The future strategy of the traditional banking industry – adapt or die

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DECLARATION

I, Lara Stonier, declare that this research article is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

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Lara Stonier

Signed at Johannesburg

On the 28th day of February 2018
DEDICATION

I dedicate this research to my creative and inspiring husband, Matthew Stonier, who gave me the motivation and strength needed throughout this period. Also to my parents, Duncan and Jennifer Adams, who afforded me every opportunity in life and believed in me always.
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ABSTRACT

This paper discusses how the exponential pace of technological change and impacts of digitisation are felt in the South African banking industry. The study explores challenges introduced by technology, shifting customer expectations and increasing competition, contrasted with path dependencies inhibiting the ability of banks to respond appropriately. It aims to establish general sentiment toward speculation around the future banking model and identifies key factors for banks to consider to remain relevant and competitive. Findings of the study indicate a potential mismatch between the pace of change demanded by the market versus the ability of banks to adapt to avoid redundancy.

Keywords: Digitisation, technology, banking, future, strategy, customer, competition, path dependency, change, adaptation
1. INTRODUCTION

The development, introduction and continuous improvement of newer, smarter technology is revolutionising the financial services industry (Tapestry Networks, 2016). This rapid digitisation is breaking down industry boundaries, creating new opportunities and introducing business challenges in the form of changing customer expectations, new competition and the constant need for adaptation in a phenomenon termed digital disruption (Wiell & Woerner, 2015).

Hirt and Willmott (2014) argue that we are in the midst of a transition that occurs every 100 years and that the pace of technological change threatens the relevance of the existing global banking business model. This speculation is due to the potential for smaller start-ups with high technological capability (FinTechs), cryptocurrencies and blockchain technology to negate the need for traditional banks to act as an intermediary for financial transactions. Although the landscape may appear to be moving in a series of incremental steps, companies cannot afford to move incrementally – they must proactively scan the market for threats and opportunities, quickly adapting to the changing landscape and envisioning a new future (Tapestry Networks, 2016).

Against the above background, this research article looks at the digital transformation being experienced in the world as a whole and how this is disrupting the banking industry, specifically. The research will focus on changing customer expectations as well as the changing competitive landscape within which banks operate, in the context of technological change. It will also look at how well equipped existing banks are to adapt to the changing environment and in order to remain relevant and competitive in the years to come.

1.1 Problem statement

Digital technology is transforming the banking sector in South Africa, creating both threats and opportunities for different players such as the existing big banks, new entrants targeting fully licenced bank status and smaller FinTechs. Under the current political and economic climate, the threats appear more real, particularly for existing players – Standard Bank, FirstRand Bank Ltd. (FNB),
ABSA, Nedbank and Capitec. Large and established institutions can no longer rest assured that their position in the market is safe. Failure to architect for change at an accelerated pace that is balanced and proportionate to that of the changing market will inevitably lead to companies falling behind industry trends (Hirt & Willmott, 2014) resulting in potential obsolescence.

Technology is lowering the barriers to entry into a market (Wiell & Woerner, 2015) previously thought of as impenetrable and dominated by a few large players. This digital disruption is forcing companies to rethink the value of their legacy systems as well as their fundamental operating models (Tapestry Networks, 2016). Risks which may previously have been thought of as unprecedented, black swan events, defined by Taleb, Goldstein, and Spitznagel (2009) as events that are almost impossible to predict or forecast, should now not be deemed improbable (Tapestry Networks, 2016).

It is clear from a review of some of the literature available such as (Tapestry Networks, 2016; Wiell & Woerner, 2015 and Yoo, Boland Jr, Lyytinen, & Majchrzak, 2012), that the digital era is significantly impacting the way the world operates.

1.2 Research objectives

This research study discusses and unpacks the above problem statement with a view to achieving the following objectives:

1.2.1 To explore banking industry trends through consultation with industry experts – Bank Executives, Senior Management, Subject Matter Experts (SMEs) and Consultants;

1.2.2 To establish the general sentiment and reaction of these industry experts to speculation around the future of the banking industry in South Africa; and

1.2.3 To identify the key factors that South African banks should consider to remain relevant and competitive in this rapidly changing environment.
1.3 Research questions

The research objectives indicated above can be pursued by answering the following research questions:

1.3.1 How is digital disruption changing consumer expectations and how does this manifest in the banking industry in particular?

1.3.2 What changes are experienced in the competitive landscape of the South African banking industry and how does this affect the ability of existing banks to compete effectively?

1.3.3 How well equipped are existing banks to respond to the above changes and what may be hindering their ability to adapt?

1.4 Research scope

The research study focuses on the South African banking industry as a whole but is intended to reflect on the business future strategy of the large existing players e.g. Standard Bank, Absa and FNB. The results may however be of interest to all players in this sector, including the large established banks, the existing smaller FinTech start-ups and any potential new entrants to the market.

1.4.1 Limitations

Due to the nature of the chosen methodology (discussed in chapter 3) and design of the study, the research is limited by the number of sufficiently senior research participants available and willing to partake in the study. Selected and available participants may not cover all of the big banks equally and will have comparatively limited representation from the FinTech environment.

The results of the research will be limited by the experience of the industry experts consulted, whose views may be tainted by their own path dependencies (David, 2001) and subjective perception of how their respective organisations are performing. Research participants may be reluctant to acknowledge or perhaps even oblivious to deficiencies in their own management behaviour and actions.
The results of the study could also be limited by the strategically sensitive, proprietary and potentially confidential nature of much of the subject matter. Despite the fact that data will be reported anonymously, research participants may nonetheless be reluctant or unwilling to disclose certain information.

1.4.2 Delimitations

The research does not cover the following aspects of the banking industry, which are specifically excluded from scope:
- The merits of an entirely cashless economy, the overall stability of the banking system or the possible dissolution of currency indicators and exchange rates as hypothesised by Stevens (2002);
- The structure of the South African economy, its fiscal and monetary policy or the role of the South African Reserve Bank (SARB);
- Detail around the workings or merits of an entirely bankless economy or a non-traditional banking model i.e. one in which banks do not have to act as an intermediary; and
- Detail around the workings or merits of technologies such as Bitcoin and blockchain (A. Tapscott & D. Tapscott, 2017).

The above delimitations are excluded from the research as they are too broad in relation to the specific focus of this study. They are extremely technical in nature and require specialist skills to analyse. Furthermore, to comment or make deductions on the above points would require an in depth study into each one, without necessarily contributing to the intended research objectives of this paper.

1.4.3 Assumptions

Due to the delimitations outlined above, particularly in relation to the workings and merits of an entirely bankless economy and cryptocurrency technologies such as Bitcoin and blockchain, this research is based on the assumption that there is in fact merit in these technologies.

It is assumed that the interest already shown in Bitcoin (and other cryptocurrencies) as well as the value thereof, having increased by from under $1 since its 2009 inception to just short of $20 000 in 2017 (Morris, 2017), will
continue to grow and that its prevalence and use will continue to gain traction. It further assumes that the “Bitcoin bubble” will not burst resulting in a sudden loss of value, as speculated by many cryptocurrency sceptics (Leubsdorf, 2017).
2. APPLICATION OF PRIOR RESEARCH

The next section presents an overview of literature that is relevant to the future strategy of the South African banking industry, providing a brief background to the digital disruption currently being experienced. It goes on to discuss:

- The changing and elevated expectations of digitally savvy customers;
- Increased competition in the banking industry as a result of lowered barriers to entry, afforded by digital technology; and
- Finally, the possible path dependencies (David, 2001) that may be inhibiting the existing and long standing banking institutions from adapting to the changing market conditions.

2.1 Background and context

The financial services sector is currently going through a period of accelerated change that is revolutionising the way in which financial institutions and more specifically, banks, operate. The pace and scale of change indicates that this is not merely part of the natural and inevitable ebb and flow of business cycles but that it may be fundamentally altering the ongoing structure of the sector (Tapestry Networks, 2016).

South Africa’s banking industry is relatively concentrated in terms of market share (Falkena et al., 2004) and has historically been dominated by five big players: Standard Bank; FNB; Absa; Nedbank and Investec (Fin24, 2016). For decades the key players saw very little in the way of competition or industry change in terms of domination by the biggest banks, particularly in the retail sector (Falkena et al., 2004). Mlambo and Ncube (2011) determined in a study that for the period 1999–2008, the structure of the South African banking industry was characterised by monopolistic competition i.e. a market in which many competitors sell a similar but slightly differentiated product – differentiation usually occurring through the use of branding and marketing. This view was affirmed by Simbanegavi, Greenberg, and Gwatidzo (2014) in a later study. However, in my view the banking industry we have seen over the past decade can be viewed more as an oligopoly i.e. a few large players who dominate the market and hold a lot of power.
in terms of market pricing, customer servicing and product offering. Customers have had very little choice in terms of what banks are offering. The market is therefore in need of more competition to improve the value of what customers get for their money and it is anticipated that some of the current changes to the competitor landscape will contribute positively to this end.

Capitec, a 2001 market entrant targeting the lower Lifestyle Standards Measure (LSM) levels and South Africa’s unbanked (Makhaya & Nhundu, 2016), was a good start to moving the needle towards a more competitive and inclusive market. It saw significant growth rates since its listing in 2012 (van Deventer, 2014), reporting a 17.5% market share by February 2016 (Ismail, 2016).

In 2016, we saw even further movement towards increasing competition within the market with the South African Reserve Bank (SARB) issuing three provisional i.e. section 13 (“Banks Act,” 1990) licences in 2016 to Post Bank, Discovery and TYME (Take Your Money Elsewhere), a local mobile payments start-up acquired by Commonwealth Bank of Australia. This licence allows an organisation to begin building a bank in order to apply, within a 12 month period, for a formal section 16 (“Banks Act,” 1990) banking licence (Ensor, 2017). In 2018, Bank Zero made an additional application for a provisional banking licence, further increasing market competition.

Capitec’s success in a seemingly impenetrable market indicates that with the right strategy the above licence applications, if granted, could create further disruption. Combine this with the emergence of several smaller FinTech companies offering innovative and disruptive financial services technologies and the landscape of the previously stable banking sector could be set for a revolutionary change in terms of structure.

### 2.2 Digital disruption

According to Parameswar, Dhir, and Dhir (2017), technology is key to every 21st century organisation. Pervasive digital technology and its affordances are fundamentally shifting the nature of innovation processes and outcomes, which raises questions around how organisations operate, cooperate and compete.
(Yoo et al., 2012). Based on this digitisation we may start to see changing behaviours from both the customer and the competitors in the market.

Similar to Rogers’ (2003) theory of the diffusion of innovation, which describes the process through which a new innovation is communicated, but often resisted by many due to uncertainty and is eventually fully adopted by users only after early adopters have proven its feasibility, Hirt and Willmott (2014) suggest that the process of digitisation follows a predictive pattern, as depicted in figure I below. They predict that once technologically advanced companies begin to adapt to the digitisation, levels of adoption will increase until a tipping point is reached. Eventually what was once viewed as radical will become not only normal, but expected by consumers. Organisations that are unprepared, run the risk of path dependency (David, 2001) and redundancy ultimately dropping off the curve. Organisations that successfully build new capabilities early on, have the opportunity to become powerful digital players (Hirt & Willmott, 2014).

![Figure I: Depiction of how digitisation transforms industries over time](Hirt & Willmott, 2014; p.3)
The process by which digitisation is expected to transform industries is as follows:

1. New digital trends emerge;
2. Disruptive entrants appear (Capitec, Discovery, FinTechs, etc.);
3. Products and services are embraced by early adopters;
4. Advanced existing companies begin to adapt;
5. This increases levels of adoption until the level of digitisation reaches a tipping point;
6. Companies that have not proactively adapted will begin to drop out of the game; and
7. Eventually what was once radical becomes the new normal (Hirt & Willmott, 2014).

Yoo et al. (2012) argue that the benefits of digitisation are real, offering exciting possibilities for the future such as frictionless and instant access to information, unbounded recombination of digital components and unprecedented amounts of big data. They go on, however, to highlight the risk and uncertainly of navigating this ever-evolving world and the vital need to adapt in order to thrive.

With the levels of digital disruption being experienced, the banking industry is no exception. Cuesta, Ruesta, Tuesta, and Urbiola (2015), describe digital banking as encompassing the following key traits:

- Distribution and sales of financial products and services via digital channels;
- Exploiting cutting edge technology to better understand and anticipate customer needs;
- Omni channel solutions allowing customers to communicate with their banks; and
- Prioritisation of customer needs ahead of product creation (products defined around the customer needs).

Cuesta et al. (2015) highlight a number of statistics, all indicating an increase in the use of digital technology in general and in the banking industry specifically. Mobile penetration worldwide in 2014/15 was in the region of 70% (Cuesta et al., 2015) and utilisation of mobile banking apps by digital consumers grew by 19% over 2013 and 2014 (Bain & Company, 2014). Nava, Karp, and Nash-Stacey (2014) point out the notably intensive use of new technologies, particularly in
digital banking, by the millennium generation (those who began adult life around the year 2000), with more than 70% of the youngest segment in the United States having used mobile banking services in the last 12 months, compared to only 40% for the rest of the adult population. They go on to emphasise that around 94% of millennials are active users of online banking. Bughin, Manyika, and Nottebohm (2014) argue that the pace of digitisation will only accelerate as global internet traffic surges, having expanded 18-fold from 2005 to 2014 and expected to surge an additional 8-fold by 2025.

With the apparent exponential increase in the use of digital technology, the ease thereof and the fact that from this point forward the vast majority of people will be exposed to such technology from birth, it stands to reason that this digitisation trend will continue to gain momentum.

2.2.1 Changing and elevated expectations from the digitally savvy customer

The prevalence of internet usage, smart devices, app technology and a host of other digital software, is consistently changing and evolving customer needs (Parameswar et al., 2017) and has profoundly transformed the habits of consumers. As discussed by Cuesta et al. (2015), it is changing their preferences and the way in which they interact with products and services across all industries. It has raised the bar in terms of what customers expect and what may previously have been seen as nice to have or added value service is now the norm.

Bughin et al. (2014) describe how various technologies are improving the customer experience and aiding them in their choices. Increasingly common digital tags and sensors are able to identify objects and collect information about transactions, customers, locations and timing of use. Cuesta et al. (2015) echo the statements made by Bughin et al. (2014) around online comparison sites, which are creating near perfect transparency (Hirt & Willmott, 2014) in terms of the ease with which consumers can compare and share experiences around prices, service levels and product performance. Hirt and Willmott (2014) go on to emphasise how quickly and easily consumers can switch service providers online, creating additional pressure in terms of price and margins, as consumers demand comparable features. Organisations need to meet industry expectations
or risk losing their customers, particularly the younger more digitally savvy ones, to competitors.

According to Cuesta et al. (2015), the role of social networks has had a multiplier effect in increasing the speed of digitisation. In the banking industry the new and accepted minimum standard of service, as consumers adapt to digital interaction, is the ability to conduct banking anytime and anywhere. Banking is expected to be as user friendly as email and social networks used every day, a mere extension of traditional social interaction (Cuesta et al., 2015).

Most customers in seeking convenience do not want to be forced to visit a branch and prefer virtual banking channels i.e. delivery via means other than physical branches (Liao, Shao, Wang, & Chen, 1999). While the human touch may have its place, it is not always valued by customers, many of whom according to Westerman and Bonnet (2015) may prefer to interact with a machine and view human interaction as an inconvenience or extra cost. Although there may still be a generationally based portion of society that wants a face-to-face personal interaction, the vast and growing majority of customers, particularly those born in the early 80s and onwards, prefer self-service (Westerman & Bonnet, 2015) and digital channels (Hirt & Willmott, 2014) that can be accessed at all hours and at their fingertips. Parameswar et al. (2017) anticipate that human-to-human interaction will become entirely redundant and that control will shift from the hands of employees, directly to the customer.

Heerden and Puth (1995) suggest that where there is a choice between competitors, particularly in more commoditised industries (Hirt & Willmott, 2014), most customers will look beyond products and services, to corporate behaviour. Sunter (1993), as cited by Heerden and Puth (1995), proposes that differentiation and a unique positioning in the minds of the consumers will be central to maintaining or expanding market share in a commoditised and digital world. Lyons, Chatman, and Joyce (2007) highlight the importance of innovation in fighting commoditisation and Parameswar et al. (2017) suggest that banks will need to focus on creating value for the customer, through new and innovative products, markets and channels, as opposed to being purely transactional.
2.2.2 Lowered barriers to entry resulting in new market entrants and increased competition

Added to the pressure to change, brought on by increasing customer expectations, is the comparative ease and cost efficiency with which non-traditional banks are able to enter a market which may have previously been thought impenetrable (Tapestry Networks, 2016), resulting in increased competition from nonbank financial firms (Samolyk, 1994). Hirt and Willmott (2014), Bughin et al. (2014) and Cuesta et al. (2015) all articulate how the rapid spread of the internet and digital technology is rewriting the rules of competition, profoundly changing the strategic context, creating new sets of competitors, often from unexpected places, and an entirely new competitive environment.

Technology has removed many of the geographical and cost barriers to distribution channels, reducing the need for branch networks and creating electronic delivery of financial retail services, which acts as an enabler for new players to enter traditional banking markets (Wright, 2002). Hirt and Willmott (2014) describe how technology has lowered barriers to entry, blurring long established sector boundaries and converging entire industries. Internet companies (e.g. Amazon, Google, Apple, Alibaba) and mobile phone carriers are entering the market looking for new lines of revenue. They are scaling up quickly, using new technology such as Bitcoin and Blockchain (A. Tapscott & D. Tapscott, 2017) together with more agile ways of deploying technology, causing traditional value chains to disintegrate (Hirt & Willmott, 2014).

Cuesta et al. (2015) points out how FinTech companies are typically highly flexible, adept at implementing change and tend to have lower cost structures making it easier for them to innovate and deploy disruptive technology. Hirt and Willmott (2014) describe how FinTechs are able to specialise in some of the discrete plug-and-play functions traditionally performed by a bank but without the same degree of regulatory pressure (Cuesta et al., 2015). Based on the low cost structure of their business model they are able to severely undercut pricing, forcing bigger companies to do the same (Hirt & Willmott, 2014).

This disruption can create a self-reinforcing cycle. Hirt and Willmott (2014) describes how companies better known for their digital ability attract market talent
and are better at leveraging existing digital data stores to analyse and respond to customer needs. Cuesta et al. (2015) further highlights the growing investment into FinTechs seen in recent years, as seen in figure II below, which is feeding the trend.

![Global Investment in FinTech Companies (USD mn)](source: Accenture and CB Insights)

**Figure II: Global investment in FinTech companies (USD mn)** (Accenture and CB insights as cited by (Cuesta et al., 2015; p.3)

### 2.2.3 Path dependency resulting in inability to adapt

Cuesta et al. (2015) comment on the different approaches and more importantly the speed with which banks are responding to the profound changes in demand brought about by digitisation. Both Yoo et al. (2012) and Hirt and Willmott (2014) use the word “relentless” to describe the pace of digitisation and with it, innovation. This emphasises the evolving nature of what is required from businesses, trying to keep up with a moving target.

Westerman and Bonnet (2015), however, highlight that transformation in traditional industries can be more difficult due to their incredibly complex legacy systems. Much of their technical resource capacity is channelled towards the maintenance of business as usual activity, rather than the development of innovative and disruptive technology.

Teece, Pisano and Shuen (1997) argue that the ability for an organisation to mobilise towards its strategic objectives is dependent on the decisions already made. However, traditional banks have existed for decades, using the same
business model, the same processes and systems and with very little disruption to the way things are done. Morrey, Pasquire, Thomson, and Dainty (2012) suggest that an organisation’s dynamic capabilities i.e. the ability to respond to change, can be hindered due to a deeply entrenched and embedded culture and way of doing things. This is referred to by Mahoney (2000) as a type of inertia which makes an organisation unable to break free from the paths it has created. They are less able to make dynamic choices (David, 2001) and can experience lock-in.

In an industry where exponential change is essential to maintaining their relevance and competitive advantage, the size of the big banks, their lack of agility, entrenched behaviours and lack of practice in implementing change makes it all the more difficult to break free from this path dependency and keep up with the pace of change.

Many companies, as pointed out by Hirt and Willmott (2014), failed to adapt during the “dot-com crash” and dissipated as a result. Thirty or forty years ago, banking technology talk centred around electronic methods of transferring money, which is now entrenched in daily economic activity. Cuesta et al. (2015) emphasise that existing and established companies must act to address their digitisation process as a matter of urgency or risk being left behind as digital rivals move into an industry in the throes of transformation.

According to Westerman and Bonnet (2015) companies need to move beyond their current mind-sets and rethink the assumptions that affect how they relate to their customers, run their operations, organise and think about their business models. They cannot assume that the strategic assets that brought success in the physical world will necessarily be valuable in the digital environment.

2.3 Conclusion

The literature discussed above has provided an overview of some of the many effects of the digital wave that is transforming the way in which consumers behave and what they expect in terms of service as well as the way in which businesses operate and compete. It has combined this phenomenon with the
path dependencies that traditional banks often face, thereby creating a significant challenge in terms of their ability to adapt and re-strategise, to remain relevant and competitive in the market.

In summary, a recent exponential increase in digitisation is reshaping customer expectations, the way businesses collaborate and compete as well as their business models (Westerman & Bonnet, 2015).

Innovative technology is acting as an enabler (Wright, 2002), lowering barriers to entry and allowing FinTechs to enter the financial sector. These FinTechs are exploiting the divide between new demands and the outdated services offered by traditional banks, which are overly burdened by the limitations of industry regulation, structure, processes and corporate culture (Cuesta et al., 2015).

Without the ability to quickly innovate and adapt to industry changes traditional banks may find it increasingly difficult to compete and may even risk obsolescence.

The following section provides an outline into the approach and methodology that will be used to explore further, how the above problem is manifesting in the South African banking industry and what leaders are doing to future proof their organisations.
3. RESEARCH METHODOLOGY

In order to increase our understanding of the problem statement, a systematic process of collecting, analysing, and interpreting information (Leedy & Ormrod, 2010) was used. The section below explains the research study approach taken.

3.1 Rationalisation for a qualitative and exploratory research approach

Based on the different contexts of various players in the industry, it is not anticipated that there is one view, answer or solution to digital disruption in the banking industry. Rather, it is an occurrence that requires exploration (Leedy & Ormrod, 2010) and investigation to establish the extent to which it is affecting banks, how they are responding to it and what challenges they are experiencing in attempting to adapt to the changing market condition. This research was therefore conducted with the goal of unpacking and uncovering options for future strategies. It does not seek to establish a singular or definite outcome for the banking industry in South Africa as a whole or to determine a specific recommended strategy for adoption by all players in the market.

The research was therefore qualitative and explorative in nature. This approach is less structured than a quantitative approach, which involves the collection, quantification and statistical treatment of data. As speculation around future strategy is not a quantifiable field of study, a quantitative approach or lens would not be appropriate, nor would it achieve the desired outcome. Quantitative research would need to assess a much broader audience in order to get an adequate sample size. However, a broader sample of respondents who do not have the correct expertise and experience would not be as valuable as the insights of a few carefully selected respondents.

The qualitative approach taken was more holistic and in-depth and lent itself to the discovery (Williams, 2011) of themes, trends and concerns emerging within some of the current and emerging banks in South Africa. The qualitative approach taken was deemed most suitable to address the research problem as it merely purports to reconcile some of the management theory discussed and
hypothesised in the literature above with the real experiences of those on the battlefields per se.

In order to increase the validity and credibility of the results and allow for greater accuracy, the following analytical tools were be used both during and post interviews to assess whether the responses were congruent with each other and with the literature and problem statement of the study:
- The blind men and the elephant (Go & Carroll, 2004);
- Analysis of paradigms, paradoxes (Burrell & Morgan, 1979) and patterns;
- Triangulation (comparison) of multiple viewpoints (Jick, 1979) and perspectives (Hatch & Cunliffe, 2012); and
- Systems thinking to seek out any associations between digitation, customer behaviour and market conditions, as well as the impact thereof.

3.2 Methodological approach

The research was founded in primary data sourced from the opinions of experienced individuals in the industry who are currently navigating the landscape. Primary data was considered the best source of information for the study as it allowed the researcher to probe more deeply into issues that arose during the research process as opposed to having to rely on what was already documented. Participants in the study were individuals who operate at an Executive, Senior Management, Partner or Director Level and therefore were assumed to have deep and comprehensive insight into the strategic activities either within their own organisations or in an advisory capacity to the top banks.

3.3 Data collection methods (Instrumentation)

The opinions sought were gathered through face-to-face interviews based on a semi-structured questionnaire as well as ongoing discussion and engagement with appropriate SMEs. This allowed for a depth of response that would not have been gained through written responses, particularly in light of the time limitations of the participants involved.
The study included participants from multiple banking institutions and top consulting firms but did not include participants from all of the banks. Most participants have had experience working either in an internal or advisory capacity across at least more than one of the top five banks. Refer to the mix of participants below indicating the current or previous roles they have occupied, all either within the top financial institutions of South Africa or one of the Big 4 consulting firms, making them suitable candidates for the study:

- Chief Executive Officer
- Chief Information and Security Officers
- Chief Information Officer
- Chief Risk Officer
- Industry experts and consultants
- Senior advisory partners or consultants
- Heads of Departments

The sample population for the research was relatively small due to the limited access to individuals in the industry with adequate skills and experience to provide value added insight that could not be found through secondary data sources. Furthermore, the in depth and qualitative nature of the research methodology allowed for a smaller sample. Sample selection was purposive, based on the specific level of knowledge and expertise (Tongco, 2007) in the banking industry and was done through previously established relationships from the researcher’s work in the banking industry.

It is assumed that all interview participants, as industry authorities, had a good understanding of the language used and the key concepts discussed, however, where the possibility for any ambiguity was foreseen, definitions, descriptions or explanations were provided together with reflection on the responses during the interview to confirm a common understanding and alignment between different participant responses. Where appropriate, anecdotal evidence or examples were requested to ensure reliability of responses.

Although the questionnaire was used to guide the conversation, face-to-face interviews and discussions allowed an element of flexibility to delve into or ask
unplanned follow-up questions on issues or interesting themes that emerged as a result of the guideline questions.

Because all participant feedback has been reported anonymously and without disclosing the particular institution for which they work, combined with the fact that their responses were based on their experience working in multiple institutions, there is no reason to believe that there is any bias in terms of the responses provided. It is assumed that the participants answered the questions truthfully and to the best of their knowledge and ability. It is however accepted that opinions may differ substantially between participants, based on their personal experience.

The abovementioned stakeholders participated in the study based on an existing relationship with the researcher either through current or prior roles occupied. It is disclosed that the researcher currently works within the financial services industry and has previously worked in an advisory capacity within the financial services industry at one of the Big 4 consulting firms. The researcher has no vested interest in the outcome of the research and there is unlikely to be any bias in the analysis conducted.

3.4 Ethical issues

There are no specific ethical concerns to be noted in relation to the research other than that of protection of personal information. All research responses have been anonymised and utilised only as they pertain directly to this study.

3.5 Internal and external validity

It is important to note that the study is based on the opinion and perceptions of a select few industry authorities within the South African context. The results of the study therefore cannot be generalised to the entire South African banking industry and even less so globally. There may however be valid factors for consideration by all players in the financial services industry due to the global nature of digitisation. The outcomes of the study would however need to be considered
within the context of the relevant environment, the maturity of the market as well as the maturity and role of each financial institution.
4. RESEARCH RESULTS AND DISCUSSION

4.1 Background

Given the literature around digital transformation and the exponential technological change being experienced world and industry-wide, this research paper set out to investigate how this exponential change is affecting the banking industry and how well equipped existing banks are to adapt to it. It was hypothesised that banks as institutions with fairly entrenched path dependencies may not be capable of implementing change at the pace required, which could result in a failure to compete at the level necessary to avoid redundancy or at the very least a reduction in market share.

The outcome of interviews and discussions with research participants is discussed below. The discussion focuses on unpacking the key trends and challenges faced by the banking industry and more specifically in relation to changes to customer expectations and the competitive landscape, brought about by technological change. The research results compare and contrast the exponential changes we are seeing in this space with the ability of existing banks to adapt to this change. Finally, the research paper outlines some key considerations for banks to consider in order to remain relevant and competitive in the ever-changing banking landscape.

4.2 The introduction of new technology and how it is impacting the banking industry

The response below stems from the overarching problem around how digital technology is transforming the banking sector in South Africa, creating both threats and opportunities for different players such as the existing big banks, new entrants targeting fully licenced bank status and smaller FinTechs.

Consensus amongst research participants was that there is a distinguishable shift in the way technology and digital disruption is affecting not just the banking industry but life in general. People now understand that they can have things they did not even know they needed and at the easiest of convenience. Whilst in the past it may have been accepted that a customer had to “jump through certain
hoops” to get what was needed, be it a bank statement, a clothing account a cell phone or a home loan, that norm is being challenged. Research participants all appeared acutely aware of the immense power of technology and the opportunities it presents to both organisations and their customers in terms of the way we operate, do business, interact and essentially live our lives. However, without exception, research participants acknowledge that with these technological changes come a number of threats, at both an organisational and an individual consumer level, that need to be carefully managed. A number of specific technological impacts, particularly as they relate to the banking industry are discussed below.

4.2.1 The introduction of branchless and digital banking

If we look at the need for the existence of physical bank branches or the desire for customers to have to travel to and go into a branch it appears that the banking industry is no exception to the challenging of previously accepted norms and the same principles discussed above apply.

The ability to transact seamlessly and execute payments securely, from anywhere and with any device is no longer a competitive advantage but a standard. With the prevalent use of internet and mobile banking application, most banking activity can now be done without ever going into a physical branch, hence the emergence of digital banking, whereby all banking activity can be conducted via self-service online channels rather than physical branches or even call centres. Nowadays, a bank that required a customer to go into a branch to open an account or transact would simply not be an attractive option to a customer in comparison to the convenience of a bank offering online access to everything.

4.2.2 Accessibility of previously elite services

The model of private banking is also changing. Where a private banker may currently only be available to a select few customers based on income thresholds, there is no reason that similar structures could not be made available to a much broader market, termed by a number of research participants as “democratised private banking”. Through the use of technology and a reducing need for face-to-
face interaction, one personal banker has a much broader reach thereby lowering the cost structure of a previously expensive service and making it more accessible to all. Although this is an attractive option for the masses, it does reduce the associated status symbol attached to private banking, which could again make this the minimum standard as opposed to a value added service offering for the elite.

4.2.3 The impact of technology on the way we work

There is often a fear that with technological change, people’s jobs will be in danger and this is of particular concern in light of the trend towards digital banking, with a number of banks, according to Rotman (2013), already having signed on to use IBM Watson as a customer service agent in their call centres. However, research participants who discussed this particular aspect of digitisation viewed technology predominantly as an opportunity as opposed to a threat.

Although there was an acknowledgement that technology is changing corporate jobs and perhaps replacing some, it is also creating jobs that did not previously exist and enhancing existing jobs to replace certain activities rather than replacing the people. Ultimately, the view was that technology could be used as an enabler to free up people’s time to concentrate on work that is more meaningful.

However, the reality is that however good the intention is, a digital bank requires very different skills to operate successfully and the more technology based the processes within an organisation, the smaller the staff compliment. Whatever the case within an organisation, the message carried out to employees is paramount. Proactive and regular communication is required to provide comfort to employees before speculation and potential panic set in. A well-articulated and well-communicated resourcing strategy is critical to addressing the threat posed by technology and at the same time capturing the potential opportunities presented.
4.2.4  Balancing technology and the regulatory framework within which we operate

One of the major challenges experienced in the banking industry is from a regulatory perspective. The banking industry has a very stringent regulatory landscape, which on the one hand played a big role in sheltering South Africa from the global financial crisis of 2008, albeit, according to one research participant, “not necessarily by design”. On the other hand the regulatory landscape is so complex that it can be difficult to navigate, to comply with and sometimes, to do business. It is also changing rapidly and banks are grappling with the need to balance an aggressive approach to technology and innovation while maintaining conformance to an already difficult technology and regulatory landscape.

4.2.5  Movement in the cyber security space

One of the key factors that appears to be top of mind for most research participants is that of cyber security, with a view that the more we connect, the more threats arise. The security threat landscape is constantly changing with cyber criminals who seem to be getting smarter and at the forefront of their game. In order to stay a step ahead of these cyber criminals, banks need to be proactively and consistently on top of this threat and ready to adapt. The view is that as the banks improve, so do the cyber criminals and their ability to attack.

An interesting challenge raised by one research participant was “the inherent conflict between information technology and information security, the goals of which can be seen to be in conflict of each other”. As technology changes, organisations will have to determine how they deal with this domain. One of the main challenges and goals of technology is availability. In contrast, one of the main goals of security is to protect availability i.e. only authorised access. According to the same participant, “the question that banks should be asking is how to preserve the balance of availability and protection of data at the same time. This is only possible by design and should be inherently built into everything a bank does”.

It is important to acknowledge how security has evolved. One research participant described how “we have gone from script kiddies defacing websites from their parents’ basements to hacking as a service, corporate espionage and state sponsored attacks”. In a world pushing the boundaries of technology with more and more automation, the internet of things and even flying and driverless cars, cyber security is becoming a greater and greater threat, with the ability to breach this “connected” ecosystem.

The greater power technology has over our lives greater the potential for evil if that technology lands in the wrong hands. For example, a 2017 cyber-attack called “WannaCry” (Fruhlinger, 2017), speculated to be linked to a cybercrime organisation connected to the North Korean government, rapidly spread ransomware on a global scale to a number of high-profile systems, by exploiting a Windows vulnerability.

4.2.6 The internet of things and the potential of big data

The prevalence of technology in everything we do is creating massive amounts of data along the way. This data can be incredibly powerful for an organisation if appropriately capitalised on. Some organisations have developed advanced data analytics capabilities to take advantage of the amount of data they produce and connecting with other databases, thereby enhancing their ability to anticipate customer needs, cut costs, detect fraud, enhance the customer experience, etc. The problem is that not all organisations have a good handle on their data i.e. where it sits, where it comes from, its accuracy, its protection and ultimately, how to extract value from it. Banks, particularly in light of regulatory requirements related to data governance and management, are talking about data supply chain management and analytics to drive intelligence and ensure that decisions are made based on real data rather than gut feel.

With ninety percent of all data that exists having been created in a mere two years (Jacobson, 2013), another important consideration for banks is the location, storage and backup of all of their data, a costly and complex activity. Banks need to ensure that their data is secure from untrusted sources, hacking and accidental breach but is also easily accessible for servicing of customers, regulatory
requirements and their own analysis. One research participant highlighted that “with such aggressive changes on the horizon in terms of data protection legislation and data governance standards, organisations really need to look into a holistic data strategy that protects as well as enables”.

4.2.7 Replacement of legacy systems with a more agile and flexible technology platform

Much of the core banking systems infrastructure on which the large banks operate was built 20 to 50 years ago and the conversation on the lips of all the big banks is how to replace these legacy system stacks. This will be discussed in greater detail during the discussion on the organisation’s ability to implement change, however, what is important here is the way in which legacy systems are built as opposed to a much more modern, agile and flexible way of developing systems.

One research participant described how “a few decades ago, the existing banks may not have thought they would be in this position”. Similarly so, it is important for the big banks as they replace systems, new entrants building banking systems from scratch, as well as FinTechs to “think about the future, architecting for resilience as [they] build now. The question should not only be how to fix the legacy issues but how to future proof for the next few decades by building in such a way that the system is easily extendible, compatible and allows for add-ons down the line that may not necessarily be needed in the immediate future”. Organisations need to plan now for future design. Even if certain functionality is not needed immediately, “failure to architect for certain capabilities now will result in an inability to add them at a later stage”.

Further to the design aspects that assist in future agility, there is opportunity to improve the way in which system applications are packaged and deployed. According to a number of research participants, the development methodology being used by FinTechs as opposed to the existing big banks is faster, more scalable, more flexible and more automated in terms of build, testing and deployment. This gives them a decided advantage in terms of their speed to market and pace of change.
Technology can do great things for us and can be incredibly powerful if used correctly. However, it brings with it new rules of engagement in terms of the way in which we communicate and what we communicate. The information generated and available from these interactions can be very dangerous if it gets into the wrong hands. The risks associated with the use of technology are increasing and in many ways the more we use it the more we become exposed on a personal front and at an organisational level to new and emerging risks never before dealt with. Too often, the assumption is one of good intention and this lowers people’s guard, but we need to be more cautious than ever before.

The technology currently exists to do a number of things for which the ethical boundaries have not yet been clearly defined. This sometimes leaves the boundaries of behaviour open to interpretation and therefore ethical governance and consent become critical. It also becomes important to ensure that data does not get into the hands of people or organisations whose intentions are not above board. One research participant highlighted that “although individuals need to be responsible for protecting their own information, it is the ethical duty of the organisations dealing with customer data to educate them on the usage thereof”. As customers become more aware of the implications of sharing their personal information and the potential for the data to be used against them, the more weary they are likely to become.

The consequences of a data breach are significant in terms of regulatory and reputational impacts, not just at a theoretical level but at a very tangible level, potentially affecting company share pricing and therefore, the bottom line. It is critical for organisations who use customer data not only to do so in a secure manner, but also to create a reputation for being completely beyond reproach.

Technology is moving fast and we cannot stop it, nor do we want to. However, it is important to be conscious about its use and the careful management of its implications.

As much as we are advancing from a technology perspective, organisations are still challenged to remain people centric. The people and processes that drive
technology still need to be at the centre of discussion so as not to lose sight of what it is the organisation is trying to achieve through the use of technology.

4.3 Changes to the expectations and needs of consumers

The response below stems from the question of how digital disruption is changing consumer expectations and how this manifests in the banking industry in particular.

What is evident from discussions with research participants is the consistent and relentless focus on the customer, whose needs are adapting and evolving with the technology being offered to them. Rather than focusing internally and pushing a particular business agenda onto the customer, banks are looking outward, firstly focusing on customer needs and desires and developing content, products and processes around what they want and what is most convenient to them.

This customer centricity creates a better and more personal relationship with the customer and increases the likelihood that customers will react favourably to products and processes as they have been listened to and their preferences taken into account.

4.3.1 Communication and interaction preferences

Feedback from research participants on what customers want was mixed. Some were of the view that the majority of people favour electronic or automated channels of communication and would even prefer to speak to a robot than another human being. Whereas a few years ago they would rather speak to a human. Their view is that the number of people who still want to interact in the same way that banks have always operated is small and diminishing. This changes things from a people perspective and has significant cost and staffing implications as well as opportunities for streamlining. For example, if this is the case, banks may no longer require such large call centres.

Other research participants were of the view that there are still a large portion of customers who value and expect a certain level of personal interaction and customer engagement. They want to speak to a person. It was however
conceded that this may merely be a generational consideration that will be phased out over time, as the majority of customers become a more millennial set.

What is clear from the above is that not all customers are created equal and what is important is to have options available to in order to serve customers through a channel that is most convenient to them. Banks need to think of innovative ways to deliver the same customer experience. The key, as described by one research participant, is to create “a seemingly bespoke customer interaction, using market segmentation, technology and data analytics. The future philosophy should be that every customer is offered a unique and tailored banking service whereby they are able to choose where they want connection and where they do not”. A bank’s API (Application Programme Interface), needs to be flexible and agile enough to chop and change and integrate quickly enough to do exactly what the individual customer wants. Banks should keep this top of mind when building their user platforms. The goal should be a bespoke customer application by creating a platform that will not merely tell a customer what they want but will allow them to choose what they want.

4.3.2 The root that drives customer wants and needs

When discussing customer wants and needs many research participants raised the 2008 financial crisis (Erkens, Hung, & Matos, 2012), indicating a link between the two. When the financial crisis hit, people lost faith, confidence and trust in banks. As much as customers want convenience in general, when it comes to their money, a particular area of sensitivity and stress for many, trust may be more important. In general, when customers feel unsure of something they want to be able to turn to a trusted advisor. The thing to be cautious of as a bank as in any other servicing industry is that customers are turning more and more to social media either to obtain this advice or to complain about the support and advice they are receiving from a particular organisation. Banks need to embrace this culture and, realising the immense power of social media, take this tool into their own hands. One research participant highlighted that “if you are not saying something, someone else will say it for you and it may be the wrong message”. This theme can be applied equally to positive and negative messages. Yes, customers want convenience, but they also want trust. The same research
participant proposed that “the question bank executives should be trying to answer is how they can use technology to build trust and repair any reputational damage that may have had nothing to do with technology”.

4.3.3 What customers really want

Following from the above, what customers really want is philosophical in nature and not technical. They want to feel unique, special, like their needs matter to the organisation they are dealing with and that they have trust and confidence in the organisation to deliver it. This is unlikely to change. The difference is that people are starting to understand what is at their fingertips and they are spoilt for choice. One research participant described technology as “a mere enabler to give the customer what they principally want”, further stating that “the principles have not changed but the dimensions within which they can be delivered have”.

This is of equal importance whether dealing with long standing clientele who are used to a particular way of being serviced and may not be as tech savvy, or when bringing on a new and rapidly growing group of younger customers whose potential future earnings and spend are critical to the bank’s sustainability. These customers may wish to be serviced in an entirely different manner. The challenge for organisations is how to accommodate both without hindering the other and without losing efficiencies or alienating any clientele. For the more automated servicing channels, how do organisations maintain personal touch and not lose their sense of identity, culture and good old-fashioned service? Some participants argued that personal touch no longer necessarily means a friendly smile so to speak. A personal touch can come in many forms, one of which can be knowing your customer and anticipating their personal needs through the use of technology. This was argued to be emerging as more important to the customer than “friendly” service.

4.3.4 Opportunity to continuously re-invent the future for the customer

One of the more progressive views that emerged during research discussions was that organisations are operating during a time where they should not only give customers what they want but present to them a future that they want but never knew they needed. One research participant mentioned Henry Ford, who
is quoted as saying, “If I had asked people what they wanted, they would have said faster horses” (Vlaskovits, 2011). According to this research participant, “the proactive and more progressive view when it comes to servicing customers is that organisations have an obligation to design the future for them rather than merely servicing their existing needs”.

In many ways banking has become a commoditised grudge purchase with a perception of high fees, poor service and not much added value. Some banks have managed to differentiate themselves slightly in terms of innovation and customer experience but at the core of it, what they offer is the same thing and they are not adequately differentiated to maintain a sustainable lead on the competitors as their models are easy to emulate. The market is hungry for new options. In one research participant’s view “no service is the best service and banks should be calling their customers with a solution before they even know there is a problem”.

4.4   Changes to the competitive landscape within the banking industry

The response below stems from the question of what changes are being experienced in the competitive landscape of the South African banking industry and how this is affecting the ability of existing banks to compete effectively.

The discussion about the changing landscape of the banking industry cannot be complete without consideration of how these technological changes are affecting the competitive environment within which banks have to operate.

Research participants were all acutely aware and focused on the changes currently taking place within the banking competitor landscape, particularly with the recent banking licence applications by Post Bank, Discovery and TYME. Added to the three 2016 licence applications was the announcement by Michael Jordaan, former FNB CEO, of Bank Zero – an app-driven banking venture (Naidoo, 2018) and the most recent recipient of a provisional banking licence in terms of the “Banks Act” (1990).

4.4.1   Perceived reaction to competitive changes
Discussions with research participants revealed a general seriousness with which the industry is taking all competition within the banking industry. All research participants appear to be watching recent competitor movements closely, with a definite appreciation for the starkly different competitive landscape they could all be facing within a few short years or even months.

Responses to questions around all new entrants had a cautious and earnest tone with no one wanting to be caught off-guard or accused of underestimating the competition, only to be found wanting at a later stage. New entrants themselves are not just considering competitors targeting the same market segments but are looking at the potential of all banks to move either up or down the vertical value chain as their existing market growth plateaus, regardless of where they currently compete.

4.4.2 Different sources of competition

Banks are no longer just competing amongst themselves. They have had to expand their horizon to consider competition from organisations and even industries never before considered and banks that may previously have underestimated up and coming market entrants such as Capitec are unlikely to do so again particularly considering Nedbank’s recent fall from the top 4 banks in South Africa, by value (Bonorchis, 2017). One research participant pointed out that “where five or six years ago, Nedbank may have considered themselves safe as one of the top four, this assumption is now being challenged. No bank is too big to fail and even the biggest banks need to work hard to stay at the top. If their competitive position is taken for granted, it may soon be up for grabs”.

A potential competitive trend that emerged during discussions with some but not all research participants was the threat that comes from convergence of industries and the disappearing perimeters that have historically separated sectors within the market. Examples of this are telecommunications and technology companies whose core business is not banking but have nonetheless become involved in the payments sector offering innovative payment options, particularly to serve the previously unmet needs of the rural market and small businesses. According to one research participant, the trend amongst many
companies or organisations is that they are “looking to build customer centric ecosystems that can take care of everything a customer may need” from banking, to cell phone contracts, to financial planning, to insurance. This way, once a customer is in the door, they never have to leave making the lifetime value of a customer, once acquired, much higher and making the switching costs higher too making them less likely to leave.

4.4.3 Barriers to entry and the introduction of FinTechs

The reality, according to research respondents, is that the barriers to entry to set up a new and fully-fledged bank are extremely high. The capital required to build the necessary systems and set up appropriate governance structures and processes are significant. The skills required in terms of system development, the regulatory environment and the inner workings of the banking industry operations are expensive and in short supply in the South African market, resulting in high costs and the need to bring in consultants and often, international resources.

Furthermore, the regulatory requirements and expectations from the South African Reserve Bank in order to be awarded a Section 16 banking licence in terms of “Banks Act” (1990) are extremely onerous and complex to navigate, implement and comply with. It is not a journey to be taken upon lightly and requires a team of highly skilled and experienced resources.

However, based on the above, the Competition Commission and the SARB are highly in favour of introducing additional competition to the South African banking industry in order to provide consumers with increased, better and more cost competitive options. The SARB is therefore, according to research participants, working within the bounds of the law to assist the process for those entrants who have commenced with the initiative to obtain a banking licence, in order to encourage the investment.

Although the high barriers to entry for a fully licenced bank are high, this is not to say that there is not very real opportunity for smaller technology based companies to enter the banking industry. Companies that have technology at the core of their capabilities are often better able to deploy innovative, unique and agile solutions. They are able to do this faster and more cost effectively than larger organisations,
whose core business is not to develop systems. By developing bespoke standalone solutions that “plug and play” with the broader banking infrastructure to perform specific and discreet functions that do not require a banking licence, smaller FinTech are able to enter the banking industry with relatively low barriers to overcome. This could be by partnering and collaborating with existing banks or bank entrants that may be struggling with particular technologies such as crypto currency and blockchain and for whom it would be more cost effective to outsource particular development. It could also involve launching app-based financial (investment, trading or payment) products directly to consumers as alternatives or at least supplements to the traditional banking model. Either way, it is clear from discussions with research participants that entry to the banking industry and competitor landscape is not limited to those players that want to develop fully licenced banks. The significantly reduced cost and time to market for technology-based companies to develop banking solutions does mean that the barriers to entry for this type of activity have significantly reduced.

4.4.4 The cost of interoperability

The significance of new markets entrants to the banking industry is not just in the potential battle for market share but also in the network economics required to run the banking industry and the exponential technological complexity and cost introduced every time a new “node” (a system, an ATM, a bank interface, etc.) is added to the network. This complexity, as raised by one research participant in particular, centres around interoperability, a critical concept for the banking system to function. The concept of interoperability dictates that all systems, devices and platforms regardless of the banking institution to which they belong, must speak the same language and be able to communicate and interact with each other. Without interoperability, customers utilising different institutions would not be able to transfer money to each other and clearing and settlement mechanisms between banking institutions would not be possible. However, interoperability is not free and with every new entrant comes a requirement for system development and configuration by all existing banking institutions to ensure that they can transact seamlessly with one another.
There is a further cost to banks through interoperability in that there is always a commercial arrangement that flows between banking institutions e.g. a homing fee to direct money to a particular account. This is to ensure that it is in the interests of all parties to cooperate. However, the agreed interoperability fees between banks have to be negotiated and this can place existing banks at a competitive advantage in comparison to the smaller FinTechs or new market entrants, as they are able to use their presence to negotiate better rates. According to one research participant, “new market entrants are forced to play game at the dictated price or risk not being able to interact with existing banks at all”. This increased barrier to entry is currently a subject of enquiry for the Competition Commission and it is possible in the near future that these fees will be centrally set and governed.

4.5 Path dependency and the ability for banks to adapt

The response below stems from the question of how well equipped existing banks are to respond to the changes brought about by digitisation and what may be hindering their ability to adapt.

Central to this discussion is the concept of path dependency, which suggests that an organisation’s ability to respond and adapt to change and thereby implement a desired strategy is limited by the events of the past (David, 2001). Unless an organisation is able to consciously break free from an entrenched way of doing things (systems, processes, culture, governance, etc.), the barriers to change are often too high to overcome (Morrey et al., 2012).

Sometimes, the perception of being too big to fail can be an organisation’s worst inhibitor to change as they are not able to envision or imagine a world in which they are not relevant and therefore do not take the need for change as seriously as they should. But history tells a different story, with lessons that the big banks should heed, of seemingly unstoppable organisations (Kodak, Encyclopaedia Britannica, Motorola) that now either cease to exist or have lost the competitive advantage in their core competency (Teece et al., 1997).
4.5.1  Ability to respond to industry changes and hindrances to doing so

According to research participants, there are a number of elements affecting not only their organisation’s ability to change but also and perhaps more importantly, the rate thereof. Unless banks make it a priority to stay abreast of the market and the competitive landscape and proactively implement change it simply will not happen or will not happen fast enough. The following factors were specifically highlighted:

4.5.1.1  Stringent and changing regulations imposed on the banks

According to research participants, South Africa is known for its incredibly robust regulation of the banking sector, which has placed the country in good stead to cope with much of the financial pressure felt by the rest of the world during the 2008 financial crisis (Erkens et al., 2012). However, although these regulations protected the country and the banks themselves from many potential negative outcomes (Ntim, Lindop, & Thomas, 2013), it is according to research participants also extremely complex, onerous and resource intensive to ensure compliance with the current central bank and industry standards. Add to this the fact that the focus of the regulator changes over the years as the industry matures. This means not just staying on top of existing regulations but constant adaptation of systems and processes to ensure adherence to new requirements brought in on a regular basis to further close any gaps or weaknesses identified in the systemic landscape.

4.5.1.2  Agility and time to market

Top of mind for all research participants was their ability to move quickly, whether it be to change systems, processes, products or strategies. Large organisations in particular are slow to react and even slower to implement change due to the bureaucracy and red tape that comes naturally with their size. Decisions take longer to make, approvals are difficult to get and in their defence the complexity of any change implemented, however minor, can be significant to navigate and the knock on effect exponential in terms of the business and integration touch points that require consideration and potential changes themselves. One research participant described bureaucracy as the “antagonist for change”,

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indicating that one of the primary battles of large organisations is to eliminate this element at all costs, even if this increases the risk of failure because an idea that never gets to market cannot be considered an innovation. One organisation has, where possible, transformed traditional monthly or quarterly decision making forums into a more regular, ad hoc and agile decision making structure that can convene to make fast decisions as and when required as opposed to holding up implementation progress for a predetermined cadence.

The faster an organisation can get a product or piece of technology to market, the lower the risk of intellectual property leakage and technical debt and the higher the return on investment. A number of instances were reported during discussions with research participants where a competitor launched a product or idea still in development within a particular company by receiving intelligence from poached employees and simply moving faster to launch a not perfect but workable solution. The reality as pointed out by a research participant is that “an imperfect first to market is infinitely more valuable than a perfect runner up”. Thus, the balance must be struck between speed to market and issues such as system stability and the reputational risk of launching before one is operationally ready.

However, not all pace of change relates to the public launch of a product. It also relates to continuous improvement within the organisation and the ability to recognise and act on opportunities for efficiency and effectiveness thus reducing cost, lowering risk and capital requirements, increasing automation, minimising manual error and improving customer service.

4.5.1.3 Processes and culture imposed over years

One of the key observations and most significant findings of this piece of research paper was that except for those in the independent consulting or advisory field, there was an appreciable lack of acknowledgement or allusion to any problems with deeply embedded patterns, ways of thinking or doing things and ultimately mind-sets within the research participants respective organisations that may be affecting their ability to implement change. The views offered by research participants indicated that they were satisfied with their processes for change and their culture and attitude towards it. Although there was acknowledgement of a
need for continuous improvement, research participants were not quick to admit a fundamental problem with the way things are done or a need for a complete overhaul. It appears from these responses that the norm is accepted.

However, we know how long it takes to implement change within any of these large organisations and how inefficient they can be in terms of decision-making and execution of strategic initiatives. This raises the question as to whether they too may be victims of path dependency and in denial about their ability to adapt to change and thereby their potential for redundancy.

Is it simply untenable to admit that the processes within an organisation are not working or do the banks genuinely think that they are better at change than they are? Either way, perhaps research participant themselves are too embedded in the organisations within which they operate to see clearly the inefficiencies which exist. Perhaps they are somewhat blinded to their own entrenched behaviours. In my opinion the views of research participants do not match what we see in the industry – save for a few organisations. If all banks were so innovative and effective at implementing change, they would perhaps not be in the position that many of them are.

4.5.1.4 Legacy technology

One of the most pressing issues raised by research participants was that of the legacy technology stacks on which the big banks are dependent. This issue is counterintuitive as on the one hand, it is a key driver behind the need for change, due to the risk associated with running on old infrastructure. On the other hand, it is one of the key elements hindering change due to the complexity of the existing systems.

According to research participants within the big banks, legacy technology creates the following risks and issues:

- The need for change: The older the technology the more it tends to break resulting in increased downtime and inability to service the business and its customers. A failure to proactively plan for and implement changes to these legacy systems will result in outdated technology that is slow in
terms of its processing performance, unstable in terms of downtime and system errors and inflexible in terms of its agility and extendibility;

- A hindrance to change: Much of the legacy technology stacks were built 20 to 50 years ago and over the decades technology has advance, additional functionality has been added, system patches have been put in to fix system defects and the interfaces between multiple systems have become incredibly complex. Furthermore, the resources who built the original system stack are reaching retirement or have left the organisation, resulting in a very small handful of people who know exactly how all the technology hangs together. This means that making any seemingly small change to the system can have negative and sometimes disastrous consequences and knock on effects for the rest of the system, resulting in further instability. Getting system changes right is therefore time consuming and expensive and affects the rate at which the banks are able to introduce change without throwing the entire core banking system into disarray.

Discussions with research participants from both small FinTechs and large banks revealed a significant advantage on the part of smaller FinTechs in terms of their speed to market and ability to move quickly compared to larger, more cumbersome banks. However, they can be at a disadvantage when it comes to capital outlay.

4.5.2 Ability to innovate

Big banks all appear to think they are doing really well in terms of innovation. New banks also think they are doing well. However, when comparing these comments to the responses from FinTechs, it becomes clear that the reality is that they are worlds apart. Independent opinions from consultants who have worked across multiple banking institutions are that innovation in the big banks, as well as the new ones, is at a very superficial level. Existing banks are not reinventing the core of what they do; they are merely giving it a “facelift”, as termed by one research participant, in terms of customer service and addressing the minimum requirements of keeping their systems from completely falling over. The new banks are claiming exciting new innovation but the reality is that they are based
on the traditional banking model, with elements of digitisation and granted, a lower cost structure and faster, more efficient and modern systems infrastructure. No one other than the FinTechs is even acknowledging that the banking model itself could fundamentally change in the near future and they are certainly not engineering for it as their core focus. When asked about the future of cryptocurrency, one research participant said, “We’re still a hundred years away from that.”

FinTechs on the other hand are fully on board with a future and completely alternative way of thinking that flips the traditional banking model on its head and assumes an entirely different core infrastructure, or rather takes no assumptions as a given. They envision a model based on cryptocurrency and eventually an entirely bankless world.

4.6 Future possibilities

The response below stems from the research objective to establish the general sentiment and reaction of industry experts to certain speculation around the future of the banking industry in South Africa.

4.6.1 Speculation around cryptocurrency

There is a lot of speculation and excitement in the financial markets around cryptocurrency and Bitcoin. Some people claim that Bitcoin will fundamentally alter the way that the financial markets and specifically payment systems operate (Narayanan, Bonneau, Felten, Miller, & Goldfeder, 2016). Others believe that it is inherently flawed, with a limited lifespan, comparing it to a “bubble” (Leubsdorf, 2017) that will eventually pop. Although this research will not delve into the detail around cryptocurrency, the workings of Bitcoin or the merits thereof, it is necessary for the purposes of this discussion to outline briefly, what it is.

In very simplistic terms, Bitcoin is a form of digital currency that can be transferred directly from peer-to-peer, through an encrypted algorithm. Through the use of blockchain technology, the integrity and security of all Bitcoin transactions is maintained, preventing fraudulent activity without the need for a bank to act as an intermediary verifying the authenticity thereof (Narayanan et al., 2016).
Although instinctively the prospects on the horizon around cryptocurrencies seem very exciting and something that the existing banks would naturally be striving towards, it does not appear from discussions with research participants that this is where their focus lies. This may be for a number of the following reasons provided by research participants:

- The complexity involved;
- The existing infrastructure that would have to change;
- Other priorities merely to remain afloat in terms of legacy issues;
- A lack of acknowledgement that this will completely transform the banking sector or at least the pace at which this change is likely to occur; and
- The fact that it is highly energy inefficient and therefore not in line with the current focus on going green.

However, cryptocurrency is interesting in that there is no government regulation behind it (Grinberg, 2012). There is no money supply from a central source and ultimately, transactions are determined by consensus. Following this thinking, one of the most interesting reasons for the lack of focus in this area was a comment from one research participant stating that “we do not want to do anything to make the regulator uncomfortable”, which is of particular importance for the new competitors entering the market and wanting to portray a sense of control to the regulator. This comment indicates a broader resistance to fundamental change in the industry and an element of fear of the unknown. South Africa has a very well regulated banking environment and this has helped mitigate and avoid many of the risks that have materialised throughout the global financial sector. It appears from discussion with this particular research participant that the traditional banking model is seen as stable and the idea of introducing cryptocurrencies and blockchain technology in conflict with this stability. Too much focus of cryptocurrency it appears could be viewed as uprooting the traditional banking model, creating discomfort and potential instability or at the very least, a lack of confidence from the regulator in a bank’s ability to deliver the minimum requirements of the traditional banking model. Flowing from the regulator’s focus on the avoidance of the introduction of systemic risk to the
industry as a whole it can be inferred that this technology is something that has the potential to do just that, thereby destabilising the industry as a whole.

This is not to say that research participants do not see the value in the application potential of blockchain technology. It is simply not where the current focus lies.

4.6.2 Potential redundancy of traditional banks

The view strongly echoed by all research participants other than those from small FinTech companies was that the traditional banking model is here to stay for the foreseeable future. They did not indicate any concerns about the possible redundancy of traditional banks in the future and in fact dismissed the idea relatively quickly. The reasoning behind their lack of concern centred around the large network of banking infrastructure that would have to change and be replaced in order for any of the FinTech companies and cryptocurrency technologies to function independently – without the use of traditional banks acting as intermediaries. They seemed to view FinTechs and cryptocurrency technology as something that would plug into their existing world rather than something that could threaten their existence.

Even the new market entrants, although focused on market disruption, do not appear to be strategising around the banking model itself but rather structural and process efficiencies, banking channels, digitisation and the customer value proposition and experience. All of the banks seem to gravitate towards discussion around rewards programmes when directed to talking about what differentiates them. The fundamental model upon which those rewards are based is not significantly different from bank to bank and research participants did not so much as mention a scenario in which the banking industry does not centre around their existence.

Research participants in the smaller FinTech companies were in general much more forward looking and open minded about the possibilities of the future. They had not resigned themselves to one outcome and were less limited in their thinking by perceived barriers, such as existing infrastructure, models or processes. Not only did they think that a bankless world was a possibility in the
near future but that the technology and infrastructure to support such a world is already here and being used.

4.7 Conclusion

Consensus amongst research participants is that the world of technology is changing at an exponential rate and that digitisation is the way of the future for the banking industry. The sentiment around digital transformation is largely positive, with most commentary focusing on the enormous potential and opportunity that it brings. However, the inevitable challenges and threats that come with such change are very definitely acknowledged and it appears that they are being taken very seriously.

From discussions with research participants, banks appear to be very focused on shifting customer expectations and are moulding much of what they do to match customer needs. A holistically positive customer experience is seen as central to all decision making around products, servicing channels and processes and the banking model as a whole.

The competitive landscape of the banking sector has commenced with a period of change that will see increased competition from a number of newly licenced banks, cross-industry entrants as well as smaller FinTechs. Research participants appear to be taking serious note of all competition being careful not to underestimate anyone. However, it is unclear what specific counter strategies they have in place to prepare for the changing competition.

The most significant observation from this research is there appears to be an incongruence between the type of change described in the literature reviewed, a change which has the potential to fundamentally alter the structure of the banking industry, and the responses of most research participants. Although research participants acknowledge a significant change within the banking industry as a result of digitisation and therefore the need to implement change within their organisations, they appear much slower to acknowledge any deficiency in their ability to respond to this change. They also do not seem to acknowledge the type of revolutionary change described in the literature, a change that would see banks becoming redundant. As a result of this disparity, I believe that banks are
suffering from path dependencies that are limiting their thinking and preventing them from truly revolutionary innovation. By failing to focus adequately on the technology threatening to alter the traditional banking model as a whole and viewing the redundancy of this model through the surge of cryptocurrency as an improbable, if not distant possibility, banks are selling themselves short.

A failure to acknowledge a need for fundamental change in the very way banks operate could result in a situation where banks are unable to keep up with the pace of change within the market or where their response to change is too late. As a worst-case scenario, this could lead to redundancy but at best, a loss of market share from some of the biggest players in the industry.

4.8 Recommendations

4.8.1 How should management take action

The response below discusses the implications for management and stems from the research objective to identify the key factors that South African banks should consider in order to remain relevant and competitive in this rapidly changing environment.

With the pace of technological change being experienced, the shifting and ever increasing customer expectations, the opportunities that technology brings and the increasing threats in the form of new competition, banks need to seriously evaluate their ability to adapt and to remain relevant and competitive in the changing market. The following should be considered to enable banks for the future:

- Areas for exploration and investigation through research and development programmes with formally reported recommendations to Board:
  - Investigate the “Uber-equivalent” model for the banking industry;
  - Look at crowd sourcing ideas such that the likelihood of delivering a customer experience that people want is increased;
  - Fundamentally prepare for all future possibilities, including speculation around cryptocurrency and a bankless world;

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- Investigate potential partnerships through acquisitions, collaboration, or joint ventures with FinTechs;

- Self-assessments to be conducted at an Executive and Senior Management level, followed by independent assessment by external audit or advisory opinion, as deemed appropriate. Assessments to cover the following topics:
  - The cost of infrastructure (physical branches, large call centres, ATMs and cash handling fees, etc.) and how to potentially minimise this;
  - Stability of core banking systems and efficiency and effectiveness of system maintenance and development (speed to market, agility of applications, speed of transactions and reliability, etc.);

- Proactive breaking of path dependencies through formal change management intervention programme, including workshops on:
  - Creating new paths and ways of thinking to maintain the required pace of change;
  - Young talent leadership and innovation;
  - International trends and history i.e. learn from the past and from what other industry leaders are doing;
  - Ability to reinvent and questioning processes and culture;
  - Shifting change resistant attitudes through case studies to increase realisation that no organisation or industry is too big to fail;

- Principles to follow:
  - Within reason and without introducing system instability, launch now and course correct along the way to ensure that the time from idea generation to market delivery is fast enough that innovations do not become outdated by the time they are launched;
  - Run strategic interventions in parallel with current legacy upgrade initiatives to avoid being left behind altogether and ultimately, becoming redundant;
  - Invest in innovation by formally budgeting for it now.
4.8.2  How can the academic community take this research further

Based on some of the key questions raised in the above research as well as the delimitations previously highlighted, there is an opportunity to conduct further academic research into the feasibility of cryptocurrencies as a primary form of transacting in South Africa as well as the likelihood and practicalities of an entirely bankless economy.

More specifically, further research is required into the sustainability of Bitcoin (and other cryptocurrencies) in order to obtain a view on whether the Bitcoin bubble (Leubsdorf, 2017) is likely to burst or maintain its growth trajectory.

There would be value in additional research to answer questions around how cryptocurrency infrastructure could be phased into the existing and traditional banking model, how its theoretical investment and trading value can be translated into more intrinsic and practical day-to-day transactional value and the expected timing thereof.

This would assist management within existing banks to more accurately predict the future of banking in South Africa and to strategise accordingly. It may also assist in providing the reality check needed to break some of their existing path dependencies and deeply entrenched ways of thinking.
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