoeur, 2015), and are shaped by local and global social pressures.

Management scholars occasionally differentiate between “old” and “new” institutionalism (Suddaby, 2013:381). While old institutionalism focuses on processes that occur inside individual organisations, new institutionalism focuses on processes that occur across clusters of organisations that interact with each other frequently (Suddaby, 2013:381). In other words, new institutionalism looks to determine how organisations influence and impact each other through their interactions.

Institutional research from the mid-1990s, up to and including the present, adopted a much stronger link to agency theory (Suddaby, 2013:382). Institutional theory, as a result, has become less associated with notions of blind conformity and ceremonial adoption and more interested in understanding how organisations actively influence their institutional environment (Suddaby, 2013:383). This study will assess the influence of social pressures coupled with the entry of challenger banks on the institutional norms in the South African banking environment.

1.2 The South African banking industry

Since the 2008 financial crisis which has led to a loss in confidence and seen millennials turning their back on traditional players (Darolles, 2016:85), the emergence of the fintech phenomenon has been witnessed across the globe. *Oxford Living Dictionaries* (2018b) describes fintech as computer programmes and other technology used to support or enable banking and financial services. According to Dombret (2016:78), fintech could have a disruptive impact on financial services, while Villeroy de Galhau (2016:7) asserts that, in today’s new digital era, financial innovation’s balance looks to be shifting to new players, some of which lie outside of the traditional financial services market. Technological innovations are no longer solely driven by traditional competitive market pressures but by the arrival of outside firms with expertise on new technology (Villeroy de Galhau, 2016:7). Porter (1985) states that technological change is not important in isolation, but it is important if it affects competitive advantages and industry structure.

The digitalisation of financial services is no longer optional (Dan Costin, 2016:151). Traditional patterns in customer behaviour have changed and the market has moved. Millennials are considered “digital natives”, and to attract and retain them as customers, banks must innovate by means of new digital technologies. They need to look to new revenue channels and product offerings as the market changes, and they need an operating model that can support and enable these changes. For banks to secure millennial market share and retain their competitive edge, they need to be early adopters and implementers of these new technologies (Accenture, 2016).

Worlock (2007:83) stresses that, in and of itself, technology does not disrupt anything: it is our recognition of utility and development of business models alongside that utility that generates a competitive advantage. Carlsson and Stankiewicz (1991:530) concur that invention and innovation will lead to economic change only to the extent that agents within the system are successful in taking advantage of the opportunities to which they give rise. This means that, without a business model that can effectively capture the value created by the new technology or innovation, an organisation will not be able to effect economic change.

Markides and Sosa (2013:327) theorise that pioneer and new entrants in a market have a better chance to survive – or even win – the market if they apply an innovative business model. Innovation is therefore a key aspect to consider for an incumbent bank looking to protect market share and retain competitive advantage, but it needs to have a business model that is able to support this innovation.

Authors suggest that a business model is capable of providing/generating competitive advantage for an organisation (Chesbrough & Rosenbloom, 2002). Porter (1998) suggests that competitive advantage can result from cost advantage or product differentiation. It is therefore fair to assume that the market leader is able to generate competitive advantage as it enjoys a business model that enables a lower price point or differentiated product/service.

On the digital front, challenger banks have a competitive advantage in the financial industry due to the technical debt accumulated by traditional banks (Darolles, 2016:88). The core legacy IT systems of the industry incumbents, consisting of multiple versions layered on each other, create complexity and give limited room to manoeuvre when compared to challenger banks (Darolles, 2016:88). In response to challenger banks, industry incumbents are looking to shift business models, but shifting from traditional business models is not a quick or easy process.

Literature thus provides evidence that the financial industry is changing, and that this change is driven by technology and the millennial generation. As referenced by Dan Costin (2016:148) industry incumbents have choices to make regarding the four pillars of their current business models as each of the pillars will be disrupted to different degrees in the immediate future. There is limited local research relating to the choices that the South African banking industry is going to have to make relating to their business models.

1.3 Motivation around topic actuality

As disruptive technological uptake increases across the financial services sector and challenger banks look to enter the market, there is considerable uncertainty around who will be market leaders and what business model these market leading organisations will adopt. In the near future, as a result of technological advances, highly automated/digitised banks will operate on a much lower cost base when compared to the incumbents (Villeroy de Galhau, 2016:20). Since the financial services sector plays a major role in the South African economy, any potential change to the status quo requires careful examination.

1.4 Problem statement

Given that a growing millennial population is driving the adoption of technology in the local banking industry, while new technologies are lowering the barriers to entry, the South African banking market is due for disruption.

These new technologies enable organisations to pursue innovative business models, offering enhanced banking services at a lower cost base, as mentioned. This is in comparison to the traditional “brick and mortar” business models followed by the incumbent banks in South Africa. Four new banks will be entering the South African market over the next two years, and these are all looking to disrupt the status quo and change the face of the country’s banking industry.

Given that the banking market is likely to be disrupted while challenger banks are entering the market, the research question can be formulated as follows: What could the business models of the incumbent banks look like in future if they hope to retain market share and actively compete with the challenger banks the local banking market?

1.5 Objectives

The main objective of this study is to develop a framework for future business models in the South African banking industry.

This objective is supported by the following secondary objectives:

- To identify and describe an appropriate research methodology to address the research objectives of the study (chapter 2);
- Conceptualising the literature relating to the concepts of business models, disruption caused by technology and the banking industry (chapter 3);

- Developing a framework, using semi-structured interviews and a literature review, to conceptualise what the future business models of the South African banking industry could look like (chapter 4); and

- Summarising the findings of the study based on empirical evidence and evidence from the literature review (chapter 5).

1.6 Research design/method

1.6.1 Literature review

The purpose of the literature review is to provide context around the concepts of business models, the banking industry and the potential effects of new technologies on an industry. This encompasses reviewing text books, journal- and internet articles as well as discussion papers with a view to gaining insight into and understanding the relevant concepts. This understanding will form the basis of the questionnaire that is to be developed in the process of designing the framework for future business models in the local banking industry.

1.6.2 Empirical research

The target population for this study was the South African banking industry, specifically senior executive management within a challenger bank or fintech start-up. As indicated, challenger banks began to enter the South African market from the first half of 2019.

The participants were selected from the local banking industry, all with considerable experience of traditional banking as well as the challenger bank- and fintech environment. The intention was to interview six participants, although the interviews would be extended until a point of saturation was achieved.

Qualitative data collection techniques were followed involving face-to-face semi-structured interviews with participants. A questionnaire was developed based on the findings generated in the literature review. This questionnaire was completed by the researcher during the interviews. Each interview was recorded and transcribed. The questions focused on collecting data to develop themes around and insights into the potential impact of challenger banks on the business models of bricks and mortar banks in South Africa. The intent of this study was to develop a framework for assisting banks in making informed decisions/choices regarding their operating models.

1.6.3 Paradigmatic assumptions and perspectives

Ontological assumptions encompass what constitutes reality, and can be defined as "the science or study of being" (Blaikie, 1993). Ontology considers the question of whether social entities need to be perceived as objects or subjects. Objectivism, also referred to as positivism, believes that there is a single reality that can be measured. Subjectivism, also referred to as interpretivism, perceives that reality is multiple and relative (Hudson & Ozanne, 1988:509) and that, therefore, reality needs to be interpreted. This study was conducted on the subjective ontological assumption that the qualitative data gathered as part of the study had to be interpreted by the researcher, and that this resulted in findings.

Epistemology looks to answer the question: "what is the relationship between the researcher and the research subject"? According to Cohen *et al.* (2011:7), epistemology is concerned with the nature and forms of knowledge. This study was based on subjective epistemological assumptions. The research paradigm adopted for this study was therefore suitably interpretive in nature.

1.7 Chapter overview

This study comprises the following chapters:

Chapter 1: Introduction and background

This chapter provides an overview of the research topic, including a literature review and the rationale for the project. The chapter justifies the relevance of the topic. It illuminates the research objectives and the problem statement, while giving a brief overview of the research methodology adopted.

Chapter 2: Research design and methodology

This chapter presents the appropriate research methodology for this study, including a discussion of research assumptions, a review of the methodology and a justification of its relevance. Data collection methods, which included questionnaires and interviews, are also discussed.

Chapter 3: Literature review – business model disruption in banking

This chapter includes the review of various sources of literature relating to business models, the impact of social pressures on organisations and the current banking industry in South

Africa. It forms the basis for the study and provides context to key ideas and topics to with a view to addressing the research problem adequately.

Chapter 4: Results and findings

The results of the qualitative data gathered during the interviews were analysed and are discussed in detail in this chapter. The findings of the interviews were used to develop a framework to assess the impact of a challenger bank on the business models followed by banks in South Africa.

Chapter 5: Conclusions and recommendations

The findings of this study are summarised in this chapter, including whether the problem statement had been successfully addressed. Recommendations are made based on the findings of the literature review and the qualitative research undertaken.

The next chapter will present a research design and discussion around methodology.

CHAPTER 2

2 RESEARCH DESIGN AND METHODOLOGY

2.1 Introduction

This chapter addresses the secondary objective raised in chapter 1 (see section 1.5), which is to identify and describe an appropriate research methodology to address the research objectives of the study.

The chapter describes the concept of research paradigms and critically determines the relevant research paradigm to be followed in this study. It further focuses on three major approaches to research: quantitative-, qualitative- and mixed method research. It further identifies an approach that is relevant for the present study.

Subsequently, around methodology the chapter considers approaches followed in qualitative research for sampling and site selection, and identifies the relevant approach adopted in this study. Here the chapter looks at defining data collections methods and identifies the most relevant one – given the nature of this study – to be one including a questionnaire and semi-structured interviews. Qualitative data analysis approaches are discussed, and thematic analyses is identified as most relevant to the present study.

The chapter will conclude with a discussion of the reliability and validity of qualitative research, and the importance of ethics.

2.2 Research paradigm

A research paradigm as described by Creswell (2009:6), relates to a general orientation about the world and a researcher's perceptions of the nature of research. The research paradigm adopted contains important assumptions about the way the world is viewed. These assumptions underpin the research approach and methods followed (Saunders *et al.*, 2009:108).

As discussed in the preceding chapter, two main areas of philosophy are involved in research, namely ontology and epistemology (see section 1.6.3). All scientific research rests on assumptions and principles that reside in these two areas (Neuman, 2014:93).

Ontology concerns the issue of what exists, or the fundamental nature of reality (Neuman, 2014:94). Hudson and Ozanne (1988:509) refer to ontological assumptions as assumptions about the nature of reality and social beings. Two basic positions within ontology are objectivism and subjectivism that is, social entities are perceived as objects (that is, they can be measured) or subjects (that is, they require interpretation).

Objectivism portrays the position that social entities exist in a reality external to social actors concerned with their existence. Subjectivism, on the other hand, holds that social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence (Saunders *et al.*, 2009:110). This study adopts subjective ontological assumptions, since a qualitative research approach was followed for the data collection.

Epistemology concerns what constitutes acceptable knowledge in a field of study (Saunders *et al.*, 2009:112). Neuman (2014:95) describes it as the issue of how we know the world around us or what makes a claim about it to be true or not. This includes what we need to produce knowledge and what scientific knowledge will look like once we have produced it (Neuman, 2014:95). The present study is underpinned by the acknowledgement of subjective epistemological assumptions, since the findings of the research requires interpretation by the researcher. The research paradigm followed for the study is therefore interpretive in nature, as has been argued and indicated also in the preceding chapter.

2.3 Research approach

Most research approaches can be grouped into three major categories: quantitative-, qualitative- and mixed methods research, as has been stated. The research approach selected must align with the research paradigm, as described above (section 2.2).

Quantitative research involves the following: generate statistics through the use of large-scale survey research (Dawson, 2002:23). It involves the generation of data in quantitative form, which can be subjected to quantitative analysis in a formal and rigorous fashion (Kothari, 2004:5). Creswell (2009:4) describes quantitative research as a means for testing objective theories by examining relationships among variables. The results of this type of research approach is essentially a set of numbers.

In some contrast, qualitative research explores attitudes, behaviours and experiences (Dawson, 2002:22). Kothari (2004:5) confirms that it is concerned with the subjective assessment of attitudes, opinions and behaviour. Kothari (2004:5) continues to say that under these circumstances research is a function of the researcher’s insights and impressions. The data in qualitative research is typically collected in the participants’ settings and is then grouped into general themes that are interpreted by the researcher (Creswell, 2009:4). This research approach is interpretive in nature and aligned with the research paradigm adopted in this study.

Mixed method research combines quantitative and qualitative research approaches (Creswell, 2009:4). Researchers draw liberally from both approaches and their concomitant assumptions. They look to many approaches for collecting and analysing data rather than subscribing to only one way, that is, either quantitative or qualitative (Creswell, 2009:11). This can involve combining observations and interviews with traditional surveys (Creswell, 2009:14).

As indicated, the main objective of this study is to develop a framework for future business models in the South African banking industry. In line with this, a qualitative research approach has been adopted. As chapter 1 states (in section 1.6.2), the present study makes use of qualitative data collection techniques in the form of semi-structured face-to-face interviews. This qualitative research approach dovetails with the interpretive research paradigm adopted.

2.4 Research methodology

Kothari (2004:8) describes research methodology as a systematic way to solve a problem. This includes the forms of data collection, analysis and interpretation that the researcher proposes for the study (Creswell, 2009:15). The research methodology adopted in this study is discussed below.

2.4.1 Sampling and site selection

All items under consideration in any field of inquiry constitute a “universe” or “population” (Kothari, 2004:14). Saunders *et al.* (2009:212) state that when it is impractical to collect data from an entire population, one needs to select a sample. There are two main sampling techniques: probability- or representative sampling and non-probability- or judgement sampling (Saunders *et al.*, 2009:213). According to Neuman (2014:248), most quantitative studies use probability- or probability-like samples, while most qualitative studies use non-probability sampling methods.

Probability sampling is most commonly associated with survey-based research strategies where one makes inferences from a sample about a population to answer a research question(s) or to meet objectives (Saunders *et al.*, 2009:214). Dawson (2002:48) states that in the case of probability sampling all people within the research population have a specifiable chance of being selected. Non-probability sampling, on the other hand, involves purposive- or deliberate selection of particular units of the universe to constitute a sample that represents the population (Kothari, 2004:15). Walliman (2011:96) defines non-probability sampling as sampling based on selection by non-random means.

When population elements are selected for inclusion in the sample based on ease of access it is called convenience sampling (Kothari, 2004:15). When the researcher uses judgement for selecting a sample is it called judgement sampling (Kothari, 2004:15). Another form of sampling is expert sampling, where the researcher seeks for the consent of those that are experts or known experts in the area of study, and collects information directly from individuals or groups of respondents (Etikan & Bala, 2017).

According to Creswell (2009:178), the idea behind qualitative research is to purposefully select participants or sites that will best help the researcher understand the problem and research question. Hancock and Algozzine (2016:40) echo this: the most important consideration is to identify those persons in the research setting who may have the best information with which to address the study's research questions.

To best answer the research question as formulated in chapter 1 (section 1.4), participants were selected using non-probability expert sampling. This sampling method is suited to qualitative studies. Six participants from across the South African banking industry were purposefully selected: two internal participants from the challenger bank and four external participants from the greater South African banking industry. They were selected based on their considerable experience within the South African banking industry, specifically given their experience in challenger banks and fintech's in South Africa.

2.4.2 Data collection methods

Neuman (2014:46) groups data collection methods into two categories based on the type of data gathered: quantitative, that is, collecting data in the form of numbers, and qualitative, that is, collecting data in the form of words and pictures.

The data collection procedures in qualitative research involve four basic types (Creswell, 2009:181): observation; interviews; documents; and audio- and visual materials. Interviews can be standardised or non-standardised: the former are used to gather data that will be subject to quantitative analysis, while the latter, either in semi-structured or in-depth form, are used to gather data that will be subject to qualitative analysis (Saunders *et al.*, 2009:321).

Qualitative interviews involve the researcher conducting face-to-face or telephone discussion with participants or sees him or her engaging in focus groups to elicit views and opinions from participants (Creswell, 2009:181). Using this approach, researchers ask predetermined but flexibly worded questions to which the responses will provide tentative answers to the researchers' questions, as averred by Hancock and Algozzine (2016:40). They go on to say that in addition to posing predetermined questions, researchers that use semi-structured interviews ask follow-up questions designed to probe issues of interest to interviewees more deeply (Hancock & Algozzine, 2016:40). In this manner, semi-structured interviews invite participants to express themselves openly and freely and define the world from their own perspectives, and not solely from the perspective of the researcher (Hancock & Algozzine, 2016:40). Saunders *et al.* (2009:327) describe the aim of semi-structured interviews as exploring events or seeking explanations from the target population.

As this study is qualitative in nature, data was collected through an in-depth literature review and semi-structured interviews. The questionnaire that was answered during the interviews, was developed based on the in-depth literature review and the key themes and insights identified. These themes and key insights were used as a basis for the development of the questionnaire.

The interviews were scheduled in advance, where each interviewee was asked the same set of open-ended questions: see Appendix 1 (page 81). Each of the six semi-structured interviews were recorded and transcribed.

2.5 Data analysis

Saunders *et al.* (2009:480) state that to be useful, these data need to be analysed and the meanings understood. Neuman (2014:277) confirms this: it is not enough to collect the data, it must also be analysed.

Data analysis involves collecting qualitative data on the basis of asking general questions and developing an analysis with a view to the information supplied by participants (Creswell, 2009:184). Neuman (2014:277) describes the process of analysing data as the systematic organisation, integration and examination of the data, while searching for patterns and relationships among the specific details. In qualitative research, one organises raw data into conceptual categories to create themes or concepts (Neuman, 2014:480).

Saunders *et al.* (2009:490) stated that, due to the diverse nature of qualitative data, no standardised procedure for analysing such data can be followed. Saunders *et al.* (2009:490) group the analysis of qualitative data into three main types: i) *summarising* (condensation) of meanings, ii) *categorisation* (grouping) of meanings and iii) *structuring* (ordering) of meanings by using narrative.

Figure 2-1: Dimensions of qualitative analysis

Source: Saunders *et al.* (2009:491)

In practice, research combines elements of inductive and deductive approaches (Figure 2-1) (Saunders *et al.*, 2009:490). Some procedures for analysing data can be used deductively, such as deriving categories and codes for analysing data from theory, following a predetermined analytical framework (Saunders *et al.*, 2009:491). Saunders *et al.* (2009:491) go on to say that other procedures can commence inductively, without predetermined or *a priori* categories and codes to direct the analysis.

When data is analysed by theme, it is called *thematic analysis* (Dawson, 2002:115). Dawson (2002:115) describes this type of analysis as highly inductive, that is, the themes emerge from the data and are not imposed upon it by the researcher. Miller (2016) defines *thematic analysis* as a method used in qualitative research to identify patterns or themes within a given data set. *Comparative analysis* is similar to *thematic analysis* (Dawson, 2002:116): using this method, data obtained from different participants are compared and contrasted and the process continues until the researcher is satisfied that no new issues are arising.

The present study, as indicated, is qualitative in nature, and the data for the study were generated by employing semi-structured interviews that were transcribed. A thematic analysis approach was adopted, as the transcripts from each of the interviews were analysed, and the themes/findings identified are presented in chapter 4.

2.6 Methodological rigour

Reliability and validity are concepts that help to establish the truthfulness, credibility or believability of findings (Neuman, 2014:212). They are critical towards ensuring that the findings of a study are credible and add value to the target population, in the case of this study the framework developed hopes to aid the management of South African banks with business model transformations they are undertaking.

Validity does not carry the same connotations in qualitative research as it does in quantitative research, nor is it a companion of reliability, that is, examining stability or consistency of responses, or generalisability, that is, the external validity of applying results to new settings, people or samples (Creswell, 2009:190). Saunders *et al.* (2009:327) are of the view that the high level of validity that is possible in qualitative interviews is made possible by the fact that questions can be clarified, meanings of responses probed, and topics discussed from a variety of angles.

They state that validity is concerned with whether the findings are really about what they appear to be about, and continue by describing validity as the extent to which the researcher gains access to the participants' knowledge and experience, and is able to infer meaning that the participant intended from the language that was used by this person. Neuman (2014:218) confirms this view when he says that qualitative studies are concerned with capturing an inside view and providing a detailed account from the viewpoint of the population being studied.

According to Neuman (2014:212), validity suggests truthfulness, and refers to how well an idea "fits" with actual reality. In qualitative studies, we are more interested in achieving authenticity than realising a single version of "truth" according to Neuman (2014:218). He defines authenticity as meaning to offer a fair, honest, and balanced account of social life from the viewpoint of the people who live it every day.

Reliability refers to the extent to which data collection techniques or analysis procedures will yield consistent findings (Saunders *et al.*, 2009:156). Researchers want to be consistent that is, not vacillating or erratic when it comes to the manner in which they make observations (Neuman, 2014:218). He defines reliability as dependability or consistency, it suggests that the same thing is repeated or recurs under identical or very similar conditions. Saunders *et al.* (2009:327) argue that the findings derived from using qualitative research methods are not necessarily meant to be repeatable, since they reflect reality at the time at which they were collected, and this may change. To address this, researchers should make and retain notes relating to their research design, stating the reasons underpinning the choice of strategy, methods and the data obtained (Saunders *et al.*, 2009:328).

To ensure validity and reliability all notes were retained in the case of the present study and interviews were recorded and transcribed verbatim to capture the data generated from the interviews. In terms of validity, the interviewees were all able to discuss and probe the questions in the course of their semi-structured interviews, thus to ensure authenticity. The same set of open-ended questions contained in the questionnaire were utilised in all the semi-structured interviews to ensure consistency that is, reliability.

2.7 Ethics

Walliman (2011:42) states that discoveries made through research are only of value if the research is carried out honestly. He goes on to say that one cannot trust the results of a research project if it is suspected that the researcher did not act with integrity (Walliman, 2011:42).

Neuman (2014:145) echoes this view: ethical research depends on the integrity and values of individual researchers. He further states that researchers have a moral and professional obligation to be ethical even when research participants are unaware of or unconcerned about ethics. Ethics defines what is or is not legitimate or what “moral” research procedure involves (Neuman, 2014:145).

Working with human participants always raises ethical issues about how to treat them. People should be treated with respect, which has many implications for how exactly one deals with them before, during and after the research project (Walliman, 2011:42).

The present research project was approved by the North-West University’s Economic and Management Sciences Research Ethics Committee (ethics number: NWU-00757-18-S4). It followed ethical principles and was conducted in a confidential manner. All interviewees were treated fairly and in a professional manner prior to, during and after the interviews.

2.8 Summary

This chapter discussed the relevant research methodology that was adopted in the present study to meet the first secondary research objective as set out in chapter 1 (section 1.5). The present chapter examined different research paradigms, and identified that the relevant research paradigm here must be interpretive in nature. Ontological and epistemological assumptions that underpin this paradigm were also outlined succinctly.

The three approaches to research, namely quantitative; qualitative and mixed method ones, were reviewed. A qualitative approach was identified as most relevant to this study based on the research paradigm adopted and the problem statement this study aims to address. The research methodology for this study was subsequently discussed, and non-probability expert sampling was identified as the most relevant method, due to the limited target population of this study. A questionnaire and semi-structured interviews were identified as the most relevant data collection methods for this qualitative study.

Various qualitative data analytics procedures were reviewed, and it was found that thematic analysis was the most relevant to this study. The issue of ensuring validity and reliability in qualitative research was discussed, and it was determined that these issues would be most adequately addressed by ensuring that the research process was conducted with methodological rigour. The final section of the chapter addressed the importance of ethics and the role it plays in ensuring that the research carries value.

The next chapter contains the detailed literature review of business models, the South African banking industry and the current social pressures that are influencing it.

CHAPTER 3

3 LITERATURE REVIEW – BUSINESS MODEL DISRUPTION IN BANKING

3.1 Introduction

This chapter looks to address the second secondary objective defined in the first chapter (see section 1.5), which is to conceptualise the literature relating to the concepts of business models, disruption caused by technology and the nature of the banking industry in South Africa. The literature review to follow here provides a foundation for this study as well as insights into key topics and concepts pertaining to this study.

The literature review forms the basis for identifying and developing questions for the semi-structured interviews to be conducted, as discussed in chapter 1 (section 1.6.2). The results of the data collected during the interviews are analysed in detail in the next chapter (chapter 4).

The present chapter begins by providing a detailed overview of business models in literature and explores its different elements. The subsequent section of this chapter reviews disruption in business models and looks to understand some of the reasons/causes for this.

This is followed by a section overviewing the current South African banking environment, considering both internal and external factors that could impact the current status quo. The chapter concludes with an examination of institutional theory and how it may be used to assess the potential impact of challenger banks entering the South African banking environment.

3.2 Business models

According to Casadesus-Masanell and Ricart (2011:1), strategy has been the primary building block of competitiveness over the past three decades, but in the future, the quest for sustainable advantages may well begin with the business model. The importance of an organisation's business model cannot be underestimated and business models in banking have not significantly changed in years. The objective of a business model is to exploit business opportunities by creating value for the parties involved (Zott & Amit, 2010:217). Casadesus-Masanell and Ricart (2011:4) define a business model as the choices executives and managers make about how an organisation should operate and the consequences of those choices. Afuah and Tucci (2003:4) view a business model as that which enables an organisation to enjoy sustainable competitive advantages and it details how an organisation makes money and how it plans to do so in the long run. Teece (2010:173) confirms these views and defines a business model as how an organisation creates and delivers value to customers and converts payments received to profits. An organisation's business model is the blueprint of how it generates value for its customers through producing products or services and then charging customers for these to capture the value generated in the form of profit. Teece (2018:40) also refers to a business model as an architecture for how a firm creates and delivers value to customers and the mechanisms employed to capture a share of that value. He goes on to say that a business model is a matched set of elements encompassing the flows of costs, revenues and profits.

3.2.1 Types of business models

Demil and Lecocq (2010:227) propose that there are two different uses of the business model concept, the first static, that is, as a blueprint for the coherence between core business model components. The second involves a transformational approach, using the concept as a tool to address change and innovation in the organisation, or in the model itself.

Fjeldstad and Snow (2018:33) echo the view of Demil and Lecocq (2010) that there are broadly two different uses of the business model concept in literature, although the terms they use differ slightly. For Fjeldstad and Snow (2018:33) the first deals with the operations of a business - how it creates value for customers and appropriates value by performing its activities efficiently and effectively, that is, the *operational* element of a business model. The second discourse deals with *dynamics* - how an organisation modifies the elements of its business model over time to adapt to changes and disruptions in its environment, that is, the dynamic element of a business model. They describe the operational dimension of a business model as how an organisation conducts its business based on the choices relating to product-/service offerings, target customers and markets. They further describe the dynamic dimension of a business model as how an organisation changes and adapts over time (Fjeldstad & Snow, 2018:34).

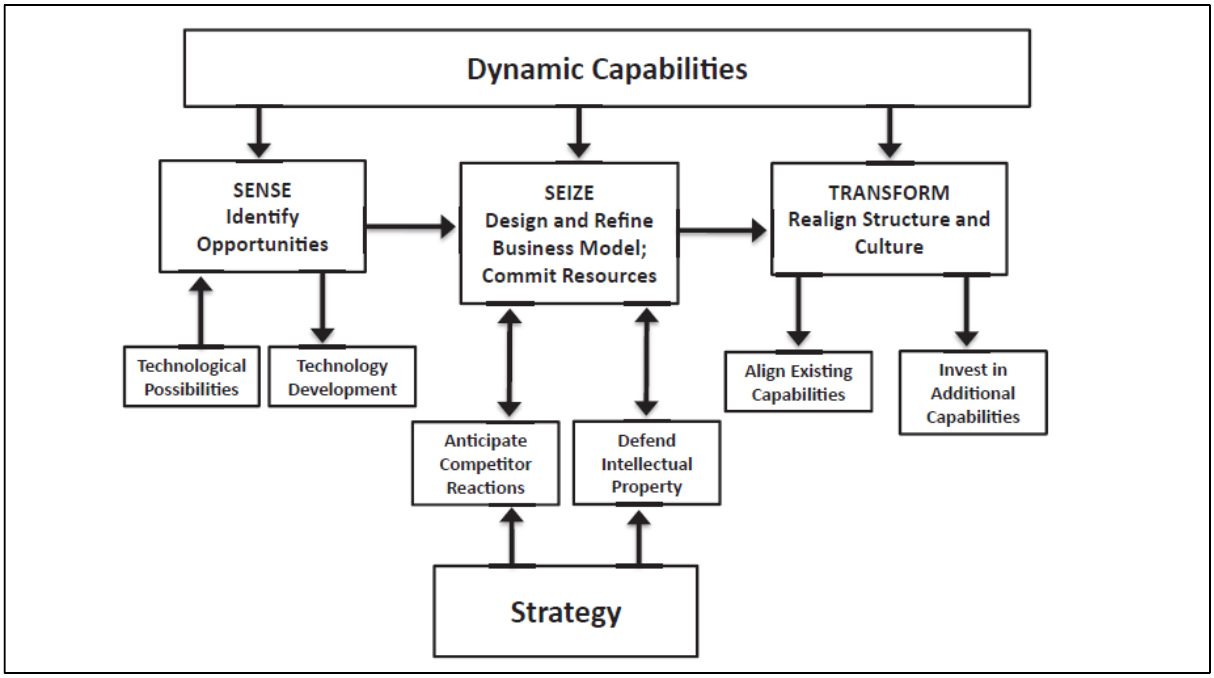
Demil and Lecocq (2010:230) refer to the capability of an organisation to change its business model, while at the same time building and maintaining sustainable performance as "*dynamic consistency*". In their turn, Ritter and Lettl (2018:5) propose that current- and future states of a firm's business model are connected by its *dynamic capabilities* - its abilities to reconfigure its assets. In this vein, Teece (2018:43) states that dynamic capabilities include the sensing-, seizing- and transforming capabilities needed to design and implement a business model. It is made up of operational elements and dynamic elements, both of which will have an impact on the organisation's long-term sustainability.

3.2.2 Dynamic capabilities

An organisation's dynamic capabilities are those that top management should be most focused on, as they allow an organisation to innovate and adapt to challenges or opportunities in the market. An organisation is required to leverage its dynamic capabilities to adjust its business model to changes in the market, such as involving new technologies and coping with new market entrants. A key element of an organisation's dynamic capabilities for seizing new opportunities in most cases will be the managerial competences that will achieve devising and refining business models (Teece, 2007:20). Organisations with higher dynamic capabilities are better able to transform their business models to ensure long term sustainability, because they are better able to sense and seize opportunities in the market and responding to threats. Teece (2018:44) ratifies this view by stating that strong dynamic capabilities can serve as a firm foundation for sustainable competitive advantage for an organisation to respond to changes in the market more proficiently than its competitors.

Dynamic capabilities and strategy combine to create and refine a defensible business model, which guides organisational transformation (Teece, 2018:44). Figure 3-1 below presents a simplified version of the dynamic capabilities framework, omitting feedback channels such as those between organisation design and dynamic capabilities.

Figure 3-1: Dynamic capabilities and strategy combined



Source: Teece (2018:44)

Figure 3-1 reflects the interdependencies between an organisation's strategy, its dynamic capabilities and its ability to adapt its business model. It also highlights the importance of the alignment of an organisation's business model with its strategy if it hopes to generate long term sustainability. The strength of an organisation's dynamic capabilities, according to Teece (2018:43), will determine the speed and costs associated with aligning its business model to the changing needs and aspirations of the customer. Therefore, strong dynamic capabilities can serve as a foundation for sustainable competitive advantage for an organisation, since it will be able to adapt its business model faster and with less expenses to the changing needs of customers than its competitors.

3.2.3 Characteristics of business models

Casadesus-Masanell and Ricart (2011) describe a good business model as having the following three characteristics:

- *Alignment to the company's goals* - choices made while designing a business model of an organisation should deliver consequences that enable the organisation to achieve its goals;
- *Self-reinforcing* - choices that executives make while creating a business model should complement one another; there must be internal consistency;
- *Robust* - a good business model should be able to sustain its effectiveness over time by fending off threats.

As an organisation transforms/develops its business model through its dynamic capabilities, management needs to make good choices to ensure that the organisation is sustainable in the long term. Any choices relating to the business model need to be aligned with the strategy of the organisation to ensure long term sustainability (Casadesus-Masanell & Ricart, 2010).

Casadesus-Masanell and Ricart (2011) posit that management needs to make decisions that create a business model that generates virtuous cycles or feedback loops, which are self-reinforcing. That is, management's choices need to be aligned with support and enable the chosen business model of an organisation.

Teece (2018:44) has found that a business model shapes strategy in as much as it constrains some actions and facilitates others – this is reflected in Figure 3-1. By determining costs and profitability, a business model impacts the feasibility of a strategy, highlighting the point made by Casadesus-Masanell and Ricart (2011) that it needs to be aligned with an organisation's goals – its strategy. This further emphasises the importance of ensuring that all choices made by management look to generate virtuous cycles within an organisation's business model, and that the consequences of the choices are aligned to support or enable the strategy of the organisation. Chandler (1962) states that "structure follows strategy", in other words, the design of an organisation must be aligned with its strategic objectives. According to Fjeldstad and Snow (2018:36), organisational design affects overall effectiveness, efficiency and agility of an organisation, while a business model frames the sources of effectiveness, efficiency and agility as well as the organisation's strategic domain. With a view to the present study, taking into account the above, the concept of business models will refer to an organisation's current operational state as well as its dynamic capability to adapt its business model to ensure long term value creation.

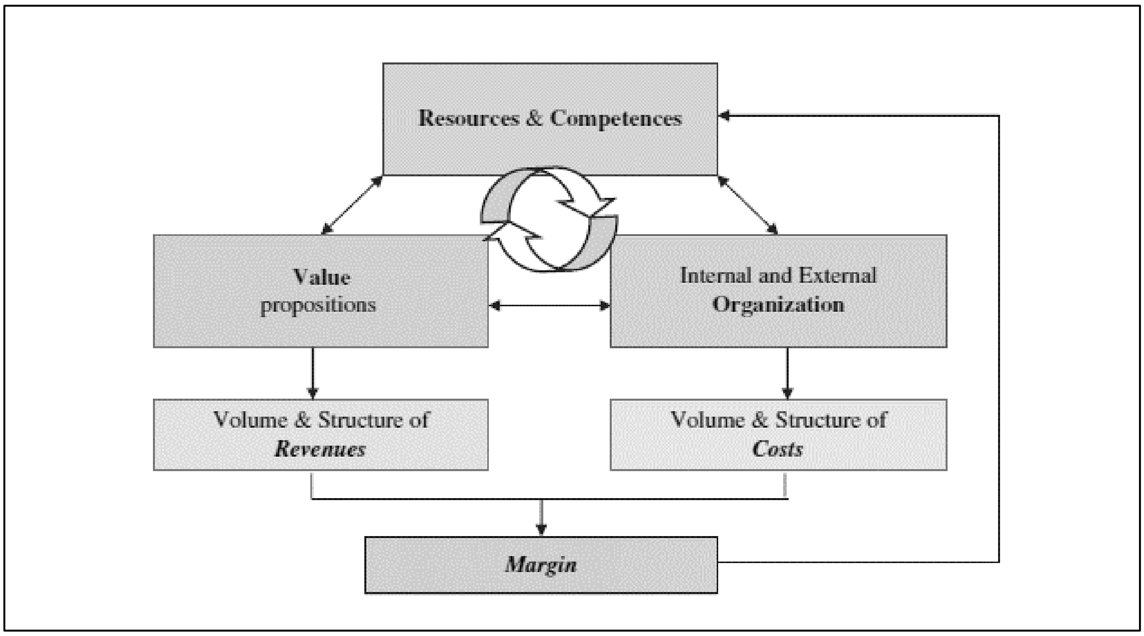
Demil and Lecocq (2010) conceptualise a view of a business model by adopting Penrose's view of an organisation as a bundle of resources, mainly physical- and human ones (Penrose, 1959). Demil and Lecocq (2010:231) describe the three core components of a business model as follows: i) resources and competences, ii) organisational structure and iii) propositions for value delivery.

- *Resources and competences* - the resources may come from external markets or be developed internally. The competences refer to the abilities and knowledge managers develop, individually and collectively, to improve, recombine or change the services their resources can offer;
- *Organisational structure* - encompasses the organisation's activities and the relations it establishes with other organisations to combine and exploit its resources (including its value chain activities);
- The *propositions for value delivery* - the value propositions an organisation delivers to customers in the form of its products and services.

The view that a business model entails these three core components has been adopted by Demil and Lecocq (2010:231) to enable comparisons of business models across different organisations. These core components relate to the operational dimension of a business model. Each of the core components is made up of several different sub-elements. The structure and volume of these sub-elements determines an organisation's costs and revenues (Demil & Lecocq, 2010:232).

Demil and Lecocq (2010:234) have developed the RCOV framework (Figure 3-2) to illustrate the relationships between the three core components that they propose to make up a business model. The three basic business model components in the RCOV framework are *resources and competences* (RC) to value or combine; the *organisational structure* (O) of the business within a value network or within the firm boundaries and the *value propositions* (V) through the supply of products and services; these will determine the structure and the volume of costs and revenues of a business and thus its margin, and so, ultimately, its sustainability (Demil & Lecocq, 2010:234).

Figure 3-2: RCOV framework



c

Source: Demil and Lecocq (2010:234)

The RCOV framework as presented in Figure 3-2 highlights the interactions between the core components of a business model that occur following the choice to develop a new value proposition, create new combinations of resources or make changes in the organisational system. Figure 3-2 also highlights the impacts such adaptations will have on the other components and their subsidiary elements (Demil & Lecocq, 2010:234).

As reflected by the RCOV framework (Figure 3-2), there is a dynamic relationship between the core components of a business model, and they are connected and dependant on each other. Any change to one component will have an impact on the other components. An organisation generates revenue through its value propositions, while these value propositions are created by an organisation leveraging its resources and competences and its organisational structure. The organisational structure adopted by an organisation influences, and is influenced by, its resources and competences, and it is the major driver of costs as reflected in Figure 3-2.

Through the interaction between the core components of its business model, an organisation generates value for its customers and then captures the value created. The effectiveness of these interactions ultimately determines an organisation's long-term sustainability. This is confirmed by the view of Penrose (1959), who states that the growth of the firm results from the interaction between its resources, its organisation and its capacity to propose new value propositions in markets.

Expanding on the earlier definition of Casadesus-Masanell and Ricart (2011), who conceptualise a business model as consisting of a set of managerial choices and the consequences of those choices – either in flexible or rigid manner – it could be said that a flexible consequence is one that responds quickly when the underlying choice changes, while rigid consequences take significantly longer to disappear once the underlying choice changes.

Figure 3-2 illustrates the importance of the fact that management needs to understand the potential consequences of their choices, especially when those choices have an impact on the core components of an organisation's business model. The consequences of their choices could create vicious cycles, as opposed to the desired virtuous cycles, if they are not fully aligned with the organisation's goals (Casadesus-Masanell & Ricart, 2011). This could potentially have a negative impact on its margin and in turn its long-term sustainability.

These management choices relate to the dynamic element of an organisation's business model. The dynamic element, as previously stated, relates to its ability to adapt and change its business model over time to ensure long term sustainability. Demil and Lecocq (2010:236) contend that, as strategy, a business model may evolve in response to external- and internal factors. Effective organisations constantly align the elements of their business model to the environment in which they are operating (Fjeldstad & Snow, 2018:34).

3.3 Disruption of business models

Today's global economy, supported by the internet and new technologies, has given the customer greater choices, leading many organisations to re-evaluate their value propositions as the supply side logic of the industrial era is no longer valid (Teece, 2010:172). Walsh (2013) identifies four main types of value propositions: i) low cost, ii) superior product, iii) ease of use and iv) expert service. A value proposition is defined as an implicit, and sometimes explicit, promise made to a customer by the provider of a product or service. This is a promise that goes beyond the physical characteristics of the product or service and involves all forms of utility that can be enjoyed by the customer. It is manifested in such areas as emotional-, status- and self-actualisation benefits to be obtained from consumption or utilisation (Walsh, 2013).

As stated earlier, Demil and Lecocq (2010:231) identify an organisation's value proposition as one of the core components of a business model, and state that any change to one of its core components would have an impact on the other core components as reflected in Figure 3-2. According to Baden-Fuller (2013:419), technological development can facilitate new business models, and therefore enable new value propositions. The most obvious historical example is the way the invention and development of steam power facilitated the mass production business model. With new technologies having an impact on an organisation's existing business models and value propositions, legacy organisations will need to innovate if they hope to maintain long term sustainability.

As discussed in chapter 1 (section 1.1), the local banking industry incumbents are faced with challenges across the four pillars of their business models (Dan Costin, 2016:148): i) *personnel – human capital*; ii) *information, communication and telecommunication (ICT) infrastructures*; iii) *internal procedures and work-flows* and iv) *communication policy and protocols*. These four pillars are considered to be the sub-element of the three core components referenced by Demil and Lecocq (2010:232), which make up the operational dimension of a business model.

According to Teece (2010:174), an effective business model yields value propositions that are compelling to customers, achieves advantageous cost and risk structures, and enables significant value capture by the business that generates and delivers products and services. With the growth of the internet, fundamental questions have been raised about how businesses deliver value to customers and how organisations capture this value (Teece, 2010:174). Teece (2010:174) goes on to say that the internet is causing many "bricks and mortar" companies to fundamentally rethink their business models.

It is not only the internet and new technologies that have a disruptive effect on business models, it is also the millennial customers who cause organisations to rethink their value propositions, which in turn requires organisations to rethink their business models. McFeely and O'Boyle (2018) describe millennial customers as first-generation digital natives, and found that they are the most likely generation to use digital- and online channels, whilst they visit brick and mortar branches less than prior generations. Figure 3-7, which highlights the popularity of digital channels amongst African customers and particularly among South African banking customers where 56% prefer digital channels, reflect this development.

Teece (2018:42) emphasises that the most important alignment for business model implementation are those of company- and customer needs. This supports the view that technology and changing customer needs are causing organisations to rethink their business models if they want to maintain long term sustainability.

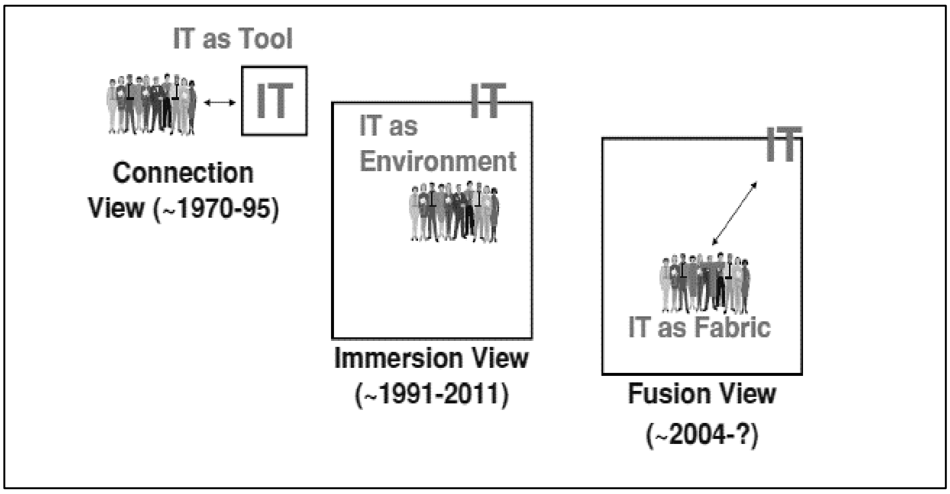
Enders and Jelassi (2000:543) define a “bricks-and-mortar” business model as one based on a physical store or place, where the organisation interacts with the customer. The “bricks and mortar” business model is considered to be the legacy business model that most banks currently utilise, as they were founded prior to the invention of the internet. “Bricks and mortar” can been seen as management choices relating to one of the sub-element, sub-elements make up the organisational structure component of a business model (Demil & Lecocq, 2010:231), and consequently any changes to this sub-element will have an impact of the other core components of the business model.

The legacy bricks and mortar business model followed by banks is not very flexible, as it carries significant fixed costs due to the large physical footprint and the larger staff numbers associated. The limited flexibility is a rigid consequence of the management choices previously made, and any changes to this business model require significant effort and costs (Casadesus-Masanell & Ricart, 2011).

Technology has evolved to allow a lower cost for the provisioning of information and customer solutions, while this means that organisations need to be more customer-centric if they hope to generate value in the long run (Teece, 2010:172). Technological changes often provide the impetus for new and better ways to satisfy customer needs (Teece, 2010:187). Organisations look to satisfy their customers’ needs through the products or services they offer, and these services or products form part of an organisation’s value proposition. According to Chesbrough (2010:354), technology by itself has no single objective value and an organisation must commercialise new ideas and technologies through its business model. He continues to indicate that the economic value of a technology remains latent until it has been commercialised by means of a business model (Chesbrough, 2010:354).

The arrival of a new general-purpose technology, such as the internet or smartphones, opens opportunities for radically new business models to which corporate strategy must then respond (Teece, 2018:44). The role of information technology in business has evolved over the years, and this is causing businesses to rethink their business models. According to El Sawy and Pereira (2013:16), we have progressively transitioned from a focus on the design of information systems to the design of IT-enabled business processes, and more recently to the design of business models for services provided through digital platforms. The changing role of information technology is reflected in Figure 3-3.

Figure 3-3: Changing role of technology in business



Source: El Sawy and Pereira (2013:19)

The banking industry is responding to these new technologies and the role they play in organisations by adopting digital strategies. The industry is looking to commercialise these new technologies through the adoption of more digitally focused business models. El Sawy and Pereira (2013:16) describe a digital business model as one where products and/or services are provided through digital platforms. Liao *et al.* (1999:63) define a virtual-/digital bank as a ”non-branch bank”, while the virtual banking is the provision of banking services through electronic media such as ATM, telephone, personal computers and/or the internet.

The rapid implementation of and adjustment to new business models require strong dynamic capabilities, including an organisation that has been designed and primed to be innovative and flexible (Teece, 2018:46). For an organisation to be innovative and flexible, management needs to have made business model choices where flexible and rigid consequences are aligned with each other to support these characteristics. Strong dynamic capabilities alone are not enough to enable rapid adjustments to business models.

In the event of a conflict between strategy and the business model, top management is responsible for determining which of the two should change (Teece, 2018:44). Many of the incumbents have adopted a digital strategy and are offering ever-expanding digital channels on which customers can complete their banking. All the incumbents offer mobile and app-based banking. Although the incumbents have adopted a digital strategy, they still predominately follow traditional “bricks and mortar” business models.

3.4 The South African banking environment

Five major banks dominate the South African banking environment: ABSA, Standard Bank, First National Bank (FNB), Capitec and Nedbank (Anon, 2017), and they are considered to be the incumbents for the purpose of this study. The incumbents follow a traditional "bricks and mortar" business model with high operating costs, a large staff head count and a large physical branch network across the country, and collectively dispose of over 3 500 branches (BANKSETA, 2016:23), employing over 120 000 people (Anon, 2017).

3.4.1 The arrival of challenger banks

As mentioned, four newly-licenced banks have entered or are still to enter the market in the near future: Bank Zero, Discovery Bank, PostBank and Tyme (Mchunu, 2018). According to PWC (2018), many commentators agree that the newly-licenced South African banks that are already operating in the local market will cause disruptions in the local banking industry. We have already seen that with a differentiate business model, Capitec have been able to achieve competitive advantage. Business model innovation can itself be a pathway to a competitive advantage if the model is sufficiently differentiated and hard to replicate for incumbents and new entrants alike (Teece, 2010:173).

These newly-licenced digital banks are considered to be "challenger banks", they will all be competing against the incumbent banks for a share of the market. With the exception of Postbank, the newly-licenced banks are adopting a predominately digital approach and will operate as full service digital-only banks without physical bank branches (Dube, 2018). They are adopting digital business models that have significantly lower operating costs than those of the incumbents. Liao *et al.* (1999:65) state that virtual banks, that is, digital banks, benefit from low operating cost, because they need less staff and physical branches when compared with their "bricks and mortar" counterparts.

As mentioned in a preceding chapter, the *Cambridge Dictionary* (2019) defines operating costs as those associated with producing a company's goods or service, including expenses such as employee salaries as well as amortisation, depreciation, rent, taxes, and so forth (BusinessDictionary, 2019). Organisations that incur higher operating costs are required to charge a higher price for their products or services to generate a profit or maintain a profit margin. This means that customers have to pay more for products or services, whereas the challenger banks will offer customers products and services at a lower price because of significantly lower operating costs. Because of high staff numbers as reflected in Figure 3-5, incumbents have high operating costs. This is a consequence of management choices relating to their business models. According to Moyo (2018:9), older and larger banks are less technically efficient than their younger, smaller counterparts who are able to achieve more with less. Technical efficiency is described by InvestorWords (2019) as the measure of how effective specific inputs relate to given output, this supports the statement by Moyo (2018).

Through a differentiated, low-cost product offering, Capitec, for instance, has been able to grow its customer base from 2.1 million customers in 2010 (Anon, 2010) to over 9 million customers in 2017 (Pitjeng, 2018), achieving a customer growth rate of over 23% a year. Its low-cost value proposition was one of the key elements to this successful growth curve. It has a cost-to-income ratio of 36% (Capitec, 2018), which is significantly lower than the South African banking sector average of 57%, as reported in May 2018 (SARB, 2018). This lower ratio highlights that Capitec are more technically efficient and have a more innovation business model when compared to the incumbent banks.

According to Teece (2010:173), to profit from innovation, business pioneers need to excel not only at product innovation but also at business model design, understanding business design options as well as customer needs and technological trajectories. Tripe (1998:4) defines the cost-to-income ratio as non-interest costs, excluding bad and doubtful debt expense, divided by the total of net interest income and non-interest income. The cost-to-income ratio is also known as the efficiency ratio or expense to income ratio, and is used as a measure of bank performance according to Tripe (1998).

Against this background it appears that Capitec is better at controlling its operating costs when compared to the other four major banks in South Africa – Absa, Standard Bank, Nedbank and FNB, as reflected in its lower cost-to-income ratio. Its lower cost-to-income ratio has enabled it to generate a competitive advantage over the other major banks and gain significant market share over the last few years.

Capitec's management made good choices relating to the business model they adopted, and ensured that the consequences of their choices created virtuous feedback loops which aligned their business model with their low-cost strategy. In addition, its innovative business model (Deventer, 2017) and differentiated value proposition underpinned by digital technology (Nhundu & Makhaya, 2016:131) have demonstrated that the South African banking industry is vulnerable to disruption.

This lower cost-to-income ratio is a consequence of the business model adopted by Capitec. It was not encumbered by legacy IT systems (Nhundu & Makhaya, 2016:125), building instead custom IT infrastructures that were responsive to market needs. This custom core system was customer-centric and enabled the bank to focus its services on the customer, which lowered the cost to serve and improved the client experience (Nhundu & Makhaya, 2016:126). In contrast to this, incumbent banks are bound to complex legacy systems (Darolles, 2016:88) with multiple silos (Nhundu & Makhaya, 2016:126), driving up their service costs.

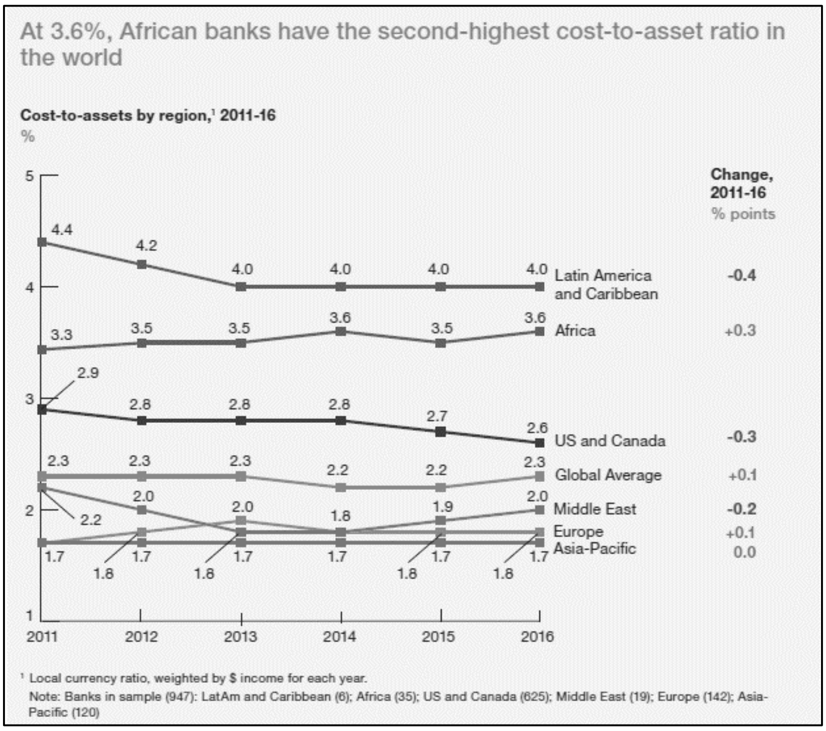
The challenger banks enjoy a further advantage over the incumbent banks as they are able to build their core IT infrastructure from scratch without the constrains of legacy systems (Anon, 2018). Focused on offering mostly web- and app-based services, these new entrants stand to reap the rewards of digital banking's lower cost structures and are unrestrained from legacy system architecture (PWC, 2018).

All the incumbents, with the exception of Capitec, operate on core banking systems that were developed in the 1970s and 1980s (Anon, 2018). These core legacy systems generate significant technical debt for the banks. Darolles (2016:88) state that the core legacy IT systems of the industry incumbents are highly complex and offer limited room to manoeuvre, because they consist of multiple versions layered on top of one other. This makes maintaining and upgrading these systems expensive and complex, increasing operating costs.

3.4.2 How local banks compare to global benchmarks

According to Mckinsey & Company (2018:12), African banks benchmark poorly on productivity, with a cost-to-asset ratio of 3.7%, which is one of the highest in the world. The cost-to-asset ratio is defined as operating costs to average total assets (Tripe, 1998:6), and is a measure of productivity in the banking industry. Looking at it from a South African banking perspective, the average cost-to-asset ratio reported by the South African Reserve Bank in May 2018 was 3.17%, up from 3.04% in May 2017 (SARB, 2018). This increase highlights increasing cost pressures in recent times and is driving the reduction in productivity when measured by the cost-to-asset ratio.

Figure 3-4: Cost-to-asset ratios of African banks

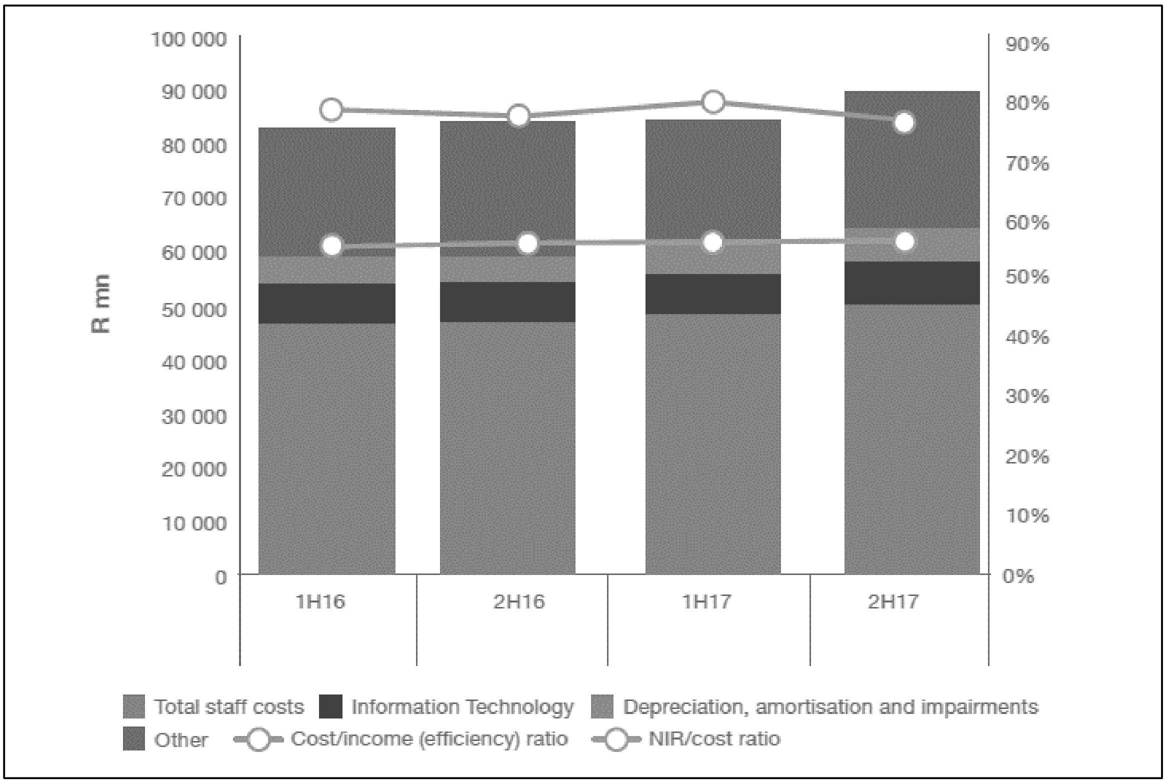


Source: Mckinsey & Company (2018:12)

Figure 3-4 demonstrates that African banks – which include South African banks – are falling behind the world in terms of productivity when measured by the cost-to-asset ratio. According to Mckinsey & Company (2018:12) the fact that local banks have more manual processes, tellers and cash-related costs drive the increase. The high operating costs associated with the incumbents further embody consequences of previously-made management choices that relate to their business models. They would be considered rigid consequences by Casadesus-Masanell and Ricart (2011), and will require significant time and effort to change.

The major driver of operating costs for the incumbent banks in South Africa is staff (PWC, 2018). Approximately 46% of operating costs are related to staff costs, as reflected in Figure 3-5.

Figure 3-5: Operating expenses of South African banks



Source: PWC (2018)

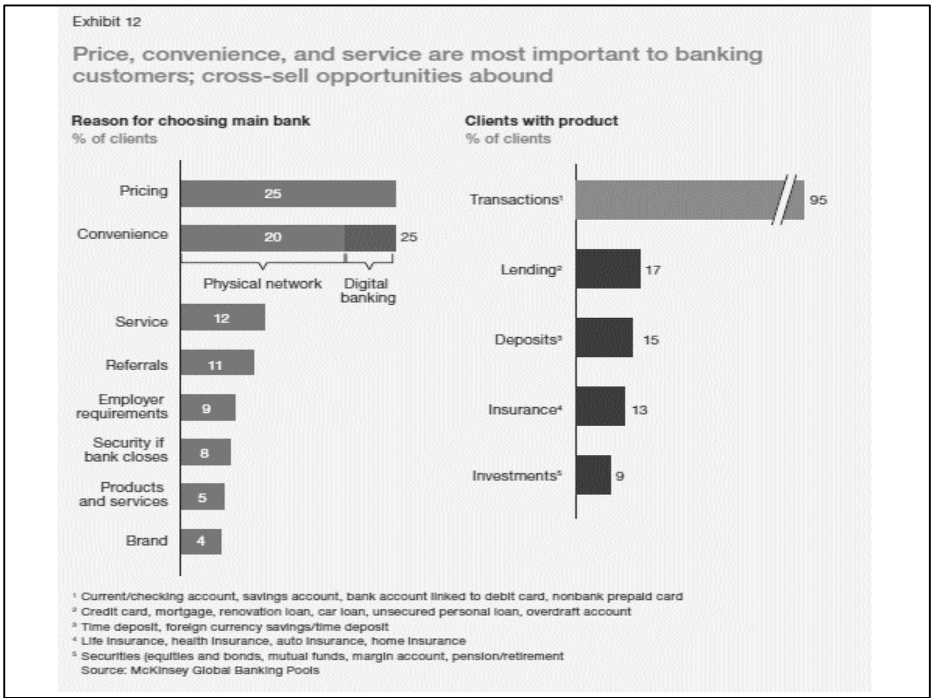
Of the total staff employed, approximately 40% of employees are clerical support workers (BANKSETA, 2018:26). Relative to global benchmarks, African banks have a higher share of their total staff in support functions such as IT, risk, marketing, HR and finance (Mckinsey & Company, 2018:32). This confirms that low productivity is driven in part by manual paper-heavy processes that require human intervention. This further increases the need for high staff numbers in the local banks (Mckinsey & Company, 2018:12). The large branch footprint of the incumbent banks is another significant driver of high operating expenses, as these generate rental charges and require a high number of client-facing staff. Moreover, the high number of branches is driven by the traditional brick and mortar business models followed by the incumbent banks.

According to BANKSETA (2018:23), with the introduction of on-line banking and mobile banking, the position of branches and ATMs is fast becoming obsolete as the banking sector gears towards branchless banking. BANKSETA (2018:23) describes the operating costs relating to the branch network as “burdensome”, further highlighting the need for the incumbents to reduce their branch-related operating costs.

3.4.3 The African consumer

Figure 3-6 highlights the price sensitivity of the African consumer when it comes to choosing their primary bank – this can be assumed to also hold true in the South African market. Due to a shrinking local economy and rising costs consumers are more price-sensitive than in the past and a considerable number of citizens are finding it hard to balance their day to day expenses (Dube, 2017).

Figure 3-6: Price sensitivity of African consumer

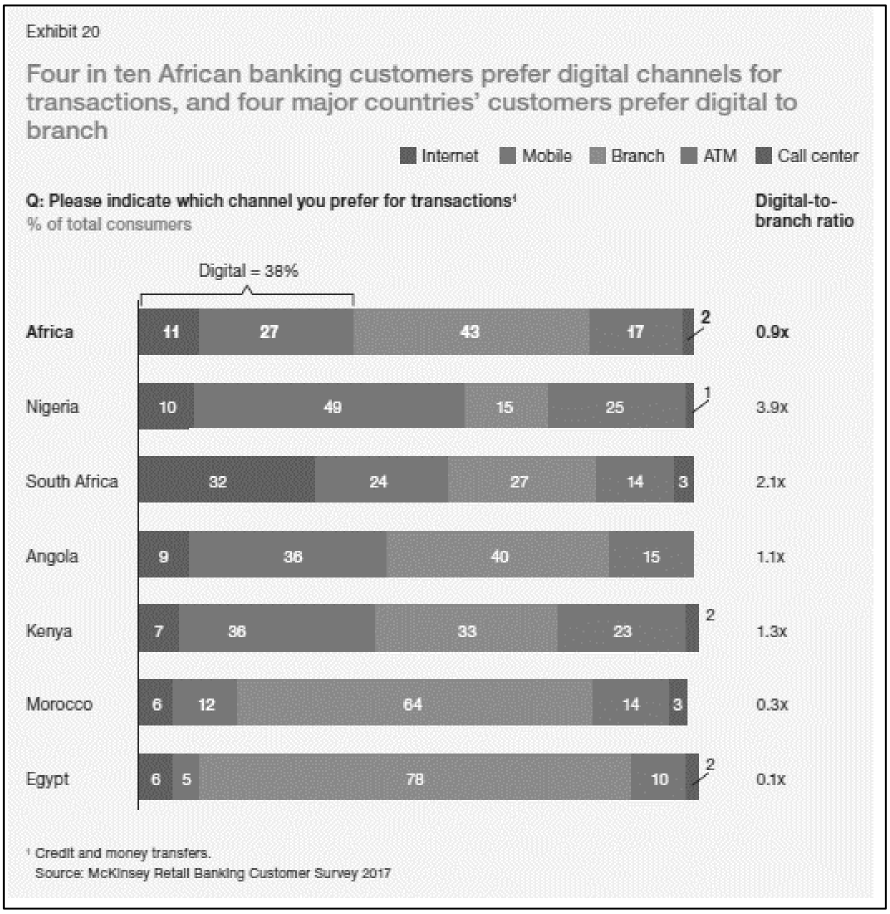


Source: Mckinsey & Company (2018:24)

As Figure 3-6 indicates, the two main reasons for African consumers choosing their primary bank are i) cost and ii) convenience. This is evidenced by the high growth rate of customers that Capitec has achieved in South Africa over the last few years by means of its low-cost customer-centric product offering. With the local economy shrinking by 2.2% quarter to quarter for the first quarter of 2018 (StatsSA, 2018), and low growth expected in the near future, incumbents are under growing pressure to adjust their business models to reduce their operating costs. Low cost products and services will be key aspects of any organisation looking to maintain sustainability in the tough economic market conditions in South Africa.

Another obstacle facing the incumbents is the popularity of digital channels among South African customers. According to Mckinsey & Company (2018:38), over 50% of customers prefer digital channels to perform transactions, as opposed to only 27% preferring branches (as presented in Figure 3-7). Figure 3-6 shows that African consumers identify convenience as one of the main considerations for selecting which primary bank they use. Digital channels offer lower costs and greater convenience to customers. These were identified as the two major reasons that spur consumers on to choose their main bank (Mckinsey & Company, 2018:24), which places additional pressure on the incumbents to change their business models and reduce their branch footprint, as the popularity of branches decreases.

Figure 3-7: Digital channels



Source: Mckinsey & Company (2018:38)

Sub-Saharan Africa has the highest growth rate in mobile subscriptions globally, and mobile phone penetration in South Africa is above 90% of the adult population (Anon, 2018:7). The popularity of digital channels is likely to grow in the coming years where 69% of South Africans currently use smartphones (Anon, 2018:7). The popularity of digital channels is further expected to grow in coming years, because the average age of the South African population is 28 years, making the average South African customer a millennial (Anon, 2018:13). Millennials, also known as generation Y, are characterised by people born between 1980 and 2000 (Main, 2017).

As the new generation turns their backs on traditional players and look to see if new organisations can offer innovative approaches to finance (Darolles, 2016:86), the millennial customer poses new challenges to the incumbents and their business models. Millennial customers are expecting a different way of doing business, and this holds true for the banking industry. In short, the digitisation agenda will have an impact on banking (Dan Costin, 2016:145).

According to Teece (2018:42), the most important alignment for business model implementation is that of company and customer needs, in a way that provides the company with an ongoing stream of profits. As the needs of the customer are changing, organisations need to adapt their business models to align to the new needs of the customer.

Incumbents need to respond to the changes in the market and to customer preferences. They need to reduce operating costs and focus on digital initiatives to retain market share in competition with challenger banks. This requires them to rethink their bricks and mortar business models. The incumbents already offer digital channels to customers, but they still follow traditional business models that are burdened with the associated high legacy operating costs. The incumbents are yet to truly transform their business models and adopt digital business models that will enable them to meet the needs of their millennial customers.

The incumbents are responding to the changes in market conditions and their growing millennial customer base, and are looking at ways to digitise and reduce operating costs. According to Mckinsey & Company (2018:39), the level of urgency is high, and banks need a rapid, robust response to digital disruption if they hope to retain market share.

To date, the incumbents have mainly focused their digital transformation on the front layer of their businesses and are increasingly looking to address the constraints of legacy systems and back office processes (Anon, 2018:42). South African banks have generally struggled to shift to proper API-led connectivity due to the constraints of legacy core banking systems (Anon, 2018:42). API-led connectivity is a methodical way to connect data to applications through reusable and purposeful APIs (Pearlman, 2017). API stands for stands for "Application Programming Interface" – an API is a set of commands, functions, protocols and objects that programmers can use to create software or interact with an external system (TechTerms, 2016).

The incumbents are focused on digitising legacy processes through automation, replacing and upgrading legacy system architecture (PWC, 2018). The shift towards automation offers significant efficiency and cost saving opportunities; in particular, automation of bank processes reduces the need for high back office head count (Mckinsey & Company, 2018:3).

3.5 The application of institutional theory

Institutional theory, as motivated n chapter 1 (section 1.1), was used to evaluate the potential influence of social pressures and the entry of challenger banks on the industry norms followed in the South Africa banking environment. The management choices relating to the business models of challenger banks have the potential to disrupt industry norms and, consequently, the management choices relating to the business models of the incumbent banks.

Rahal and Vadeboncoeur (2015) state that organisations that operate in a similar institutional environment conform to industry norms, which leads to *isomorphism,* a phenomenon where organisations become more similar over time. Suddaby (2013:381) is of the view that organisations conform to industry norms by adopting structures, practices and behaviours similar to other leading organisations. These industry norms will have a direct impact on the decisions and choices made by management in terms of organisational direction and strategy.

Industry norms adopted by organisations are influenced by *rationalise myths*. These *rationalise myths* are followed by organisations to gain *legitimacy* (Rahal & Vadeboncoeur, 2015). Suddaby (2013:383) states that industry norms are influenced by organisations that operate in the institutional environment as well as other external factors such as local and global social pressures (Rahal & Vadeboncoeur, 2015).

With the incumbents facing growing social pressures from the millennial population to become more digital and to reduce the costs relating to banking services, as reflected in Figure 3-6 and Figure 3-7, these social pressures will influence industry norms. The arrival of challenger banks is also likely to have an impact on these, as they will look to operate in the same institutional environment as the incumbent brick and mortar banks.

These social pressures coupled with challenger banks entering the institutional environment will have an influence on the industry norms followed in the South African banking environment. Changes to industry norms will require incumbent managements to make choices relating to their current structures, practices and behaviours as they look to conform to the new industry norms.

These new industry norms may be highly dependent on the business models adopted by the challenger banks. This study looks to analyse the business models of challenger banks to determine the potential/possible impact on industry norms in the South African banking industry.

3.6 Summary

This chapter conceptualised the literature relating to the concepts of business models, disruption caused by technology and the banking industry in South Africa, thus to address the second secondary objective described in chapter 1 (section 1.5).

The chapter began with an overview of business models in literature and defined a business model for the purposes of this study. The chapter discussed the elements of a business model and looked at the key components of a good business model. The RCOV framework was utilised to highlight the dynamic relationship of core elements of a business model.

The chapter subsequently examined what causes disruption to a business model, where technological advances and impact of the millennial consumer were identified as causes of potential business model disruption in the South African banking industry.

This was followed by an overview of the current South African environment from a banking perspective and a boarder social- and economic perspective. Challenges facing the industry were highlighted and insights around the changing South African consumer tastes and preferences were disseminated.

The final section of the chapter considered the relevant theoretical framework that was used as part of this study, namely institutional *theory*, and applied it to the South African banking market.

The next chapter will present the findings of the empirical study.

CHAPTER 4

4 RESULTS AND FINDINGS

4.1 Introduction

The main research objective of this study, as set out in chapter 1 (page 6), was to develop a framework for future business models in the South African banking industry. The purpose of the present chapter will be to address the third secondary objective as set out in section 1.5 (on page 6). That is, to develop a framework for future business models in the local banking industry with a view to the main research objective of this study, by discussing the results of the semi-structured interviews and the literature review.

To address these main and secondary objectives, a new questionnaire was compiled on the basis of the literature review, as discussed in chapter 3. The questions posed to participants were informed by the themes and concepts discussed and analysed as part of the literature review. The interviews were semi-structured in nature, with all the participants interviewed on a face-to-face basis using the standard questionnaire. See Appendix 1 (page 81) for the full questionnaire.

As mentioned, the questionnaire was developed based on the findings and analysis conducted in the literature review, while also, however, taking into account the key frameworks as set out in chapter 3 (see page 19) including materials presented in the following figures: Figure 3-1: Dynamic capabilities and strategy combined; Figure 3-2: RCOV framework and Figure 3-3: Changing role of technology in business. Key themes around business models, value propositions and local market conditions were identified in the literature review. These themes form the basis of the questionnaire, supported by the key frameworks.

The interviews were all recorded and transcribed, and the transcripts of the interviews were used to compile the overall findings of this study. These were grouped into themes that were identified by means of a detailed review of each transcript. Each identified theme was based on the number of participants who mentioned it or discussed it, and the amount of time the participant spent discussing or elaborating on the theme. For a theme to be regarded as relevant to this study, four out of the six respondents needed to have mentioned or discussed it as it represented the majority view highlighting its importance and alignment/commonality of thinking between the participants when it comes to the future of banking in South Africa. These common themes were ultimately utilised to design the conceptual business model framework as presented in Figure 4.1.

The findings of this study are discussed below by means of the following sequence of foci: an overview of what is changing in the local market, a detailed discussion of the challenges facing the incumbent banks, analysis of what these changes and challenges mean for the South African banking industry and looking at what this means for the business models followed by local banks.

4.2 Participants' profiles

As part of this empirical study, six participants from the South African Banking industry were selected using non-probability expert sampling (see section 2.4.1), and they were subsequently individually interviewed. The format of the interviews was face-to-face and semi-structured, using a standard questionnaire for each interview. The participants were a mix of male and female and were all experienced and senior professionals in the South African Banking industry. Four of the participants had previously been appointed as senior executives of major South African Banks. Their titles include Director: Customer Experience; CEO: Beyond Payments; CEO: Savings, Investment and Fiduciary and CEO Transactional Banking and Mass Market.

These four participants are directly or indirectly involved in the developing emergence of challenger banks or fintech start-ups in the South African market. Three of the participants are founding members of local challenger banks and the fourth is involved in fintech start-up advisory and is a Professor at a South African university and abroad.

The remaining two participants are senior strategy consultants at one of the major global consulting firms in South Africa. Each enjoys more than fifteen years' experience working with clients in the South African Banking industry across a wide variety of projects. The participants hold a diverse set of qualifications in the fields of engineering, law, accounting (Chartered accountant – CA(SA)), economics (Chartered financial analyst – CFA), Master of Commerce in IT Audit (MCom), Master of Business Administration (MBA) and Master in Applied Mathematics (MSc). The selection therefore ensured that a broad set of views and ideas were shared as part of the interview process.

4.3 What is changing in the local market?

Conditions in the local banking market are continuing to evolve, as referenced in chapter 3 (section 3.4, page 29), and the challenger banks have begun to enter the local banking market. All participants held a common view of current market conditions, and entertained consistent views about the challenges facing the incumbent banks as they look to compete with challenger banks.

"*Digital banking is cheaper than physical banking*" – Participant 3

As Participant 2 said, "*most digital banks are challenger banks, but not all challenger banks are digital banks".* Tyme, BankZero and Discovery are all considered challenger banks – the participants all shared the view that these three challenger banks would cause disruption to the local banking market in coming years. Discovery was defined by the participants to be a "*behavioural bank*" that would compete through a unique value proposition, whereas the present study will consider Tyme and BankZero to be "*digital banks*". Participant 5 described BankZero as a "*NeoBank*" - "*So we are much more the neo bank*". A "*NeoBank*" is defined as a financial technology firm that offers digital or mobile-only financial services (Pritchard, 2019) that would compete with the advantage of "*90% lower costs*" – Participant 1. They continued to say that the enhanced value propositions offered by challenger banks focus on "*cost and service*" – Participant 1.

The other challenges in the local banking environment are being driven by multiple factors, both economic and social, and all have a significant impact on the local banking industry. In terms of economic factors, all participants share the view that incumbent banks are facing a revenue problem. This, while the South African economy continues to shrink, and consumers become more price sensitive (Figure 3-6: Price sensitivity of African consumer), involving a trend that is predicted to continue into the foreseeable future. Participant 3 described current economic conditions facing the incumbent banks as follows: "*In South Africa, and Africa, there's no more banking money to go around; there's no more revenue*". Participant 1 confirmed this concern: "*I think we've got a revenue problem*. *90% of my revenue still come from a traditional stream*". Participant 6 said that incumbent banks generate a large percentage of their revenue through fees and non-interest cost. These are going to come under pressure from low-cost challenger banks such as BankZero and Tyme.

As the potential revenue pool continues to shrink, it will put additional pressure on incumbents to ensure that they offer low cost products and services if they want to protect market share from the new challenger banks, who will compete directly on both price and service. Capitec has already shown that, by employing a differentiated low cost value proposition, the market can be disrupted (see section 3.4, page 29): indeed, as Participant 1 said: "*Capitec has taught the banks, and the executives in the banks, that they need to pay attention*", continuing to say that "*Capitec has fundamentally shifted the attitude of the other four banks in South Africa*". All the participants agreed that Capitec Bank was the first challenger bank to have had a major impact on the local banking industry, and that the incumbent banks were aware of the potential disruption they might face as more challenger banks entered the market.

The participants all felt that there was not a significant opportunity for the challenger banks to target the unbanked population of South Africa, agreeing with Participant 4 who said: "*unbanked is very small, at this stage*". This implies that the challenger banks would be directly targeting current customers of the incumbent banks. Participant 2 said: "*it's impossible for a single entity to simultaneously cover everyone and do it perfectly*". The participants held a consistent view that there were opportunities in the market for challenger banks to target: – "*we think there's a gap that's not being filled and we are going into those gaps*" – Participant 4, who here referred to the fact that challenger banks felt there were gaps in the market and those gaps presented opportunities for challenger banks. This view was also held by Participant 5: "*we feel customers have not been properly looked after at any level*", reminiscent with a view held in the literature by Darolles (2016:85), who states that millennials are turning their backs on traditional players. Participant 2 indeed stated: "*between the banking entity, and the needs of society and consumers; huge mismatch*". This statement further emphasises that there are significant opportunities for challenger banks to target the existing customers of the incumbent banks.

The challenger banks are not merely looking to compete on price, they are also looking to offer customers products and services that have an enhanced value proposition. This is in comparison to existing products and services offered by incumbent brick and mortar banks. Participant 4 stated: "*we're building a customer value proposition that is unique*". The participant was referring to a value proposition being developed by one of the challenger banks that would soon enter the market. Participant 3 made a similar statement when the participant said: "*you're offering a client something different, which a traditional bank can't do*", thus referring to the fact that challengers would provide value propositions that were different to the contemporary value propositions offered by incumbent banks. Participant 5 described the value proposition of a challenger bank as follows: it "*must be customer-focused, it must solve the real problems*". With a view to literature, consider here that Demil and Lecocq (2010:231) identify an organisation's value proposition as one of the core components of a business model, supporting the view of the participants that the challenger banks would follow differentiated business models. Teece (2010:174), on the other hand, describes a value proposition as how an organisation captures value from its customers, reflecting the view of the participants that the challenger banks would capture value from their customers in different ways to that of the incumbent banks.

Chapter 3 (section 3.5) demonstrated that *institutional theory* looks to understand how external pressures can influence the norms of an industry, and how, over time, organisations conform to the norms of the industry – defined as isomorphism (Rahal & Vadeboncoeur, 2015). In this context, consider one or two responses from the interviews. Participant 5 said: "*Are we in the process challenging the status quo? Yes*, *we're going to challenge the paradigm*". This view was shared by three of the participants, highlighting the fact that challenger banks are looking to challenge and ultimately change the norms and standards of the South African banking industry. Participant 5 talked directly to what has been termed here *institutional theory*: "*The main value probably is that we are bringing certain functionality that the banks are not… So one could see that as that we challenging them but we are just saying; come on guys these things that you need to be doing for customers and by being the change we hoping that we are spearheading the movement that the other banks will follow*." The challenger banks are directly looking to change the norms of the South African banking industry.

Participant 1 was of the view that the norms of the banking industry had been impacted and disrupted already by the challenger banks: "*I've already seen that it's starting to change, so it's already had an impact*". This view was shared by all the other participants. Along with the economic challenges highlighted earlier in the chapter, technology was moreover identified as one of the factors causing change in the banking industry. With smartphone penetration rates continuing to rise in South Africa, it is likely that the popularity of digital channels will also increase (Figure 3-7: Digital channels) as confirmed by a statement made by Participant 2: "*technology allows a better rate of disruption, that is true*".

The challenger banks are going to be asset-light and heavily reliant on digital technologies. Participant 3 described them as "*lean and mean*", that is, as not having heavy cost structures and very limited physical presence. This view of challenger banks was echoed by the other participants who, among others, described them as "*fundamentally different*". Participant 1 stated: "*I think the real paradigm shift, is to understand that challenger banks will employ between a hundred and fifty, and two thousand people*", speaking to the major structural changes and head count differences between a challenger bank and the incumbent brick and mortar banks. The challenger banks will have significantly lower headcounts when compared to the headcounts of the incumbent banks.

According to Baden-Fuller (2013:419), technology can facilitate new business models and enable new value propositions. This dovetails with the participants' view that challenger banks will offer differentiated value propositions and will follow more digitally enabled business models. Casadesus-Masanell and Ricart (2010) posit that, in future, the quest for sustainable advantage may well begin at the level of the business model. Participants' responses showed that the challenger banks are having an impact not only on the norms of the South African banking industry, but also on the business models followed by the incumbent banks as the incumbents look to leverage more digital in their business models. Although the full impact is yet to be determined, the incumbent banks have all started to respond to most of the major challenges in the market in various ways.

The incumbent banks have responded with considerable force to the arrival of the challenger banks. Participant 1 referred to the arising conflict as "*a race to zero*" with reference to the incumbent banks severely dropping their monthly account fees on their entry level transactional accounts in weeks prior to the interview as a response to the arrival of Tyme and threat of BankZero arriving in the coming months. This relates to Moyo (2019), who said that the emergence of the new digital banks in SA has ignited a price war among financial institutions, as incumbents were slashing their banking fees one after the other. Each of the participants made a reference to these market conditions. Participant 6 stated: "*we all know transactional banking, it's a race to zero anyway*", which was echoed by the view of Participant 3, who stated: "*so everyone's going to get to zero, from a price war perspective, so we're all going to be sitting on zero cost banking*". There was consistency among participants about the low-cost-, zero-cost-, or almost zero-cost nature of the future of transactional banking. Participant 1 did however raise the point that it was not in fact a race to zero, but a race to close to zero, as research showed consumers were not price sensitive below a certain price point. Participant 3 argued that traditional banks would have to respond by reducing their cost structures: "*The traditional banks are going to have to attack their cost structures, to make that sustainable. And then once that wave is over, then it's about differentiating products and services*." Participant 3 is referencing that traditional banks current cost structures are not sustainable in the long term and that the traditional banks first need to first address their cost structures before they look at differentiating their product/service offerings.

Three of the participants made reference to the term "*multi-banked*" as describing their view of the future of the local market, referring thus to consumers who hold accounts with multiple banks for different products or services, due for instance to low costs involved and the differing value propositions among the banks, viz. Participant 3: "*so in the world, where everyone's multi-banked, because I get this from this bank, that from that bank, and that from that bank, what that's going to mean, is that traditional banks are going to have to drive their cost structures lower*". Multiple participants referred to Standard Bank's announcement of branch closures and headcount reductions as an indication that the arrival of the challenger banks as well as technological advances and social factors were having an impact on the banking industry. This is also an indication that they were in the process of reducing their cost structures.

Participant 1 posed a question: the "*role of the bank branch, or the lifespan of the retail bank branch, in its current format? I think it's limited*". The participants confirmed this statement in various ways. However, there was no consensus among them about what the future bank branch would look like. "*I mean we talk about there's a role for the physical world in an increasingly digital bank for sure, but it isn't what the branch is today*" – Participant 6. In their turn, Participant 5 said: "*I recently had to go to a branch, and I thought there was no benefit*". BANKSETA (2018:23) holds a view consistent with this: the position of branches is fast becoming obsolete. There was consensus, however, that the role of the bank branch would be more customer-service focused in future. Participant 1 did raise the point around cash: "*the elephant in the room, in this conversation, is cash*". This was in reference to the fact that cash processing was still required, and that this was a problem that all the banks would need to solve in future.

"*The universal banking model is going to die away over time, because banks have to specialise. And in a world where best of breed is winning, then a universal bank, where everything is average, can't possibly survive*" – thus Participant 2. Some participants see the collapse of some of the incumbent banks looming ahead: "*I see a Kodak Barnes and Noble blockbuster moment coming to the banks"* – Participant 2. Participant 3, on the other hand, estimates that *"the reports of the death of the traditional bank, are premature*". There was therefore no consensus on the future make-up of the South African banking industry. Participants all agreed, though, that the future market would be made up of a "*broader pool of players*" – Participant 3.

All participants held positive views about the role that the South African Reserve Bank (SARB) plays in governing the banking industry in South Africa including that it was supportive of the challenger banks' entry into the market. Participant 3 described the SARB as having an "*enabling mindset*", and continued that "*regulators are not standing in the way*". This view of the SARB was reaffirmed by Participant 1, who stated that the "*SARB has been massively supportive of opening up the competitive environmen*t". It is clear that the SARB would not be a hindrance to challenger banks, and is supportive of the additional competition that they bring to the market, ultimately to the benefit of consumers.

4.4 Current challenges facing incumbent banks

All the participants agreed that the incumbent banks face multiple challenges around their business models, due to the arrival of challenger banks coupled with the social and economic factors currently impacting the South African banking industry. The participants also agreed that these factors were all likely to have an impact on the norms and standards of the South African banking industry (Rahal & Vadeboncoeur, 2015). These changes would therefore have a direct impact on the business models followed by the incumbent banks.

As discussed in chapter 3 (see section 3.2, page 19), the current and future states of a firm's business model is connected by its *dynamic capabilities* – its abilities to reconfigure its assets (Ritter & Lettl, 2018:5). An organisation leverages these dynamic capabilities to adjust its business model to changes in the market, such as new technologies or new market entrants, as reflected in Figure 3-1 (page 21). Discussed below are the major challenges facing the incumbent banks as they look to leverage their dynamic capabilities to transform their business models. The challenges, grouped in themes below, were identified by carefully reading the interviews.

4.4.1 Legacy

The *Oxford Learner's Dictionaries* (2019) define "legacy" as a situation that exists now because of events or actions that took place in the past. Casadesus-Masanell and Ricart (2011:104) define a business model as being designed by choices and the consequences of those choices. With this in mind, it is fair to say that the choices the incumbents made relating to their business models in the past are responsible for the legacy of their business models today.

Against this background, consider that Participant 1 made the following statement: "*Traditional banks evolved over a hundred and fifty years*". All participants echoed this sentiment. They agreed that all of our current major banks were considered to be legacies due to their age. The reference to legacy by the participants carries a negative connotation and they did not view legacy as a positive description for the tractional banks. Participant 2 described the banks as being "*technically outdated*". Participant 1 described them as having a "*legacy culture, legacy system, legacy process*". This legacy is one of the major challenges facing our banks as they look to compete in a market that is undergoing disruption from multiple sources, as has been indicated above.

Participant 4 also referred to legacy as a major reason why banks were not able to respond fast enough to market changes: "*legacy decisions inhibit the ability to be agile and quickly pivoted to change"*. This view was echoed by Participant 2, who described the incumbent banks as "*too monolithic, they're too slow moving".* This dovetails with a statement by Darolles (2016:88) that the core legacy IT systems of the industry incumbents are highly complex and offer limited room to manoeuvre. Participant 1 mentioned that the incumbents have a "*lack of agility*", stating that it emanated from their "*legacy technology and culture*". Participant 3 shared the view that legacy IT systems hampered the agility of the banks – "*the big heavy IT stuff sits around the legacy systems*".

"*Every bank in this country, has somewhere between a hundred and fifty, and a fifty-year legacy…. culture legacy, legacy culture, legacy system, legacy process, in it, and turning that around, and fixing that overnight, is tremendously difficult*" – Participant 1 further expanded on the negative view of *legacy,* and the opinion that it was going to be difficult for the traditional banks to overcome the legacy challenges within their organisations that have built up over the years. The age of the traditional banks was one of the major contributors to the participants describing their traditional banks challenges as legacy. All six participants emphasised legacy structure, -technology and -culture as a major challenge for the incumbents, which will be discussed below in detail.

4.4.2 Short- versus long term focus

Another challenge facing the incumbent banks, raised by five participants, was that the incumbent banks were too focused on the short term, while this was driven by their reward- and incentive structures. "*It's very rare that you find a group executive, and a Board, that can think twenty years ahead*", was the view of Participant 1. Participant 2 reaffirmed this view when the participant said: "*nobody cares about ten years. But nobody's incentivised for ten years, and everyone's looking at short term gains*". Participant 1 and 2 both raised the point that "*nobody is paid for long term transformation"* – Participant 1. "*So, in terms of your short-term focus, it's, a lot of that is also related to the remuneration structure, in banks specifically"* – Participant 4. The latter Participant further confirmed the opinion that the short-term focus of banks was driven by the "*reward and incentive structures"* that they currently use. This view was confirmed by Participant 6 – "*long-term versus short-term incentives*", when referring to the challenges that traditional banks' management faced. The participant was of the view that due to the focus on short-term it was very difficult to execute any long-term transformations.

Compounding this challenge is that they are listed on the Johannesburg Stock Exchange (JSE Ltd) and that shareholders expected annual returns. Participant 6 made a statement in this respect: – "*I mean our banks are loved by investors in this country for high dividend yield and capital appreciation which is 100"* – highlighting that the incumbent banks are expected to generate annual returns for their shareholders. "*That's one of the reasons that we never want* *to list, because the moment you list you have shareholder profits and what do they want, half year, every six months you need to show the return*" – thus reads Participant 5's view of the challenges of having shareholders. This is a further part of what drives a short-term focus on returns and not a long-term view, especially if management wants to be rewarded based on current incentives focused on the short term.

This short-term focus poses a challenge, as the required business model transformation will take significant effort and time, therefore demanding a long-term focus to ensure sustainability. When speaking about the transformational journey for the incumbent banks, Participant 4 stated that it "*will take time*", while Participant 6 affirmed this by saying that "*it's going to take a period of time*".

4.4.3 Culture

Participant 1 said that "*it all comes down to culture"* when asked about how incumbents could transform their business models. Culture was identified as one of the major challenges facing incumbent banks as they look to compete with the challenger banks. This was confirmed by all of the participants, who referred to the notion of culture multiple times throughout the interviews. They all confirmed the view that without the right culture the banks would struggle to transform their business models.

The participants described the culture as "*fear-driven*" – Participant 5. Participant 2 described it as "*a self-serving institution and culture*". Participant 1 repeated the notion of "*legacy*" in this context, and said that "*banks are risk averse, banks are not innovators*". One infers that banks do not have an innovative culture. With a view to innovation, Participant 4 stated: "*culture and your politics will kill that*", echoing the views of Participant 1 that banks did not have an innovative culture. Participant 3 identified culture as one of the reasons that banks were not able to transform their business models: "*culture and structure*". Participant 6 identified the culture entertained by these banks as a hindrance to working in innovative ways. The following statement indeed highlights the obstacles traditional banks face in terms of culture:

"*I think their biggest issue, is whether or not they have the adaptability and the agility that they need. And that agility or lack of agility, comes from their core systems, and systems, and technology legacy and more so, it comes from their culture*." – Participant 1.

4.4.4 Strategy and business models

The participants had consistent views around the challenges facing the incumbent banks in terms of their current strategies. Participant 2 described them as universal banks: "*The big four banks all position themselves as universal banks*", universal banks try and service a very wide range of customer across a broad product/service offering, with limited specialisation. Participant 5 confirmed this view when he or she said that "*they are now doubling down on that journey of being all things for people*". The participants all agreed that the incumbent bank strategy was to have a very wide product and service offering. Participant 4 explained why this is a problem in today's market with revenue pressures and new market entrants when he or she indicated that "*being all things to all people is very costly*". Participant 1 said: "*Traditionally, bankers had enough money, were arrogant enough to believe that they needed to own the entire value chain, they had to own everything; and owning the entire value chain, makes it very expensive, it also builds legacy into your balance sheet*".

"*Some point structure does follow strategy and then you set down the structure, the problem is when you keep changing the strategy then the structure keeps changing and that is what you are seeing happening with the big banks is, they keep restructuring*" – Participant 5. Participant 5 referencing that the incumbent banks have changed strategies numerous times in recent years and that their structures have not been able to keep up.

All the participants mentioned the "digital strategies" employed by the incumbent banks. For instance, Participant 6 said there is "*no such thing as a digital strategy, there's only strategy in a digital world*". But, as they still followed traditional brick and mortar business models, the participants did not appear to indicate any belief for incumbent banks to follow the rule of thumb that "structure follows strategy" as stipulated by Chandler (1962). "*I mean many have digital strategies and have tried to create small fragments of digital structure within it. Do they have end-to-end digital structures? No*" – Participant 6, reinforcing their view that the incumbent banks do not have digital structures or digital operating models.

As Casadesus-Masanell and Ricart (2011) argue, a business model needs to be aligned with an organisation's strategy. Teece (2018:44) states that, in the event of a conflict between strategy and the business model, top management is responsible for determining which of the two should change. The digital strategies adopted by the incumbent banks are not aligned with their current business models, highlighting the need for business model transformation.

"*Banks will probably stand up and say, we're fast followers. These days, a fast follower is dead*" – Participant 1. Participant 1 reflecting that the incumbent banks are considered "fast followers", implying they will follow the business models of the challenger banks, but Participant 1 felt that in today's fast moving markets fast followers would not survive.

As defined by Demil and Lecocq (2010:231), the three core components of a business model are i) resources and competences, ii) organisational structure and iii) propositions for value delivery (as reflected in Figure 3-2, page 24). Each of these elements will be analysed separately.

- Resources and competences

"*Problem with banks; too many accountants, too many lawyers, and not enough senior executives, who really, deeply understand technology*" – this statement was made by Participant 1. Participant 6 confirmed the view that the incumbent banks faced skills challenges among their current staff: "*there's just no ways we can get modern day talented millennial digital guys to come and want to work here*". Participant 2 confirmed that incumbents have a challenge when it comes to current staff when he said that "*they've got the wrong people in the wrong jobs, you've got sixty-year olds, seventy-year olds, sitting on Boards*". These three participants (1, 2 and 6) were of the view that the incumbent banks did not have the right skills mix required for today's digitally driven world, and this was a major challenge they faced. This view was not confirmed by Participant 3 who felt that "*they have the best skills, best people".*

There was, however, no consensus around this matter, as only four participants spoke about current staffing and skill sets. Although they entertained differing views, three out of six participants felt that incumbent banks did not have the right skills or people in the right roles to enable a successful business model transformation in response to the challenger banks entering the market.

- Organisational structure

The participants shared common views about the organisational structures of the incumbent banks. They felt the bank structures were of the legacy (or brick and mortar) variety, and that this drove their significant operating expenses. None of the participants was of the view that the incumbent banks were structured sufficiently to compete with the challenger banks and their unique value propositions.

Participant 5: "*Everyone calls themselves digital even though they are not*". Participant 1 made a statement that dovetails with this: "*Any bank in South Africa that says we are truly digital, okay, is drinking its own cool-aid"*. Participant 2 reflected on the business models, and made the comment that "*it can't be innovated on*", while Participant 3 felt the incumbents could not offer the unique value propositions of the challenger banks, due to "*their inherent structures*". Participant 2 stated: "*The banks are not structured for growth, they're not structured to be aggressive, they're not structured for customer, they're not structured for technology"*.

As reflected by the RCOV framework (Figure 3-2), there is a dynamic relationship between the core components of a business model, while the "organisational structure" is the major driver of the volume and structure of costs. Another challenge relating to structure identified here was the complexity and size of the incumbent banks, making it difficult for them to be responsive to the changes in customer's needs – "*it's the organisational complexity*" – Participant 3. Participant 3 was referring to the challenge created through the complexity of the internal structure of the incumbent banks.

Participant 4 affirmed this complexity by further highlighting capacity, mentioning the "*whole thing about capacity comes into play. Keeping up with all the regulation, all the complexity, in these traditional banks, require a lot of capacity, and a lot of that capacity is consumed by things that they have to do, and not really bringing in any new innovation, etc*".

This challenge compounded further by the capacity challenges facing banks, as has been highlighted above, and as was identified by the participants, such as Participant 2: "*the bigger problem is not the channels, the bigger problem is fifty-five thousand people at Standard Bank, and fifty-five thousand people at Standard Bank are managing the back-office, they're not managing channels*". "*There's another very obvious one which is capacity, you are physically running this huge infrastructure which takes up 90% of everybody's focus which is to keep the bank currently running* "– Participant 6. Participant 2 further raised the point that banks have too many people in the back office, a view that dovetails neatly with Mckinsey & Company (2018:32).

Participant 3 highlighted that a large portion of the banks' capacity was focused on regulatory requirements: "*big risk regulatory stuff, which, you have to recognise, probably consumes – I don't know – a significant portion of every breath they take*". Participant 4 was of the same view. Participant 5 felt that a considerable portion of this capacity used by regulatory requirements could be freed up by leveraging automation and technological advances: *"There's a requirement from regulators that certain things must still be eye-balled where you* *don't have a choice but over time even that can be automated"*. Such freed-up capacity could be redirected to improve service to the customer and enhance the value proposition of the incumbent banks.

The participants felt that the focus on back office processes meant incumbent banks' business models were not sufficiently focused on the customer. Participant 3 averred: "*they are so far removed from the customer",* while Participant 5 agreed that "*the customer focus is gone, they not designing with the customer in mind they are designing with profits in mind*". "*Customers are not at the centre of the organisation, profitability is*" – Participant 2, while Participant 6 said that "*the way the organisation was structured was still product orientation*".

Since the incumbents' business models are not sufficiently focused on the customer, as mentioned by all the participants, they will struggle in delivering compelling value propositions to compete with the challenger banks.

- Propositions for value delivery

The RCOV framework (see Figure 3-2) suggests that an organisation's value propositions are generated by leveraging its resources and competences and its organisational structure. The participants identified a lack of customer focus in the incumbent banks as an obstacle, and this was impacting their value propositions. As Participant 5 averred, "*the customer focus is gone"*.

"*If you look at the current incumbents, they have wide but shallow value propositions and the moment you go width, you go massive organisational structure. So this value proposition directly drives this"* – Participant 6, here incidentally speaking to the RCOV framework (see Figure 3-2, page 24) in terms of the incumbent banks and how their value propositions are responsible for driving their large structure.

Participant 5 emphasised that the challenger banks would uphold a much deeper and more client focused value proposition: "*you have to have a meeting where 100 new projects need to be discussed for priority, whereas if you are in a small organisation with a focus value prop, the focus is on how do we make this value prop even deeper, even deeper, even better, add more functionality into it*."

Consider in this regard that Carande and Anzevino (2010:39) propose that understanding the customer is a key aspect for developing a new business model for an organisation. Yet, the participants were of the view that the incumbent banks did not have a good understanding of their customers. Participant 5 described the incumbent banks' value propositions to be lacking a good customer experience: "*you don't have the customer experience*". When discussing the incumbent banks leveraging their customer data to generate insights and new value propositions, Participant 1 made the comment that "*they are so terrible at using it*". Participant 4 was of a similar view: incumbent banks lacked customer insights and understanding.

Organisations generate revenue through their value propositions. In a market where revenues are coming under pressure, any value proposition that is not sufficiently aligned with the customers' needs will pose a major challenge. The incumbent banks will need to overcome this as they look to transform their business models.

4.4.5 Operating expenses

The participants all shared the view that the incumbent banks needed to reduce their operating costs given the "*race to zero*" market conditions and shrinking revenue streams in the South African banking market. "*They need to drop their costs, internal costs*" – Participant 5. While participants did acknowledge that the incumbent banks had begun to reduce their operating expenses, they felt that banks still had significant work to do.

"Y*ou've seen that in the market already, all the banks are on some level of headcount reduction, some level of automation, some level of simplification, to bring down the cost structures*" – Participant 3.

A significant portion of the incumbent banks' operating expenses result from what has been described above as "legacy". As discussed earlier, legacy was one of the major challenges facing banks. These operating expenses were driven by their brick and mortar operating model, their legacy core systems and manual processes and large branch network, that is, what Participant 3 referred to as "*non-automated back-office functions"*.

"*If you employ forty-eight thousand people, if you have a thousand branches, and twenty thousand ATMs it's very difficult to squeeze your unit rate cost down"* – Participant 1.

The major operating expense for incumbent banks (as reflected in Figure 3-5, page 33), was staff, representing approximately 46% (PWC, 2018) of the total. Given that participants view the future of banking to be of a low-cost nature, this will pose another major challenge. The high staff head count in the incumbent banks is driven by manual processes and large branch networks (Mckinsey & Company, 2018:12). Participant 1 confirmed this view when he or she said: "*big cost drivers, its staff, its property*", while a statement by Participant 5 was in agreement with this sentiment: "*we believe the costs need to come down fundamentally, a big portion of the costs obviously is staff*". Participant 4 felt that banks needed to decrease operating costs by 40%–50% – "*we're not talking about 10 or 15% costs that they need to pull out, we're talking about like 40–50+% costs*". The incumbent banks face a real challenge in reducing their operational costs if they hope to compete with the low-cost banks, as indicated by a remark that Participant 6 made: "*it's very easy to add a new cost, but to get rid of an old cost"*, saying in other words that getting rid of an old cost is difficult.

4.5 What do these challenges mean for the incumbent banks?

The participants agree that the incumbent needed to change, but the view of how they would change and what would drive this change differed between the participants. "*Everybody knows they have to change but the amount of capital needed to change and the value you know the return from it makes it incredibly difficult to motivate for these types of business cases and I think that's why they are stuck in this kind of – they stuck between this rock and a hard place you know* " – Participant 6. Participant 2 advised as follows: "*Banks should be unbundled, and either the government will do it, or they'll have to do it themselves*".

Fjeldstad and Snow (2018:34) state that effective organisations constantly align the elements of their business model to the environment in which they are operating. As discussed, the South African banking industry is undergoing disruption and the norms of the industry are changing. The incumbent banks have all started to transform their operating models in response. They will need to leverage their dynamic capabilities to transform their business models. According to Teece (2018:43), the strength of an organisation's dynamic capabilities will determine the speed and costs associated with aligning its business model to the changing needs and aspirations of the customer.

The participants all agreed the banks had options with regard to how they would compete with the challenger banks. These options included that they could build their own stand-alone digital bank, partner with fintechs or transform their business models to be more digital and customer-focused. All of these options were identified as difficult and costly for the incumbent banks. There was no consensus among participants around which of the options presented would yield the greatest value over the long term for the incumbents – each participant had differing views around this crucial aspect of the matter.

Participant 1 felt that transforming the business model of a bank was "*the hardest, because that's a cultural conversation*". Asking staff to redesign themselves out of the process was very difficult: "*it's like asking turkeys to vote for Christmas; you can't get turkeys to vote for Christmas, and the staff know that*" – Participant 1. This view was confirmed by Participant 6.

Both participants (1 and 6) felt that the banks could transform their business models, but that this would require significant effort to "*rotate to a digital organisation*".

Participant 4 did not believe the incumbent banks could create a new digital business model within their existing legacy structures: "*it will not work if you're trying to create a new bank, within a traditional organisation; because very soon your culture and your politics will kill that*". Furthermore, Participant 4 believed a new digital business model would need to be separated from the existing legacy challenges.

Participant 2 said that the incumbents should build a new standalone digital business model: "*you have to build a new bank. What banks should do, build a new bank, shut down the old bank*". Participant 4 felt that building a new digital bank would be a challenge, and related it to the capacity constraints already identified in this chapter: "*it consumes priorities, and capacity*".

The participants shared the view that the incumbent banks needed to reconfigure their business models to be more customer-centric. In the words of Participant 2: "*The value proposition has got to be totally unpacked, and got to be simplified"*. Participant 3 described the value propositions needed in a market where people are multi-banked as "*in the niche*", implying that differentiation and specialised products and services would be critical in the future of banking in South Africa.

Participant 1 felt that banks also needed to become better at using their customer data: "*two things inside data; one, learn how to use their data better to make better decisions around what customers need. The second part of that data, is that they need to learn how to partner*". Participants 2, 6 and 3 confirmed this view and they believed banks were currently poor at using their customer data to drive insights and ultimately enhance their value propositions, because they did not have a single view of the customer, that is, the incumbent banks' customer data sits across multiple systems and data sources. Participant 6 felt the following around this matter: "*They won't have it for a long time*", having in mind that the incumbent banks held a narrow view of the customer and it would take time before they were able to generate a single view of the customer across their multiple data sources.

The participants held the view that technology was having an impact of the traditional banks, supporting the view held by Teece (2010:172) around the impact that technology was having on organisations. He states that technology has evolved to allow a lower cost for the provisioning of information and customer solutions, with the effect that organisations need to be more customer-centric if they hope to generate value in the long run.

"*The cost of technology is dropping off significantly. Beyond the cost the technology itself is evolving so quickly that it's becoming easier and easier and easier to solve some of the legacy issues*", thus Participant 6 when identifying technology as one of the key enablers for the incumbent banks to overcome the legacy challenges facing them. Technology could be leveraged to reduce costs, improve customer insights and enable more agile business models that are more future fit.

Participant 1 felt that banks who strove to achieve this would need to "*invest a lot more inside my customer insight teams*" and "*reimagine the process*". Through realigning their business models and value propositions, the incumbent banks would be able to reduce their operating costs, as highlighted by Participant 5: "*you have a deep but focused value prop you can get away with a very small internal/external organisation*". From the perspective of the present study, this kind of achievement could change the bricks and mortar structure of these institutions.

The participants also felt that banks could enhance their value propositions by partnering with other organisations: "*what they have to do, is to figure out how to create a differentiated volume value proposition through partnering*", said Participant 1. The latter continued to say: "*I would be driving my executives to understand that they will be rewarded, and we will succeed, based on differentiated partnership relationships*". Participant 4 acknowledged that the banks were already looking to partner with other organisations in the South African market, both financial and non-financial organisations to enhance their value propositions offered to customers: "*I think there's still a lot to be done on the ecosystem, I don't think it's complete*". This emphasises the growing importance of partnering in a market where customers are multi-banked. Under these circumstances, incumbent banks will need to make strategic decisions around their future products and customer segments to focus their capacity and ensure an enhanced value proposition for their customers.

Along with restructuring their business models to drive enhanced customer value propositions, the participants identified that incumbent banks needed to reduce their operating costs considerably if they hoped to compete against the challenger banks, who followed low cost business models.

The majority of the participants (five out of six) believed that a cost-to-income ratio (see section 3.4, page 29) of around 25% would need to be achieved if the banks hoped to be able to compete: "*20/25%, if you're not there, you're not going to be in existence*", averred Participant 2 when speaking to the cost-to-income ratio of a low cost digital bank. Participant 5 confirmed the view that, in future, cost-to-income ratios of banks would need to be around 25%.

Participant 6 held a different view, believing that the incumbent banks would need to drop their costs comprehensively, but held the view that, in future, the cost-to-income ratio of a bank could be 90%. This differing view was based on the opinion that revenue pressure would continue, and banks would not be able to enjoy high profit margins, especially in a multi-banked market.

El Sawy and Pereira (2013:16) describe a digital business model one where products and/or services are provided through digital platforms. The participants all agreed that the role of IT is becoming increasingly important in the age of digital business models. The view of Participant 6 was that "*technology is everywhere right, it's from front to back*", continuing to say that "*technology has to run the whole way through the organisation*". Participant 1 described the change in the role of IT as follows: "*we've gone from systems of control, to systems of engagement*". The participants agreed the role of IT has change and this is being driven by advancements in technology.

The was also a view that along with the role of IT changing the structure of IT was also changing, Participant 2 viewed the structure of IT in a digital business model as being modular in nature: "*it's modular*". When asked about Figure 3-3: Changing role of technology in business (see page 28), Participant 3 stated that "*IT is a platform, because it is a platform; you enable what you need on the platform*". When speaking about the role and structure of IT and how it has shifted to become a platform, the same participant continued to say: *"and abstracting the complexity from end-user, so they're not then core to the solution; they're core to making the solution implementable in a frictionless way, by the business"*. *IT as a platform* defines IT as the end to end enabling capability across the organisation, it is the "platform" that all business functionality and processes are built upon and enabled by. *IT as a platform* is aligned to support the business architecture, IT becomes more than a collection of applications and software programs, it becomes the base upon which the organisation is built.

By leveraging their IT capacities, the banks will be able to reduce operating expenses significantly, as they will thus transform their business models to become more customer-focused. New technology would improve agility and the ability of the banks to respond quickly to changing customer's needs, which are required if the banks hope to compete successfully with challenger banks.

The participants all agreed that the banks could leverage what Ritter & Lettl (2018:5) would have referred to as dynamic capabilities, thus to reconfigure their existing assets in response to the challenger banks and challenges in the market. For instance, Participant 6 said: "*The most obvious response, is you have to utilise the assets that you have, repurpose the assets that you have*". Participant 6 was making reference to the fact that management need to repurpose the organisations assets, as previously defined management leverages their dynamic capability to reconfigure/repurpose an organisation's asset. These assets refer to the incumbent banks having strong balance sheets, strong brands and customer data.

Participant 1 referred to the two advantages that banks enjoy that fintech's and challenger banks do not: "*a balance sheet and money"*, and the same participant indicated that "*they cannot compete with you across your entire value proposition*". The participant was referencing that fintech's and challenger banks are more niche and focused on a few product offering or service, they would not be able to compete with the incumbent banks across their entire value change or product/service offerings.

All the participants referred to the banks' brands. Five out of the six participants felt that they could leverage their brands when they compete with the challenger banks: "*They definitely can. So, a bank brand always, always needs to stand for trust, and they have that huge benefit of trust which we don't have yet*", averred Participant 5. "*Nobody wants to move away from a big bank; what they want is the bank to give them a service, that's more meaningful*", said Participant 2, thus confirming that the name or brand of big banks were important to retaining their customer base. Participants 3, 4 and 6 confirmed the view that the banks could leverage their strong brands and the trust they have earned in the local market.

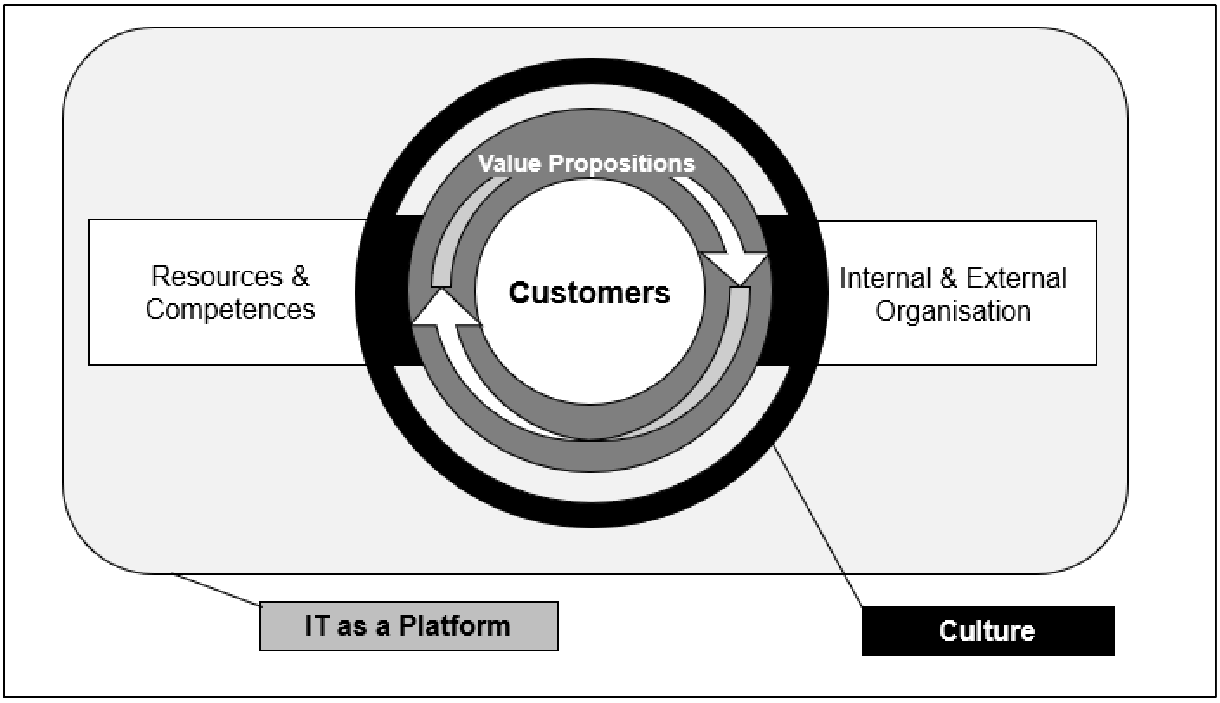
4.6 What could the business model of incumbent banks look like in future?

As has been cited above, Participant 6 made the following resounding statement that encapsulates much of the problems around the way ahead for incumbents: "*No such thing as a digital strategy, there's only strategy in a digital world*". Participant 6 was referencing that in today's digital world, all strategies are inherently digital due the nature of the world in which organisations operate and therefore having a *digital* strategy is moot. Participant 6 continued by rightfully pointing out that "*digital is a way of working, digital is a culture*". However, given their legacy business models and the challenges identified by the participants, incumbent banks have a long transformational journey ahead of them as they look to adjust to the new norms and standards of the South African banking industry.

As the incumbent banks begin their transformations, "*rotating to a digital organisation*" (Participant 6), they will need to restructure their business models if they hope to achieve sustainability and effectively compete with the challenger banks. These new business models will have to make use of IT as a *platform* (Participant 3) to drive significantly lower operating expenses, while providing improved agility and greater customer insights. Customer insights can be defined as insights into customer behaviours, preferences, wants and needs. The business model needs to be customer-focused and create a single view of that customer, which can be leveraged to create enhanced and unique value propositions that are required to compete successfully in a market where being "*multi-banked*" is becoming the norm. A single view of the customer entails an organisation being able to gather all the customer data in a single easily accessible source from the multiple data sources across the organisation (all departments and areas of the organisation where the customer has engaged the bank – i.e. call centre data combined with usage data from the banks website), this view should also include external data sources like Facebook or Twitter. These multiple sources of data are combined into a single view creating a holistic view of the customers preferences and tastes giving an organisation more insight into their customers.

Using Figure 3-2: RCOV framework (see page 24) in addition to the insights gathered through analysing the transcripts of the interviews with the six participants, a framework was developed to illustrate what a business model of the future could look like. Consider once more in this context that Casadesus-Masanell and Ricart (2011:104) define a business model, in its simplest form, as choices made by management and the consequences of those choices. Against this background, the framework presented below was developed to assist the incumbent banks when they begin to employ business model transformations. That is, the choices made, and their consequences play a central role in the proposed framework below, as will be seen, for example, in terms of their value propositions and the other organisations they chose to partner with in order to differentiate themselves from competitors. The value proposition will be influenced by the organisations that are chosen to partner with, if the value proposition is a premium one, the organisation needs to partner with only premium organisations in order to not dilute the value proposition. The framework looks to enable management to make informed choices relating to core elements of their business models. The implementation of this framework will be discussed in chapter 5.

Figure 4-1: Framework for business model transformation



Source: Author's own construction

4.7 Summary

The purpose of this chapter was to address the third secondary research objective as set out in section 1.5 (see page 6), namely to develop a framework for future business models in the South African banking industry by employing semi-structured interviews and a literature review.

To address this secondary objective, a questionnaire was developed based on the detailed literature review conducted in chapter 3 (see page 19). This questionnaire was used during face-to-face, semi-structured interviews with the participants, who were interviewed individually. The six participants that were interviewed as part of this study were all seasoned senior banking professionals who enjoyed considerable experience in traditional banking as well as in the challenger bank- and fintech environment. The broad experience of the participants ensured that differing views and perspectives were captured in the transcripts of the semi-structured interviews, which formed the basis for this chapter.

With one or two exceptions, as discussed above, the participants held consistent views on the current state of the South African banking industry, confirming the view that the challenger banks would have an impact on the South African banking industry and, in fact, are already making that impact. The participants highlighted that it was not only the challenger banks that impacted the industry, but also weakening economic conditions as well as growing social pressures and the advances of technology.

Tyme, Discovery and BankZero were identified as the challenger banks that were having an impact on the industry. The participants agreed, however, that the challenger banks were not all of the same type/nature, as indicated when a participant said: "*most digital banks are challenger banks, but not all challenger banks are digital banks"*. Discovery was identified as a "*behavioural bank"* that would compete with the incumbent banks by means of a differentiated value proposition, while Tyme and BankZero were identified as "*digital banks*" that would compete with the incumbents by leveraging technology and their concomitant low-cost business models.

One of the major economic challenges identified by the participants was contracting economic conditions, which meant that consumers were becoming more price-sensitive, while this would pressurise the banks' traditional revenue streams, fees and non-interest costs. One participant stated: "*I think we've got a revenue problem*", describing the economic challenges facing the South African banking industry. Since challenger banks such as Tyme and BankZero followed a low-cost differentiated value proposition, the participants felt that this would put additional pressure on the banks' traditional revenue streams. They described local market conditions to be "*a race to zero"*, and there was agreement that the future of transactional baking in South Africa would be of a low-cost nature.

It was agreed by the participants that Capitec had already shown that the South African banking industry could be disrupted through innovation and a differentiated low-cost value proposition. The participants felt that the incumbent banks were very aware of the potential disruption that the challenger banks could cause in the industry, and they were already taking steps to compete against this.

The participants felt that the challenger banks would not be targeting the "unbanked" population, since the population of "unbanked" in South Africa was too small and not economically viable, but that challenger banks would in fact specifically target existing customers who are under-served by the incumbent banks. "*We think there's a gap that's not being filled and we are going into those gaps*", one participant said, and this view was echoed by all the participants when asked if there were opportunities for the challenger banks to compete with the incumbents. The challenger banks were found to be competing not only on price, but also with “*unique value propositions*”, as one participant said, describing them as “*something different, which a traditional bank can’t do*”.

As has been mentioned further, *institutional theory* was used to examine the way in which external pressures could influence the norms of an industry and how, over time, organisations conformed to the norms of the industry, defined as isomorphism (Rahal & Vadeboncoeur, 2015). The participants confirmed that the challenger banks all intend to disrupt the norms of the industry. They felt that the incumbent banks were already responding to the changes in the industry, and referred to banks dropping fees on their transactional accounts in addition to branch closures.

As the incumbents look to respond to changes in the industry, participants identified key challenges that they would need to overcome: *legacy; short term versus long term focus; culture; strategy and business model* including *resources and competence; organisational structure; propositions for value delivery* and *operating expenses.* The present chapter analysed these challenges in detail.

The participants were all of the view that the future of low-cost banking entailed that consumers would be “*multi-banked”* and that, to compete in this new market, a differentiated value proposition was required. This meant that the incumbents would need to transform their business models to be more “*customer-focused*”, leveraging technology to drive value propositions that were aligned with the consumers’ needs to a greater degree if they wanted to be sustainable in the long term. As part of their business model transformation, the incumbent banks would need to reduce their operating costs comprehensively, and the participants felt that a cost-to-income ratio of less than 25% would need to be achieved if they hoped to compete with the low-cost challenger banks. Participants also referred to “*partnering”* as a key element that incumbent banks would need to embrace as they looked to adjust to the changes in the industry. There was no consensus on what the future business model would look like. However, the participants did agree that “*technology as a platform*” was a key enabler in such a new business model.

The chapter concluded with a view of what future business models could look like based on the RCOV framework (see Figure 3-2, page 24), and insights gleaned from the analysis of transcripts.

The final chapter of this study, chapter 5 below, will address the fourth secondary objective by summarising the study and making relevant recommendations based on the findings of the present study.

CHAPTER 5

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This final chapter will summarise and conclude this study by summarising and synthesising the literature review and the empirical study towards the development of framework for a future business model. Conclusions will therefore be drawn in response to the research objectives described in the first chapter.

The main objective of this study was to develop a framework for future business models in the South African banking industry (see section 1.5, page 7).

The following secondary objectives were identified as part of the attempt to achieve said main objective:

- To identify and describe an appropriate research methodology to address the research objectives of the study (see chapter 2, page 10);
- Conceptualising the literature relating to the concepts of business models, value propositions, disruption caused by technology and the banking industry (see chapter 3, page 19);
- Developing a framework for future business models in the local banking industry by using a combination of semi-structured interviews and examination of extant literature around the topic (see chapter 4, page 39); and
- Summarising and synthesising the findings of the study based on empirical evidence and evidence gleaned from the literature review, thus to develop a framework based on the findings (see the remainder of the present chapter, chapter 5).

The study was performed by undertaking a literature review and an empirical study. A summary of each is provided below.

5.2 Summary of findings

The findings are summarised based on the literature review and empirical study.

5.2.1 Literature review

As part of this study a detailed literature review was undertaken. The topics covered in the literature review included business models, disruption in business caused by technology and views around the banking industry in South Africa. The literature review formed the basis for this study and was used to develop the questionnaire utilised during semi-structured interviews, which constituted the empirical study.

Literature uncovers that a business model has many definitions. Broadly, two uses of the business model concept occur, although the terms used differ slightly. The first deals with the operations of a business: the way in which it creates value for customers and appropriates value by performing its activities efficiently and effectively. This is the *operational* element of a business model. The second discourse deals with *dynamics*, that is, how an organisation modifies the elements of its business model over time to adapt to changes and disruptions in its environment. This is the *dynamic* element of a business model.

It was inferred that a business model enjoys three core components: i) resources and competences, ii) organisational structure and iii) propositions for value delivery. An organisation leverages these core components to generate a return and ultimately determine its long-term sustainability. These core components relate to the operational dimensions of a business model.

The dynamic element of a business model requires management to dispose of strong dynamic capabilities to successfully adapt it to changes in the market. These dynamic capabilities are critical for an organisation to leverage when it makes business model changes, as all the elements of a business model are connected. Management needs to understand the choices they are making and ensure that the consequence of their choices is aligned to their future business models, as a change to one element of the business model will impact the other elements. The dynamic capabilities framework as conceived by Teece (2018) and the RCOV framework (Demil & Lecocq, 2010:234) were integrated into this study and used to develop a framework as indicated.

The literature review revealed that businesses face disruption in multiple areas, while technological advances are prompting organisations to re-think their value propositions. Since value propositions were found in the present study to be core components of a business model, disruption to these will likely impact the other core elements of a business model, its internal and external structures along with its resources.

Organisations will need to adapt their business models if they hope to be sustainable in the long term. Technology is reducing the cost of providing services and products, offering organisations opportunities to employ more flexible business models. The current bricks and mortar business models followed by the incumbents lack the agility required to quickly respond to the disruption facing the banks. The role of technology is changing, smart phone penetration is increasing, and organisations need to adapt their business models to these changes. They need to ensure alignment between their business model and customer needs. In other words, the disruption facing the South African banking industry does not only emanate from technological advances but also from changes in consumer behaviours and societal pressures.

A review of the South African banking sector found that it is dominated by five traditional brick and mortar retail banks, and that this sector is responsible for employing over 120 000 people. It was identified that there were multiple new banks looking to enter the South African banking sector, while some have done so already. These are considered to be challenger banks, and they will rely heavily on digital business models to drive low-cost business models and differentiated value propositions.

Capitec has experienced significant growth over the past few years and has grown into one of the major banks in South Africa. Capitec's success is credited to its unique value proposition and a differentiated business model that have enabled it to disrupt the market. It has shown that the South African banking industry can be disrupted by a low cost and differentiated value proposition.

Furthermore, South African banks do not benchmark well in terms of productivity when compared to global banks, as they operate on higher cost-to-income ratios. These are driven by higher operating costs. The latter are associated with the bricks and mortar business models followed by the incumbent banks – they have large branch- and ATM footprints and significant back-office headcounts. The latter are caused by manual processes and large branch networks.

It was found that consumers were becoming more price-sensitive: the major reason for consumers choice of a primary bank was price. As a consequence, incumbent banks will need to examine ways to reduce their operating costs if they hope to compete with the challenger banks who will look to compete with low cost differentiated value propositions. The research also highlighted the growth in popularity of on-line channels (mobile and on the internet) as the primary way to bank, with over 50% of consumers in South Africa preferring internet and mobile banking as their primary way of transacting. The popularity of on-line channels is expected to grow, as the average age of the South African consumer is 28, which means they belong to the generation popularly known as millennials, while this generation is considered to be digital natives. Changing market conditions and consumer needs will have an impact of the business models followed by the incumbent banks in South Africa.

In the literature review *institutional theory* was identified as appropriate for this study, as it looks to evaluate the impact of social and market pressures on the standards and norms followed by an industry. Organisations that operate in the same industry tend to conform to the reigning norms by adopting structures, practises and behaviours similar to other leading organisations – this is defined as *isomorphism.* The entry of the challenger banks coupled with the social pressures are likely to impact the norms of the banking industry in South Africa. As the norms of the South African banking industry are impacted, management of the incumbent banks will need to make choices around their business models to conform to industry norms, since isomorphism will remain an important stimulus within the banking context.

5.2.2 Empirical study

An empirical study was conducted by employing semi-structured face-to-face interviews with six senior banking executives from the South African banking industry. The participants contained a mixture of male and female persons from diverse backgrounds. A questionnaire was developed based on the analysis in the literature review and key frameworks.

All the participants acknowledged that the South African banking industry was being disrupted, and that incumbent banks needed to transform their business models, but there was no consistent view of what these new business models would entail. They agreed that the disruption was being caused by multiple challenges in the industry. They identified these challenges to be challenger banks, societal- and economic pressures and technological advances.

They all identified BankZero, Discovery and Tyme to be challenger banks. Discovery was identified as a "*behavioural bank*" that followed a unique value proposition, BankZero and Tyme were identified as low-cost "*digital banks*". They believed these challengers would maintain unique value positions and would impact on the norms of the South African banking industry.

The participants described the current market as "*a race to zero"*, referring to the current "*price war" among* banks. They were all looking to compete on price against the new market entrants: Tyme and Discovery as well as BankZero have already or would soon enter the local market. These challenger banks enjoy enhanced value propositions and are structured to be more customer-focused than incumbent banks. They are therefore expected to be considerably competitive in the local market. All the participants agreed that the incumbent banks had a "*revenue problem*", as their traditional revenue streams would come under increasing pressure. The incumbent banks earn a significant percentage of their revenue through fees and non-interest costs. This revenue problem was compounded by weakening economic conditions and changes in customer expectations including their increasing price sensitivity.

The participants agreed that the pressures and challenge facing the incumbent banks were likely to impact on industry norms, and that the incumbent banks would need to adapt to these changes. The participants shared the view that for the banks to adjust their business models, they would need to overcome multiple internal challenges.

These internal challenges were identified by the participants to be the following:

i) legacy – the incumbent banks were identified as facing legacy structures, -cultures and -IT systems that were not aligned so as to compete with a digital bank;
ii) short- versus long term focus – the participants shared the view that the incumbent banks were too focused on the short term, and were therefore observably not sufficiently focused or incentivised on the long term. Long-term focus would be required to make a business model transformation;
iii) culture – the incumbents were perceived to be entertaining a poor culture, not one of innovation and adaptability, which will be required to make a significant business model transformation;
iv) strategy and business models – the participants agreed that none of the incumbent banks followed a digital business model, they merely followed digital strategies. Their business models were brick and mortar based and this generated significant operating costs, and drove the high back-office head count. The participants shared the view that digital strategies adopted by the incumbent banks were not aligned with their brick and mortar business models. The structure followed by the incumbents drove their large branch- and ATM networks, which in turn drove increases in operating expenses. These banks were perceived to lack customer focus, while their value propositions would be significantly challenged by the challenger banks;
v) operating expenses – the participants all identified the high operating expenses of the incumbent banks as a major internal challenge facing them, especially if they hoped to compete with the low-cost challenger banks. Their high operating expenses are a consequence of their brick and mortar business models.

As has been established above, effective organisations constantly align elements of their business models to the environment in which they operate. As the South African banking environment gets disrupted, the participants all agreed that the incumbents will need to leverage their dynamic capabilities to transform their business models, although the participants were divided about what their future business models would look like. They did agree that these new business models should leverage new technology, reduce operating costs and be more customer-centric, not least by offering differentiated value propositions. The participants held that incumbents needed to make use of IT as a platform to enable them to drive significantly lower operating expenses, while providing improved agility and greater insights into their customers preferences, behaviours and needs. Five of six participants agreed that the banks could leverage their brands to defend their market share against the challenger banks.

5.3 Discussion and conclusion

This study found that the arrival of challenger banks, coupled with societal- and economic pressures facing incumbent banks, will have an impact on the norms of the South African banking industry. These have in fact begun, and incumbent banks are defending their market share by dropping prices on their transactional accounts in response to the arrival of the challenger banks.

The latter follow business models different from those of incumbent banks, who follow traditional bricks and mortar business models, while these models can be used to leverage technology to significantly reduce their operating expenses, thus enabling them to be more customer-centric, that is, as indicated, by offering them enhanced value propositions. The challenger banks follow digital low-cost business models, and are customer-focused: they indeed already offer customers differentiated value propositions.

5.4 Recommendations

As reflected in the literature research, consumers' primary reason for choosing a bank was price (cost of services and products offered), and they preferred digital channels to traditional ones. This underscores the recognition view that incumbent banks need to transform their business models. Their models are responsible for driving their high operating expenses, large back-office headcounts and large branch- and ATM networks. It is therefore strongly advised that incumbent banks use technology to enhance their value propositions and significantly reduce their operating expenses. They run on legacy core-systems and this was identified as one of the major challenges that they need to overcome.

Currently, their business models do not align with their strategies. They employ digital strategies, but the business models have remained the bricks and mortar variety. This lack of alignment will surely impact long term sustainability, as has been demonstrated, since their traditional revenue streams will come under increasing pressure in the context of South African banking. Based on the research conducted here, it is therefore further recommended that they reduce operating expenses and find alternative revenue streams. This will involve making use of IT as a platform and transform towards increasingly digitised business models that will be aligned maximally with their digital strategies. It is recommended that the incumbent banks overcome other internal challenges such as their poor cultures and skills/staff mix as they look to transform their business models.

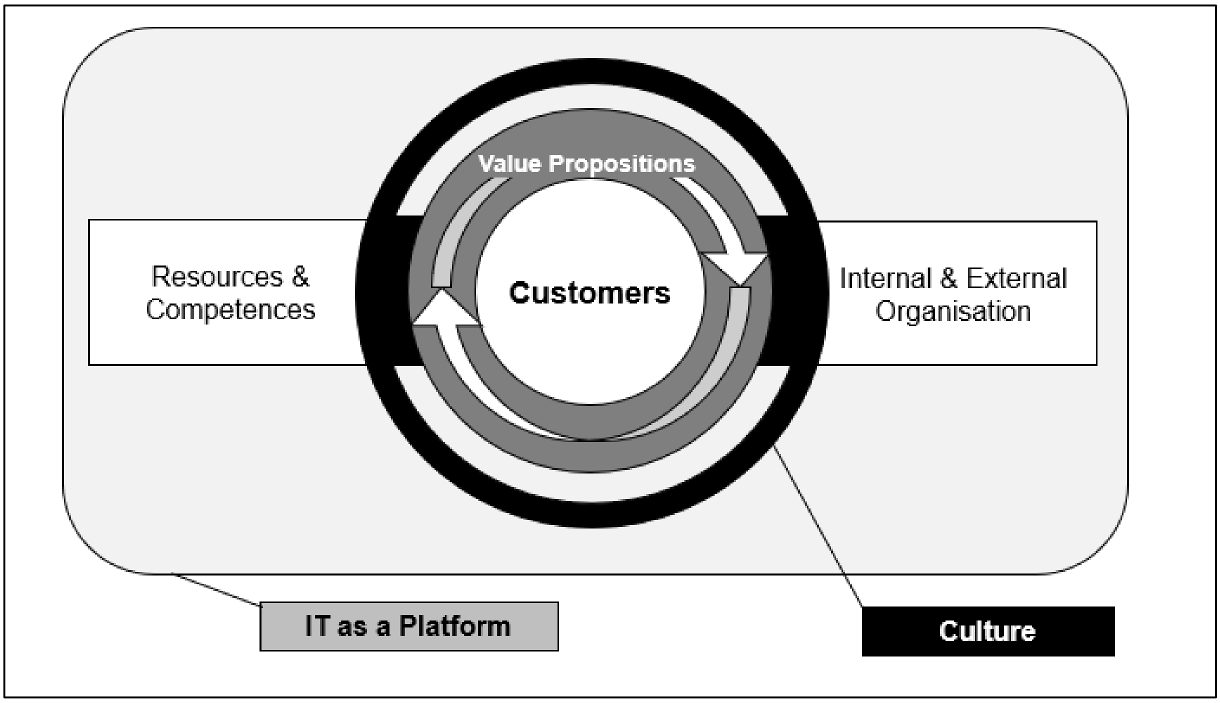
Incumbents should furthermore transform their legacy culture and adopt a more innovative, agile and entrepreneurial one. They should moreover shift focus from the short term to the longer term, this will require changes to the incentive structures in order to drive the behavioural change required from management. They will however need to restructure themselves to achieve this: they will have to adopt a customer-focused approach, redesign and refocus their incentive structures to ensure that required behavioural and cultural changes occur to drive long term sustainability. Talent with diversified skill sets should be hired, instead of further hiring in traditional terms.

Is it recommended that incumbent banks should focus on understanding their customer's needs by making better use of customer data to generate insights into their behaviours and preferences. These customer insights, coupled with a customer-focused business model and culture, will enable differentiated value propositions which, in their turn, will enable incumbent banks to generate new revenue streams by offering new products and services to the South African consumer.

As identified by the participants of this study, these banks should leverage their brands when they compete with challenger banks. They enjoy the advantage of established brands over challenger banks.

They should further transform their business models towards greater digitisation and customer-focused approaches that should include lower operating expenses. Hence, the framework below was developed as a guide for what the form that these new business models may adopt.

Figure 5-1: Framework for business model transformation



Source: Author's own construction

Overview of the framework:

Resources and Competences – this refers to staff and the competencies of management within an organisation. As reflected in the framework, the resources and competences need to be customer-focused and aligned with internal and external organisational components – business/third party partnerships with other organisations both financial and non-financial. The choices management make around each component of the business model need to be well thought through, ensuring that the customer remains at the centre of the organisation.

Customers – this component of the framework focuses on customers of the organisation; while the other components are also structured around them to ensure that he or she is always at the centre of the organisation's attention. As has been amply illustrated in the arguments above, customer-centricity is a key aspect for achieving long term sustainability.

Internal and external organisation – this involves an organisation's internal structures and external partnerships/stakeholders (other organisations both financial and non-financial). The framework reflects that the structure of an organisation needs to be aligned with its resources and competences, while, once more, remaining customer-focused, and by remaining connected to its culture. As a platform, IT connects all the components of the business model and enables value propositions to be delivered to customers. The size and structure of internal-and external organisation will depend heavily on the IT platform, thus to reduce headcount requirements and the need for physical structures such as those required by branch networks.

Value propositions – involving how an organisation will generate value from its customers. The value proposition revolves around customers, and this entails that organisations need to ensure constantly that their value propositions are customer-focused, while adapting to the latter's changing needs. The incumbent banks will therefore need to leverage all the components of their business models to ensure that their value propositions remain relevant and competitive while, again, an IT platform will remain a key enabler in this regard.

IT as a platform – as has been indicated throughout this argument in its various aspects, this is the component of the business model that will enable the organisation to achieve its objectives, since it will allow organisations to pursue digital *business models*. The framework diagram presented above hence shows it to be the underlying component that connects all the others. As a platform, IT will enable the organisation to leverage its data to create meaningful insights into customer preferences and so forth, and offer enhanced value propositions across its range of products and services. The use of IT as a platform will further enable the banks to reduce operating expenses and enhance their agility in response to changes in customer behaviours and new technologies.

Culture – this component of the framework is critical to the business model, not least since, along with IT as a platform, it serves to tie the other components together. In other words, a bank's culture will be important when it comes to driving consistency of goals and long-term focus, in addition to ensuring that its value propositions truly are customer-focused. It ensures that all the bank's resources work towards high levels of customer satisfaction. Ultimately, this upholds the organisation's long-term sustainability

5.5 Assessment of the study

The present project developed a business model framework to assist management of incumbent banks to make informed decisions relating to their business model transformations. The framework provides a view towards adopting potential new business models for the incumbent banks as they respond to the challenger banks entering the South African banking industry. This study also identified key challenges that the incumbent banks will need to overcome as they look to respond to the arrival of the challenger banks entering the local market.

5.6 Limitations of the study

This study is specific to the South African banking industry, and can, as a consequence, not be implemented in other countries. Neither can the findings be applied to other South African industries due to the uniqueness and maturity of the South African banking industry.

The South African banking industry is still yet to be truly disrupted, as BankZero has not launch yet at the time of writing this study, while Tyme and Discovery Bank are slowly starting to grow their market share their impact in still too been seen. The full impact of these developments on the industry is only likely to be seen in years to come, as the incumbent banks will take multiple years to complete the large scales transformations required to their business models. The framework can therefore only be tested once the incumbent banks complete their business model transformations.

This is the first study in South Africa to evaluate the business models of the new challenger banks and their potential impact on the norms of the South African banking industry as well as the impact on the business models followed by the incumbent brick and mortar banks. It should be noted, however, that it only considered the view of six participants, and focused on the five major retails banks in South Africa. It did not consider the smaller banking institutions within South Africa or other fintechs.

5.7 Areas for future research

This study foresees and provides the following further research opportunities:

- Extend the research to consider the impact of fintechs and new digital payment platforms within South Africa, and how they, too, may disrupt the norms of the banking industry;
- Expand the research to consider the importance of the fact that an organisation should employ a value proposition aligned with customer needs, and a business model that would enable a differentiated value proposition;
- Further research the role that the SARB plays in drafting legislation to enable banks to leverage new technologies to offer enhanced services and products to consumers;
- Expand the research to consider other African countries and their banking industries;

- Research the role that culture plays when making significant business model transformations, and the importance of having the appropriate culture in an organisation;

- Research the role brand plays in defending market share from new market entrants, and how established brands can be leveraged as part of an organisation's value proposition; and

- Further research the impact that the millennial consumer is having on the banking industry and how they look to service their customers.

5.8 Final conclusion

As more challenger banks enter the South African banking industry and new technologies and changing consumer needs continue to disrupt industry norms, it will be increasingly important to understand the potential impact on business models followed by incumbent banks.

This study intended to evaluate the business model of challenger banks through a literature review in tandem with an empirical study. It was able to assess the potential impact on business models of incumbent banks brought about by the entrance of challenger banks in the South African banking industry. A framework for future business models in the South African banking industry was developed based on the findings of the study. The research objectives of this study have therefore been achieved.

List of references

Accenture. 2016. 2016 North America Consumer Digital Payments Survey. https://www.accenture.com/t20161013T024052__w__/us-en/_acnmedia/PDF-34/Accenture-2016-North-America-Consumer-Digital-Payments-Survey.pdf Date of access: 18 Jan 2018.

Afuah, A. and Tucci, C.L. 2003. Internet business models and strategies : text and cases: Boston : McGraw-Hill, c2003. 2nd ed.

Anon. 2010. Capitec grows client base 37 percent *BusinessReport,* 31 March 2010. https://www.iol.co.za/business-report/economy/capitec-grows-client-base-37-percent-697490 Date of access: 10 December 2018.

Anon. 2017. Battle of the banks: how SA's big five banks compare. *BISINESSTECH,* 2 Jul. https://businesstech.co.za/news/banking/182873/battle-of-the-banks-how-sas-big-five-banks-compare/ Date of access: 15 Dec 2018.

Anon. 2018. The impact of the 4th industrial revolution on the South African financial services market (executive summary): Services, T.C.O.E.I.F.

Baden-Fuller, C.H., Stefan. 2013. Business models and technological innovation. *Long range planning*, 46(6):419-426.

BANKSETA. 2016. Sector Skills Plan for fiscal year 2015/2016. https://www.bankseta.org.za/downloads/BANKSETA_SSP%202015_16.pdf Date of access: 5 Dec 2017.

BANKSETA. 2018. Sector Skills Plan for fiscal year 2018/2019. https://www.bankseta.org.za/downloads/BANKSETA_SSP%202018_19.pdf Date of access: 15 Dec 2018.

Blaikie, N. 1993. Approaches to Social Enquiry, 1st ed, Cambridge : Polity Press.

BusinessDictionary. 2019. Operating expenses. http://www.businessdictionary.com/definition/operating-expenses.html Date of access: 20 Jan. 2019.

BusinessIntelligence. 2018. Legacy System. https://businessintelligence.com/dictionary/legacy-system/ Date of access: 26th Jan 2018.

Cambridge Dictionary. 2018. Disrupt. https://dictionary.cambridge.org/dictionary/english/disrupt Date of access: 26 Jan 2018.

Cambridge Dictionary. 2018. Bricks and mortar. https://dictionary.cambridge.org/dictionary/english/brick-and-mortar Date of access: 12 Feb 2018.

Cambridge Dictionary. 2019. Operating Cost. https://dictionary.cambridge.org/dictionary/english/operating-cost?q=operating-cost_1 Date of access: 17 Jan. 2019.

Capitec. 2018. Capitec bank stands steadfast with strong brand and continued growth 27 March 2018. https://www.capitecbank.co.za/media-centre/news-article/696 Date of access: 19 Dec 2018.

Carande, C. & Anzevino, A. 2010. Beyond turbulent times: transforming banking business models: one of the most difficult economic environments since the Great Depression, an environment that has created dramatic changes to the financial. *Bank Accounting & Finance,* Aug-Sep:37.

Carlsson, B. & Stankiewicz, R. 1991. On the nature, function and composition of technological systems. *Journal of evolutionary economics*, 1(2):93-118.

Casadesus-Masanell, R. and Ricart, J.E. 2010. From strategy to business models and onto tactics. *Long range planning*, 43:195-215.

Casadesus-Masanell, R. and Ricart, J.E. 2011. How to design a winning business model. *Harvard business review*, 89(1/2):100-107.

Chandler, A.D., Jr. 1962. Strategy and structure: chapters in the history of the industrial enterprise. Oxford: M.I.T. Press.

Chesbrough, H. 2010. Business model innovation: opportunities and barriers. *Long range planning*, 43:354-363.

Chesbrough, H. and Rosenbloom, R.S. 2002. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and corporate change*, 11(3):529-555.

Cohen, L., Morrison, K. and Manion, L. 2011. Research methods in education. 7th ed. London : Routledge.

Creswell, J.W. 2009. Research design : qualitative, quantitative, and mixed methods approaches 3d ed., Los Angeles : Sage Publications.

Dan Costin, N. 2016. New pillars of the banking business model or a new model of doing banking? *Theoretical and applied economics,* XXIII(4):143-152.

Darolles, S. 2016. The rise of fintechs and their regulation. *Financial stability review*, (20):85-92.

Dawson, C. 2002. A practical guide to research methods : a user-friendly manual for mastering research techniques and projects: Oxford : How To Books.

Demil, B. & Lecocq, X. 2010. Business model evolution: in search of dynamic consistency. *Long range planning,* 43:227-246.

Deventer, C. 2017. Analysing capitec bank: anything but an Abil. *BizNews,* 21 Oct 2014. https://www.biznews.com/sa-investing/2014/10/21/analysing-capitec-bank-anything-but-an-abil/ Date of access: 26 Jan 2018.

Dombret, A.R. 2016. Beyond technology – adequate regulation and oversight in the age of fintechs. *Financial stability review* 20:77-83.

Dube, N. 2017. Tough times ahead as cost of living soar *New24*. https://www.news24.com/SouthAfrica/Local/Stanger-Weekly/tough-times-ahead-as-costs-of-living-soar-20171101 Date of access: 28 Dec 2018.

Dube, S. 2018. Digital banks: game changers in South Africa's banking industry? https://www.competition.org.za/review/2018/5/30/digital-banks-game-changers-in-south-africas-banking-industry Date of access: 15 Dec 2018.

El Sawy, O.A. & Pereira, F. 2013. Business modelling in the dynamic digital space : an ecosystem approach [electronic resource]: Berlin ; New York : Springer, c2013.

Enders, A. & Jelassi, T. 2000. The converging business models of Internet and bricks-and-mortar retailers. *European Management Journal*(5):542.

Etikan, I. & Bala, K. 2017. Sampling and Sampling Methods. *Biometrics & Biostatistics International Journal*, 5(6).

Fjeldstad, Ø.D. & Snow, C.C. 2018. Business models and organization design. *Long range planning*, 51:32-39.

Hancock, D.R. & Algozzine, B. 2016. Doing case study research: a practical guide for beginning researchers. Third ed. New York : Teachers College Press.

Hudson, L. & Ozanne, J. 1988. Alternative ways of seeking knowledge in consumer research. *Journal of consumer research,* 4:508.

InvestorWords. 2019. Technical efficiency. http://www.investorwords.com/16827/technical_efficiency.html Date of access: 3 Aug 2019.

Ismail, A. 2017. Why SA's Capitec is best bank in the world *Fin24,* 27 Jun 2017. https://www.fin24.com/Companies/Financial-Services/why-sas-capitec-is-best-bank-in-the-world-20170627-2 Date of access: 5 Dec 2018.

Kothari, C.R. 2004. *Research methodology: methods & techniques* [electronic resource]. 2nd rev. ed. New Delhi : New Age International.

Liao, S., Pu Shao, Y., Wang, H. & Chen, A. 1999. The adoption of virtual banking: an empirical study. 1999:63.

Main, D. 2017. Who are the millennials? *Livescience,* 8 Sep 2017. https://www.livescience.com/38061-millennials-generation-y.html Date of access: 25 Jan 2018.

Markides, C. & Sosa, L. 2013. Pioneering and first mover advantages: the importance of business models. *Long range planning*, 46:325-335.

McFeely, S. & O'Boyle, E. 2018. 4 (more) ways banks can win and keep millennial customers. *Gallup business journal*:1-1.

Mchunu, S. 2018. Banking business model threatened by Zero Bank and other tech companies. *Business Report,* 17 Jan 2018. https://www.iol.co.za/business-report/companies/banking-business-model-threatened-by-zero-bank-and-other-tech-companies-12764979 Date of access: 30 Jan 2018.

Mckinsey & Company. 2018. Roaring to life: growth and innovation in African retail banking. https://www.mckinsey.com/~/media/McKinsey/Industries/Financial%20Services/Our%20Insights/African%20retail%20bankings%20next%20growth%20frontier/Roaring-to-life-growth-and-innovation-in-African-retail-banking-web-final.ashx Date of access: 21 Aug 2018.

Miller, S.P.M.A. 2016. Thematic analysis: Salem Press. https://nwulib.nwu.ac.za/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=113931226&site=eds-live Date of access 28 Jan 2019.

Moyo, A. 2019. Digital newcomers spark price war among SA banks *ITWeb,* 12 June 2019. https://www.itweb.co.za/content/KA3WwqdlL1aqrydZ. Date of access: 24 Aug 2019.

Moyo, B. 2018. An analysis of competition, efficiency and soundness in the South African banking sector. *2018*, 21(1), a2291. https://doi. org/10.4102/sajems. v21i1.2291.

Neuman, W.L. 2014. Social research methods : qualitative and quantitative approaches. 7th ed. Harlow : Pearson Education.

Nhundu, N. & Makhaya, T. 2016. Competition, barriers to entry and inclusive growth in retail banking : Capitec case study1. *The African Journal of information and communication,* 17:111.

Oxford Living Dictionaries. 2018a. Challenger banks. https://en.oxforddictionaries.com/definition/challenger_bank Date of access: 26 Jan. 2018.

Oxford Living Dictionaries. 2018b. Fintech. https://en.oxforddictionaries.com/definition/fintech Date of access: 8 Dec. 2018.

Oxford Learner's Dictionaries. 2019. Legacy. https://www.oxfordlearnersdictionaries.com/definition/english/legacy_1 Date of access: 6 Aug. 2019.

Pearlman, S. 2017. What is API-led connectivity MuleSoft. https://blogs.mulesoft.com/dev/api-dev/what-is-api-led-connectivity/ Date of access 28 Dec 2018.

Penrose, E.T. 1959. The theory of the growth of the firm. Oxford: Blackwell.

Pitjeng, R. 2018. Capitec Bank now the largest bank in SA, survey finds *ENW*. https://ewn.co.za/2018/05/08/capitec-bank-now-the-largest-bank-in-sa-survey-finds Date of access: 14 Dec 2018.

Porter, M.E. 1985. Technology and competitive advantage. *Journal of business strategy*, 5(3):60-78.

Porter, M.E. 1998. Competitive advantage: creating and sustaining superior performance (1st Free Press ed.). New York: Free Press.

Pritchard, J. 2019. What is a Neobank (and should you try one?) *The balance*. https://www.thebalance.com/what-is-a-neobank-and-should-you-try-one-4186468 Date of access: 8 Aug 2019.

PWC. 2017. Who are you calling a "challenger'? How competition is improving customer choice and driving innovation in the UK banking market. https://www.pwc.co.uk/challenger-banks Date of access: 18 Jan 2018.

PWC. 2018. A positive path South Africa – major banks analysis. https://www.pwc.co.za/en/assets/pdf/2h17-major-banking-analysis-march-18.pdf Date of access: 7 Jul 2018.

Rahal, L. & Vadeboncoeur, J.A., PhD. 2015. Institutional theory. https://nwulib.nwu.ac.za/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=109057050&site=eds-live Date of access 20 October 2018.

Ritter, T. & Lettl, C. 2018. The wider implications of business-model research. *Long range planning*, 51(1):1-8.

SARB. 2018. Select South African banking sector trends. https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8307/05%20May%202018.pdf Date of access 25 Aug 2018.

Saunders, M., Lewis, P. & Thornhill, A. 2009. Research methods for business students. 5th ed. Harlow: FT/Prentice Hall.

StatsSA. 2018. Economy disappoints in Q1 2018, contracting by 2,2%. http://www.statssa.gov.za/?p=11202 Date of access: 23 Dec 2018.

Suddaby, R. 2013. Encyclopaedia of management theory. Thousand Oaks: SAGE.

Teece, D.J. 2007. Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13):1319-1350.

Teece, D.J. 2010. Business models, business strategy and innovation. *Long range planning*, 43:172-194.

Teece, D.J. 2018. Business models and dynamic capabilities. *Long range planning*, 51:40-49.

Tripe, D. 1998. Cost to income ratios in Australasian banking.

Villeroy de Galhau, F. 2016. Constructing the possible trinity of innovation, stability and regulation for digital finance. *Financial stability review* (20):5-13.

Walliman, N. 2011. Research methods: the basics: London: Routledge.

Walsh, J.P. 2013. Value proposition http://nwulib.nwu.ac.za/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=90558491&site=eds-live Date of access 11th Aug 2018.

Worlock, D.R. 2007. The view from the tower. *Business information review*, 24(2):83-88.

Zott, C. & Amit, R. 2010. Business model design: an activity system perspective. *Long range planning*, 43:216-226.

Appendix 1: Questionnaire

General questions (was not recorded as part of transcripts due to participant confidentiality)**:**

1. Highest qualification?
2. What is your current position?
3. Years of experience in the banking industry?
4. Field of experience/ background i.e. accounting, IT, Finance etc.?

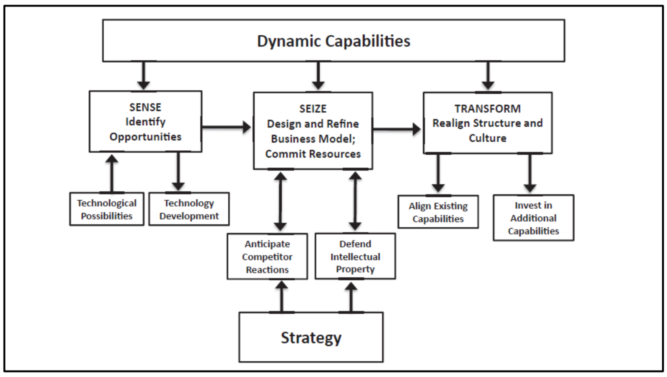
Questions (responses recorded and transcribed):

1. How would you describe challenger Bank?
    a. What type of bank is one?
    b. What is its key differentiator? Or Innovation? E.g technology, management, value proposition, brand etc.?

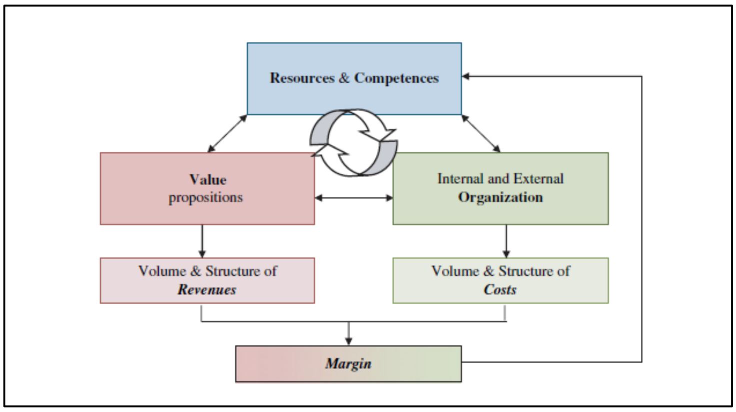
2. How / in what way does it differ from a bricks and mortar bank that offers digital channels i.e. an app; mobile banking?
    a. How would you describe BankZero or any other challenger bank relative to a traditional bricks and mortar bank?
    b. In what way do the two business models differ? At a high level

3. Do you think low cost banking is the future of banking in South Africa, given the success of Capitec? Describe what you think the future of banking should look like in South Africa and how it might be different from the current status quo.
    a. How could a bank achieve a significant lower cost structure in order to enhance its value proposition?

4. Based on the framework below, (dynamic capabilities are defined as - the current and future states of a firm's business model are connected by the firm's *dynamic capabilities* - its abilities to reconfigure its assets), do our incumbent banks have the dynamic capabilities required to transform their business models? Explain



5. Looking at the RCOV frame work, is it a fair reflection of a modern/digital business model?



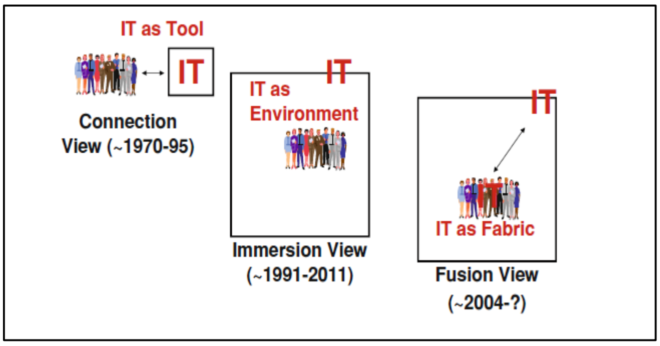
6. Looking at the RVOC framework, which area do you feel will most likely to be impacted /required adaption in incumbent bricks and mortar banks? And in what way do you see it changing?

7. The RVOC framework reflects that a change to any core element of the business model will impact the other elements, this means alignment is key. Which element of the business models followed by traditional bricks and mortar banks is least aligned to need the need of the consumer? And in what way? (*Resources and competences; Organisational structure or propositions for value delivery)*

8. Where do you feel IT sits in the RVOC framework?
    a. Does it still sit in the traditional "resources and competences" core component?

9. "Structure follows strategy" – Based on this quote, do you feel our current banks are structured in a way to follow their digital strategies? Explain?
    a. How would the structure of a digital bank differ?

10. What role do you see IT / technology playing moving forward?
    a. Do you believe technology and the implementation of it will be a critical success factor moving forward?
    b. Does it justify being a separate component given the influence/ impact on the business model? Explain. With reference of the below.



11. Do you believe the IT choices banks make today will impact their long-term competitions and ultimately their sustainability? Explain

12. Do you feel that traditional brick and mortar banks have the dynamic capabilities to fully leverage new technologies to meet the changing needs of the local consumer, while making these required business model changes successful in the long term?
    a. Are their business models sufficiently aligned to their strategies, i.e. are their business models able to fully support digital banking / digital strategies?

13. Do you think the entry of a digital bank will impact the norms and standards of the South African banking industry? If so, in what way?
    a. Will it impact the product / service offerings?
    b. Regulatory impact / response?
    c. Will brick and mortar banks attempt to remain competitive by becoming more digitally focused themselves?
    d. Other

14. What do you see as the most likely response of brick and mortar banks to the threat of a digital bank in order to remain competitive and retain market share?

    a. Price?
    b. Value prop – offering superior products to consumers?
    c. Using their strong Brand?
    d. Partnerships?
    e. Building their own digital offering?

15. In what way do you see a digital bank impacting the organisational structure of a bricks and mortar bank?

    a. Large back offices / high staff numbers
    b. Large operating costs

16. With fee revenue likely to come under increasing pressure in future, how do you see banks generating revenue in future?

    a. Leveraging data?
    b. New value/product propositions?
    c. Expanding value chain?

17. What do you think will be a key factor in future that banks will use to compete for market share in the South African environment?
    a. How important is brand vs value proposition?

18. What do you think is driving the changes in the local banking industry / having the greatest impact: social forces or technological advancements? Explain using below.

    a. How do you feel social forces are motivating the changes we are seeing in the banking industry? i.e. the millennial population; weak economic conditions
    b. How do you see new technologies driving the change we are seeing in the banking industry currently? i.e. smartphones; artificial intelligence.
        i. Do you see mobile banking continuing to grow in popularity?
        ii. What does this mean for the relevance of traditional bank branches?

19. What cost to income ration do you feel is realistically achievable for a digital bank?
    a. How could a traditional bricks and mortar bank achieve a similar cost to income ratio?