# The Benefits of Open Banking to Consumers, Banks and FinTech Companies

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in collaboration with Business School Netherlands
for the degree of Doctor of Business Administration

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# Candidate Declaration

I hereby declare that:

1 I have not been enrolled for another award of the University, or other academic or professional organisation, whilst undertaking my research degree.

2 None of the material contained in the thesis has been used in any other submission for an academic award.

3 I am aware of and understand the University's policy on plagiarism and certify that this thesis is my own work. The use of all published or other sources of material consulted have been properly and fully acknowledged.

4 The work conducted towards the thesis has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy.

5 The word count is 60,000.

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# Abstract

This thesis presents a qualitative grounded theory investigation into the possible benefits of open banking for consumers, traditional banks and FinTech companies, with the study exploring the impact of open banking regulation on the banking industry as regulatory actions occur globally, underpinning rapid innovation in banking, and effectively supporting the rise of the FinTech phenomenon.

The general views held by traditional bankers on open banking are explored together with the paths available to them, as they seek compliance with recently issued data sharing regulation, and what this may mean for consumers and FinTech companies.

The role played by FinTech companies is also explored, including the possible benefits they derive and contribute to banks and consumers. The benefits to consumers are presented based on the findings and the literature, along with the benefits to banks and FinTech companies, based on the research.

Purposive sampling was employed, arriving at a representative sample of top banking and FinTech leaders against which a subjectivist approach application of semi-structured interviews was administered. Data analysis and coding generated 4 themes from which emergent theory arose, forming part of the contribution to knowledge. This emergent theory argues that the current structure of bank business models appears unsustainable under consumer-led pressure for innovative and convenient, independent mobile based products; to respond, bank and FinTech collaboration is key.

The theory provides a basis for recommendations that form contributions to practice, designed to support banks as they navigate the transformative nature of the open banking regulation before them. These contributions take the form of a two-part model integrated strategic review process by which banks can make better informed decisions, ensuring improved sustainability and systemic stability. Practice recommendations were also provided for the consideration of FinTech companies.

Consumers benefit from the posited contribution to practice as the industry reshapes to specifically meet their needs based on collaboration, reduced systemic costs, increased innovation and just sufficient regulation.

Whilst regulators were not a focus of this research, significant findings emerged from the data which have been presented, along with a contribution to practice by way of a set of recommendations for the consideration of regulators seeking to develop an appropriate response to the rapid innovation coming from the FinTech companies.

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I would like to start off with the *dedication* of this thesis; to my late parents Z.T.Z and G.D.Z, thank you for all the encouragement, support and guidance to keep reaching for the stars...

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# Table of Contents

**Abstract** 3

**Acknowledgements** 4

**Table of Contents** 5

**List of Figures** 8

**List of Tables** 9

**Glossary of Terms** 11

**1 Introduction** 12

1.1 Setting the Scene 12

1.2 My Interest in Researching This Problem 12

1.3 A Personal Experiment Conducted at the Bottom of the Pyramid 14

1.4 The Observed Gap in Traditional Banking Services 14

1.5 Research Aim 15

1.6 Research Objectives 16

1.7 Structure of the Thesis 16

1.8 Summary and Linking Comment 17

**2 Literature Review** 18

2.1 Introduction 18

2.2 Literature Review Method 23

2.3 Literature Search Strategy 25

2.4 Banks and FinTechs: Open Banking 26

2.5 Changing demands of the Consumer 32

2.6 The Regulatory environment 40

2.7 Financial Inclusion and FinTechs 47

2.8 Industry Initiatives Advancing Open Banking 49

2.9 Regulatory Concerns: Systemic Risk and Stability 50

2.10 Research Questions 52

2.11 Summary 54

2.12 Linking Comment 56

**3 Research Design and Methodology** 57

3.1 Chapter Outline 57

3.2 Introduction 57

3.3 Methodology 58

3.4 Role of the Researcher 61

3.5 Data Sources and Collection Methods 63

3.5.1 Research Participants 63

3.5.2 Interview Sample ... 67
3.5.3 Data Collection ... 71
3.5.4 Data Collection Procedure ... 71
3.5.4.1 Data Collection Phase One ... 73
3.5.4.2 Data Collection Phase Two ... 74

3.6 Data Analysis ... 76

3.7 Data Analysis Procedure ... 78

3.8 Analysing and processing the data ... 80

3.9 Replication of the field work ... 80

3.10 Research Design ... 81

3.11 Credibility ... 82

3.12 Ethical Considerations ... 83

3.13 Summary ... 84

3.14 Linking Comment ... 85

**4 Research Findings ... 86**

4.1 Introduction ... 86

4.2 Characteristic views on open banking by the participant groups ... 86
4.2.1 Bank Exec characteristic views on open banking ... 87
4.2.2 Fin Exec characteristic views on open banking ... 90

4.3 Characteristic views of Traditional Banks on open banking ... 93
4.3.1 From the Bank Exec Perspective ... 94
4.3.2 From The Fin Exec Perspective ... 96

4.4 Characteristic views of FinTech Companies on open banking ... 99
4.4.1 From the Bank Exec Perspective ... 100
4.4.2 From the Fin Exec Perspective ... 102

4.5 Investigating the Data ... 104
4.5.1 The Data Analysis Process Arriving at Theme 1 ... 106
4.5.1.1 Banking Business Model Change ... 107
4.5.1.2 Banks Must Collaborate to Access New Data to Innovate ... 110
4.5.1.3 Banks Are Likely to Become Utilities or Background Actors ... 114
4.5.1.4 Banks Are Risk Averse, Slow Speed, Agility is an Issue ... 116
4.5.1.5 Banks Costs of Usage Remains High due to Infrastructure etc ... 118
4.5.2 The Data Analysis Process Arriving at Theme 2 ... 120
4.5.2.1 Consumers Still Want Trust Factor Given by Banks ... 121
4.5.2.2 Consumers Demand and Enjoy Digital Innovation and Experience. 123
4.5.2.3 Fintech Innovation and Product Convenience Attracts Customers... 126
4.5.2.4 Banks Have Failed Clients Especially Unbanked and Underbanked 129
4.5.2.5 Open Banking – Customer Owns Their Data ... 132
4.5.3 The Data Analysis Process Arriving at Theme 3 ... 134
4.5.3.1 Banks Require Education on FinTech and Open Banking ... 135
4.5.3.2 Open Banking Brings Ecosystems ... 139
4.5.3.3 Banks Must Get on Train or Risk Falling Behind ... 141
4.5.3.4 FinTechs Bring Financial Inclusion and Must Train Clients ... 145
4.5.3.5 Banks Benefit Strategically, plus Value Add and Financially ... 148
4.5.4 The Data Analysis Process Arriving at Theme 4 ... 151
4.5.4.1 Regulators Want Industry Competition and Support Open Banking 153

4.5.4.2 Open Banking Beneficial to Industry – Competition & Expansion..156
4.5.4.3 Regulator in South Africa Has Not Yet Issued a Framework or Standards ........ 159
4.5.4.4 Banks Believe They Own Customer Data ........ 162
4.5.4.5 TechFin Threat is Bigger – Google®, Apple®, MNOs and others ........ 165
4.6 Heat Map of Findings ........ 168
4.7 Summary ........ 169
4.8 Linking Comment ........ 170
**5 Discussion ........ 171**
5.1 Introduction ........ 171
5.2 Summary of Key Findings ........ 173
5.2.1 Status Quo Unsustainable ........ 173
5.2.2 Improved User Experience ........ 174
5.2.3 Collaboration is Key ........ 176
5.2.4 Regulatory Support ........ 178
5.3 Interpretations of the Findings ........ 180
5.3.1 The Consumer ........ 180
5.3.2 The Traditional Banks ........ 181
5.3.3 The FinTech companies ........ 185
5.4 Implications of the Findings ........ 188
5.5 Summary and Linking Comment ........ 190
**6 Key Conclusions ........ 191**
6.1 Responding to the Research Aim ........ 191
6.2 Contribution to Knowledge ........ 197
6.3 Contribution to Practice ........ 199
6.3.1 Traditional Banks ........ 199
6.3.2 FinTech Companies ........ 201
6.3.3 Regulatory Supervision ........ 201
6.4 Limitations and Future Research ........ 202
6.5 Personal Reflections ........ 203
**References ........ 205**
**Appendix 1 – Africa the Good News ........ 214**
**Appendix 2 – Permission to use content ........ 224**
**Appendix 3 – Participant Consent Form ........ 226**
**Appendix 4 – Participant Information Sheet ........ 228**
**Appendix 5 – Reference codes – Banking Business Model Change ........ 232**
**Appendix 6 – Reference codes – Banks are Risk Averse & Slow ........ 241**
**Appendix 7 – Reference codes – Banks Believe They Own Customer Data ........ 244**
**Appendix 8 – Reference codes – Banks Must Collaborate to Access New Data ... 249**

# List of Figures


Figure 1: Definition of FinTech ..... 19
Figure 2: Open Banking Value Proposition Framework ..... 19
Figure 3: PSD2 Development Timeline ..... 20
Figure 4: Extract - 2 of 14 Main Review Types Characterised by Methods Used.. 24
Figure 5: FinTech Tree - A Taxonomy ..... 29
Figure 6: FinTech business models ranked from most to least common ..... 30
Figure 7: Locating the Millennial & Gen Z ..... 33
Figure 8: Global population of millennials now second to Gen Z from 2019 ..... 34
Figure 9: Millennials Trust Levels with Businesses ..... 35
Figure 10: Engagement with Primary Bank, amongst Generations ..... 37
Figure 11: The FinTech Phenomenon ..... 39
Figure 12: Implementation of PSD 2 - 2018 & 2019 ..... 43
Figure 13: Global View of Open Banking Developments ..... 43
Figure 14: Comparison of Open Banking Frameworks ..... 44
Figure 15: G20 2016 High Level Principles for Digital Financial Inclusion ..... 45
Figure 16: The India Stack ..... 46
Figure 17: Stats of Mobile Wallets vs Bank Accounts ..... 48
Figure 18: Systemic Risk in the 2008 Financial Crisis ..... 51
Figure 19: What is Systemic Risk? ..... 52
Figure 20: Extract of bibliography ..... 54
Figure 21: Factors influencing quality in the conduct of grounded theory research ..... 61
Figure 22: Data Analysis in Qualitative Research ..... 65
Figure 23: Intensive Interview - Interviewer ..... 66
Figure 24: Intensive Interview - Participant ..... 66
Figure 25: Sample LinkedIn Invitation Message ..... 68

# List of Tables


Table 1: Participant Listing ........ 69
Table 2: Interview Guide ........ 73
Table 3: Preliminary Summary of Findings ........ 74
Table 4: Advanced coding ........ 77
Table 5: NVivo Top 20 Codes Generated ........ 79
Table 6: Study Replication Steps ........ 81
Table 7: Banking Business Model Change - Sub Category Data ........ 106
Table 8: Data Reduction Resulting in Theme 1 ........ 107
Table 9: Banking Business Model Change ........ 110
Table 10: Banks Must Collaborate to Access New Data to Innovate ........ 114
Table 11: Banks Likely to Become Utilities or Background Actors ........ 116
Table 12: Banks Are Risk Averse, Slow Speed, Agility is an Issue ........ 118
Table 13: Banks Costs of Usage Remains High due to Infrastructure etc ........ 120
Table 14: Data Reduction Resulting in Theme 2 ........ 121
Table 15: Customers Still Want Trust Factor Given by Banks ........ 123
Table 16: Consumers Demand & Enjoy Digital Innovation & Experience ........ 126
Table 17: FinTech Innovation and Product Convenience Attracts Customers ........ 129
Table 18: Banks Have Failed Clients Especially Unbanked and Underbanked ........ 131
Table 19: Open Banking - Customer Owns Their Data ........ 134
Table 20: Data Reduction Resulting in Theme 3 ........ 135
Table 21: Banks Require Education on FinTech and Open Banking ........ 138
Table 22: Open Banking Brings Ecosystems ........ 141
Table 23: Banks Must Get on Train or Risk Falling Behind ........ 144
Table 24: FinTechs Bring Financial Inclusion, Must Train Clients ........ 148
Table 25: Banks Benefit Strategically, plus Value Add and Financially ........ 151
Table 26: Data Reduction Resulting in Theme 4 ........ 152
Table 27: Regulators Want Industry Competition & Support Open Banking ........ 156
Table 28: Open Banking Beneficial to Industry - Competition & Expansion ........ 159
Table 29: Regulator in SA Has Not Yet Issued a Framework or Standards ........ 162
Table 30: Banks Believe They Own Customer Data ........ 165
Table 31: TechFin Threat is Bigger - Google®, Apple®, MNOs and others ........ 167
Table 32: Heat Map - Participant Findings against Codes ........ 169
Table 33: Strategic Change and Renewal Process ........ 194

**Table 34: Strategic Response Matrix ............................................................ 197**
**Table 35: Phase 1 Review Model – inputs (sessions)................................................ 200**
**Table 36: Phase 1 Review Model – outputs (quadrant)........................................... 200**

# Glossary of Terms

| | |
|---|---|
| A.I. | Artificial Intelligence |
| API | Application Programming Interfaces |
| APPS | Computer or Mobile Applications |
| BIS | Bank for International Settlements |
| BCBS | Basle Committee on Banking Supervision |
| BOE | Bank of England |
| CEO | Chief Executive Officer |
| EBA | European Banking Authority |
| EU | European Union |
| Gen Z | Generation Z |
| GDP | Gross Domestic Product |
| IFWG | Intergovernmental FinTech Working Group |
| IMF | International Monetary Fund |
| KYC | Know Your Customer |
| MNOs | Mobile Network Operators |
| PSD2 | Payment Services Directive 2 |
| RegTech | Regulatory Technology |
| RTS | Regulatory Technical Standards on strong customer authentication and secure communication under PSD2 |
| SMME | Small, Micro and Medium Enterprises |
| UK | United Kingdom |
| UN | United Nations |
| U.S. | United States |

# 1 Introduction

## 1.1 Setting the Scene

This journey starts with the back-story of a young professional banker who harboured a passion for technology and uplifting people. The recounting of this story is intrinsic to this research in that it is the impeller for what transpired over the following decade, leading to the point where this became a key part of the motivation for this study.

The story starts with my professional journey in banking, which has spanned the last 38 years at 4 traditional banks, across 4 countries. I have also been a bank CEO for roughly the last 20 years, running large divisions of a listed bank, which was voted the most innovative bank in the world several times over a few years by different prestigious awarding bodies. I was also the CEO of a state bank for 2 years and held the position of group CEO of a listed bank for a period just under 4 years . During my time leading this particular institution the bank was the first to launch into its market in 2006, an innovative technology based product, being an early iteration of cellphone banking. It is also important to mention that after this followed the 2008 launch of the Banking Sign Language Booklet, which was a collaboration between the bank and 3 agencies that dealt with the hearing impaired. These products that were unique at the time, were the beginnings of my desire to have a positive impact on the challenge of reaching underserved markets through the use of technology. This desire was to remain with me throughout the rest of my traditional banking career, eventually even to the point of providing inexpensive traditional banking services to the low income market in South Africa.

Enter open banking. It was inevitable that I would eventually be so drawn to the opportunities presented by this phenomenon which was building momentum in the financial services space. I then took the logical step and shifted focus to transition into the open banking space, founding and leading a financial technology company (FinTech).

## 1.2 My Interest in Researching This Problem

I have always harboured a keen interest in Financial Inclusion and the deepening of access to financial services for the simple reason that I felt that this was one of the quickest ways of expanding the economy of a catchment area, town, city or nation. Access to funding is a seriously limiting factor in the quest for economic survival and improving the circumstances of individuals from subsistence living to becoming a more meaningful contributor to their local economy, thereby also improving their family's financial circumstances. Prahalad and Hart (1999) discuss the urgent need for multi-national companies to find new radically innovative ways to extract the untapped value at the bottom of the pyramid where, they estimated, over 4 billion people lie in wait for opportunities. Prahalad and Hart (1999) posit that new innovative technologies coupled with new business models are what will cause the shift in attention towards the untapped poor, driving sustainability in growth from a previously unseen market, via these new ways of doing business.

My interest also stems from my professional observation of a shift in the behaviour patterns of those consumers who do have access to a broad range of financial services and how they demand increasingly improved products that meet their needs and aspirations more satisfyingly. This observed shift is coupled with clear price sensitivity which calls for a strong value-for-money approach to paying for products and services, the results of which would be an ever increasing compression of margin for banks and other financial service providers, forcing a change in business model strategies in a bid to manage costs downwards whilst accessing greater transactional volumes through the use of new product delivery channels.

In further support of my observed shift in the behaviour of consumers, especially millennials, Zandamela (2008) provides evidence and discusses the development of a mobile banking application in the developing nation of Botswana, which saw rapid take up and growth, becoming a significant service delivery channel for the traditional bank which brought to market this early iteration of a digital banking offering (see appendix 1).

This is where an entry point has been created for FinTech companies due to the fact that they bring agility, technology and innovation into the market, responding to the opportunities presented by the relatively poor response from traditional players in the market, mostly due to their legacy core banking systems and high cost structures which limit their ability for an agile on-point response (Hill, 2018).

## 1.3 A Personal Experiment Conducted at the Bottom of the Pyramid

Whilst running a large traditional bank in 2007 as CEO in Botswana, the researcher in collaboration with the manager of the Maun branch developed a financial inclusion experiment that was conducted to advance micro loans, of up to P3,000 each (±US$ 300), which were given to mostly women street vendors as a capital injection into each of their businesses. This was administered by the manager of Maun branch, a far outlying outlet located in the tourist town of Maun in northern Botswana. The experiment was conducted for a period of about 12 months and proved to be a resounding success in that it empowered the borrowers to achieve higher turnovers through their businesses, making increased profits with which they were able to improve the lives of their families. This ring-fenced loan portfolio, authorised by the researcher to a fund level of about P500,000 (±US$ 50,000) performed exceptionally well with all funds repaid by the borrowers, which was a credit to the branch manager and his team. They also provided financial literacy training, support and guidance to the borrowers.

Key observations from this experiment were the complete willingness of the borrowers to repay their loans and the increased economic activity generated by the street vendors, leading to increased profits which were re-invested into their businesses, thereby maintaining a higher level of performance for a sustained period of time after the loan was repaid. A distinctive observation was on the willingness of the borrowers to learn basic methods which improved their ability to manage their businesses with greater skill, coupled with stronger money management through the financial literacy support provided by the branch team. Appendix 1 provides some additional insight on Botswana's first cellphone banking product introduced by the bank during October 2006, just before the above experiment was conducted, as a financial inclusion intervention (Zandamela, 2008).

## 1.4 The Observed Gap in Traditional Banking Services

General observations of the banking industry world-wide reveal that these institutions are not readily able to provide adequate banking services at the bottom end of the market due to their business models and high cost structures which result in their products being premium priced and quite expensive for the consumption of the underbanked or underserved communities (Vives, 2017). This unsustainable situation is part of the reason that a gap has arisen in the provision of banking and financial services to these communities, giving rise, in part, to the phenomenon of FinTech companies which are able to develop simpler, more appropriate products to meet the needs of these consumers. This is achieved at a significantly reduced cost based on the low cost structures carried by these companies, with these cost benefits being passed on to consumers (Lee and Shin, 2018). Whilst there may be additional reasons for the rise of FinTech companies to bring innovative services to various customer types, the opportunity presented for financial inclusion is enormous as these companies are able to deliver these products and services efficiently whereas the large traditional banks are unable to achieve the same performance due to their high cost structures, (IMF, 2019).

In addition to their ability to develop and deliver products at a significantly lower cost point, FinTech companies are also able to respond quite dynamically to the product demands and needs of their customers due to their shorter development and release cycles based on their advanced technological platforms and agile processes.

In a space that is similar to that of the FinTech companies are the new styled digital banking companies that have recently arisen to take advantage of the inflexibility of incumbent banks. These newcomers are often referred to as “challenger banks” or “neobanks”, which tend to adopt a much lighter and cost efficient business model to that of conventional banks. They also locate themselves in the banking industry as licenced banks, often falling under the regulatory structures guiding established banks as regards their deposit taking activities, but employ an advanced technology approach. When compared to the traditional banks, it is quite easy to understand that their low cost model is attributable to their almost non-existent physical footprint and presence, which is coupled with the use of advanced technology to reach their clients and deliver products. This is in stark contrast to the infrastructure heavy channels that the conventional banks use, which still tends to rely extensively on a branch network to reach customers.

## 1.5 Research Aim

The role that FinTech companies expect to fulfil in the banking sector has not generally been investigated, especially as regards their interplay with traditional banks and the resultant benefits to either of these companies as a result of this. Researchers seem to have focused their attention on what the banks are doing wrong and on what customer sentiment is towards banks, expressing their willingness to consume the offerings of FinTech product providers (Ozili, 2018). This will be discussed in greater detail in sections 4.10.1 and 5.2.2.

The research aim of this thesis was to address the identified gap in the literature by researching the following:-

*What benefits accrue to the traditional banks and FinTech companies through open banking and how can these institutions be encouraged to collaborate to take advantage of this, thereby increasing the benefits to consumers?*

## 1.6 Research Objectives

In support of the achievement of the research aim, the research objectives for this thesis were to:

1. Discover the nature of the current attitude held by banks towards FinTech companies.
2. Investigate the understanding banks have of the role played by FinTech companies in the new regulatory environment.
3. Explore the stance held by FinTech companies towards traditional banks.
4. Examine how the banks could derive value from relationships with FinTech companies.

## 1.7 Structure of the Thesis

This chapter presents the researcher's background and reasons for the study, along with the aims and objectives for the study.

Chapter 2 is where the available literature is reviewed and discussed, presenting data drawn from the consumer side of the research and showing where the research gaps lie in the literature and where the proposed research direction flows from this.

Chapter 3 deals with the research philosophy and selected methodology by which the research objectives may be achieved. The data collection method is outlined, as is the method of analysis and the ethical considerations are also covered.

Chapter 4 presents the research findings and the analysis of the collected primary data, leading to the significance of the findings.

Chapter 5 presents the discussion and interpretations of this thesis where the response to the research question is discussed, and the implications of the study.

Chapter 6 deals with key conclusions, the contributions to knowledge and practice, the limitations and future research directions and closes with a personal reflection section.

In the Introduction chapter and in chapter 6, section 6.5 which deals with my final personal reflections, the self-descriptor "I" has been used as this was deemed appropriate. However, in keeping with good academic practice, henceforth when referring to the self, the "researcher" shall be the descriptor.

## 1.8 Summary and Linking Comment

This chapter dealt with an introduction to the thesis and gave the reader some background to the researcher's interest in the study and the motivations for the undertaking of this work.

Chapter 2 leads into the literature review and the strategies employed are also discussed, taking the reader through the thinking behind the chosen review method. The research questions are also developed as a result of this process, which will guide the study as it unfolds further.

# 2 Literature Review

## 2.1 Introduction

In chapter 1 of this thesis the researcher discusses the performance gap that exists between the current services provided by traditional banks to their customers, especially at higher income bands, and the services provided to those potential customers that are predominantly unbanked and who occupy the lower income brackets. This disparity in the provision of banking services has arisen due to various reasons, some of which are to be identified from the available literature and discussed in this chapter. The Literature Review shall also seek out, discuss and critique the available literature in the emerging industry segment of the FinTech companies, with a particular focus on those that participate in open banking activities, in association with established Banks. The discussion also gives attention to the consumer of financial services as they are the main target of all the entities in this industry and their changing needs must be met, especially as their demands have begun to shift significantly, as shall shortly become evident.

In their recent article, Goldstein, Jiang, & Karolyi (2019) make mention of their findings on the available literature regarding the FinTech phenomenon, decrying the “dearth of published research” despite the rapid and explosive growth in the global industry. Almost no research has surfaced regarding the specific dimension of open banking, which is where the greater part of the interaction between incumbent banks and FinTech entities is most likely to take place in terms of the provision of value added banking services to consumers, especially the underserved markets.

Various types of financial technology companies exist in the market with diverse applications and approaches to business models. In order to assist the audience on which aspect of FinTech is the focus of the research for this thesis, the researcher has developed the definition of a FinTech entity operating in the open banking environment as it pertains to this study, articulated in *Figure 1* below.

***Figure 1: Definition of FinTech***

*A FinTech is an authorised third party service provider in the financial services sector employing secure advanced technology to develop cutting edge products and services which accurately meet the needs of customers, accessing customer data by permission, which is located in the secure systems of banking institutions.*

*The process of accessing customer data, with their approval, at banks by a FinTech using the advanced secure method provided by Application Programming Interfaces so as to provide innovative products and services is called Open Banking.*

***Source: Zandamela***

To illustrate the above point further, Omarini (2018, p.24) cites the Financial Stability Board's 2017 definition of FinTech as being the *"technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services"*.

In similar fashion to the definition of FinTech, various definitions of open banking currently flourish, especially at this early stage in the development of the phenomenon. To maintain clarity in this study, the researcher has developed the following elements to the framework of open banking used in this thesis to ensure consistency in understanding, shown in *Figure 2* as follows:

***Figure 2: Open Banking Value Proposition Framework***

| | |
|---|---|
| **The Customer** | this element owns the data and gives permission to banks and third parties to access that data; privacy and various other laws protect the customer. |
| **The Bank** | at this stage, this element provides the master repository that provides secure custody of customer data and through a regulatory framework, gives access to that data via Open, Partner or Closed APIs; |
| **The FinTech** | this element provides advanced technology and enriched data for convenient consumption by the consumer, based on accessing the customer's basic data via API. |

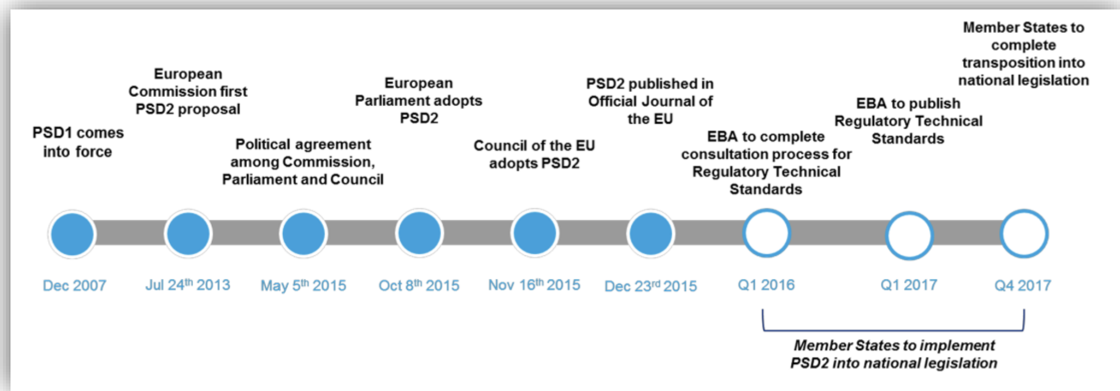
***Source: Zandamela***

The European Commission (2022) describes the Payment Services Directive 2 (PSD2) as being a regulatory framework that was created to bring Europe's payment services up to modern standards, thereby increasing innovation and security across all digital platforms for consumers and companies. Furthermore, the European Commission (2022) states that the framework seeks to increase competition and efficiency through the introduction of new players in the market, commonly known as FinTech companies, or Third Party Payment Service Providers (TPPs) of payment services, allowing for the regulatory framework to extend over these entities as well. Other key benefits of the framework include the prohibition of surcharging, the streamlining of the handling of complaints, the addressing of fraud through the introduction of strong customer authentication processes as well as the increase in consumer rights and protections in the payments arena.

The PSD2 development timeline illustrated by Deloitte (2016) in *Figure 3* below shows that the framework was first proposed by the European Commission on 24th July 2013, politically agreed to on 5th May 2015, adopted by the European Parliament on 8th October 2015, adopted by the Council of the EU on16th November 2015, with publication of the framework taking place in the official journal of the EU on 23rd December 2015. Following this development process, the European Banking Authority commenced with the consultation process so as to develop the Regulatory Technical Standards for PSD2, which effectively was the trigger to commence the process for member states to move towards adopting PSD2 into domestic legislation.

The European Commission (2022) suggests that the benefits that are expected to be realised through the introduction of PSD2 will be far reaching in extent, bringing Europe into a single digital market for the benefit of all consumers and businesses.

***Figure 3: PSD2 Development Timeline***




***Adapted from: Deloitte. (2016)***

Outside Europe, open banking frameworks are in various stages of development as shown in *Figures 13* and *14*, with some of these frameworks drawing some lessons from the first mover market, the EU, as they develop regulation that meets their particular needs.

Some commentators have viewed the ramping up of technology by incumbent banks as being their "internal" FinTech strategy in response to the revolution unfolding in the environment. However, it would appear that this development is more likely to be about traditional banks attempting to address the legacy system issues they have to contend with, coupled with aspects that assist them in the transformation of traditional banking towards compliance with an open banking structure (Basel Committee on Banking Supervision, 2019). Banks have generally developed their systems to attempt to keep pace with technological advancement but the assertion that these "internal" new technology activities could yield, in the short term, a comparable and advanced functionality comparable to those of FinTechs is not plausible. More so because many established banks mostly sit on legacy core banking platforms that are linked to other middleware systems, a set up that tends to restrict agility and response speed. Additionally, this arrangement commands a significant slice of the organisation's annual budget from an operational cost perspective, simply to maintain the running of these systems (Omarini, 2018).

Further to this, sentiment amongst customers, is tending towards the use of an independent provider of advanced financial services whilst still relying on the bank brand for security, suggesting a consumer led split in their view and approach to their take up of products and services provided via traditional banking, (Anand and Mantrala, 2019)

Regulatory bodies also play a critically important part to the Framework shown in *Figure 2* above but their approach is to ensure sound market conduct and supervision of actions against regulation and legislation, (Bank for International Settlements, 2019).

The situation is further broadened by a general regulatory standpoint, across almost all Committee jurisdictions, as reported by the Basle Committee on Banking Supervision (BCBS), which are clear in encouraging and supporting the development of the FinTech movement through an innovation-friendly regulatory stance. As an example, this can be seen from some of the early actions by regulators that have led the charge to implement regulation such as the European and the British regulators, with the introduction of the PSD2 regulatory framework, the Singaporean regulator with the imminent introduction of the Financial Planning Digital Services (FPDS) framework, to name just three of the many global regulatory entities (Ramsden, 2018).

From an underserved market perspective the relevant available literature is reviewed with respect to financial inclusion as it applies to this research, being an area that has been the subject of focus for regulators and other stakeholders for several years. This issue is not restricted, as one may readily assume, to just the developing world where infrastructure challenges exist, limiting the physical presence and reach of bank and non-bank financial institutions. This limited representation footprint of traditional banks , coupled with the low delivery of digital capabilities in far-flung rural areas, contributes to the so-called underserved regions across various developing countries, however the rural areas of developed countries suffer from very similar challenges faced by the rural areas in developing countries in so far as access to financial services is concerned (Pearce & Borgstein, 2018).

Whilst the FinTech "revolution", as it has been referred to, may seem to be a fairly new phenomenon it has actually been around for a long time, albeit in different guises. Arner, Barberis, and Buckley (2016) refer to the three waves of FinTech, namely, 1.0 which they assert runs from 1866 to 1967 and brought, amongst other things, the change from analogue to digital, the deployment of the first ATM and the introduction of credit cards to the public. FinTech 2.0 ran from 1967 to 2008 and brought with it various advances including online banking in 1980; this was followed by FinTech 3.0 which covers the period 2008 till the present, bringing with it the revolution we are familiar with from media articles, and what is referred to as being the democratisation of financial services.

This is unlike any of the previous transformations seen thus far by the established industry in that this wave brings with it two concurrent business model approaches, being firstly the actual FinTech companies which utilise highly advanced technology, commonly referred to as "start-ups", and secondly the "neo-banks", or challenger banks as they are referred to, putting forth a totally new business model in banking, structured around a branchless banking business model paired with highly advanced technology. The stated focus of this research cannot, unfortunately, cater for an in-depth study of the business models of the challenger banks in relation to the business models of the FinTech companies as this will not do justice to this important development in the financial services environment. This can be the subject of future research.

However, from the customer perspective and behavioural patterns, as we shall see in this literature review, the FinTech business model could compliment that of the challenger banks much in the same way as for the traditional institutions because the customer is tending to be "bank agnostic", rather placing emphasis on service offerings from FinTech companies, (Navaretti, Calzolari, and Pozollo, 2018).

In this chapter we shall review the available literature, as it pertains to this thesis and provide our critique and analysis thereof, following a process that shall focus on the areas that relate to the research question, broken into the following subsections:-

- Banks and FinTechs,
- The changing demands of the customer,
- The regulatory environment and
- Financial Inclusion and FinTechs.

These will be followed by a conclusion which brings together the literature review findings, highlighting the research gap which currently exists.

## 2.2 Literature Review Method

With the increasing development and importance of research and the dependence on evidence based practice, several types of literature review methods have evolved over time, resulting in what Grant & Booth (2009) describe as being a possible loss of the full potential or benefit due to the apparent "confusion of indistinct and misapplied terms".

The narrative review method (often simply referred to as literature review) has traditionally been relied upon quite extensively by researchers as a popular method, with Grant & Booth (2009) positing that this method generally follows a set process for the identification of literature for consideration and possible inclusion, whether a formal literature search is required or not. Additionally, the method works to build upon existing literature by targeting gaps and omissions in the literature, yet a weakness of the method could lie in the selective actions of the researcher when settling on articles to be included, potentially inadvertently exposing the process to bias and using material that supports a particular objective.

Green, Johnson & Adams (2006) also posit that author bias in the narrative review method is an aspect of the review process that must be managed carefully so as to reduce its effect on the written study, thereby increasing objectivity and credibility. They also suggest that the author's interpretation of the reviewed literature is important to the study, suggesting that expertise in the research area is of benefit to the process as the researcher may even be able to provide a critical assessment of the reviewed literature.

Lame (2019) conducted research on a research method that has gained popularity in recent times, the systematic review format, and he asserts that whilst systematic reviews may assist is the resolution of certain research issues around consistency and bias, to name just two issues, more work is required to clarify which review methods are appropriate for specific research questions and that it was also important that the researcher adapts methods to their specific needs.

*Figure 4* below provides a summarised comparison of some of the elements of the two literature review methods discussed in this section. In developing this thesis and taking into account the mix of literature sources, with the low number of academic articles available and relevant to the subject plus the larger quantity of professional literature that is available, with these sources being used side by side, the researcher settled for the use of the narrative literature review method (Ferrari, 2015; Booth, Sutton, & Papaioannou, 2016). An element infused from the systematic review approach was the literature search method using specific search terms, with this being systematic without the formulaic guide aspect, which the researcher felt would be appropriate for the mixed literature sources, thereby serving the study well. Additionally, Mendeley software was set to continuously search various databases for literature which matched a specific search criteria, thereby systematically presenting new literature to the researcher on an ongoing basis.

***Figure 4: Extract - 2 of 14 Main Review Types Characterised by Methods Used.***

| Label | Description | Search | Appraisal | Synthesis | Analysis |
|---|---|---|---|---|---|
| Literature review | Generic term: published materials that provide examination of recent or current literature. Can cover wide range of subjects at various levels of completeness and comprehensiveness. May include research findings | May or may not include comprehensive searching | May or may not include quality assessment | Typically narrative | Analysis may be chronological, conceptual, thematic, etc. |
| Systematic review | Seeks to systematically search for, appraise and synthesis research evidence, often adhering to guidelines on the conduct of a review | Aims for exhaustive, comprehensive searching | Quality assessment may determine inclusion/exclusion | Typically narrative with tabular accompaniment | What is known; recommendations for practice. What remains unknown; uncertainty around findings, recommendations for future research |

***Adapted from: Grant & Booth (2009)***

## 2.3 Literature Search Strategy

The literature search approach started with the identification of the key words that would be used to specify the search in the search engine search bar. The words used included the obvious ones such as FinTech, open banking, digital banking, consumer banking behaviour, consumer banking preferences, consumer digital banking, banks and technology, agility of banking technology systems, banks & collaboration on technology and RegTech. Variations on these key words were used including the use of synonyms as terminology differs from region to region. Other search functions were conducted in the academic databases mentioned below directly, using the same key terms mentioned above. On receiving the results from any search engine, these were further scrutinised for relevant literature. Additional search sources came from the reference lists in the literature that was accessed so as to broaden the mix of journal based documents.

It must be noted that a sizeable pool of non-academic and non-peer reviewed research exists from various sources such as company sponsored research conducted by consultants with an academic background, or from large consulting firms or banking institutions themselves, which may have a bias to their research in one or other way. This development is good in that this rapidly changing phenomenon is receiving attention which is documented for general consumption, but the academic literature in this same space is sparse and has not kept step (Goldstein, Jiang, & Karolyi, 2019). This thesis goes some way to addressing the current dearth of academic literature in the specific area of study stated in the research aim.

The literature search resulted in the collection of a pool of literature sourced from academic and professional sources such as the Sheffield Hallam university library and other libraries and databases such as Wiley Online, Elsevier (Scopus, ScienceDirect), Emerald and Taylor & Francis Online, amongst others, which yielded academic research papers, articles and journals. These were then filtered further to arrive at peer-reviewed work and other documents produced by scholars, authoritative professional bodies and policy making institutions, taking into account the credentials of each of these. Only the most relevant contributors to the research topic have been identified and used in developing the literature review; additionally, attention was directed at accessing the most recent available publications, keeping to a five year limit as far as possible, save for a few notable exceptions which maintain relevance to major theoretical frameworks and relevant models for the purposes of this research.

A very useful tool in the literature search effort was Google Scholar which brought forward certain difficult to locate text books. A critical document management and analysis tool is the Mendeley application which supports highlighting and annotation of acrobat pdf documents. All the sourced documents were loaded in one location within the application and in the main online settings of the Mendeley account, the option to be notified of new publications regularly was selected, based on the literature contents of the Mendeley library holding the sourced publications. As a result of this, Mendeley assisted in the process of monitoring new publications in the subject matter of FinTech and open banking, sending about 3 emails per month to the researcher, advising of appropriate literature titles. Through this, 60 emails were received between January 2020 and August 2021, however, there was significant repetition of titles already identified in previous weeks with the search results also bringing forward articles from past years and articles already previously identified. Despite this the tool was helpful as 13 new journal articles were identified as useful with 5 of these being relevant to this research.

## 2.4 Banks and FinTechs: Open Banking

The magnitude and importance of the FinTech revolution has become the subject of much attention and debate across the various parts of the financial services sector with many banks adopting a defined strategy of either participating by developing what they believe is an internal technological capacity building response to these events, or by partnering in some way with FinTech start-up companies. Navaretti et al. (2018) state that the FinTech revolution brings with it entities that are able to enhance competition in the established financial sector through leveraging their advanced technology to provide customers with enhanced products and services which are either not available from the banks, or are inefficiently provided by the banks (Vives, 2017).

In their article, Navaretti et al. (2018) also suggest that the FinTech revolution will have the secondary result of strengthening the established banks that respond rapidly to this development. This resonates with the researcher's above assertion that both banks and FinTech stand to benefit from the rise of the FinTech phenomenon. In Anand and Mantrala's (2019) conceptual article on the response options available to traditional banks in the light of a perceived FinTech onslaught, mention is made of the ways in which banks could consider collaborating with FinTechs as the two types of organisations are able to complement one another, each raising the other's capabilities beyond their sole ability. They go on to state that for traditional banks to be able to accept the possibility of a mutually beneficial relationship based on a collaborative partnership with a third party provider (a FinTech), this could be viewed as an admission of failure of sorts, which would be a bitter pill to swallow, especially in the light of bank management teams suffering from what they referred to as poor market orientation which resulted in what they describe as “marketing myopia”.

The banking industry response to the FinTech revolution and, more importantly, the introduction of regulation and legislation on PSD2 has been varied with some resistance to the adoption of the regulation. This type of response is to be expected as this is a significant change to the status quo for the industry but brings with it great opportunity, as stated by Botta et al. (2018), plus compliance with the open banking standard which is now written into law is a compliance matter requiring adherence. Botta et al. (2018) go on to state that traditional banks have to analyse the developing FinTech ecosystems and consider the directions that customers may move into with the new opportunities presented by open banking and then assess where they may then be able to add the greatest value, based on their own capabilities.

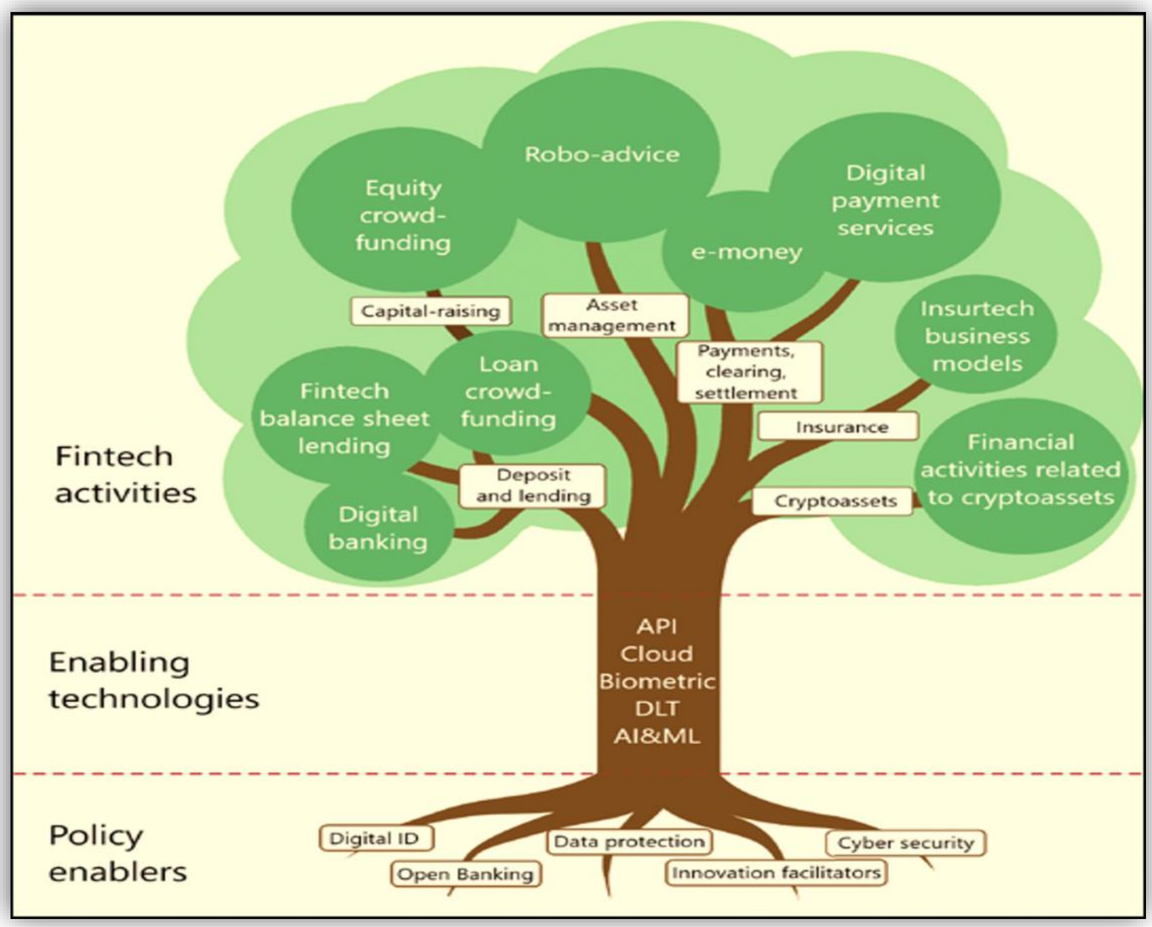
For banks to take advantage of the opportunities under the new regulatory environment bold decisions and actions are required, coupled with acceptance of the new normal so as to focus on gaining traction and a favourable position early on. In his journal article in European Economy – Banks, Regulation, and the Real Sector, Boot (2017) cites economists Boyd and Gertler from their 1994 study (Are Banks Dead? Or Are the Reports Greatly Exaggerated?) regarding the expected demise of banks due to the securitisation phenomenon at the time. Needless to say, Boyd and Gertler’s reports were greatly exaggerated as the banking industry kept growing their advances for a long time past the emergence of securitisation.

As with the securitisation event and the many systemic shocks that banks have weathered over several decades, they need to focus on their strengths and allow the market to do what the market does, which is to evolve for the benefit of progress using innovation and technology to achieve this. For banks taking the strategic decisions and actions to do this, the apparent disaggregation of the value chain which they have been in control of for so long will most likely be managed in an orderly fashion with banks taking on a new natural role which speaks to their strengths through the cycle. Boot (2017) goes on to state that banks could maintain strong relevance by providing their unique solutions to customers that require assurances on security and privacy whilst enjoying the new-found marketplace convenience provided by the agile FinTech solution provider.

Drasch, Schweizer, & Urbach, (2018) make a few assertions from their research. They state that in order for banks to remain relevant in the market, they have to innovate consistently, which has tended to be a challenge for them. The researcher would support this view and contribute further to this perspective from experience by stating that reputation around incumbent banks being well known for maintaining “legacy systems” could only reasonably be ascribed to a level of under investment in modern technology systems (Deloitte, 2014). Drasch, Schweizer, & Urbach, (2018) also posit that traditional bankers realise that they tend to focus on a short term horizon with a decidedly management focus as opposed to having a longer term view, leading to internal inefficiencies which negatively impact future outcomes. They add to this, citing an Economist Intelligence Unit (2015) finding that reveals complementary strengths and weaknesses between traditional banks and FinTech companies, based on an administered self-assessment. A further key research finding was regarding the outcome of interviews conducted, which revealed that roughly half of the expert participants confirmed that their incumbent institution had developed and were executing on a strategy to address the issue of legacy core banking systems by replacing them.

Whilst colloquially and across the media liberal use is made of the term “*FinTech*”, *Figure 5* below provides a good sense of the breadth of the industry along with the different types of firms to be found with their diverse focus areas. This research follows common practice, using the term generally whilst having its focus on those firms that provide products and services aimed at customers of banks by accessing their data and providing open banking services in general collaboration with the banks.

*Figure 5: FinTech Tree - A Taxonomy*




***Adapted from: Bank for International Settlements – Financial Stability Institute Staff (2019).***

Navaretti et al. (2018) assert that the current FinTech business model operating on the open banking stream, as shown in *Figure 5* above, will see them mostly originating new deals and distributing these to the banks for them to hold onto, keeping these customers on their balance sheets. This activity is one which the banks would appreciate considerably as this adds growth and value; such a relationship would be one for the banks to maintain and develop due to the significant value added at a significantly reduced cost to their usual embedded acquisition methods, giving them the opportunity to then work these embedded costs out of their business models. The value of these newly acquired customers could become incrementally significant as additional products are then cross-sold to them.

With such a typical relationship being put in place, a symbiosis would develop between banks and FinTech firms which would result in it being unlikely that FinTech would replace banks, also agreed by Navaretti et al. (2018), leading to a sustainable long term change to business models.

During their discussion at the International Conference on Information Systems, Eickhoff, Muntermann, & Weinrich (2018) presented the research outcomes from their investigation into what FinTech companies actually do. They offered a taxonomy they had designed based on their findings, illustrating the FinTech business models they had identified as being in use, to support their arguments, shown in *Figure 6* below. This gives insight into some of the parts of the traditional banking value chain that these advanced technology entities have representation in. They went on to state that despite the seemingly academic nature of taxonomies, business practitioners would likely find value in their application, assisting them to identify opportunities or threats between their banks and FinTech companies, and hopefully through this process making strategic use of the FinTech business model information.

***Figure 6: FinTech business models ranked from most to least common***

| Archetype Label | Cluster | Dominant Technology Component | Value Proposition | Delivery Channel | Customers | Revenue Stream | Product/ Service Offering |
|---|---|---|---|---|---|---|---|
| Cryptocurrency | *A* | Blockchain | Convenience/ Usability | API | B2C | Unknown | Currency Exchange |
| Payment Service | *B_E* | Transaction Processing System | Convenience/ Usability | App | B2B | Unknown | Payment Service |
| Financial Markets Intermediary | *F* | Marketplace; Transaction Processing System | Matching/ Intermediation; Security | Physical / WWW | B2B | Sales, Unknown | Brokerage; Device |
| Information Aggregator | *G* | Decision Support System | Convenience/Usability | App | B2B, B2C | Unknown | Inform. Aggregation |
| Information Extractor | *H* | Decision Support System | Insight | App | B2B | Unknown | Inform. Aggregation |
| Insourcer of Sub-Processes | *I_J* | Decision Support System | Automation | App | B2B | Unknown | Inform. Aggregation |
| Lending Community | *K* | Marketplace | Monetary; Transparency | WWW | B2C | Revenue Share; Unknown | Lending/ Credit; Financing |
| Alternative Trading Venue | *L* | Marketplace | Matching/ Intermediation | WWW+ App | B2B, B2C | Unknown | Investments; Lending/ Credit |
| Robo Advisor | *O* | Decision Support System | Monetary | App | B2C | Revenue Share; Unknown | Personal Assistant |
| Co-Creator of Financial Analysis | *Q_R_ W* | Decision Support System | Convenience/Usability | App | B2B | Unknown | Inform. Aggregation |

***Adapted from: Eickhoff, Muntermann & Weinrich (2018).***

At the 3rd World Conference on Technology, Innovation and Entrepreneurship, Acar and Çıtak (2019) presented their paper on a suggested integration process for traditional banks to consider when seeking out FinTech partners to collaborate with. They support their argument by presenting from their findings an example of the process followed by a bank in Turkey which followed a particular methodology to scout for a few target FinTechs for evaluation by certain internal committees for suitability as collaboration partners. Eventually, at a certain point in the process, a meeting of senior management is convened where a presentation is delivered of the results of the suitability test, after which a final discussion and vote is undertaken by these executives. The next step in the process is for a proof of concept interaction between the two entities before they eventually go-live. The journal article outlines what comes across as being a relatively simple business-as-usual approach, followed by the particular bank used in the study, to what is surely a challenging and emotionally charged position that most traditional banks find themselves in when considering the question of collaborating with FinTechs through open banking.

Were this not the case, open banking regulation would not be required to prompt banks to collaborate with FinTech companies so as to respond to the push by consumers driving for their banking data to be accessed by third parties offering superior products, as will be shown in section 2.4 below. This is viewed as a business-as-usual approach due to the manner in which departments of the bank in the example are mandated to chart their own course to seek out parties with which to collaborate, with the final approval occurring in due course up the line, suggesting a bottom up approach.

Ozili (2018) suggests that FinTech companies are able to stimulate economic growth as the nature of their business is such that they are able to increase the volume of transactions in the banking system. This in turn could positively impact the gross domestic product of a country as millions of new consumers that were previously unbanked would become economically visible. Furthermore, Ozili (2018) postulates the benefits to banks, stating that digital financial inclusion assists traditional banks to reduce their costs of doing business through a reduction in manual processes and a decrease in infrastructure costs by consolidating branch outlets. Some of the expected benefits to FinTech companies are also articulated, however no support or research findings are given for any of the statements regarding these benefits. This suggests that the stated benefits that have been arrived at seem to be no more than expressed views.

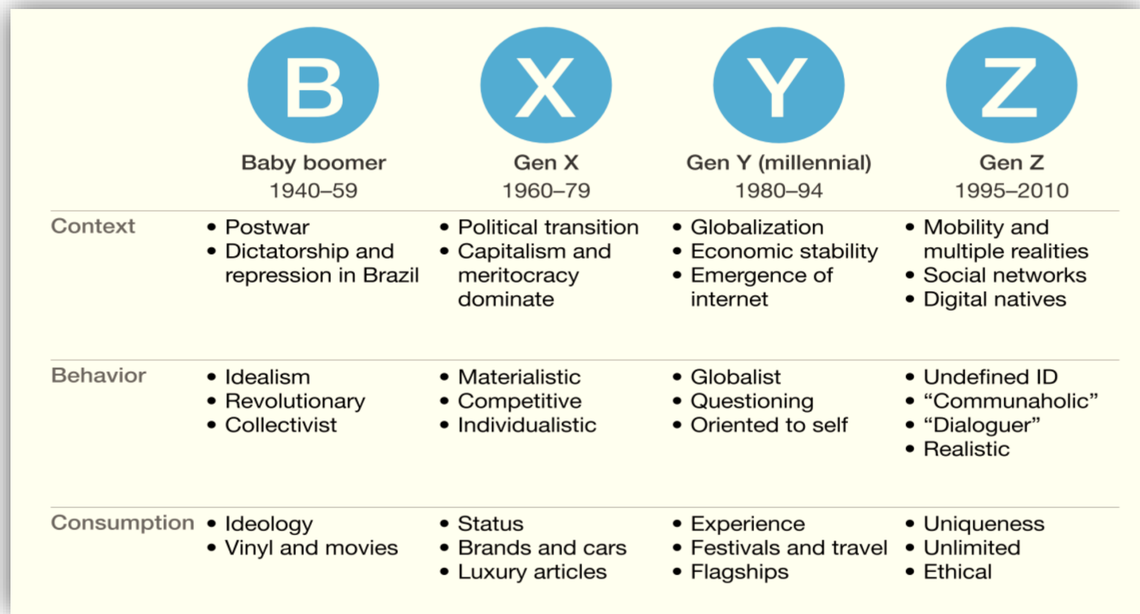
The discussion around traditional bank business models also surfaces in Anagnostopoulos' (2018) research where it is stated that FinTech entities have targeted the weaknesses in the business models of incumbents as a result of the changing requirements of the market. This action by the FinTech entities, he posits, sees the introduction of new business models developed by the FinTechs which are future- ready and address areas that meet the needs of the consumer into the future. He argues further that the result of this is that many banks have adopted the position that they are threatened by FinTech entities, expressing their resistance to regulators and arguing for regulation to be introduced over the new comers. This is seen as a counter-progressive demand which would seek to maintain the status quo, reducing the industry to the same issues that the consumers have effectively voted against. He also argues that this counter-progressive stance would keep traditional banks with their high cost structures intact and free of the need to transform, a situation which keeps competition in the industry at pedestrian levels, often resulting in oligopolistic market conditions. In support of progress and innovation, Vives (2019) suggests that incumbent banks should not be protected from competition as this provides for societal progress and the reduction of inefficiencies in the banking sector, thereby allowing for the rise of the FinTech participants.

Deloitte (2014) state that the high cost bases of traditional banks are an unsustainable feature of their business models, requiring urgent attention to achieve a reduction of these costs. This action, coupled with a new business model that defines more efficient operational structures would position them to be more responsive to customer needs. Without this change occurring, incumbent banks will remain uncompetitive and the inefficiencies in the banking system will remain, with the consumer and society bearing the brunt of this situation.

## 2.5 Changing demands of the Consumer

According to a survey conducted by Gallup Incorporated (2016) 85% of millennials access the internet via their mobile devices, predominantly “living” their lives in a connected fashion, online. Furthermore, 55% of millennials are not engaged at their places of employment, the highest level amongst the generations, with this being a lost opportunity for real production being generated out of a significant portion of the workforce. In *Figure 7* below we see some of the basic experiential characteristics that influence the behavioural drivers of the various generations making up the bulk of the economically active populations on our planet. These characteristics are the foundations that give rise to the increased use of digital devices as a channel for the consumption of products and services delivered in this way, a situation driven by millennials and generation z (Gen Z) which affects their banking preferences as well.

*Figure 7: Locating the Millennial & Gen Z*



| | B | X | Y | Z |
|---|---|---|---|---|
| | Baby boomer 1940–59 | Gen X 1960–79 | Gen Y (millennial) 1980–94 | Gen Z 1995–2010 |
| Context | • Postwar<br>• Dictatorship and repression in Brazil | • Political transition<br>• Capitalism and meritocracy dominate | • Globalization<br>• Economic stability<br>• Emergence of internet | • Mobility and multiple realities<br>• Social networks<br>• Digital natives |
| Behavior | • Idealism<br>• Revolutionary<br>• Collectivist | • Materialistic<br>• Competitive<br>• Individualistic | • Globalist<br>• Questioning<br>• Oriented to self | • Undefined ID<br>• "Communaholic"<br>• "Dialoguer"<br>• Realistic |
| Consumption | • Ideology<br>• Vinyl and movies | • Status<br>• Brands and cars<br>• Luxury articles | • Experience<br>• Festivals and travel<br>• Flagships | • Uniqueness<br>• Unlimited<br>• Ethical |

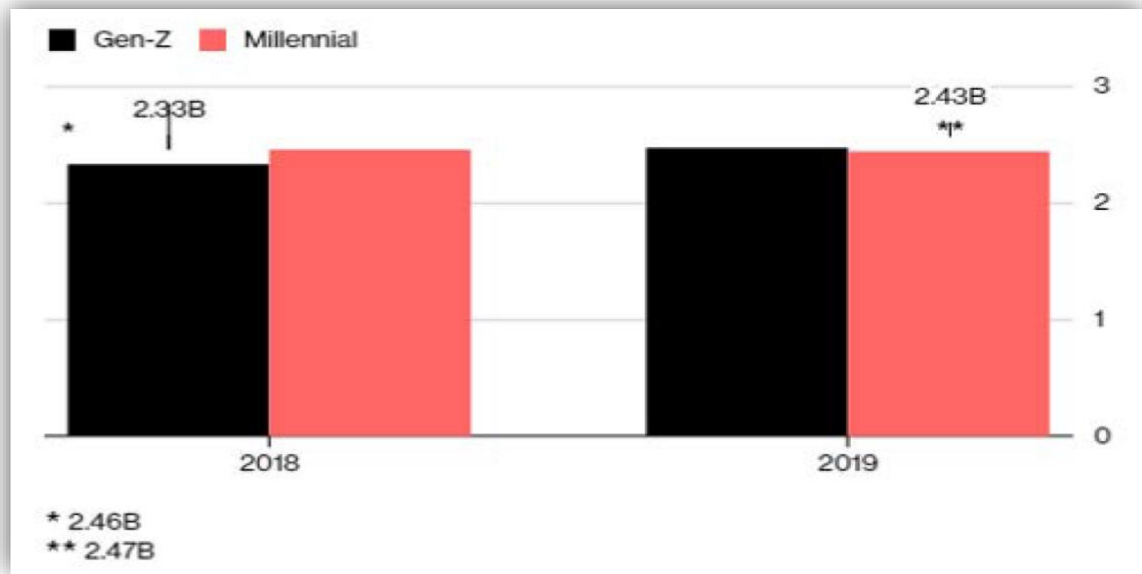
***Adapted from McKinsey Insights (2019)***

Miller and Lu (2018) inform us that Bloomberg's analysis of UN population data using 2000/2001 as the generational split date reveals that Gen Z alone make up approximately 32% of the world's 7.7 billion population in 2019 and command billions of dollars in spending power. This population group is also stated to have a cash averseness that sees them using cash for only 6% of their transactions, preferring to use digital payment channels, effectively surpassing the behavioural patterns of the millennial generation. The report goes on to state that this development is good news for digitally delivered services across various industries as this is the channel which this demographic uses for accessing various services, as is the case with the millennials.

Whilst millennials are seen to be highly connected to technology and digital channels, preferring social media modes to consume products and services, Gen Z are "digital natives", as shown in the UN data, making them an even larger force to be addressed via the provision of convenient, digitally delivered products and services. A digital native is one who is born into the modern digital world with full access to various digital devices from birth.

The researcher offers lived evidence of the changing needs of millennials discussed in Zandamela (2008) as mentioned in section 1.2 and appendix 1.

*Figure 8: Global population of millennials now second to Gen Z from 2019*




*Adapted from Bloomberg: Bloomberg Analysis of the UN World Population Prospects (2019)*

*Figure 8* above illustrates the remarkable phenomenon of the millennial generation being surpassed by the digitally native Gen Z for the first time, from a population growth perspective, in 2019. This data represents the Gen Z grouping across the world and reflects the massive potential of this generation to make a significant impact to the way in which Generation X, and to a large extent millennials, consume banking products due to the sheer volumes concerned. Furthermore, 2019's dataset represents members of Gen Z that have attained majority at 18 years of age which was as at 2001; another 9 years of members of this generation shall still join the workforce until 2010 when using the McKinsey generational counter used in *Figure 7* above.

The different generational counter cut-off years used in the two different studies do account for slight differences in the data which, for the purposes of this exercise shall be ignored as our task does not depend on statistical accuracy but on general trends.

Survey based research on millennials conducted by Gallup Inc. (2016) presented in *Figure 9* below reveals that trust levels held in small businesses is very high amongst this grouping and that they do not have a great deal of trust in traditional established banks. However, 67% of those surveyed trusted that established banks would keep their data safe and secure, with this type of organisation enjoying the highest ranking of all other business types across all other industry sectors.

***Figure 9: Millennials Trust Levels with Businesses***


***Adapted from: Gallup Inc.***

This suggests an opportunity exists for banks and FinTech companies to collaborate and develop mutually beneficial solutions to meet the needs of the millennials; the FinTech would develop advanced innovative products which the millennial is looking to this source for such products, whilst the bank would provide the data security, privacy and compliance adherence required.

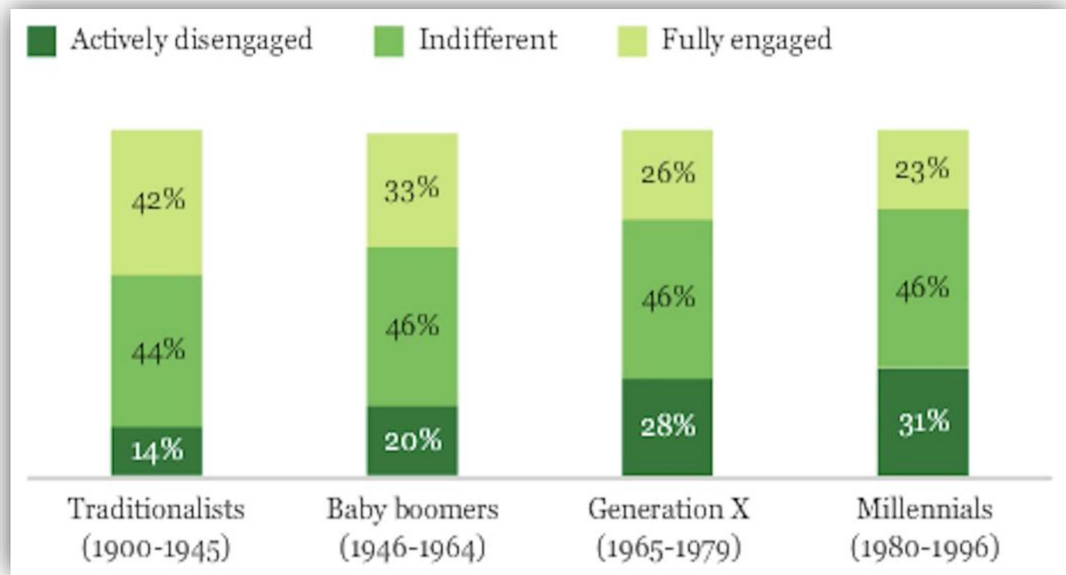
Aitken et al. (2020) discuss the issue of trust by consumers in FinTech companies, offering several aspects to this issue, ranging from the concept of a social licence between consumers and the FinTech industry to build trust, to the concept of trustworthy technology which touches on the ethical debate of the use of Artificial Intelligence (A.I.) by FinTechs and how this could introduce unfair algorithmic outcomes. These are key considerations in this dimension of the trust issue around FinTech companies as they tend to implement advanced A.I. solutions in their products, and is separate to the data privacy and security issue which also impacts upon the trust of FinTechs.

Aligned to the debate around trust is the debate on data ethics and privacy. Aitken et al. (2021) conducted focus group studies amongst members of the public to investigate the role of discourse and engagement in the public arena in a bid to spur on private sector entities to embrace the concerns raised. The findings pertaining specifically to open banking reveal that the participants were strongly attracted to the perceived benefits of the innovations in this space, which would give them increased control over their finances, but expressed concerns over data ethics. The severity of the concern issue influenced their trust factor of the FinTech entities involved with their data, ultimately driving their decision to take up open banking product offerings.

On the subject of engagement with their bank, research by McFeely & O'Boyle (2018) reveals that only 30% of millennials are found to be engaged with their primary bank and are the most likely generational group of customers, of the various generations, to move their banking requirements away from their primary bank due to poor service experiences, poor product performance and unacceptable fees charged which don't meet their needs. This generation is not likely to report their poor experiences to their bank but will elect to rather change service providers, looking to retain the services of a digital offering in the process, with this being more readily fulfilled via the offerings of a FinTech.

Gallup Panel is one of the few U.S. research houses that conducts surveys across the entire U.S. population for various purposes. In 2014 the Gallup Panel conducted a survey on primary bank engagement levels across all U.S. generational groupings, the findings of which are illustrated in *Figure 10* below. As can be seen, the millennials are the most actively disengaged grouping in this dimension and this should be an urgent cause for concern amongst traditional banks. The results further reveal that the millennial has frequent disappointments in their interactions with their primary bank, with their needs remaining unmet; the main reason for this is that the millennial uses several different channels of their bank with the services levels being inconsistent across these channels, leading to disappointment, which unfortunately translates into disengagement. Millennials also report that their attempts to get issues resolved do not amount to much attention from the primary bank on a consistent basis, with this leading to a failure by the bank to resolve the issues.

*Figure 10: Engagement with Primary Bank, amongst Generations*




***Adapted from: Gallup Panel, June 2014, Gallup Inc.***

A different generational demographic, with a more intense picture is revealed by the digitally native Gen Z population group which was subjected to a recent quantitative online survey conducted by Unidays (2019) on a verified Gen Z population group. This population group, which numbered over 1,800 university students located across the United Kingdom, the United States, Australia and New Zealand, is a predominantly mobile based grouping, preferring to interact with the world through their mobile devices. This research found that Gen Z currently commands approximately $143 billion in the US alone and are found to belong to three clearly defined sub-groups in terms of banking attitudes, described as follows:

1. The **Conventionals**: this sub-group prefer to interact on a face-to-face basis with their bank and are somewhat averse to banking mixed with technology.
2. The **Digitals**: are a sub-grouping that prefers to bank entirely digitally, abhorring the traditional banking model entirely.
3. The **Pioneers**: is a sub-group that anticipates a future where technology companies provide them with financial services. They seem to be suspicious of banks and credit providers.

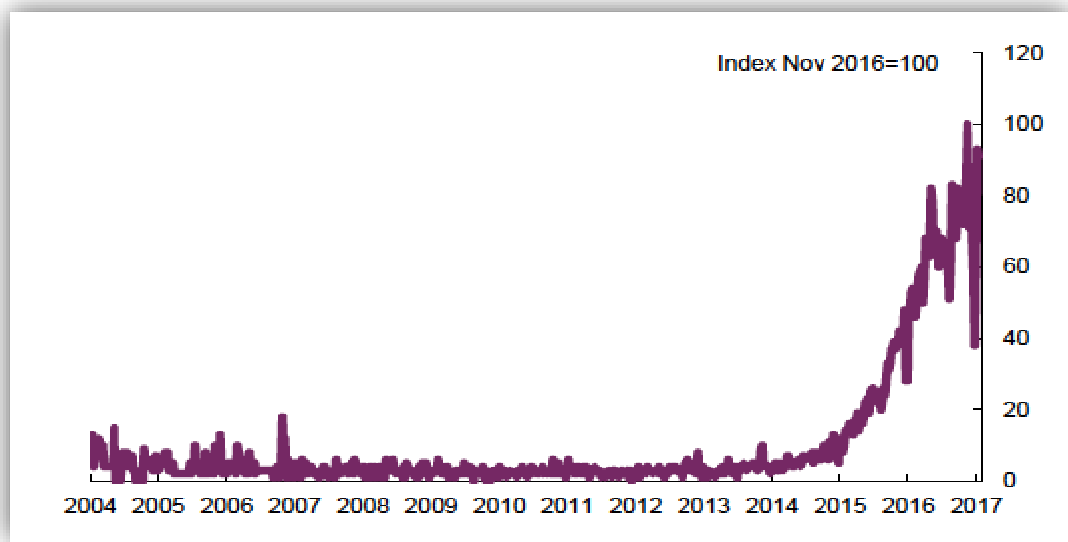
Another output of this survey reveals that at least 55% of Gen Z would bank with a FinTech that has only a digital presence, with 45% wanting a physical branch to also be available, in case of need.

The Unidays (2019) research corroborates the Gallup research with both findings pointing to conclusions that Gen Z and millennials strongly tend towards digital usage for their financial services, yet a sub-sect of the Gen Z consumer still relies on the bricks and mortar infrastructure of the traditional banking system.

TransUnion (2020) conducted a global study using depersonalised consumer data from their proprietary databases to analyse the various credit related behaviours and trends of Gen Z across Canada, Columbia, Hong Kong, India, South Africa and the United States, a study which includes both well developed and still developing credit economies. Various findings were arrived at but of pertinence to this research, the analysis found that the fastest growing credit product in any of the countries was referred to as a "FinTech Loan" found in Colombia, growing at a staggering 728%. This growth rate was followed by more traditional lending products such as "Personal Revolving Loans" in Colombia growing at 294%, "Bank Loans" in South Africa growing at 209% and the balance of traditional product types growing at less than half these rates. The study was conducted in 2019 therefore whilst not explicitly stated in the report, the assumption is made that the annual percentage growth rates shown are over 2018 base values. Here again the survey results which have been presented in this section from various quantitative research studies conducted across several countries, showing that the trends and preferences of Gen Z to prefer digitally based FinTech solutions, is independently corroborated, this time by an analysis of historical credit data, also pulled from several countries.

*Figure 11* below provides the results of an analysis of data drawn of the number of worldwide google searches, for the term "FinTech". With the FinTech revolution gaining momentum from around 2015, plus the fact that many Gen Z consumers born at the inception of their generational time line in 1995 reaching the age of 20 in 2015, it would be a reasonable extrapolation that Gen Z coupled with the millennials, would be mostly responsible for the overwhelming interest in understanding about FinTech and therefore searching for this knowledge on the Internet.

*Figure 11: The FinTech Phenomenon*




***Adapted from Bank of England: The Promise of FinTech, Google Analytics – Chart shows an index of the number of Google searches for the term "FinTech".***

The generational population groups occur across the entire world and are generally very similar in many cultural contexts, save for some differences, being mostly influenced by popular culture and trends which know no bounds in a digitally inter-connected world.

Our study approaches the research question from a global perspective due to the fact that banking itself is a global activity which is practiced fairly uniformly by banks and by regulators across the different jurisdictions, with what can be considered as being moderate differences across these. The regulatory frameworks that regulators work within are also well coordinated globally through the international institution, the Bank for International Settlements (BIS) (Reakal, 2018 and Fratianni, 2006) with its policy development unit the Basle Committee on Banking Supervision (BCBS), policy is disseminated to and implemented through a cooperative approach by Central Banks across the world. These bodies are regularly brought together via various interactions to share best practice and to make important decisions quickly, with minimal bureaucracy and red tape (Maume, 2017). The BIS is currently owned by 63 central banks and was formed in 1930 with the mission to "support central banks' pursuit of monetary and financial stability through international cooperation, and to act as a bank for central banks" (Bank for International Settlements, 2021; Reakal, 2018).

With the foregoing being said, the FinTech phenomenon is occurring simultaneously on a global scale with many similarities visible across various jurisdictions.

## 2.6 The Regulatory environment

The Bank Of England (BOE) Governor Carney remarked at the Deutsche Bundesbank G20 conference on "Digitising finance, financial inclusion and financial literacy", held at Wiesbaden in 2017, that the bank viewed the promise of FinTech as being able to add greater value to the banking value-chain through the unbundling of the complex services, namely, settling payments, executing on maturity transformation and the sharing of risk and allocation of capital. Furthermore, he mentioned that these advances were being driven by new external parties to the banking industry, using the term "FinTechs" to describe them, who were bringing to bear new technologies which embodies economies of scale, agility and new business models. He mentioned that the regulators also saw that with these developments systemic risks would evolve, bringing with them changes in customer loyalties which, in turn, could affect the stability of bank funding, amongst several other material risks. However, this also comes with new infrastructure and applications that could reduce costs, improve efficiencies, including capital efficiencies and create new critical economic functions and that all these dimensions challenge the policymakers and regulators to ensure that FinTech develops in a way that maximises on the opportunities whilst reducing the risks posed to society. Some key comments given by the Governor, showing the delicate challenges that the regulators need to contend with are captured in his statement:

*"Our starting point is that there is nothing new under the sun. We need to be disciplined about consistent approaches to similar activities undertaken by different institutions that give rise to the same financial stability risks. Just because something is new doesn't necessarily mean it should be treated differently. Similarly, just because it is outside the regulatory perimeter doesn't necessarily mean it needs to be brought inside.",* Carney (2017, p. 8).

This stance, taken by the lead regulator in what is now globally recognised as being the current leading FinTech growth market amongst the various international markets, demonstrates the extent of the support that FinTechs are receiving from the regulatory authorities looking for modernisation of the banking industry.

Ramsden (2018) mentions that the BOE has to ensure that it remains open minded to the changing environment that brings with it innovation that dis-aggregates the complex, systemically concentrated, somewhat inefficient and expensive banking industry for the benefit of customers, thereby improving the weak productivity and driving competition, but simultaneously be alive to identifying and managing the risks without stifling the positive changes with regulation.

The challenges of the "too big to fail" phenomenon, which could be a topic for further research, manifested itself during the global financial crisis of 2008 and placed a particular stress on financial markets and regulators who had to step in to support stability across the industry and markets by providing vast amounts of liquidity. These experiences seem to be part of the reasoning behind the keenness by regulators to support and explore the new models presented by FinTechs, which have the effect of breaking down the concentration risks that created that phenomenon, (Zandamela, 2009; Dombret, 2015).

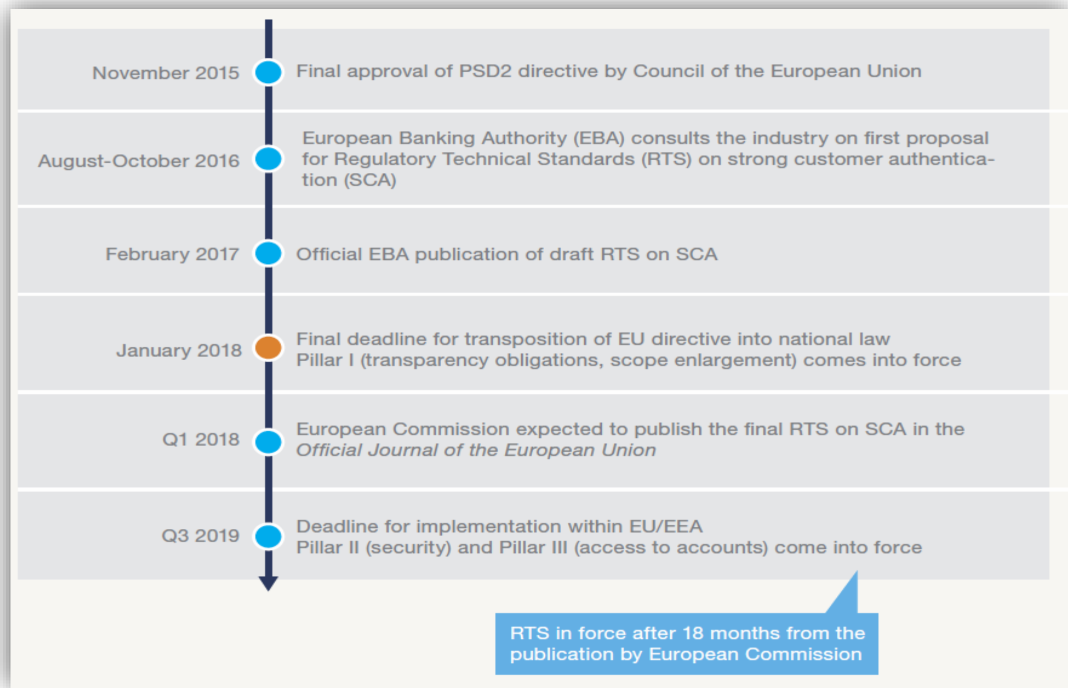
Regulators have been investigating ways of mitigating this phenomena and have decried the behaviour of traditional banks which they see as being incentivised to take on additional risks which would not be assumed were such a protective blanket not available (Magnuson, 2018). Magnuson finds that the rise of FinTechs somewhat mitigates the concentration risks posed by very large financial institutions, yet this change does bring with it a different set of challenges due to the disaggregated nature of these smaller firms which generally carry a different set of risks and behaviours. Whilst this is indeed the case it could be argued that breaking down the risks from the massive concentrations of the past to the new risk structures being set up by FinTechs would improve the overall risk profile facing the industry from a systemic stability perspective as the disaggregated risks would be well spread across a few professionally run entities, as opposed to concentrated in one incumbent. Furthermore, traditional regulatory frameworks need to be re-worked to deal with these new players which, due to their specialised, agile and advanced capabilities may be better off self-regulating and collaborating with the traditional regulators in some sort of consolidated fashion. In contrast to my above views, Magnuson (2018) seems to find that disaggregated and decentralised risks pose a greater systemic threat than concentrated risks, a position which goes against risk management practices in banks where "risks well-spread" is a preferred environment to deal with, posing a lower systemic risk to a market. This philosophy follows a "portfolio management" approach of risk diversification, presenting an improved outcome should a negative systemic event occur.

The scope of this thesis does not allow for the in depth analysis of the too big to fail debate, the actions taken by regulators and the management of this issue; additional research would benefit from the time and resources applied to analyse this critically important dimension, especially as it relates to the arrival of open banking and the impending restructure of the concentration of the banking industry across the global systemically important banks.

In his article on banking supervision and FinTech innovation, Maume (2017) puts forward various points around the challenges faced by regulators in considering the regulation of the industry. The key message for this thesis from his article includes the statements that the collaboration fit between incumbents and the new players makes good business sense in that FinTechs bring advanced technology which complements the legacy core banking systems of the banks for the benefit of customers, with the added advantage of responsivity to these needs.

The implementation of PSD2 is in itself an affirmation by the European regulators of the importance of the FinTech revolution and the need for it to be sustained into the future with the creation of Regulatory Sandboxes where Application Programming Interfaces (APIs) are available to FinTechs to test their systems, products and services in a "regulation friendly" environment. This is shown in *Figure 12* below, where a strict timeline to the implementation date was followed in Europe, clearing the path for open banking (Restoy, 2020).

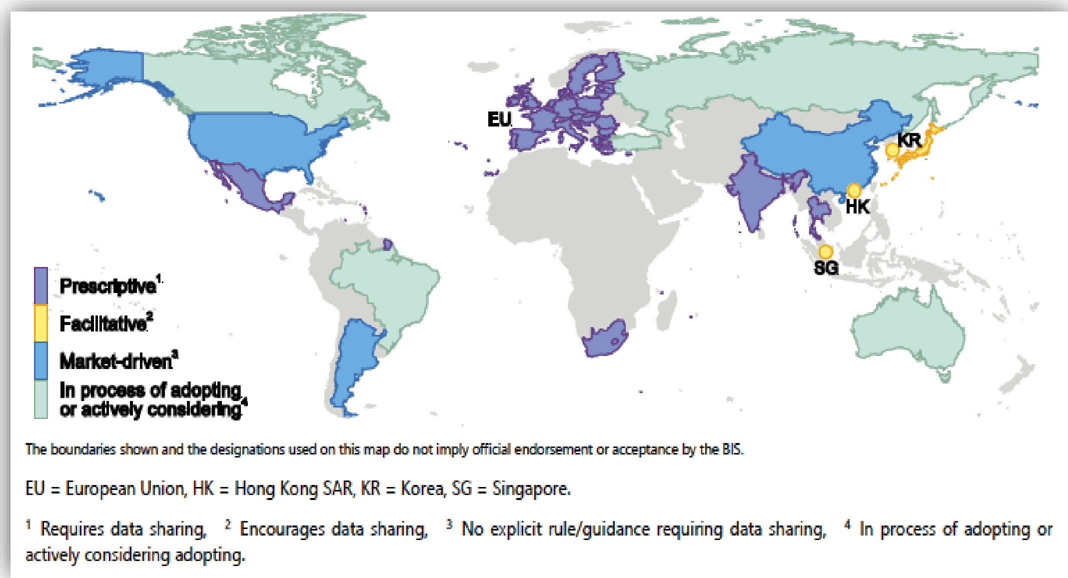
*Figure 12: Implementation of PSD 2 - 2018 & 2019*




***Adapted from EBA; McKinsey Analysis, PSD2: Taking advantage of open- banking disruption.***

*Figure 13* below reveals the progress achieved by the various Committee Jurisdictions on the implementation of open banking and the introduction of APIs which will strengthen the security processes and resolve authentication challenges of customers whilst preserving privacy rights.

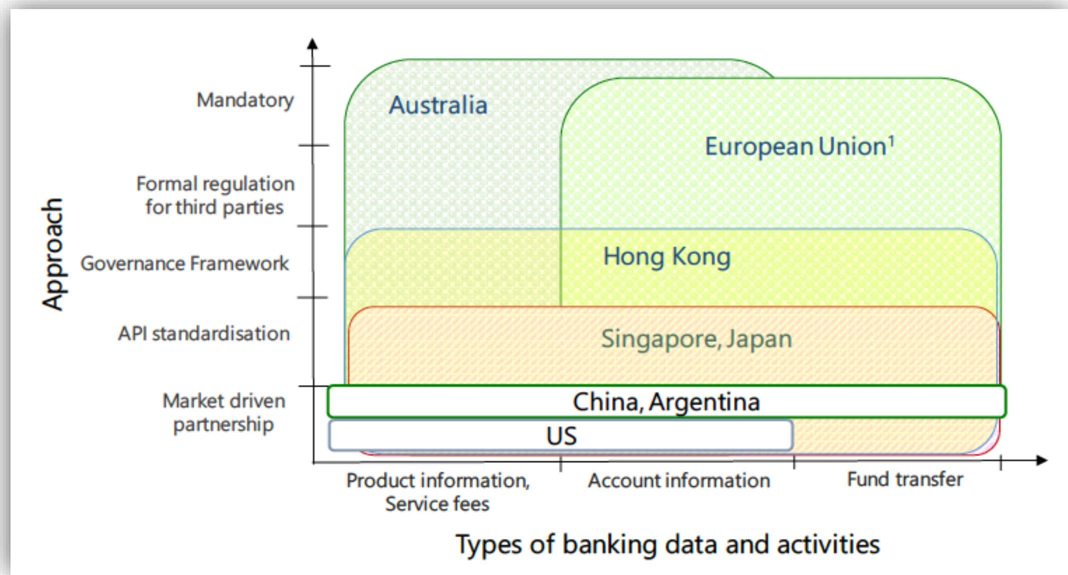
*Figure 13: Global View of Open Banking Developments*




***Adapted from: BIS Report on Open Banking and APIs – Basle Committee on Banking Supervision (2019)***

*Figure 14* below illustrates the differing frameworks being adopted in the implementation of open banking across Committee Jurisdictions and the approach and types of limitations as regards data access and requirements placed by these jurisdictions.

***Figure 14: Comparison of Open Banking Frameworks***




***Adapted from: BIS Report on Open Banking and APIs – Basle Committee on Banking Supervision (2019)***

[1]*EU: perimeter depicted in this figure represents the scope of the EU's PSD2, which only applies to payment services. Individual jurisdictions within the EU may choose to broaden the scope of their open banking frameworks beyond the requirements of PSD2 (e.g. France and UK).*

In the South African market the Inter-governmental Fintech Working Group (2019) has completed its inaugural scoping analysis of the FinTech companies operating in the environment, so as to understand the sector better and provide regulators with additional information which will enable them to better support a more solution orientated approach to policy formulation and regulation. This move by the regulators that are members of the Inter-governmental Fintech Working Group is a positive one whilst still being in its infancy and appears to be somewhat reactive at this stage, probably in part due to the previously mentioned global unfolding scenarios under the purview of the BCBS.

The G20 Global Partnership for Financial Inclusion, (2017) developed a set of principles to guide member states in the creation of policy actions and coordinated state efforts to support the facilitation of digital innovation in financial services, called the 2010 Principles for Innovative Financial Inclusion. Through this, member states would promote financial inclusion based on various digital interventions.

This was followed up with the development of the G20's 2016 High Level Principles for Digital Financial Inclusion designed to drive policy actions in a similar way. The 8 principles are shown in *Figure 15* below and reveal various interventions which are key to guiding the policy actions, which in turn would cascade to guide the formulation of regulations to create the required enabling environment for digitally driven financial inclusion.

***Figure 15: G20 2016 High Level Principles for Digital Financial Inclusion***

- **Principle 1. Promote a Digital Approach to Financial Inclusion:** Promote digital financial services as a priority to drive development of inclusive financial systems, including through coordinated, monitored, and evaluated national strategies and action plans.
- **Principle 2. Balance Innovation and Risk to Achieve Digital Financial Inclusion:** Balance promoting innovation to achieve digital financial inclusion with identifying, assessing, monitoring and managing new risks.
- **Principle 3. Provide an Enabling and Proportionate Legal and Regulatory Framework for Digital Financial Inclusion:** Provide an enabling and proportionate legal and regulatory framework for digital financial inclusion, taking into account relevant G20 and international standard setting body standards and guidance.
- **Principle 4. Expand the Digital Financial Services Infrastructure Ecosystem:** Expand the digital financial services ecosystem—including financial and information and communications technology infrastructure—for the safe, reliable and low-cost provision of digital financial services to all relevant geographical areas, especially underserved rural areas.
- **Principle 5. Establish Responsible Digital Financial Practices to Protect Consumers:** Establish a comprehensive approach to consumer and data protection that focuses on issues of specific relevance to digital financial services.
- **Principle 6. Strengthen Digital and Financial Literacy and Awareness:** Support and evaluate programs that enhance digital and financial literacy in light of the unique characteristics, advantages, and risks of digital financial services and channels.
- **Principle 7. Facilitate Customer Identification for Digital Financial Services:** Facilitate access to digital financial services by developing, or encouraging the development of, customer identity systems, products and services that are accessible, affordable, and verifiable and accommodate multiple needs and risk levels for a risk-based approach to customer due diligence.

**Principle 8. Track Digital Financial Inclusion Progress:** Track progress on digital financial inclusion through a comprehensive and robust data measurement and evaluation system.

***Adapted from: G20 Global Partnership for Financial Inclusion, (2017)***

The achievements of several member states are discussed in the report, for example the National Financial Inclusion Strategies of Pakistan, Tanzania, the Philippines and others are discussed, with a notable description of the advanced and integrated technology initiatives put together by India, referred to as the "India Stack", shown in *Figure 16* below.

***Figure 16: The India Stack***

The India Stack is an open digital infrastructure platform that makes use of open Application Programming Interfaces (APIs)[16] to promote "presence-less, paperless, and cashless delivery" of services across different sectors of the economy.[17] The India Stack is built on four technology layers:

- *Presence-less layer* which leverages India's Aadhaar unique identification and authentication system to enable remote and real-time identification and verification of individuals and businesses;
- *Paper-less layer* which is comprised of a "Digital Locker" and "Digital Signature" (or e-Signature) and enables entities to share documents and enter into contracts digitally and remotely;
- *Cash-less layer* which is based on the recently developed Unified Payments Interface and which allows for real-time and interoperable payments across all bank accounts and mobile wallets. Transactions can be stored, and transaction histories shared, for example, with credit providers to enable alternative credit-scoring models; and
- *Consent layer* which, while not yet complete, will enable individuals to share data of their choosing, or to allow time-bound and identity-verified access to their data, but only with their consent.

***Adapted from: G20 Global Partnership for Financial Inclusion, (2017)***

A workable adjunct to the regulatory frameworks being considered for the support of the FinTech industry by the authorities is the development of self-policing or self-regulation, especially since regulatory authorities are grappling with trying to understand the advanced technology being utilised by these players (Restoy, 2020; Magnuson, 2018). This is seen as being potentially very effective as these players would be better placed to understand the advanced activities employed; this could be coupled to a form of insurance to mitigate the risks that harden and through positive behaviour, the management of the associated costs could be managed down. Aligned to this angle, Anagnostopoulos (2018) argues that regulators could consider some form of a simple licence for FinTechs which would equip them with the legal ability to effectively disrupt the industry with tacit permission.

From a policy and regulatory perspective, Eickhoff, Muntermann, & Weinrich (2018) argue that the FinTech business model taxonomy they developed, shown in *Figure 6,* section 2.3 above, could find useful application by regulators as they consider how to move forward. They suggest that not all FinTech business models require regulation of the type placed before traditional banks, dependent on their impact on the issue of stability. This is considered to be a prudent approach as it gives consideration to nuances of risk as opposed to a heavy-handed blanket approach.

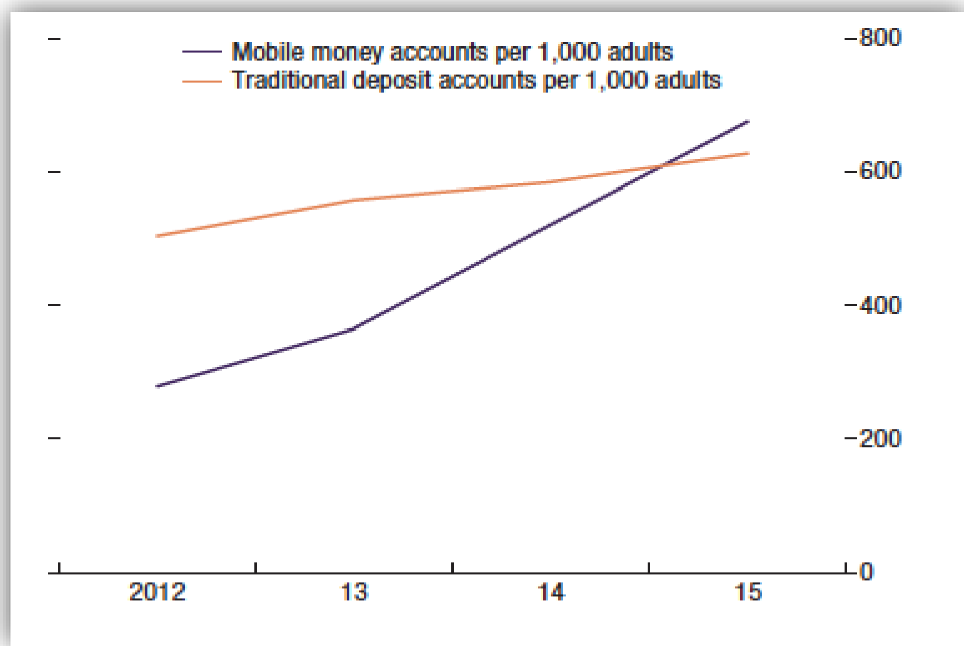
## 2.7 Financial Inclusion and FinTechs

The FinTech revolution has brought to life an ability for the underserved communities to access financial services that traditional banks have failed to do, effectively breathing life into the unbanked and the underbanked populations across the world. At these lower income brackets the banking industry is mostly not aware of the needs of these people and as stated by Navaretti et al. (2018 p.9) *"FinTechs enhance competition in financial markets, provide services that traditional financial institutions do less efficiently or do not do at all, and widen the pool of users of such services"*. The importance of broadening the pool of users of financial services, referred to in the industry as Financial Inclusion, is highlighted in the Pearce & Borgstein (2018) update on progress in Financial Inclusion in the SADC, where this is National Policy across member states with the objective of achieving increased economic growth and improved societal livelihood. Key to the achievement of the United Nations Sustainable Development Goals is an increasing access to financial services because this brings the poor and vulnerable up to a level where they can become economically active. This results in these vulnerable groups being able to move out of poverty, build up an asset base and with their financial lives improved, contribute meaningfully to the successful progress in the implementation of public policy objectives around poverty alleviation and economic growth (Pearce & Borgstein, 2018).

Access to banking and financial services is greatly improved by the advanced technology developed and deployed by FinTech firms, with these technologies giving access to the design of products that are low cost, secure, simple to use and providing rich data with an unparalleled user experience based on an intuitive user interface. In this way, customers are able to access credit in ways they have not been able to before from the banking industry (Claessens, Frost, Turner & Zhu, 2018). As a result of these developments, regulators are accepting the value they see FinTechs bringing to the inclusion debate, actively encouraging and supporting adoption and a framework within which this is located (IMF – World Bank, 2019).

The marvel about the FinTech revolution is that the solutions provided seem to be fairly well spread across the various needs of the customer currently sitting outside of the financial economy, despite these products still being very much at the infancy stage, covering access to credit, payments systems, savings wallets, financial advice and other products for improved financial management for individuals and for SMMEs (Sy, 2019).

*Figure 17: Stats of Mobile Wallets vs Bank Accounts*




*Adapted from: FinTech in Sub-Saharan Africa – IMF Financial Access Survey*

*Figure 17* portrays the extent to which mobile money wallet accounts have overtaken traditional bank accounts across the populations of Sub-Saharan Africa. Whilst this can be termed a FinTech achievement, for the purposes of this paper and our stated definition of FinTech in *Figure 1*, section 2.1, this significant achievement is to be seen as a mostly Mobile Network Operator (MNO) led growth, as opposed to an open banking FinTech led opportunity.

The opportunities that are available to the FinTech community are quite vast and have the capability to impact the financial services sector as a whole, changing the way banking is conducted completely, forcing banks to adopt new business models entirely which will broaden the market significantly, bringing into the economic fold millions of unbanked and underbanked individuals across various markets (Omarini, 2018). Part of what is of importance for FinTechs is ensuring that they have the correct skills and talent, adhere to the compliance and regulatory requirements set upon them and for them to seek to go beyond this with inexpensive technology based solutions, and to work towards collaborating with the incumbents as much as possible to create an air of common progress during this industrial transformation. This collaboration is important as the FinTechs do depend on partnering with the banking institutions to execute on their deliverables for the customer's data is held safely under the care of the banks.

## 2.8 Industry Initiatives Advancing Open Banking

From an industry and practice perspective significant interventions and activities have been undertaken to provide support and frameworks in addition to those of the traditional regulatory agencies which promulgate regulation and legislation. An example of this in the UK is the creation of the Global Open Finance Centre of Excellence (GOFCoE) which was created with the mission "To improve people's lives by safely unlocking the potential of financial data." (Global Open Finance Centre of Excellence, 2022). GOFCoE states that it was established at the beginning of 2021 as a not-for-profit, independent organisation that is neutral, ethically based with trust at its core, the entity seeks to execute on its mission by bringing together diverse partners to achieve this in a world first endeavour. In order to ensure that the most advanced technologies and data security systems were employed, the project was housed out of the University of Edinburgh's Advanced Computing Facility, which is the High Performance Computing data centre of the Edinburgh Parallel Computing Centre (EPCC) which has been using supercomputing technology since inception in 1990 (Global Open Finance Centre of Excellence, 2022).

Active regulatory support of a practical and operational nature is provided by entities such as the Financial Conduct Authority in the UK and the Financial Sector Conduct Authority together with the IFWG in South Africa, to name just two examples of the many similar actions being conducted across many other countries, through the provision of Regulatory Sandboxes. These regulatory sandboxes are consistent in their aims in the industry in that they provide a safe environment plus access to regulatory oversight and expertise as FinTech and traditional banks test new innovative products in a controlled and monitored environment against regulation (Financial Conduct Authority, 2022; Mothibi, 2020; IFWG, 2022).

In a bid to provide consistency in approach and so as to harmonise issues around data security, open data, and inter-operability, to name but three aspects of an extensive list of technical performance areas, the setting of standards to guide the development of the industry is supported by organisations that develop and curate standards across many industries. The International Standards Organisation (ISO) and the Institute of Electrical and Electronics Engineers (IEEE) both provide key focus areas in their research and development endeavours so as to advance the development of technologies and standards to meet the needs of innovative advancements in finance and banking. The IEEE is a technical professional organisation with over 400,000 members across over 160 countries and features a broad diversity of activities dealing with various aspects of technology advancement. The IEEE Future Directions Committee identifies and supports the funding required for emerging technologies as well as new expressions of existing technologies, providing for opportunities to interact with the public as well as opportunities for research interventions such as conferences, research publications, white papers, research grants and more (IEEE, 2002).

The ISO has a membership of over 165 national standards organisations and is established as an independent non-governmental entity operating through its member bodies in an effort to foster interaction amongst the group's experts to develop international standards which address market issues and international challenges. An example of some of the standards that the ISO has worked on includes standards for mobile payments and financial messaging systems for the banking industry, with universal access to financial services (ISO, 2020).

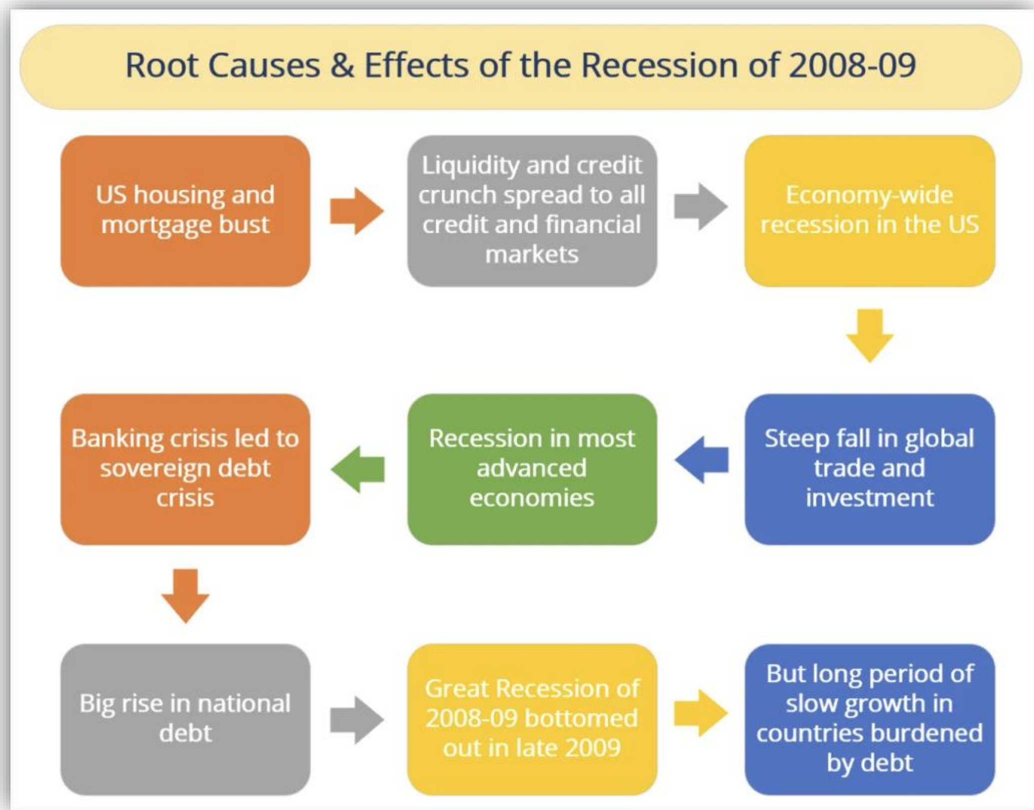
A.I. and it's increasingly pervasive use in technological applications which interact with members of the public, especially in banking, receives attention from the volunteer based community action group known as ForHumanity. Independent audits of A.I. systems are conducted by the individual contributors that make up the community who work to mitigate the bias, ethics, privacy, trust and other risks presented by these systems in a bid to arrive at protections and beneficial outcomes, for humanity's sake.

## 2.9 Regulatory Concerns: Systemic Risk and Stability

In section 2.5 above, this study finds that the literature demonstrates the support that the regulators have put into place for the introduction and development of the open banking industry through the introduction of regulations, frameworks and driving appropriate legislation. However, regulators have also expressed concern regarding the issue of systemic stability regarding the transformation taking place in the industry as a result of open banking specifically. This has resulted in regulators maintaining specific focus on the systemic stability implications of the transformation underway across the traditional banking industry (Financial Stability Board, 2019).

A stark example of a systemic risk which seriously affected the stability of the global financial sector is shown in *Figure 18* below, which occurred through practices in the U.S. banking sector which gave rise to a set of new risks which were not dealt with timeously, resulting the financial crisis of 2008. This systemic risk resulted in a significant shock event resulting in the failure of several banks and financial institutions in the U.S. market and severe stress across global markets and economies (Zandamela, 2009; Corporate Finance Institute, 2022).

***Figure 18: Systemic Risk in the 2008 Financial Crisis***




***Adapted from: Corporate Finance Institute (2022).***

The Corporate Finance Institute (2022) defines systemic risk as illustrated in *Figure 19* below, asserting that this attribute is "inherent in a market system, and hence unavoidable", a situation which any regulator would be wary of when faced with a rapidly growing FinTech company in a given market, described in the example of Yu'E Bao, a FinTech owned by Alibaba® which expanded from being a "too-small-to-care" sized firm to a "too-big-to-fail" systemically significant FinTech entity managing over US$ 165 billion in money market funds over a period of 9 months, outstripping the size of JP Morgan in the process (Anagnostopoulos, 2018). This event would suddenly pose itself as a possible area concern for systemic risk, when viewed at by a regulator.

*Figure 19: What is Systemic Risk?*

> Systemic risk can be defined as the risk associated with the collapse or failure of a company, industry, financial institution, or an entire economy. It is the risk of a major failure of a financial system, whereby a crisis occurs when providers of capital, i.e., depositors, investors, and capital markets, lose trust in the users of capital, i.e., banks, borrowers, leveraged investors, etc. or in a given medium of exchange (US dollar, Japanese yen, gold, etc.). It is inherent in a market system, and hence unavoidable.
>
> The most important feature of systemic risk is that the risk spreads from unhealthy institutions to relatively healthier institutions through a transmission mechanism.

*Adapted from: Corporate Finance Institute (2022).*

The importance and significance of financial system risk and the possibility of the resultant shocks, with these requiring regulatory scrutiny and management is a situation that is heightened by the importance for open banking innovation. It is critical for this to continue receiving regulatory support, especially as this is phenomenon is principally market led, yet the presently unknown risks potentially being presented demand investigation and probable mitigation. In discussing this point, Yin (2022) posits that the innovation brought about by the FinTech phenomenon should be supported by regulators in a way that provides for real-time systemic risk monitoring so as to surface the as yet unknown risks presented by FinTechs. He goes on to suggest that FinTech entities do have a positive impact on the financial sector by reducing concentration risks, and that through an improvement in efficiencies of financial systems brought about by FinTechs, financial risks would be positively impacted and reduced.

## 2.10 Research Questions

Sections 1.5 and 1.6 presented the research aim and the research objectives of this thesis which were developed to address the issues arising from the researcher's prior experience which became evident prior to conducting the literature review.

On completion of the analysis and review of the literature, the below research questions were developed, taking into account the analysis of the literature described in this chapter. In *Figure* 20 below the researcher presents an extract of just the top 5 key literature sources from the complete review of the literature, illustrating the analysis that was conducted and leading to the development of the research questions.

These research questions informed the research methodology followed as discussed in chapter 3, being the process the researcher designed to achieve the desired investigation outcome.

- **What are the expected benefits to consumers, traditional banks and FinTech companies through their participation in Open Banking?**

- **What contribution could be made to practice and theory to influence or improve the understanding of these benefits for an improved outcome in support of open banking?**

The literature review in chapter 2 contains a significant amount of secondary data drawn from academic and other reliable journal sources as evidenced by the bibliography, providing a sound basis for the understanding of the benefits of open banking to consumers.

In undertaking this investigation, the researcher believed that through this study, the findings would lead to the understanding of what the phenomenal rise in FinTech activity has to offer by way of value addition and benefits to traditional banks and to FinTech companies, and having established this, for the researcher to posit the emergent theory. Furthermore, the developed research questions are designed to cover the aims and objectives of the study as well, with this being carried forward for inclusion in the discussion chapter and the conclusion chapter.

*Figure 20: Extract of bibliography*

| **Author** | Anand & Mantrala (2019) | Omarini (2018) | Boot (2017) | Drasch, Schweizer, & Urbach, (2018) | Ozili (2018) |
|---|---|---|---|---|---|
| **Journal** | Journal of Banking and Financial Technology | International Business Research | European Economy, Banks, Regulation and the Real Sector | Journal of Economics and Business | Borsa Istanbul Review |
| **Scope** | Research into banks vs FinTechs & the strategic response by banks | Research into the evolution of FinTech and TechFin in Open Banking | Investigating the impact of FinTech on the future structure of banking | Taxonomy development based on theory & proven through field research | Exploring the impact of digital finance on financial inclusion and the risks |
| **Key Findings** | * Banks still hold customer trust * Millennial and digital natives prefer FinTech innovation * Banks should reach strategic decision * Rudimentary strategic choice matrix proposed | * Bank specific Open Banking strategy * Open Banking is threat and opportunity * Banks should embrace FinTech innovation to compete | * Consumers still identify with trust in banks * Question of FinTech impact on systemic stability still unclear * Disaggrega-tion of banking value chain & creation of FinTech ecosystem | * Banks suffer lack of innovation capability * Banks respond by collaborating with FinTechs * Banks benefit through partnerships due to legacy system issues | * Stimulation of economic growth and GDP through growth in transactions * Collaboration leads to reduction in bank costs * Financial Inclusion via FinTechs benefits bank deposit base stability |
| **Methods** | Conceptual article with supporting case studies | Literature review | Literature review | Systematic organisation of literature & semi-structured interviews with bank and FinTech executives | Literature review and conceptual discourse |

***Source: Zandamela***

## 2.11 Summary

The review of literature reveals that the age old traditional practice of banking, especially as it has been undertaken in recent times, has entered a period of significant change brought about by technology on the one hand and increasing sophistication in customer demands, based on newly available technology, on the other. The literature has also explored some of the regulatory positions which are uniformly driven by the BIS through the BCBS across the industry globally; these positions show support for the emerging innovation wave brought on by the FinTech companies. As stated in section 2.4, this thesis investigates the FinTech phenomenon from a global perspective due to the internationally integrated nature of bank regulation and banking, resulting in a mostly homogenous practice of central bank oversight taking place across the world (Maume, 2017).

Developments in the FinTech industry are occurring rapidly with the media, academic consultants and industry professionals producing several journal published research reports which give good insight into the rapid developments in this new industry, which is closely aligned to the traditional banking industry. These publications are also keeping pace with the rate of evolution being witnessed in the industry, rate of evolution which is further spurred on by the sudden onset of a "new normal" in human interactions and behaviour, forced upon us by social distancing regulations promulgated globally by government authorities due to the Covid 19 pandemic.

Despite this, the researcher finds that a research gap exists in the academic literature regarding the understanding of how banks tend to relate to FinTech companies and how they understand, if in fact they do, what potential benefits could flow from this new union between them and FinTech companies and how consumers could derive benefit from this as well. Having completed the literature review and identified this gap in the academic literature, the path for investigation through this research now becomes clear.

From the customer perspective the available literature exposes a fairly consistent message which spans different consumer generations and jurisdictions, with these consumers demanding new products tailored to meet their specific needs, and these needs require that these products be delivered to the consumers via advanced digital technologies that bring convenience into their lives. The literature suggests that this same technology is capable of bringing into the formal financial economy the many people that have found themselves outside of this economy due to a lack of access for various reasons.

A big part of the access issue stems from the business models currently being followed by traditional banks, resulting in lower income population groups essentially being neglected by the banks. This situation is one which the regulators are unhappy about as they have been pushing for underserved markets to be given access to financial services, expecting that the traditional banks would respond to this call and develop methods by which this could be addressed.

From the literature, it is quite evident that regulators are drawn to the ability that FinTech companies have to deliver products to consumer segments that have previously been un served by the incumbents, providing support for these entities to continue with their innovative activities. However, it is also evident that regulators are somewhat wary of these same entities as their impact on the stability of the financial system is still unclear, and the risks, if any, that they pose in this regard are still being studied.

## 2.12 Linking Comment

In this chapter the author has put forward a review of the available literature, having set out the process that was followed so as to ensure that replication is possible, whilst setting out the rationale behind the choices made in the pursuit of the method developed and followed. The research questions were also presented in this chapter and these will guide the study.

Chapter 3 develops the thesis further and presents the author's research design and methodology and the reasons for the choices made. The researcher then positions himself in the study process to lend transparency to the research process and bring the reader along the inevitable debate on the issue of bias, affording the opportunity for clarity to be introduced.

# 3 Research Design and Methodology

## 3.1 Chapter Outline

This chapter opens with an introduction which exposes the philosophical standpoint of the researcher, taking a look at the research question that drives the reason for this study and the need for the discovery of a theory in response. The reader is then taken through the philosophical and methodological choices and position of the researcher and what informs these. The role of the researcher in undertaking the research is then discussed, followed by the reader being taken through the data sources and collection methods employed in this research. Subsequent to this the process followed to embark upon the data analysis is presented to the reader in detail.

The credibility of the process followed is discussed and the ethical considerations of the study are debated. The chapter is then brought to a close with concluding remarks.

## 3.2 Introduction

The researcher's approach to the research design and methodology aspects of this research has been informed by a certain ontological perspective and epistemological position, both of which effectively support the research. In commencing this type of research it is important for the researcher to understand what constitutes truth in business and management research, thereby leading to an ontological and epistemological position.

Cassell & Symon (2004) in citing Gephart (1999) mention that the nature of qualitative research is that they may be informed by any of the various epistemological positions. This inclusion embraces the epistemological positions that would normally be associated with the quantitative approach to research.

The researcher's philosophy is based on the ontology of the realist, which McAuley (2014 p.32) refers to as *"…the view that phenomena such as organisations exist 'out there' independently of our perceptual or cognitive structures and attempts to know."*. From the epistemological standpoint I hold the subjectivist approach which gives rise to the view that the way in which we get to know about the social world is arrived at by understanding the views and meanings that other people give to their experiences in the world (McAuley, 2014).

McAuley (2014) further states that having been adequately trained in the methodology and methods used in this approach, a keen awareness is required to deal with the possible implications of the double hermeneutic (Giddens, 1993 cited by McAuley, 2014) and reflexivity, which raises two sets of issues which may colour the results of observation and theory through the hermeneutic feedback loop where, it is stated, the observer cannot be fully separate from the subject of observation, thereby influencing, consciously or not, the research results.

## 3.3 Methodology

Once the researcher had decided on his philosophical standpoint, the methodological framework to be followed in the research could then be arrived at, which in turn sets the stage for engagement with the research participants in the field (Birks & Mills 2015).

The nature of the investigation required that the researcher sought out and obtained an in-depth insight into the aspects that would be the source of primary data from the field, such as the thoughts, views, experiences and concepts of the various participants. For these to be collected effectively the researcher had selected the qualitative research method as this would also give the researcher the ability to conduct interviews with selected interviewees from amongst the industry participants in banks and FinTech companies.

The research gap has been identified, as discussed in section 2.7, resulting in the inductive method chosen as the selected approach, with the objective of the emergence and development of a theory based on the researcher's findings (Creswell, 2014).

Cassell & Symon (2004) in citing Madill et al. (2000) suggest that qualitative interviews fall into classifications that follow their epistemological positions with realist based approaches at the one end of the spectrum, and radical constructionist approaches at the opposite end of the spectrum. The realist's approach holds the belief that the interview outputs tend to bear a close relationship to the participant's real experiences in the actual world, yet the radical constructionist interview output would be seen as yielding data that is limited exclusively to the interview setting, only enjoying the guidance of the skill employed by the interviewer to draw this data, with no claim as to the participant's own experiences colouring the data. The researcher holds a world view and belief that is similar to that of Willig (2001) cited by Cassell & Symon (2004) where it is posited that such classifications would tend to reduce these to somewhat overly simplified positions.

Realist interviews yield data that is usually considered to produce results that provide insight to the interviewee's life outside of the interview situation, which some suggesting that this requires a level of concern around the accuracy of this data, calling for comparisons to be made between this data and data drawn from other sources so as to achieve triangulation of the primary data to the secondary data (Cassell & Symon 2004). However, like McAuley (2014) the researcher holds the view that the in-depth interviews conducted on a semi-structured basis for qualitative investigation generates sufficient quality data which, provided that the researcher holds onto a subjectivist epistemological stance and is sufficiently trained in the collection methods whilst being aware of the implications of the double hermeneutic and reflexivity, can be relied upon. The researcher followed this guidance and choose this route as it fits well with the nature of this research.

Charmaz's (2006, p.15) viewpoint supports this as she states:

*"We are not scientific observers who can dismiss scrutiny of our values by claiming scientific neutrality and authority. Neither observer nor observed come to a scene untouched by the world. Researchers and research participants make assumptions about what is real, possess stocks of knowledge, occupy social statuses, and pursue purposes that influence their respective views and actions in the presence of each other. Nevertheless, researchers, not participants, are obligated to be reflexive about what we bring to the scene, what we see, and how we see it."*.

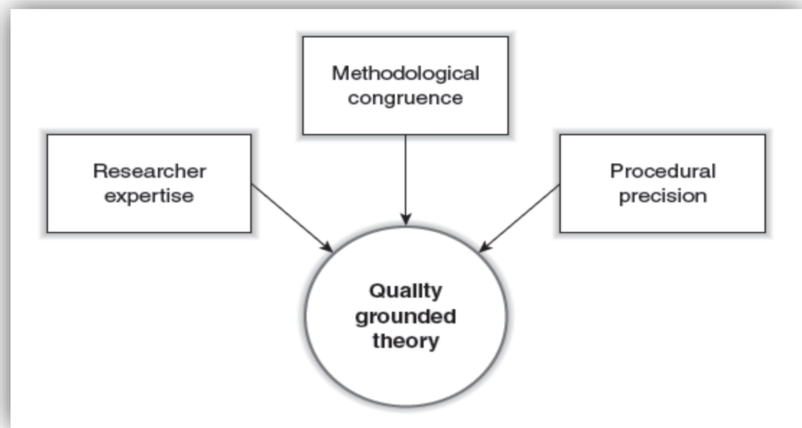
The researcher's subjectivist viewpoint suggests agreement with both Charmaz and McAuley regarding the colouring of the collected data by the interviewee, especially as the researcher/interviewer is active in the interview process and is able to guide the interviewee appropriately to report on providing data as an observer located in the world. Alvesson & Sköldberg (2009) in citing Denzin and Lincoln (2005:3) put forward a view that would seem to support this assertion in that they state that qualitative researchers are seeking to understand the interpretation given to phenomena by observers located in the world and how these are given meaning.

With a qualitative approach chosen as the methodology to use, the researcher was then able to select the preferred research strategy, best suited to ensure that the required level of rigour is achieved through the research process. The **grounded theory** research strategy was selected as being the most suitable strategy to achieve the desired goal as this strategy has as its aim the discovery of the concepts and hypotheses that bear relevance to research (Glaser and Strauss, 1999).

Charmaz (2006) has gone further to describe grounded theory as having a scientific basis that allows for rigour to be applied in such a process with new insights to assist the understanding of the various social activities being made evident from the context in which they arise in a natural, unforced manner supportive of the inductive frameworks. This in turn would effectively free up the researcher from having to produce a perfect output of the research area, instead allowing for the identification of an emergent theory once data saturation had been achieved, and no new data or insights were drawn from the interviews.

As a research strategy being used for this research, grounded theory provides a more relevant approach when compared, for example, to that of discourse analysis, which requires a deeper analysis of the language, discourse events and other discourses that arise as instances of sociocultural practice (Cassell & Symon 2004). Data is then collected through a process by which samples of data are driven and guided via the development of the concepts that emanate from the sampling process, referred to as theoretical sampling Glaser and Strauss (1999). The global pandemic Covid 19 has caused the interview processes to be conducted online in all respects and whilst a negative impact on the process is not envisioned, this may place an additional burden on the interviewer in terms of gaining access to participants.

*Figure 21: Factors influencing quality in the conduct of grounded theory research*




*Adapted from: Grounded Theory – A Practical Guide, Birks & Mills (2015)*

Birks & Mills (2015) discuss the critical elements that make for the discovery of a quality grounded theory (see *Figure 21 above*) as being as a result of the skill of the researcher, which takes into account the ability of the researcher based on experience derived over years spent in the professional arena. Added to this is the importance of harmony existing between the researcher's personal philosophical position, the aims of the study and the methodological stance taken to execute on the research, which if not congruent, could call into question the quality of the research undertaken (Birks & Mills, 2015 citing Nelson, 2008) and the value of the findings. Procedural precision is the third element in the bid to produce quality research and this takes into account the need to diligently follow the steps and processes of grounded theory to achieve rigour and precision, adding to the quality of the findings.

## 3.4 Role of the Researcher

The researcher is a banking professional with over 38 years of industry experience from a junior clerical level, through several levels to management and various executive levels all the way up to the top executive level running two different banks as the Chief Executive Officer (CEO) and Executive Director on the board of Directors. He has been the Africa CEO at one of the continent's largest banks with several subsidiary bank CEOs reporting in to him, and has been a non-executive Director on boards of banks across several jurisdictions on the continent. The experience as a traditional bank CEO spans 19+ years.

The researcher went on to found an open banking FinTech company which he leads as the CEO. He holds various professional qualifications with the highest academic qualification being a Master of Science degree in Strategic Management, awarded with Merit.

The researcher has directly pertinent, deep and broad experience which is relevant to the research aim and objectives stated in sections 1.5 and 1.6 respectively. Whilst the researcher views this intimate experience with the research aim as a strength, Creswell (2014) states that the researcher must be aware of the possibilities of researchers with experiences adopting a bias of one or other sort towards the data or emerging themes in a bid to support a position or reach a particular conclusion. The reason that the researcher holds the view that the deep experience is seen as a strength instead of the basis for tainting the findings is based on a keen understanding of the issues and the available literature, a good amount of which has been reviewed in chapter 2, coupled with this is the chosen research strategy, grounded theory, which provides a basis of a rigorous framework with which we shall discover the theory relating to the research aims (Creswell, 2014; Babbie, 2013). Babbie (2013, p.410) discusses the issue of bias, which the researcher subscribes to, as follows:

*"Researcher bias is hardly inevitable, however. Experienced qualitative analysts avoid this pitfall through a deliberate awareness of their own values and preferences as well as adherence to established techniques for data collection and analysis.".*

Creswell (2014) cites Glesne & Peshkin (1992) in highlighting the issue of "Backyard" research to researchers, emphasising the need to ensure that studies conducted at one's own organisation are understood to present additional challenges which would require care, such as compromising private information through disclosure or creating a relationship imbalance between the researcher and the interviewee. Further challenges that would be brought about by this type of research could be around distortions that arise in the sourced information. With these being real challenges and limitations to this study, the researcher did not undertake any backyard research.

Prior to the commencement of the field study the researcher took a moment to reflect and capture any impressions that may have been held on the research question, in a bid to identify and encapsulate any possible bias for ongoing quality control purposes.

Professional knowledge of both sides of the debate enabled the researcher to appreciate the research question from a bigger picture vantage point, with the supposition that the open banking phenomenon being driven by the consumer is the result of the mostly unchanging attitudes of traditional bankers towards their needs. With this supposition clear, it would now be key for the researcher to follow the established data collection techniques and maintain this position encapsulated, in keeping with the researcher's philosophical standpoint.

None of the interviewees had a connection with the researcher of a nature that could exert some influence on the researcher's interpretations of the data or compromise the integrity of the findings.

## 3.5 Data Sources and Collection Methods

### 3.5.1 Research Participants

The data was drawn from participants that represented the two different types of organisations. Firstly the traditional banking industry interviewees were active executives currently operating in the industry, involved in the decision making processes regarding the strategies that their institutions would follow on the question of working with FinTech entities in an open banking format. The sampling method employed in the selection of the participants was purposive sampling as the study did not require a broad representative population sample group, but rather required a focused investigation across a smaller, relatively unresearched group with a high level of homogeneity. Sampling bias is a possible risk in purposive sampling, however, in this study this risk was satisfactorily mitigated by drawing participants from different institutions located in different countries across several different continents (Goulding, 2002). In starting the researcher sought to interview 5 to10 top executive participants from the category of traditional banks located across 5 different countries as this is a global phenomenon occurring simultaneously across all continents, as stated in section 2.4.

A further set of data was drawn from participants that represented FinTech companies, these were top executives that were involved in the decision making processes and strategies that have resulted in these companies working with traditional banks in one way or another. Here too the interview sample sought to include 5 to10 participants across

5 different countries, and purposive sampling was also employed here. This sample size would be subjected to the chosen investigation method, being grounded theory, which would determine if saturation is achieved or if the sample size requires further expansion.

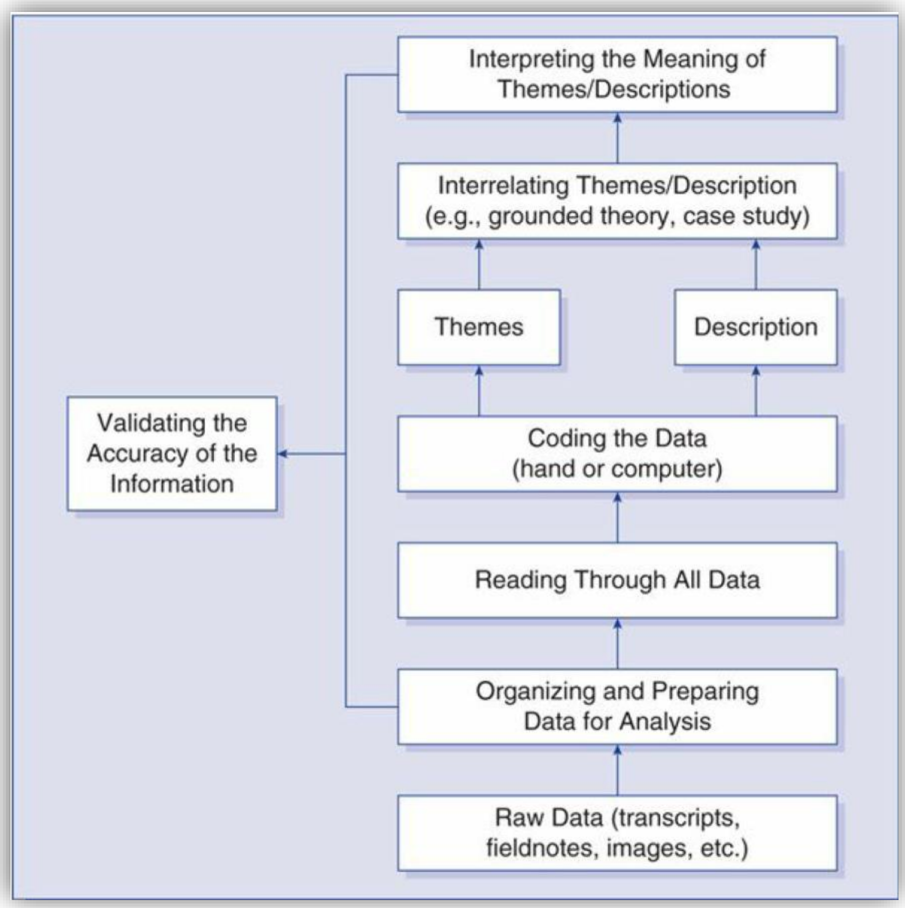
The process used to identify and select these subjects employed the use of LinkedIn only, which is a database of professionals across all industries used for a variety of purposes including establishing contact and making new connections.

An interview protocol was developed (Creswell, 2014) which will be described in this chapter, to provide the framework by which prompting questions are used to encourage the participants to speak and share extensively of their experiences. The responses were recorded using the Zoom platform, thereby providing audio and video files.

The process followed in the treatment of the recorded data is described in this chapter, leading to the discovery of the codes through analysis and culminating with the thematic analysis generating the themes from the data.

Creswell (2014) posits that the data analysis process follows the steps shown in *Figure 22* below, which, whilst appearing to be linear, is not as the grounded theory researcher is encouraged to utilise several levels of analysis to achieve interactivity with the data, which also provides the process by which reduction of the data is achieved, culminating in emergent themes.

*Figure 22: Data Analysis in Qualitative Research*




*Adapted from: Research Design, Creswell (2014)*

The type of participants (described further in this chapter) that were selected for the interviews were of a standing that permitted the use of intensive interviewing methods (Charmaz, 2014) to significantly enrich the procuring of data and the subsequent quality of data so obtained. This method therefore allowed for the reduction in the quantity of participants used for the study as the quality of data drawn from this particular quality of participant was broader and deeper than would otherwise have been the case. In essence, the breath, depth and quality of data drawn was as mature as could be available from professionals in the industry. Being a purposive sampling method, the risks associated with this were presented and discussed in section 3.5.1 and the researcher concluded that these risks were satisfactorily negated and mitigated for the reasons given there as well as in the paragraph above.

These interviewer and participant attributes and benefits are illustrated in *Figures 23* and *24* below.

*Figure 23: Intensive Interview - Interviewer*

Intensive interviews allow an interviewer to:

- Go beneath the surface of the described experience(s)
- Stop to explore a statement or topic
- Request more detail or explanation
- Ask about the participant's thoughts, feelings, and actions
- Keep the participant on the subject
- Come back to an earlier point
- Restate the participant's point to check for accuracy
- Slow or quicken the pace
- Shift the immediate topic
- Validate the participant's humanity, perspective, or action
- Use observational and social skills to further the discussion
- Respect the participant and express appreciation for participating.

***Adapted from: Constructing grounded theory Charmaz (2014).***

*Figure 24: Intensive Interview - Participant*

Intensive interviews allow research participants to:

- Break silences and express their views
- Tell their stories and to give them a coherent frame
- Reflect on earlier events
- Be experts
- Choose what to tell and how to tell it
- Share significant experiences and teach the interviewer how to interpret them
- Express thoughts and feelings disallowed in other relationships and settings
- Receive affirmation and understanding.

***Adapted from: Constructing grounded theory Charmaz (2014).***

As stated above, the maturity of the participants allowed for the use of the intensive interview methods which can be quite vigorous and intense and this requires that the interviewer/researcher themselves must be able to muster the tact to push the interviewee and direct them in the event that this becomes necessary. Success in use of the intensive interview method on a group of top executives does require an experienced and tactically astute interviewer who could hold their own with such an "elite" executive as an interview participant.

With the participants being senior executives from the financial services sector, the researcher would have to be alive to any comments made by them on behalf of customers as being offered out of perspective rather than fact.

### 3.5.2 Interview Sample

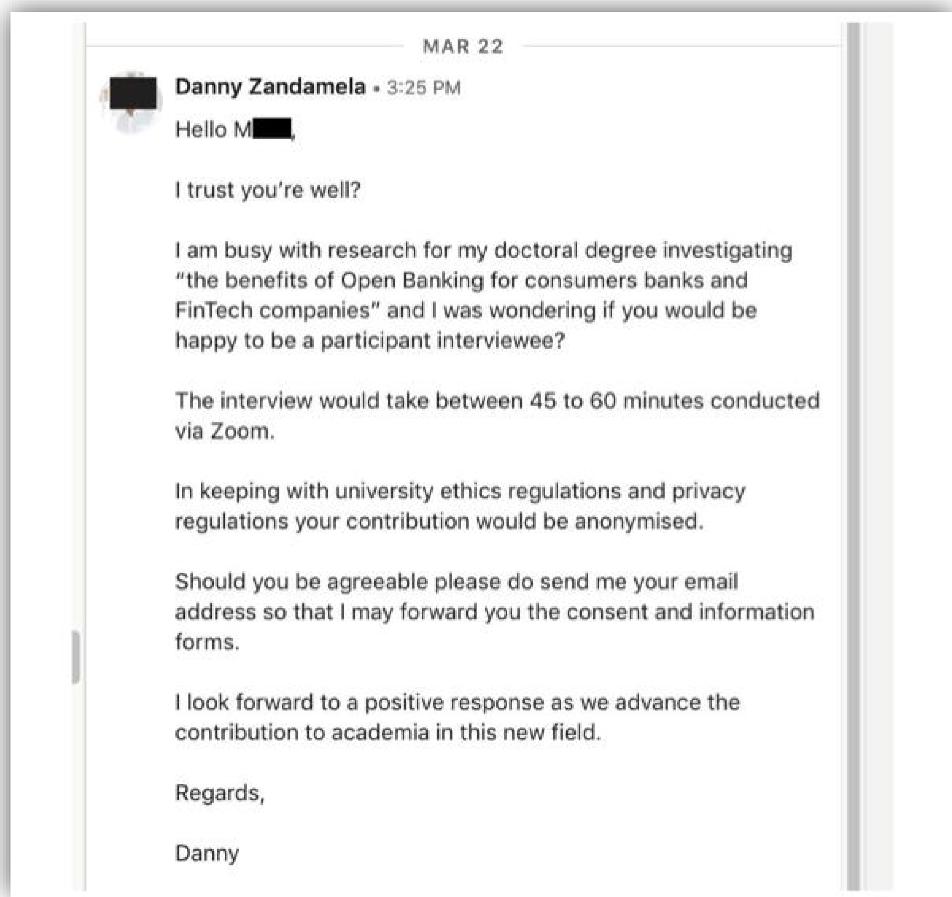
Being a study of significant and strategic importance to the banking industry, the requirement for selecting participants for this study was that they be the top decision makers in the entities that are responsible for responding to the new developments in the industry, a great deal of which currently are driven by new open banking regulation, as well as changing consumer demand.

A final selection of 15 participants was arrived at from an original list of 47 which were identified using the internet based platform LinkedIn as the source tool. LinkedIn is a tool that is used for professionals to network and connect and its users capture their qualifications and experience on a profile page which is available for perusing by other members of LinkedIn who may or may not be connected to the user posting the information. In this way, professionals are able to establish contact with like-minded professionals, or with professionals with whom they identify in some way and become connected with them, thereby broadening and deepening their network of contacts and connections. Contacts that meet over the LinkedIn platform who eventually become connections may or may not have had a prior professional relationship with one another.

The process that was used to work through the original collection of 47 identified prospects followed several steps, the first of which involved a determination of the expected level of success with each individual new prospect based entirely on the observed level of activity of that prospect on the platform, how many professional contacts they had in their list and the detail and attention they appeared to put into their listing of qualifications and past work experience. This process narrowed the list down to 32 qualifying prospects. The second step taken involved establishing contact with new prospects so as to become connected with them; this was achieved through the use of the invitation to "connect" button on the prospect's profile page. This resulted in several new connections being established and is a critical step so as to establish credibility with the new prospects. This is a list of financial services "elites" and for them to be encouraged to participate in such research they would, in all likelihood, be more amenable to dealing with a fellow financial services "elite" professional. For prospects to achieve this level of comfort, they in turn would be able to peruse the LinkedIn profile of the researcher as a means used to establish this aspect of professional credibility. Without the ability for the targeted interview participant to "interrogate" and establish the interviewer's credentials, the likelihood of success would be materially lower. This is a key step in securing the attention of this quality of participant.

The third step involved despatching invitations to all the 32 qualifying prospects using the messaging service of LinkedIn, an actual example of which is shown in *Figure 25* below.

***Figure 25: Sample LinkedIn Invitation Message***



MAR 22

Danny Zandamela • 3:25 PM

Hello M[redacted],

I trust you're well?

I am busy with research for my doctoral degree investigating "the benefits of Open Banking for consumers banks and FinTech companies" and I was wondering if you would be happy to be a participant interviewee?

The interview would take between 45 to 60 minutes conducted via Zoom.

In keeping with university ethics regulations and privacy regulations your contribution would be anonymised.

Should you be agreeable please do send me your email address so that I may forward you the consent and information forms.

I look forward to a positive response as we advance the contribution to academia in this new field.

Regards,

Danny

***Source: Zandamela/LinkedIn Messaging***

The strategy developed for the make-up of the interview participant list involved achieving an equal balance of interviewees between bank top executives and FinTech top executives in order to extract data from the two groups that are key to the execution of open banking regulations set forth by banking regulators. To this end, the fourth and final step in the creation of the list of participants involved selecting as close to an equal balance as was possible from the positive responses to the invitation message, which numbered 19. However, in attempting to confirm schedules with all 19 positive responses, 4 participants were unable to commit time due to pressures they were under, resulting in the field narrowing down to the 15 confirmed participants. To these emails were despatched with attachments of the university Consent Form and the Information Form, examples of which are to be found in the appendixes 3 and 4.

Diary dates were then agreed by email, after the email addresses were exchanged over the LinkedIn messaging service, and the interviews were duly convened and recorded using facilities embedded in the Zoom video conferencing platform.

*Table* 1 below illustrates the list of the final selection of the interview participants for the study.

***Table 1: Participant Listing***

| Participant Listing | | | | |
|---|---|---|---|---|
| **Participant** | **Number of References** | **Role Title** | **Years in Role** | **Industry Experience** |
| Bank Exec 1 | 25 | CIO | 8 | Banking |
| Bank Exec 2 | 88 | CIO | 7 | Banking |
| Bank Exec 3 | 42 | CEO | 14 | Banking |
| Bank Exec 4 | 77 | CEO | 8 | Banking |
| Bank Exec 5 | 64 | CIO | 7 | Banking |
| Bank Exec 6 | 15 | COO | 1 | Banking |
| Bank Exec 7 | 50 | CEO | 11 | Banking |
| Bank Exec 8 | 91 | CEO | 8 | Banking |
| Fin Exec 1 | 60 | CEO/Founder | 7 | FinTech & Banking |
| Fin Exec 2 | 48 | CIO/Founder | 12 | FinTech & Banking |
| Fin Exec 3 | 109 | CTO/Founder | 9 | FinTech & Banking |
| Fin Exec 4 | 76 | COO/Founder | 8 | FinTech |
| Fin Exec 5 | 76 | CEO/Founder | 11 | FinTech |
| Fin Exec 6 | 55 | Consultant/ Founder | 5 | FinTech |
| Fin Exec 7 | 61 | CEO/Founder | 27 | FinTech |

***Source: Zandamela***

Being a global phenomenon, to achieve coverage across various jurisdictions it was also a requirement of this study that participants be drawn from various countries so as to test this aspect of the phenomenon. The resultant list of participants representing the banking industry is therefore a broad sample from various countries, drawn using a criteria that meets the needs of this study, compiled from a profession of mostly like-minded banking professionals, with arguably little strategic, regulatory management or operational difference between them. It is therefore argued that the sample of banking executive participants is fairly representative of the banking industry, save for the country specific differences brought about by the nature and needs of the consumers, the competitive mix defining the local industry dynamic, and the local regulatory nuances, amongst other possible factors.

As regards the participants representing the FinTech industry, no such argument could be advanced nor could such be suggested to exist as these are mostly privately held companies with diverse strategies following unrelated operations and business models serving different parts of the banking value chain as shall be demonstrated from the findings outlined in this chapter. No argument is advanced to suggest that the sample of FinTech executive participants is representative of the FinTech industry as currently little regulatory management shapes their strategies, operational activities or business models, to name but a few possible factors which could have such an effect.

Banking and FinTech elites are generally fairly few in a given country and are therefore somewhat identifiable. To preserve anonymity their countries of operation are not shown in a column per participant but are given as two statements below.

The banking executives have experience operating across the following countries:
Australia, Botswana, Malawi, South Africa, Tanzania, Uganda and United Kingdom.

The FinTech executives have experience operating across the following countries:
Australia, India, Indonesia, South Africa, United States and Vietnam.

### 3.5.3 Data Collection

It is important to mention at the outset that the research process took place during a unique time in the history of the world because virtually all the countries around the world were under lockdown restrictions due to the Covid 19 world-wide pandemic outbreak. Whilst the tools (described in the paragraph below) that were used during the interview process were suitable for working through the social distancing requirements in force internationally, the possibility of a negative impact on the data collection process was believed to be remote as most people around the world have adopted the trend of working from home and rely on video based meetings to a large extent.

The data collection method that was used to conduct the data collection of this research study was the interview method which is well paired with the grounded theory method; the interviews were conducted by the researcher with himself being the key instrument using a previously constructed semi-structured interview guide document (see example in *Table 2 below*) to take the participant through a semi-structured interview with a few open ended questions to stimulate the views and opinions of the interviewees. The interview medium used was one of the available online video conferencing platforms that the interviewee was familiar with, such as Zoom or Skype or similar depending on their preference, provided that the chosen application allowed for recording of the interview as this would be required for data transcription and analysis purposes. The reason for the use of the application selected allows for the analysis to be conducted using an analysis tool, which in this case was NVivo (Creswell, 2014). The reason for choosing NVivo is due to user ratings on a software comparison website and the stated flexibility in using the software with video and audio data files, which would be compatible with the data recorded from the video call software. The Zoom software initially suffered some widely publicised security issues in 2020 which the company corrected with enhanced protection using end to end encryption, by way of developments to the software.

### 3.5.4 Data Collection Procedure

The data collection strategy implemented for this research study was split across two different phases. This approach was necessitated by the advent of the year end break of December 2020, which brings about a festive mood across most parts of the world and a shift in focus at the best of times; however, December 2020 was unique in that it occurred during the global pandemic with lockdown regulations in effect in virtually every country around the world. The first phase interviews occurred during November 2020 and the second phase interviews took place during March 2021.

Across both phases, the approach used during the session followed similar patterns in that the researcher had developed a list of 11 questions which were used as prompts to initiate the submission of the participant and to provide additional guidance during the session. The participant was encouraged to allow their thoughts and experiences to flow. Clarifying and amplifying questions were asked where appropriate and certain points made were revisited from a different angle so as to interrogate deeper and where requested, the researcher provided clarification of points as required by a participant.

Throughout both phases of the interviews, the sessions were recorded using the Zoom video platform with the settings configured to collect both video files with embedded sound as well as separate audio only files. The reason for this was to facilitate reviews of the video sessions where required so as to assess any notable behavioural patterns captured on camera for the purpose of analysing visual speech patterns should the audio recording become compromised due to a transmission break of any significance.

The audio only files were captured separately so as to allow for easy analysis of the data and automated transcription using the NVivo for Mac version 12 software. Audio only files are smaller than video files with embedded audio, allowing for more efficient transcription by NVivo. Once the automated transcription was complete for each file, these were verified manually word by word by the researcher which was a very time consuming process but continued to maintain and deepen the researcher's closeness to the data. This process also started the first level of analysis of the data by the researcher.

The interview guide which was used during the interview sessions is shown in *Table 2* below. During the sessions the researcher attempted to slightly alter the questions after the first two participants so as to achieve a deeper interrogation, however, almost all the participants were able to share information with little prompting, making the need for such an alteration not necessary. Undoubtedly seniority of the interviewees contributed to their ability to share data freely and confidently.

*Table 2: Interview Guide*

## Qualitative Data Semi-Structured Interview Guide

Data collection semi-structured questionnaire for the following research question:

What are the expected benefits to traditional banks, FinTech companies and consumers through their participation in Open Banking?

1. What is your view regarding the impact of regulation such as PSD2 on traditional banking business models?
2. What benefits, or disbenefits, do you believe this impact will bring to traditional bank business?
3. What is your view regarding the impact of PSD2 regulation on the FinTech industry?
4. What benefits or disbenefits do you believe this brings to FinTechs?
5. What benefits or disbenefits do you believe these changes bring to consumers of banking services?
6. What is your personal experience in the use of banking services?
7. Do you see any personal benefit to you regarding the use of new FinTech services?
8. What do you see as being the role of traditional banks in the future due to regulation such as PSD2?
9. Do you believe that there is room for collaboration between traditional banks and FinTech companies?
10. What do you believe the benefits are that would flow from such collaboration:
11. Do you have any views on FinTech as it relates to the informal sector (i.e. unbanked/underbanked) and the needs of this group?

***Source: Zandamela***

The questions in the list were used as prompts with some of these being asked of some participants whilst other questions were not, so as to increase the randomness of the process. This also made the need to create an additional questionnaire for this study quite superfluous, and satisfied the objectives of the grounded theory methodology approach.

#### *3.5.4.1 Data Collection Phase One*

In the first data collection phase 6 interviews were conducted with a split of 3 banking executives and 3 FinTech executives, alternating between the two different professions so as to secure the different perspectives of the parties in our research of the open banking phenomenon in equal measure, thereby examining and comparing the collected data early on in the process. This allowed for the introduction of a feedback loop during the interview process. In keeping with the selected methodology presented in chapter 3 above, the line by line initial coding technique described by Charmaz (2014) was used manually against the data in phase one to assist this purpose, which also brought the added benefit of the researcher getting close to the process and to the data generated, thereby informing the process more effectively through this initial analysis of the data. This resulted in the generation of 13 codes which can be viewed in the Preliminary Summary of Findings, *Table 3* below. Birks & Mills (2015) suggest that the importance of maintaining focus and analytical depth is crucial in the grounded theory approach at all times, which was the intention of the researcher and this was achieved through the time consuming initial manual analysis. The benefit of following this strategy also led to a much more intense inquiry during the second phase interviews, as well as the introduction of reflexivity with the data (Charmaz 2014).

***Table 3: Preliminary Summary of Findings***

| CODES | THEMES |
|---|---|
| • Bank technology legacy bound<br>• Banks inflexible<br>• Consumers deselect banks' inflexibility<br>• Financial Inclusion suffers | **Status Quo Intolerable** |
| • Consumers becoming better informed<br>• Consumers demanding advanced tech solutions<br>• Consumers seeking convenience | **Improved User Experience** |
| • Collaboration key between banks and FinTechs<br>• Speed of change matched by FinTechs<br>• Banks benefit from cooperation | **Collaboration is Key** |
| • Regulation levelling the playing field<br>• Regulators encouraging innovation<br>• Risks must be tracked and managed | **Regulatory Support** |
| The analysis is performed on primary data drawn from participants at senior executive level in both banks and FinTech organisations, without exception. | |
| No data points at this stage show a bias in any direction to suggest a breakout from the group themes discovered. | |

***Source: Zandamela***

### *3.5.4.2 Data Collection Phase Two*

The second phase of interviews comprised of 9 interviews which were conducted in alternating fashion between banking executives and FinTech executives so as to increase the interview rigour and achieve increased interview intensity and data diversity. The interview run times averaged approximately 50 minutes. The questioning angle was also modified during the session, informed by the phase one questions and responses in an attempt to elicit new data but this had little effect on the data collected. Additionally, the sequence of prompt questions from the interview guide was altered in an attempt to impact the data being collected but this strategy also bore no material success in securing new data.

During the course of the run of the interviews, more summarised manual analysis was employed to gain appreciation of the nature of the collected data and to seek out material changes in the code structure. Through this process, early on during the second phase of interviews conducted, it became clear that no new data or codes were derived from the process that were different to the data collected from the first phase interviews, adding no new code categories from the initially developed codes. What did materialise were local examples out of the experiences of the participants which highlighted cultural and operational nuances, which still did not advance the originally generated codes, suggesting that saturation of the data had been achieved. Glaser & Strauss (1999) have pointed out that mining data further at this point of saturation brings little additional benefit to the research objectives as no additional development of the emerging theory can reasonably take place. The researcher was satisfied with the veracity of the process that had been followed, coupled with the conviction that the data that was drawn from the participants followed an intense process and that the point had been reached showing repetition in the data, signalling saturation. With these attributes having been achieved the researcher was confident in concluding the data collection process.

Once data saturation had been achieved with no further insights being drawn from the investigation process, Charmaz (2006) states that the researcher could be satisfied that the grounded theory process has run its course, thereby allowing the researcher to consider the development of theory emerging from the data collected at this point.

The researcher had also remained vigilant throughout the interview process to ensure that procedural precision as discussed by Birks & Mills (2015) was kept in focus at all times, ensuring that the process respected these principles so as to lock the required rigour into the investigation. This would have the benefit of improving the quality and credibility of the collected data, which was highlighted in section 3.3.

Furthermore, in section 3.4 the researcher discussed the hardly avoidable issue of researcher bias which Babbie (2013) states plagues virtually all qualitative data collection and analysis activities. During the data collection and early phase analysis, and indeed during the subsequent analysis, the researcher maintained the vigilance and maturity called for to keep the required diligence active so as to ensure that researcher bias does not occur. This is also assured by disciplined adherence to the grounded theory data collection principles, which the researcher remained at pains to respect.

## 3.6 Data Analysis

Charmaz (2006) in citing Glaser, (1978) states that in grounded theory the process of analysis of the data, which involves the activity of coding, is said to start with the first mandate of grounded theory, which is to study the emerging data from the research. The collected data is key to the process of developing the theory that ultimately emerges from the process which starts with the *coding* of the collected data, thereby forming the base framework for further analysis. Charmaz (2006) goes further to describe the nature of coding in that it falls into an initial phase where naming of the data takes place, followed by the second phase where selection of the most frequent codes takes place for the sorting and the organisation of large amounts of data. Through this process we gain control and understanding of our initial data and what it tells us. This learning guides us to redesign our follow up data collection process, refining this to ensure that we dig deep into meanings to advance the emerging theory.

Through the constant analysis and comparison, Glaser and Strauss (1999) instruct that the desired outcome is to achieve insight from the data so as to develop theory, through the transformation of these insights into the various groupings and categories. Qualitative coding is quite unlike quantitative coding in how the data is handled as collection takes place, which involves immediate analysis of the data to seek out the interpretations that can be drawn using the distinctive coding procedures, often commencing with *open coding*. This is used to analyse the data down into individual units of meaning and is coded line-by-line, (Goulding, 2002). *Table 4* below presents Birks & Mills (2015) summation of the advanced coding strategies and phases posited by the grounded theory experts over the years. The researcher selected the strategy put forth by Charmaz (2014) which commences with initial coding at the start of the process, using the line-by-line strategy because this yields new ideas for further questioning through subsequent interviews, plus this method contains a self-correcting mechanism that controls the imposition of preconceived ideas by the researcher.

The second major coding strategy chosen shown in *Table 4* is that of focused coding which Charmaz (2014) describes as being robust, expedient yet maintaining integrity by not sacrificing quality and detail whilst at the same time advancing the theory. The use of reflexivity during constant comparison of the data advances the process, reaching saturation when no new discoveries are forthcoming.

With the drawing of quality data being completed at this point, as stated by Birks & Mills (2015), Charmaz's (2014) assertion that proceeding to theoretical coding as the final major coding strategy may have limited benefit to the data. The researcher has chosen to follow the advice of Charmaz (2014) and allow the process to guide the emergence of the theory at either the focused coding point or by proceeding through to the theoretical coding, as demanded by the output and findings revealed in the data.

***Table 4: Advanced coding***

| | Initial coding | Intermediate coding | Advanced coding |
|---|---|---|---|
| **Glaser & Strauss 1967** | Coding and comparing incidents | Integrating categories and properties | Delimiting the theory |
| **Glaser 1978** | Open coding | Selective coding | Theoretical coding |
| **Strauss & Corbin 1990, 1998** | Open coding | Axial coding | Selective coding |
| **Charmaz, 2014** | Initial coding | Focused coding | Theoretical coding |

***Adapted from: Grounded Theory – A Practical Guide, Birks & Mills (2015)***

In the analysis of the data, use was made of popular computer software designed for this purpose and which adds speed to the process, this software being NVivo for qualitative data analysis. The use of the software was to support the researcher who managed, monitored and checked the inputs and outputs of the software, effectively maintaining control of the analysis process and using the software merely as a technological tool to support and control the analysis activity (Creswell, 2014; Martin & Gynnild, 2012, p.110).

## 3.7 Data Analysis Procedure

As stated in the preceding section, continuous summarised manual analysis of the collected data, also referred to as constant comparison of the data (Goulding, 2002), took place so as to achieve early closeness with the data during the phase one interviews, as well as to provide a feedback loop to the interview process, grounding the data as the interview process moved through the list of participants. Birks & Mills (2015) argue that this process of constant comparison on the line by line basis described in the earlier section results in the generation of the early codes from the data, referred to as initial coding. This constant comparison of the data is typical of the inductive approach to qualitative data analysis, used in grounded theory (Charmaz, 2014).

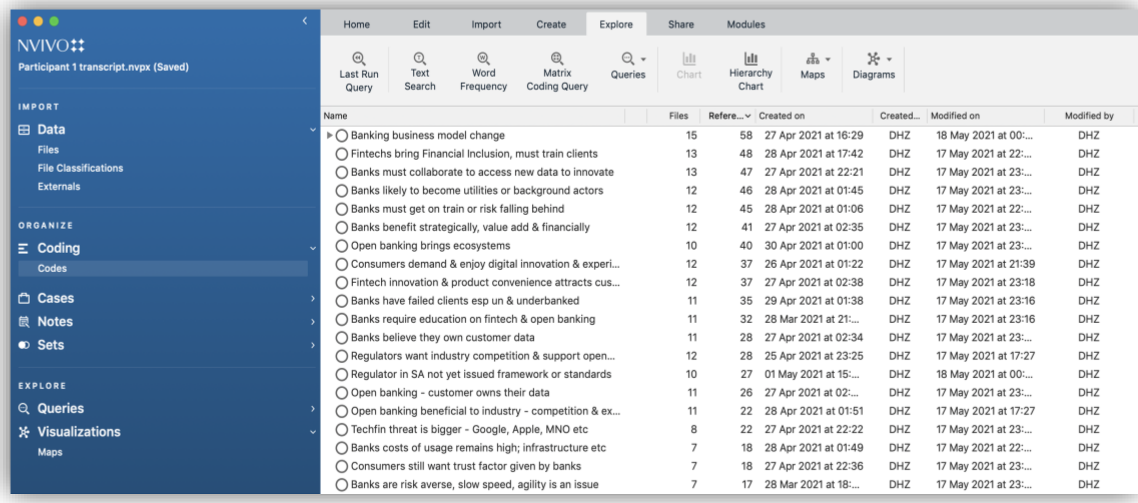
During phase 2 of the interview process the data was further analysed and coded manually using the NVivo software, this time with a view to achieve detailed coding of the data whilst maintaining control of the sizable and growing list of codes generated. The use of the software then enabled further comparison of the codes, chunking these into clusters of categories that describe the data (Goulding, 2002). This activity of clustering the data allowed for focused coding to take place at the intermediate stage of the coding process, allowing the significant codes emerging from the process to drive the analysis process (Charmaz, 2014). The total data pool generated from the coding process of all the transcripts yielded 914 reference codes which generated 366 sub-category codes, which were further reduced to a total of 52 category codes.

*Table 5* below illustrates the top 20 category code data generated, which represent 672 reference codes (grouped into sub-category data as shown in *Table 7*, section 4.10.1) of the total 914 mentioned above, that were eventually reduced to 217 files of sub-category data generated during the coding process using the NVivo for Mac software.

The top 20 category codes constitute the findings being reported in chapter 4. This represented a reporting of 73% of the total reference codes generated from the pool of data collected from the participants, which was viewed as a significant outcome catering for the most significant findings from the research.

The automated transcription process was undertaken within the software to good effect, however the researcher elected to verify the transcript line by line which was time consuming but had the effect of granting control over the data as a first level analysis event (Birks & Mills, 2015, citing Glaser, 1978).

***Table 5: NVivo Top 20 Codes Generated***




| Name | Files | Refere... | Created on | Created... | Modified on | Modified by |
|---|---|---|---|---|---|---|
| Banking business model change | 15 | 58 | 27 Apr 2021 at 16:29 | DHZ | 18 May 2021 at 00:... | DHZ |
| Fintechs bring Financial Inclusion, must train clients | 13 | 48 | 28 Apr 2021 at 17:42 | DHZ | 17 May 2021 at 22:... | DHZ |
| Banks must collaborate to access new data to innovate | 13 | 47 | 27 Apr 2021 at 22:21 | DHZ | 17 May 2021 at 23:... | DHZ |
| Banks likely to become utilities or background actors | 12 | 46 | 28 Apr 2021 at 01:45 | DHZ | 17 May 2021 at 23:... | DHZ |
| Banks must get on train or risk falling behind | 12 | 45 | 28 Apr 2021 at 01:06 | DHZ | 17 May 2021 at 22:... | DHZ |
| Banks benefit strategically, value add & financially | 12 | 41 | 27 Apr 2021 at 02:35 | DHZ | 17 May 2021 at 23:... | DHZ |
| Open banking brings ecosystems | 10 | 40 | 30 Apr 2021 at 01:00 | DHZ | 17 May 2021 at 23:... | DHZ |
| Consumers demand & enjoy digital innovation & experi... | 12 | 37 | 26 Apr 2021 at 01:22 | DHZ | 17 May 2021 at 21:39 | DHZ |
| Fintech innovation & product convenience attracts cus... | 12 | 37 | 27 Apr 2021 at 02:38 | DHZ | 17 May 2021 at 23:18 | DHZ |
| Banks have failed clients esp un & underbanked | 11 | 35 | 29 Apr 2021 at 01:38 | DHZ | 17 May 2021 at 23:16 | DHZ |
| Banks require education on fintech & open banking | 11 | 32 | 28 Mar 2021 at 21:... | DHZ | 17 May 2021 at 23:16 | DHZ |
| Banks believe they own customer data | 11 | 28 | 27 Apr 2021 at 02:34 | DHZ | 17 May 2021 at 23:... | DHZ |
| Regulators want industry competition & support open... | 12 | 28 | 25 Apr 2021 at 23:25 | DHZ | 17 May 2021 at 17:27 | DHZ |
| Regulator in SA not yet issued framework or standards | 10 | 27 | 01 May 2021 at 15:... | DHZ | 18 May 2021 at 00:... | DHZ |
| Open banking - customer owns their data | 11 | 26 | 27 Apr 2021 at 02:... | DHZ | 17 May 2021 at 23:... | DHZ |
| Open banking beneficial to industry - competition & ex... | 11 | 22 | 28 Apr 2021 at 01:51 | DHZ | 17 May 2021 at 17:27 | DHZ |
| Techfin threat is bigger - Google, Apple, MNO etc | 8 | 22 | 27 Apr 2021 at 22:22 | DHZ | 17 May 2021 at 23:... | DHZ |
| Banks costs of usage remains high; infrastructure etc | 7 | 18 | 28 Apr 2021 at 01:49 | DHZ | 17 May 2021 at 22:... | DHZ |
| Consumers still want trust factor given by banks | 7 | 18 | 27 Apr 2021 at 22:36 | DHZ | 17 May 2021 at 23:... | DHZ |
| Banks are risk averse, slow speed, agility is an issue | 7 | 17 | 28 Mar 2021 at 18:... | DHZ | 17 May 2021 at 23:... | DHZ |

***Source: Zandamela***

The category code descriptions shown in *Table 5* above were generated from the line by line analysis and reading of the meanings of the sub category codes drawn from the data, which bore similar word and meaning characteristics, resulting in the achievement of initial coding, bringing forth the first reduction of the data to representative descriptors or codes.

The number of category codes generated at the focused coding, or intermediate coding level was still substantial. As a result of this the researcher took the decision to cluster similar codes together as they represented a similar affinity in the data.

A further analysis of the clustered category codes, through comparative analysis between these codes and their derived clusters, gave rise to the advanced coding, or the theoretical coding level of analysis discussed by Charmaz (2014), which is essentially driven by the data itself. The theoretical coding analysis activity resulted in the generation of the final descriptive themes, achieving the final reduction in the data, which represents the underlying collected data from the investigation.

## 3.8 Analysing and processing the data

In the sections that follow the inductive approach analysis and processing of the data which gave rise to the reduction of the sub categories to the categories, and these eventually to the themes that emerged from the data, is demonstrated. The purpose of this demonstration is to reveal as thoroughly as possible, adherence to Charmaz's (2014) advanced coding strategy whilst understanding that in grounded theory, the inductive approach is what gives rise to the researcher's licence to permit the data to drive the emergence of theory. This all takes place with the understanding that despite the possible grappling with bias during this process, the researcher must remain true to this process, thereby ensuring academic rigour. This latter aspect was under constant contemplation throughout this study , especially with the experience of the researcher being what it is.

As previously stated in this chapter, for the purposes of this investigation, the top 20 category codes represented 73% of the total findings drawn from the collected data and were considered more than sufficient and representative as reported findings to achieve the purposes set out for this study, with the balance of the surplus codes becoming available to be used for future research in the event that these are found to be useful for such a purpose.

## 3.9 Replication of the field work

For the academic researcher looking to replicate the study that was undertaken by the researcher, the steps followed are made visible for ease of reference and to guide such research, in *Table 6* below.

*Table 6: Study Replication Steps*

| Replication of the study - practical detailed steps for data collection (Chapter 3) | |
|---|---|
| | |
| Step 20 | Employ reflexivity between sessions and reiterate to advance data interrogation, seeking signs of saturation |
| Step 19 | Save recording to secure data location. Commence transcribing using NVivo |
| Step 18 | Close session and end recording |
| Step 17 | At end of session thank participant and give them an opportunity to voice any final comments/questions |
| Step 16 | Apply further questions sporadically as prompts to keep flow of data occurring |
| Step 15 | Allow and encourage participant to keep contributing with minimal interference |
| Step 14 | Ask first interview question to kick-off session |
| Step 13 | At beginning of session advise participant of session format and obtain acceptance of recording of session |
| Step 12 | Start session and Zoom software 5 minutes before agreed time to be prepared and welcome the participant |
| Step 11 | Chase for attendance acceptance and confirmation to interview session |
| Step 10 | Despatch Zoom/Skype invitations to final list by email |
| Step 9 | Curate final list of participants ensuring a balance between bankers and FinTech execs |
| Step 8 | Chase for responses to email and ensure collection of all completed Consent forms |
| Step 7 | Despatch completed Consent and Information forms to prospects and propose diary dates by email |
| Step 6 | Collate responses of positive acceptances and request email addresses from those participants |
| Step 5 | Send out individual invitations based on Sample Invitation Message shown in Figure 23 |
| Step 4 | Develop list of names of target participants |
| Step 3 | Develop LinkedIn search criteria wording for location of specific target participants based on step1 below |
| Step 2 | Develop list of geographic locations of participants per continent and country |
| Step 1 | Develop desired participant characteristics - CEOs & Executives of Banks & FinTechs in equal numbers |
| Basic Preparation | Update researcher's LinkedIn profile to ensure completeness and professional/academic look & feel |
| Basic Preparation | Develop semi-structured interview guide and agree structure with supervisor |

***Source: Zandamela***

## 3.10 Research Design

In Birks & Mills, (2015) a general description is given to outline the development of a research design, which is an aspect of the research process that covers the identification of the philosophical standpoint and methodological position, which have been selected earlier in this chapter, plus the complementary methods to be utilised during the research, the selection of which is attended to in this sub-section.

Creswell (2014) describes how qualitative research approaches have, in modern times and into the 21$^{st}$ century, become clearer to researchers of social structures. As an example of other approaches which the researcher elected not to follow, as they were unsuitable for this research, (not to be an exhaustive list of examples) he cites Clandinin and Connelly (2000) as having given the framework which guides narrative researchers as they study the lives of individuals who are requested to provide stories about their lives. Creswell (2014) also cites Moustakas (1994) who presented the philosophical foundations and procedures underpinning the phenomenological approach, which issues from philosophy and psychology and researches the lived experiences of subjects regarding a particular event or phenomenon.

Having reviewed some of the various research methods available, it became clear to the researcher that grounded theory was the most appropriate approach for this particular research at this time, for the purpose of discovering theory in this new area of research for which no theory appears to have been located as yet.

A very useful qualitative research checklist to guide research design is proposed by Creswell (2014) which has been adopted, applied strategically and disaggregated across the chapter so as to build on the process adhered to during the research for the reader to follow and understand.

Prior to administering the interview guide with the participant, the researcher had established contact using the LinkedIn platform's messaging service and set up a mutually agreeable meeting date and time with the interviewee. The interviewees were senior executives and decision makers in their respective organisations so the issue of ethical considerations were dealt with upfront during the meeting date setup (see an elaboration of this process in the ethics subsection in this chapter).

## 3.11 Credibility

Thomas (2006) discusses the fragmented nature of descriptions of what constitutes valid research, with several disparate meanings being attached to describe validity, muddying the understanding of what this should be. He goes on to describe validity as being a positive and desired outcome of a properly developed and executed research study.

Such a properly developed research study would result in the researcher achieving high confidence levels with regards to the credibility of the concluded research due to the length of time spent interrogating the data in the grounded theory method. This is also increased further through a systematic process, achieving saturation and witnessing the emergence of the theory through the rigour applied throughout the process, (Glaser & Strauss, 1999). This process would have involved an inductive strategy and deepening through the use of reflexivity.

This thesis has followed the same grounded theory strategy discussed above and the researcher has ensured that the interviewees all have the deep experience and executive seniority to provide a rich outpouring of data for analysis, thereby ensuring that the data drawn is as superior as possible. Good technological tools were employed by way of video conferencing with the feed recorded for complete accuracy and the digital sound file processed directly into the analysis software, the researcher sample testing all aspects of the output codes and translations.

## 3.12 Ethical Considerations

The ethical issues associated with research received the attention in keeping with the Sheffield Hallam Research Ethics Policy and Procedures. Approval for the research was obtained from the university on 17th March 2014 and the method of data collection, especially during the Covid 19 pandemic period, was carefully considered, with the method adapted to cater for the collection of data within the conditions of the pandemic in keeping with the university's ethical approval regulations. Babbie (2013, p. 355) reminds us

*"as I have noted repeatedly, all forms of social research raise ethical issues. By bringing researchers into direct and often intimate contact with their subjects, field research raises ethical concerns in a particularly dramatic way."*

This warning rings even more true during this time of social distancing as the threat of the pandemic continues to wreak havoc across the world.

With this being a key point to consider, the researcher has elected to conduct all interviews electronically using video conferencing computer applications such as Zoom, Skype or Microsoft Teams, thereby eliminating any possible concerns that the subjects may have raised due to physical contact during the height of the global pandemic and the dangers of transmission. The established university protocols for remote research using electronic platforms were followed. Further to this, the interview informed consent form caters for the agreement of the subject to the session being recorded, which assists in processing the results far more accurately.

Protection of the identity of the participants and their organisations is another area of ethical concern which has been addressed by protecting their privacy through concealing their identities, and the use of pseudonyms so as to guarantee anonymity, (Babbie, 2013).

Being a practitioner in the industry being researched, the researcher further committed to avoiding selecting organisations that were clients of the researcher in the present or past for the interview process so as to ensure that no conflicts arose at any stage.

In addition to participants enjoying privacy and anonymity protection as described above, the data collected is subject to data management practices that follow a defined plan. This includes the use of a constant Virtual Private Network (VPN) connection by the researcher, ensuring that all data in transmission is encrypted and secure, as well as the use of secure 2 factor access control protocols active on the researcher's desktop computer. Transmission of files does not take place by email or via a cloud service, but makes use of the university's own large file transmission protocol housed on equipment owned by the university and located at the university's own data centre, which uses secure end-to-end encryption in addition to the VPN security. All data that is at rest is secured behind 2 factor authentication protocols plus the data is encrypted using 256-bit Advanced Encryption Standard (AES).

On final completion of the study, all data is to be purged and transferred from the researcher's secure desktop computer and housed in the secure servers at the SHU Research Data Archive where it is actively managed by the university's data management team.

## 3.13 Summary

In this chapter the researcher has articulated his research design and methodology underpinned by his philosophical stance. This philosophy was chosen as the researcher found this to be the best fit to conduct the qualitative research approach adopted to answer the research question and achieve the aims and objectives of the thesis.

Semi-structured interviews were the chosen data collection method used on the selected participants who were all senior executives in their respective organisations, thereby ensuring a draw of data that would bear a deeply experienced output from decision makers to suit the purpose of this research.

The process to be followed for the analysis of the collected data was discussed and the tools used were mentioned, as were the credibility of the data collection methods employed.

The chapter finally explained the considerations given to the ethical issues facing the research process and how these were dealt with.

## 3.14 Linking Comment

As this chapter comes to a close the reader was taken through the research design and the methods to be employed during the field study to draw the primary data. The method that was used for the analysis of the data was discussed, providing the reader with the process leading to the arrival of the participants to the study. The detailed process was also collected into a table for those researchers looking to replicate the study.

The following chapter deals with the presentation of the findings from the interviews conducted, presented as they were drawn from the field and the researcher presents a heat map, giving a visual understanding of the participants' outputs.

# 4 Research Findings

## 4.1 Introduction

This chapter presents the findings from the primary data collection process from the field. The chapter closes with a brief conclusion before the researcher discusses the findings and their implications in the following chapter.

The researcher points out at this juncture that in keeping with the epistemological approach of the subjectivist, during the process of interpreting the findings, care was to taken to ensure that comments made by the participants on behalf of consumer segment customers as regards perceived benefits brought about by open banking were accepted in the context of being offered perspectives on what customers require.

## 4.2 Characteristic views on open banking by the participant groups

Due to the global nature of the open banking phenomenon, the strategy employed in the selection of participants for this study took the approach of sourcing and selecting qualifying top executive participants from various countries and continents. Unfortunately, as stated in section 3.5.2, securing top executive participants was a somewhat challenging task due to the uniquely negative socio-economic and psychological impact of the Covid 19 global pandemic which brought with it an almost survivalist mentality. Nevertheless, a good spread of participants were successfully secured from various geographies, enabling the desired outcome to be met for the purposes of this study.

Further to this, the strategy called for an equal representation of top senior bankers and FinTech leaders to be selected as interview participants for the research. *Table 1* above illustrates the successful sourcing of the required seniority characteristic as regards the participants to this study and gives the experience of each participant in years in column 4. The reason that this characteristic was important to this study is that significant business decisions around strategy and the future of the business, amongst other matters is handled by executives in this top tier and their input would be critical to this research. The added benefit of ensuring that this is a characteristic of the participants is that each of the participants were able to generate a significant number of references that were almost all of high quality. The years of experience of a participant also contribute to the depth of knowledge they possess, which came through as they made their submissions.

The submissions of the participants carried unique geographic differences which form a part of the culture of the region and how banking business is conducted there, however, despite these culture differences, as expected, the responses reflected the typical common practices of banking and how these impact FinTech companies. The benefit of accessing participants with the characteristic of deep experience and the highest seniority from amongst both the banks and the FinTech companies became evident when personal experience examples were given. These examples exhibited a richness and depth in the data drawn which could only be ascribed to the many years of experience and seniority of the participants, which added further quality to the collected data, as will be demonstrated in the reported findings given below.

For the purposes of ensuring the privacy of the participants, a certain anonymised writing style and participant labelling convention is adopted.

### 4.2.1 Bank Exec characteristic views on open banking

The Bank Exec that operated in Uganda gave an example of how banks have not been able to support the small businesses that are run by motorbike owners providing public transportation services, yet the advent of FinTech solutions have been able to help these small businesses to become formalised and viable, giving rise to financial inclusion occurring as a result of a FinTech solution. These public transport entrepreneurs had become anathema as they presented real dangers to life and limb of the members of the public that used their transportation services because they tended to operate semi-legally. This resulted in regular calls made by law makers for their banishment. Now formalised, these operators have become an organised, accountable public transport service provider with registered drivers that are held responsible for their driving behaviour and are now able to collect decent fares for their safe service. Their financial position has also improved significantly with payment solutions provided via the integrated FinTech technology.

The Bank Exec that operated in Malawi gave an example of how banks in that country have been unable to provide services in far outlying areas of that country to support the farming communities producing crops that needed to be traded in commercial centres located a considerable distance away from these farms. This created additional risks for these small farmers as they would have to travel these distances not knowing they would arrive at the commercial centre and find the traders available with the funds to effect purchases of their produce at fair prices. With the advent of FinTech solutions, these small farmers were able to trade their commodities via mobile applications ahead of their trips, thereby securing buyers for their produce on the selected trading day as well as matching the supply and demand aspects to their commodities.

The Bank Exec located in Australia provided an example of the importance of the regulatory environment which places bankers into a tightly controlled environment with extensive cost implications. His view was that a regulatory model which is significantly lighter should be considered for the FinTech companies to avoid a repeat of the high cost issues plaguing the banking environment, with a suggestion that any envisaged regulation be executed using advanced technology to match the technology capabilities existing in FinTech companies. He stated that following this route could have the advantage of reducing the regulatory burden on FinTech companies, which run business models that are not infrastructure or personnel heavy.

One of the Bank Execs with an information technology focus operating in South Africa made mention of the view that banks have very little option but to partner with FinTech companies as the phenomenon of their arrival to the banking industry, using open banking principles, is driven by consumers themselves which causes this movement to receive support by way of frameworks and regulations issued by the regulators. The Bank Exec further mentioned that they had held extensive discussions with other bank executives inside and outside of South Africa to compare notes on how to structure their technology interfaces to be effective when partnering with FinTech companies so as to reduce friction points.

Another information technology focused Bank Exec based in South Africa contributed views around how the real threat that faced the banking industry came from the mobile network operators, in that this type of operator in the financial services sector would typically have access to massive financial resources and a massive customer base, much larger than that of the largest banks. The view was that these mobile network operators were entering spaces not traditionally occupied by banks but in which banks had an early mover advantage spanning several years of providing a form of payment wallet service to customers. The sentiment was that the mobile network operators' capabilities were more advanced and based on improved, more recent technology platforms giving these companies abilities that the banks didn't have at their disposal. He stated that mobile network operators that developed sound strategies to support their technology advantage would very likely be able to pose a serious threat with the banks possibly finding themselves at a particular disadvantage because the mobile network operators didn't seem to necessarily want to partner with banks in the same way that FinTech companies do. As a result of this, the view was that partnering with FinTech companies was the inevitable path that banks would have to follow for sustained survival into the future.

Located out of the United Kingdom is a Bank Exec who voiced concerns around the aging technology of most bank core systems when compared to the platforms of new entrants to the financial services sector, which were capable of rapid product development and deployment with advanced features that were demanded by customers, bringing convenience.

A Bank Exec participant was secured out of East Africa and an example of his submission centred around the benefits the banking industry as a whole had enjoyed through the very large deposit accounts that they held for FinTech companies and mobile network operators in their industry, which housed the deposits of the customers that utilised their digital wallet products. This practice became a significant contributor to the income of the banks for a while, until the regulator started to cap the amount of income that banks could make out of these sizable deposits and regulation of this advanced to the point where many of the banks could no longer sustain holding these accounts. The participant stated that this was an example of an extreme action by a regulator which seemed to defy common logic and this example was given to point out the challenges that banks often face with contending with what he viewed as being aspects of over-regulation.

Proving the validity of the researcher's strategy to seek out top executive expert participants with deep experience, the qualifying Bank Exec with the least experience also proved to be the participant with the least value to contribute. However, the interview session was not a total loss as some gems of examples were submitted regarding the direction that the regulator was taking in the country that he operated in. These were essentially steps that were taken to create a framework around the national payments system to give guidance to FinTech payments operators entering the open banking scene.

Aligned to this he stated that the regulator was also contemplating the development and introduction of API standards to support the introduction of open banking for the industry.

The richness of the information shared by these various Bank Execs gives texture to the cultural differences in the different countries in which they operate yet the underlying message is very clear, brought to life by the depth of experience which is a characteristic that seniority and experience collects. From submissions such as these deeper interactions with the data are possible through analysis at the various levels.

### 4.2.2 Fin Exec characteristic views on open banking

The Fin Exec operating in Singapore gave an example of how a bank he consulted at developed an API stack which they have not used since in any meaningful way, due to the competing strategies of the various senior management level staff which seem to be different to the more high technology aspirations of top executive management where the decision to invest in the costly API stack would, in all likelihood, have taken place. The participant shared that in his discussions with the middle management within the bank it was clear that fears of their jobs becoming redundant existed, exacerbated by the perception that increased automation and the introduction of services offered by external FinTech companies could pose a threat to their continued employment. This presented the traditional banks with a risk that the lower management levels were in fact not executing effectively on the instructions from the top executive structure of the institution to take the bank forward on a digital transformation path which could, in fact, assist the bank to become agile and able to meet the changing needs of the customer. His further comment on this was that the visionary banks that ensured that the digital transformation journey was executed effectively to completion were the ones that would be able to become the institutions that not only survived these major changes, but thrived. As can be seen, the depth of experience of the participant assists with insights that would otherwise be challenging to access, especially as the behaviours of the different management levels in a bank would need to be sufficiently well understood before being peeled away layer by layer, further demonstrating the importance of the seniority and experience characteristic.

This important characteristic continued to manifest in participants from other countries amongst the Fin Execs. A participant from South Africa who had also worked in the United States of America submitted an example of a FinTech technology that had been developed which bankers in that country were enthralled by but resisted integrating with, simply because it was seen to be superior to the existing technology that they had available internally in the bank, preferring to rather forgo providing convenient and advanced products to customers due to this irrelevant aspect. The Fin Exec stated that this behaviour displayed the arrogance that bankers tend to have along with a general lack of strategic foresight to partner with external entities that would bring value to their mission to provide their own customers with better products and services. The example continued, stating that the result of this was that customers would by-pass traditional banks in any event and seek out the FinTech developed solutions that met their needs for improved digital products, placing significant pressure on banks as their lack of transformational speed would result in new business model risks being realised internally, through their own short-sightedness.

A Fin Exec participant located in the United Kingdom submitted an example of her views around the nature of the support received by the FinTech companies from the regulator. This support resulted in the traditional banks having little option but to comply with the regulation to open up access to the customer data that they hold and for them to cooperate with the FinTech companies. The view was also that this development was not a move against the banks at all but a response to the changes in the preferences of consumers in how they now want to work with the financial system. This meant that modernisation in the way that the banking industry worked was required. The Fin Exec further mentioned that core to the regulation which the banks have found challenging to accept is the change in ownership of customer data, which was perceived by the banks to be owned by them. Open banking legislation has changed this long-held view, bringing the ownership of this data into the hands of the customer.

One of the Fin Execs from South Africa provided an example of how the large banks in the country tend to be quite conservative in matters that challenge them to collaborate with external parties, especially FinTech companies. His view was that this stance could place them at a real disadvantage as the regulator was contemplating the unfolding events in open banking taking place across various countries and had put into place a mechanism which included interactions and discussion documents to explore a path for the industry. His view was that the financial inclusion benefits, amongst other benefits, brought about by FinTechs were of such a significance that the modernisation of the industry through the competition introduced by open banking made for a most compelling case for the development of a regulatory framework to support this.

A Fin Exec based in the United States of America gave an example of how the banking industry in that country was taking charge of the opportunities presented by open banking without the need for any form of regulation or legislation, especially amongst the community banking system. His view was that strong competition amongst themselves as well as from the FinTech companies caused these institutions to think strategically and in so doing, they were actively seeking partnerships with the new market players. Part of the reasoning for this was due to the FinTech ability to rapidly provide new products and services that were aligned to these traditional institutions whilst meeting the pull coming from consumers for new digital product types. The view was also that developments in the sector were being advanced by certain FinTech firms excelling at the execution of their business strategy to such an extent that the traditional banks had no option but to consider doing business with them or risk being left behind. He stated that notable amongst the various top performing neobanks and FinTech entities that fell into this category was a mostly infrastructure FinTech called Plaid, which was recently in the financial press in January 2021 for one of the largest merger and acquisition transactions in that country (CNN Business, 2021).

The threat posed to the banking industry by the mobile network operators was the example given by a Fin Exec who has worked in a few developed countries but is now based in South Africa. His example, demonstrating the characteristic of the depth of his knowledge was that he viewed the real threat to the banks as coming from the large technology companies such as Apple® and Amazon®, (often referred to as BigTech or TechFin) being the unseen threat to the traditional banks due to their strategy to enter the financial services space with payment solutions, disintermediating the banks significantly. He stated that these companies didn't seem to care about owning banks, which they quite easily could do due to the considerable resources at their disposal, but sought rather to take transactions away from banks, or, at the very least, carry transactions alongside banks which brought new revenue streams to them whilst this spelt a potential loss of considerable revenue for the banks. His view continued to suggest that the FinTech phenomenon was unlike that of the TechFins in that these entities were bringing value to the banking system via open banking, by increasing the size of the pie through financial inclusion as well as by creating new sets of products that added to the available products for consumers to enjoy. This difference between the two types of entities, TechFins and FinTechs, he asserted, is what banks need to understand and for them to urgently develop an appetite to collaborate with FinTech companies for their own benefit and that of customers.

The last Fin Exec participant gave an example of how he sees data becoming a commodity through open banking in that a customer being empowered to own his or her data would be able to approach any financial institution and effect a trade using that data. This would allow for the easy porting of customer data and accounts between traditional banks to facilitate easy access to new services to be provided to the consumer should he or she elect to do so. He stated that he sees the regime of customer ownership of their data as an opportunity for traditional banks to consider capitalising on by offering a new type of secure and trusted repository facility where customers could hold their data safely. This, he added, would be in stark contrast to the current attitude held generally by most banks where they believed that they owned customer data. He further stated that banks could add the aspect of trust to their list of services because trust is the one commodity that they do have in the sector, which the FinTechs still need to build up on. This allows for the possibility of a strong collaborative partnership to grow between banks and FinTechs on this aspect alone, with several other strong areas of collaboration available between banks and FinTechs.

## 4.3 Characteristic views of Traditional Banks on open banking

In chapter 2, section 2.6 of this study the discussion of the regulatory environment around the FinTech phenomenon takes place highlighting that regulators grapple with the desire to support the emergence of FinTech players into the industry whilst being careful to avoid the challenges brought by over regulation of this new industry. Furthermore, it may prove to be beneficial for a specific investigation to be conducted into the arguments for and against regulating FinTechs versus arguments for and against the deregulation of the traditional banks, possibly coupled with moves to reduce their overall size and what this would mean for economics and the stability of the sector as a whole. Hill (2018) discusses the cycles of regulation and de-regulation in the American financial system and the support being accorded FinTechs for various reasons which include a regulatory response to changing consumer demands and the need for competition in the industry, whilst affording protections against invasion of privacy and abuse against the consumer.

Discussions in chapter 2 included arguments on the general structure of the global banking industry, overlaid by global regulation which has at its core the BIS and its executive division, the BCBS which drive a fairly uniform approach to the regulation of traditional banks globally. This multi-lateral approach to the regulation of banks effected at the national level by central banks acting in response to regulatory frameworks issued by the BCBS, suggests actions being taken in concert in their general application and effect at a jurisdictional level, save for the nuances that would be applied to cater for the granular idiosyncrasies in each market. The operations of this structure would also be an interesting subject for further study. However, it remains to be said that the Bank Exec participants to this study, being top executive banking professionals, touched on aspects of these issues, highlighting the characteristic similarities between banks and their approaches, including their responses to the emergence of the FinTech phenomenon and the regulatory support that this has enjoyed. The foregoing is supported by the following summarised findings from the data presented by the participants as regards the general characteristics of traditional banks.

### 4.3.1 From the Bank Exec Perspective

Bank Exec 1

This participant highlights that banks need to *partner with effective external partners in FinTech to become more effective,* suggesting a characteristic of being averse to doing this and achieving impact.

Bank Exec 2

- This participant states that bank's view FinTechs as entities that are *coming to eat their lunch* whether they like it or not, presenting banks with a dilemma-filled mindset.
- Additionally, this participant discussed the bank characteristic relationship with regulation, stating that *what will be left behind will be the regulatory component of a bank... and it's a balance sheet, ultimately,* highlighting the view that banks' characteristic core elements may well remain unchanged, in her view.
- The participant also commented on a characteristic viewpoint she believed was held by banks regarding control, stating - *I think what banks are really worried about is ownership of customer. You know, that sits at the centre.*

Bank Exec 4

- Bank Exec 4 discussed the benefits that may accrue to FinTechs if they collaborate with banks to *mine customer data* more effectively and develop products that better meet the needs of customers, suggesting that banks are generally resistant to this idea.
- The participant further mentioned that *traditional banks cannot reach the rural population* due to them being *scattered all over, they are not concentrated... to justify putting a branch or any sort of banking*, suggesting that the levels of unbanked and underbanked are mostly because of this.

Bank Exec 5

- Participant Bank Exec 5 commented that banks are generally more likely to *dig down and resist the regulation and look for ways to impede it or obstruct it and even possibly find loopholes that protect their dominance*.
- Additionally, Bank Exec 5 submitted that banks *assuming that you (they) can build everything and provide everything to the customer in a one stop shop is quite a bold position to take,* highlighting the general stance banks take on product development.
- Bank Exec 5 also contributed on the characteristic business model of traditional banks, stating *if you look at a statement that Nedbank put out a couple of years ago in that they don't mind seeing themselves as a utility*, pointing out the strategic decision to transform the banking model characteristic already being acted upon by this incumbent.
- A further submission was on the characteristic of the typical size of a bank in that they *may not always get to be able to compete on the agility and the intuitiveness of the start-ups, but that's just a function of their size. I think they'd have to think about their role in terms of how well their size is an advantage.*
- The participant commented on the general challenges banks tend to have around the *product centric architecture of traditional banks is going to put them at a disadvantage because if a bank within itself is unable to organize its own data, it will struggle even to comply with the legislation.*
- Regarding data, the participant commented on the characteristic approach by banks, stating that *my understanding of the regulation, first of all, is that it will force banks to recognize the data that they house, as you know, belonging not only to the customer, but then also giving the customer the right to access it however they want.*

Bank Exec 6

This participant pointed out the characteristic stance held by banks regarding customer data, highlighting their resistance to allowing *non-traditional players to get access to the data that banks have generally hogged and seen as a holy grail*.

Bank Exec 7

- The participant stated that *there's two ways this can play out for the incumbent banks - they can resist it...* in discussing the approach to regulation, portraying the general approach that has been taken in several jurisdictions at the roll out of PSD2 type regulation.
- Highlighting regulatory issues, a further statement was made that *the regulations are skewed towards banks because some regulators in many markets...* which speaks to the characteristic regulatory burden being borne by the banks.

Bank Exec 8

- This participant commented on the bank characteristic of trust and stated *I think it's trust, I think there's still a space within banks where traditional banks can still play into the psychographic changes that are taking place*, highlighting that the characteristic of trust and security is one that banks can use to their benefit.
- A further contribution was as regards banks' characteristic view of legislation and its impact on growth when he stated - *look at what's happening with the large banks who now appreciate that regulation is becoming an impediment to real growth.*
- Bank Exec 8 passed comment on the characteristic challenges facing banks regarding data, stating that *first and foremost, I think banks have been sitting with a lot of static data and a lot of unstructured transactional data about our customers, we've not been very good at leveraging that data. You know, you go in, you apply for a home loan, you go in you apply for vehicle financing - it's as if you're starting the whole process again.*
- Regarding the characteristic position held by banks on customer data, this participant stated that *I think that the shift is almost impossible for those of us who are the sort of traditional bankers to absorb and envision a situation where the bank is not king and essentially the financial system is.*

### 4.3.2 From The Fin Exec Perspective

Fin Exec 1

The participant stated that *some core aspects of the bank's business are going to change*, suggesting that a change in the core characteristic business model is likely to take place as a result of the industry transformation due to *new competitors entering, but also new competitors offering new business models*.

Fin Exec 2

The participant expressed a view on the characteristic of a bank's business model in that he *was always of the view that eventually banks will become utilities and they will operate in the background*.

Fin Exec 3

- The participant spoke of the characteristic role of provider of access to data via the publishing of APIs in that *they could actually not just be a provider of apps, but also be a consumer of APIs*, suggesting a potential strategic change in characteristic.
- The further comment was made around bank's characteristic approach to customer data in that if they were to *look at it as I am giving away my data, but I also have access to everyone else's data, then all of a sudden, it's an opportunity*.

Fin Exec 4

- This participant stated that *I think we won't see them as much as a brand. I don't think people will have the same relationship with them that they currently do* in discussing the characteristic of the banker – customer relationship, she clarified further by stating that *I don't see any one bank having that whole offering or relationship with the customer*.
- The participant mentioned a key characteristic of banks as being that *they're still going to be the ones that are holding the reserves of money and dishing it out and doing all the cross-border stuff and all the currency type stuff.*
- This participant commented about the characteristic position of banks regarding the issue of innovation generally, where she stated that *it's quite remarkable when you start going down that route how basic, unresponsive, and unhelpful and non-proactive your bank provider is*.
- The participant commented on the characteristic bank view of data, mentioning that she saw that *PSD2 has enabled...the data sharing and more than just the data sharing is it's giving the consumers ownership of their data, which is a complete change to how the banks have been viewing it, and quite a few of them still are.*

Fin Exec 5

- This participant spoke of the characteristic bank approach to non-interest revenue in that *the models are going to change. Typically, if you look at the economics of payments, I think payments potentially will bring zero revenue to a bank in the next few years*. He suggests that banks need to come to terms with transformation of their characteristic costs because in the example of payments these will be *so little that (it) will be very difficult to explain why it costs anything in the first place.*
- Additionally, the participant stated that *banks have centuries behind them of trust from consumers and that is for me, the key asset and it still stands and so they need to nurture that,* pointing out this key characteristic.
- The participant also highlighted the issue around the characteristic of infrastructure in that *it will leave them with providing other players the core infrastructure, and that's the utility, it's really a non-customer facing - it's more of a technology/regulatory compliance stack that sits behind doing the anti-money laundering, the surveillance that is required on transactions, the screening and all of that.*
- This participant highlighted the characteristic position that traditional banks hold regarding customer data stating *I think the premise is that the consumer data belongs to the consumer, even though it is sitting with the banks. It is not the property of the banks. And I think that's the thing that was difficult for banks to accept in the first place.*

Fin Exec 6

- This participant mentioned how banks characteristically viewed themselves as self-contained entities and how this needs to be allowed to extend because *now with open banking you can go beyond your own infrastructure and extend yourself into other ecosystems where your services can still be consumed*, requiring a change in paradigm view of this characteristic which feeds the *evolution of the traditional banking model, as we know it.*
- Regarding the characteristic of *trust... I do think going into the future, that will not change;* this is seen by this participant as remaining key to the role of banks.

Fin Exec 7

- Participant Fin Exec 7 views the characteristic of regulation over banks as *I see them always being, certainly in the next 10 years, being still regulated and therefore the incumbents having a role to play.*
- He further went on to give the example of the advent of the ATM in banking, stating that *if you as a bank said, we want everyone to come to our branches, we are not going to put an ATM out in the market*, suggesting that such a bank would not have survived long in the market as banks with ATMs would have attracted their customers with little effort spent; here the participant is suggesting that a similar scenario would transpire with the momentum gaining in open banking. The banks that don't participate in open banking are very likely not going to survive for long due to the force of the regulator on the one hand, and the customer voting for improved products and convenience offered through open banking on the other.
- On the characteristic position that traditional banks hold on the issue of ownership of customer data, the participant stated that banks *have a certain set of data around the customer, and by the way, the sort of consensus - worldwide consensus is the data belongs to the customer, not to the bank; banks don't always see it that way.*

## 4.4 Characteristic views of FinTech Companies on open banking

In section 2.4, *Figures 5* and *6* illustrate the variety of FinTech business models which operate in the different areas of the financial services sector. These different areas include, but are not limited to, wealth management, mobile wallets, payments, remittances, lending, cryptocurrency and infrastructure services. This study has its focus specifically on the FinTech companies that operate in the open banking environment which is governed by permissioned access to customer data held at banks under the provisions of a regulatory framework such as PSD2 and similar frameworks and pieces of legislation. Even when the definition of a FinTech entity is limited to the open banking sector, different types of companies are to be found in operation, carving up the various parts of the banking value chain to create a business model and strategy for execution. A quick survey of this defined FinTech sector reveals that generally the companies tend to be privately held with a few having opted for the publicly traded company space.

Furthermore, unlike the traditional banking industry, the defined open banking FinTech industry does not as yet in any meaningful manner fall under a shepherding collection of legislation or regulation such as banking acts or guidelines issued by banking supervisory bodies. This is not to suggest that regulators haven't given mind to an appropriate approach to the matter or how to agglomerate new guidelines across the banking value chain in a bid to give direction to this phenomenon, whilst ensuring that the innovation and agility remains intact and responsive to customer needs, from whence it is driven (Ramsden, 2018). The reality remains that the FinTechs are independent companies each with a differing approach to the opportunity presented by enabling regulation giving them customer consented access to customer data held at traditional banks. Each of these companies could have developed a unique business model designed to focus on a part of the banking value chain and would therefore be executing on strategies developed by teams generally with a technology background, as opposed to a banking background, yet dealing in banking related matters.

With these being the general features of FinTech companies, an attempt to generate a set of characteristics to define these entities would seem to be somewhat of an exercise in futility, however, the analysis of the data drawn from the participants reveals the following attempt at characterisation.

### 4.4.1 From the Bank Exec Perspective

Bank Exec 2

- This participant stated that some FinTech companies *are bringing in alternative scoring mechanisms and using alternative data for scoring, and that may provide a mechanism for the informal sector to get that foot on, I guess, the financial services ladder* which highlights the innovative characteristics she sees of FinTech companies generally.
- The participant further contributed a generalised characterisation of FinTechs by bankers, as opposed to a characteristic when she stated *and it's that, you know, this is lunch of the banks that these companies are eating, and it has forced a change in the way of thinking of the banks.*

Bank Exec 4

- This participant highlighted some characteristics around FinTech companies as being *the fintechs are bringing flexibility in terms of payments, they are bringing in an easy way of banking, they are making banking cheaper, they are making banking* *accessible to the remotest area in terms of doing maybe P2P person to person payments or person to business payments*

- Additionally, the participant stated that *there is no better system that can grow Africa from a banking or deepening financial services in rural areas, or indeed the previous unbanked community than the fintechs and the digital bank*, which alludes to the characteristic ability of FinTechs in the area of financial inclusion.

Bank Exec 5

This participant made reference to the characteristic of FinTechs regarding their shorter product development cycles and agility when submitting *I think the tide will turn when those fintechs get access to the data and when the development cycles for new products get shorter.*

Bank Exec 6

This participant made a submission on a characteristic regarding FinTechs generally around the lack of awareness concerning these entities when stating that *there has to be a whole lot of consumer education in South Africa around this thing.*

Bank Exec 7

- This participant stated of FinTech characteristics that he felt that *the overriding benefit must be convenience and more depth of choice for products. I think that they're providing products that certain consumers have not yet been able to access or markets that have not developed for consumers*.
- Additionally the participant stated that *I think that if you don't match it with an education policy of sorts, in other words, driving the educational side, then the consumer misses out completely because they don't quite understand that these are available so I think that if you are limited in your ability to understand these things, then there's no benefit for you,* highlighting the characteristic that the market is likely not very aware of the benefits brought on by the FinTech players as this relates to open banking offerings.

Bank Exec 8

- This participant spoke of the characteristic ability of FinTechs in the area of financial inclusion in that *they are able to spot opportunities outside of the top end of the* *pyramid, so to speak, which is where banks are playing, where there's a formal sector and so on.*

- The participant added that *the regulation at the moment, although they're trying to chase the fintechs is not moving fast enough to be able to keep up with the fintechs,* speaking of the characteristic space that FinTech companies find themselves in as regards the regulatory landscape.
- The participant added the characteristic of effectiveness of FinTech companies when stating *if you think about it, the fintechs have been particularly good at addressing really important problems to consumers,* which could also be seen as a characterisation of the FinTech companies.
- A further addition by the participant on the characteristics of FinTech companies was around the leadership of FinTechs generally, stating that *I think the partnerships will actually extract value out of the ecosystem, because the fintechs are nimbler and they are generally run by a lot younger people that actually understand the trends a lot better than the older tried and tested bankers like myself.*

### 4.4.2 From the Fin Exec Perspective

Fin Exec 2

This participant mentioned the following regarding a characteristic of FinTech companies' capabilities - *definitely I think with a fintech you can solve the onboarding problem.*

Fin Exec 3

- The participant commented on the characteristic ability for FinTech companies to impact financial inclusion by submitting that *in Sri Lanka... fintech services have really helped bring some services to the rural communities who didn't really have access to these services before.*
- The participant added to the characteristic ability of FinTech companies through their product capabilities when he stated *I don't need to log in to the two apps from the two banks. I could use a third-party app and I can see that data. What that allows them to do, of course, is now that I see two savings accounts and the interest rates on the two accounts, my third party can start to offer me special deals and incentives to acquire other products.*
- Around the characteristic of product convenience, this participant contributed the following: *whether you're buying a house or whether you're buying a trip or whether*

*you're buying insurance, whatever, your customers just want the convenience. Now the only way that they're going to get convenience is when somebody can create the ecosystem that brings the convenience to them. The bank is never going to do that.*

- The participant also made mention of a characteristic of greater excellence in FinTech application performance when stating that *I list all the banks and fintechs app scores and API scores as a way of analysing which apps are rated highly in the App store and Play store, quite consistently the fintech propositions have a better rating than the bank propositions.*

Fin Exec 5

- This participant spoke about the characteristic low-cost model that FinTechs follow, coupled with their digital channels when he stated that t*he fintechs, on the other hand, have demonstrated that they can reach a much, much faster, and broader population with a much lower cost. So operating expenses wise, it's very limited because very often you leverage the phone that is already sitting in the hand of the customer and you start serving that customer completely remotely without having a branch or, you know, huge infrastructure.*
- The participant added to the characteristics of FinTech with his view around how FinTechs generally approach the question of collaborating with banks when stating that *the cooperation with FinTech is super healthy... I think banks have changed their mentality, it's no longer FinTechs are competitors, it's the Telco's are our competitors; they realized that that the FinTech can open up massive opportunities.*
- A further contribution from the participant on the general characteristics of FinTech companies was around their non-core areas, stating that *FinTechs focus very much on the user experience, and they are good at delivering a good user experience. They are less good at providing the back office.*

Fin Exec 6

The participant made a statement about the general collaborative characteristic of FinTechs, stating that *the experience that I've seen is fintechs going into that informal sector of the economy, trying to understand some of those pain points and then coming up with solutions and partnering then with banks to make those services available to those communities.*

Fin Exec 7

- This participant provided a general characteristic of FinTechs which talks to their approaches to traditional banks when he stated that *I think if you're going to have FinTechs that want to partner with banks and you'll have FinTechs that want to eat the banks' lunch and both models can work, I think they'll work. You're going to eat the bank's lunch where the bank is slow to react and where the banks partner, I think they will benefit, so I think both parties will benefit by that and will have a bigger pie (to share).*
- The participant added to the characteristic ability of FinTechs to collaborate by adding that *internationally, that's already happening, there're lots of main banks that have partnered with fintechs that are offering their customers more services, they're are not losing customers, they're are making more revenue because they've got more things to sell and process and transact and charge fees on and it's an exciting journey we're on so it will be interesting to see where we end up.*
- On the point of customer loyalty the participant submitted a contribution which could be seen as a characterisation of FinTechs resulting in a perception that *at some point in the journey we'll reach a tipping point where consumers see more and more value in the apps being offered to them to help them manage their money, that the incumbents run the risk that eventually those customers start moving to a Neobank or FinTech where those will be trying to offer as many services as possible.*

## 4.5 Investigating the Data

In the following section a presentation is made of the findings from the inductive qualitative interviews that were undertaken as stated in section 3.5.4 above, and will illustrate adherence to the data reduction process described by Charmaz (2014) by which raw data is subjected to the application of initial coding, which assists the researcher to get close to the data and through the reflexivity process, to advance the grounded theory research approach.

The unfolding of the process is described below, which may appear to be a sequential and linear process, however, this is far from the truth as this is actually very iterative as the data is worked with and feedback loops are created at various points through the process:

- Raw data was recorded and collected from the interviews conducted, generated by the participants, partly in response to the interview guide question prompts prepared by the researcher.
- The raw data was transcribed using the transcription application in the NVivo for Mac software.
- The following step involved the researcher analysing and reviewing each transcript to become familiar with the data and to get close to the data.
- Initial coding took place against the transcribed data, with reflexive analysis and constant comparison of the data taking place, resulting in the identification and generation of 366 sub-category codes in the process, as well as a total of 914 reference codes from all the transcripts. This is illustrated by *Table 7* below.
- The NVivo software simplified the analysis process by simultaneously reducing the pool of reference codes into files of similar characteristics, resulting in 217 file folders composed of numerous reference codes each, being generated.
- On further analysis and reflexivity, focused coding was undertaken against the sub-category codes, resulting in data saturation revealing itself. A total generation of a total of 52 category codes was achieved.
- *Table 5* above illustrates the top 20 category codes which represent 73% of the total data drawn from the interview sessions.
- The theoretical coding analysis and reflexivity process was undertaken on the top 20 category codes. This resulted in the collection and grouping of these category codes into 4 final theoretical codes or **themes** representing the final reduction and labelling of the data. This is illustrated in *Table 8* below.

Due to the large volume of data generated by this analysis a representative sample of the sub-category reference code data generated for the 20 categorised codes will be added to the thesis document by way of appendixes 5 to 8.

In the following sections of this chapter reporting the actual findings, all italicised words represent actual quotes made by the participants during the interviews. The reader is therefore advised that the colloquial aspect of the submission has been retained, except in the instance where a minimal grammatical correction was specifically required for the sake of clarity and understanding.

*Table 7: Banking Business Model Change - Sub Category Data*

Files\\Bank Exec 1 - § 1 reference coded [ 0.18% Coverage]

Reference 1 - 0.18% Coverage

I think payments is probably going to drive more changes in banking than anything else.

Files\\Bank Exec 2 - § 8 references coded [ 4.76% Coverage]

Reference 1 - 0.28% Coverage

what we've done is we've mapped out a matrix of the different roles that we as a bank could play in a marketplace type econom

Reference 2 - 0.52% Coverage

But then as we start to move across to say, OK, well, there is a bank that is offering non-traditional banking products and potentially that could be via alternative channels and it could be white labeled products, you know

Reference 3 - 0.42% Coverage

And Capitec just done it right? I now offer home loans, but they're actually not my product. You'll come and buy from me. But actually the provider in the background is SA Home loans

Reference 4 - 0.75% Coverage

And then I think there is the converse of this where you can then offer your own APIs on a marketplace. And so we can see already in the banking industry that all the banks are doing this. They all have their own marketplaces where they are publishing or let me not say all, you know, Nedbank has it, we've got it, Standard Bank has it

Reference 5 - 0.43% Coverage

So if if a real estate agent wants to do a indicative offer or a indication of eligibility for a loan, they could use our API embedded in their website and we don't even need to get involved

Reference 6 - 0.93% Coverage

But I do think that some of the banks and I chatted to one of the European banks a couple of weeks ago, about a whole range of topics, I think that the banks are seeing that this is now been a catalyst for a different way of thinking. And I think the the business models that potentially could emerge is it could be an intermediate. So I own a marketplace. And every time you call my API, I'm going to take one cent.

Reference 7 - 0.48% Coverage

And so I think if you talk about the business models, it is about what part of the value chain you want to own? Banks own it endto-end today for the most part. But do they want to maintain that ownership into it end?

Reference 8 - 0.96% Coverage

But perhaps, you know, lending or transactional banking goes to someone else or even subsets of that value chain. And I believe the banks will be forced to make this choice. You know, the journey's started. And so I think PSD2 probably highlited different business models and those that are most reluctant and slowest to move will lose the battle, those that quickly understand that this is where the world is going.

Files\\Bank Exec 3 - § 5 references coded [ 3.75% Coverage]

Reference 1 - 0.67% Coverage

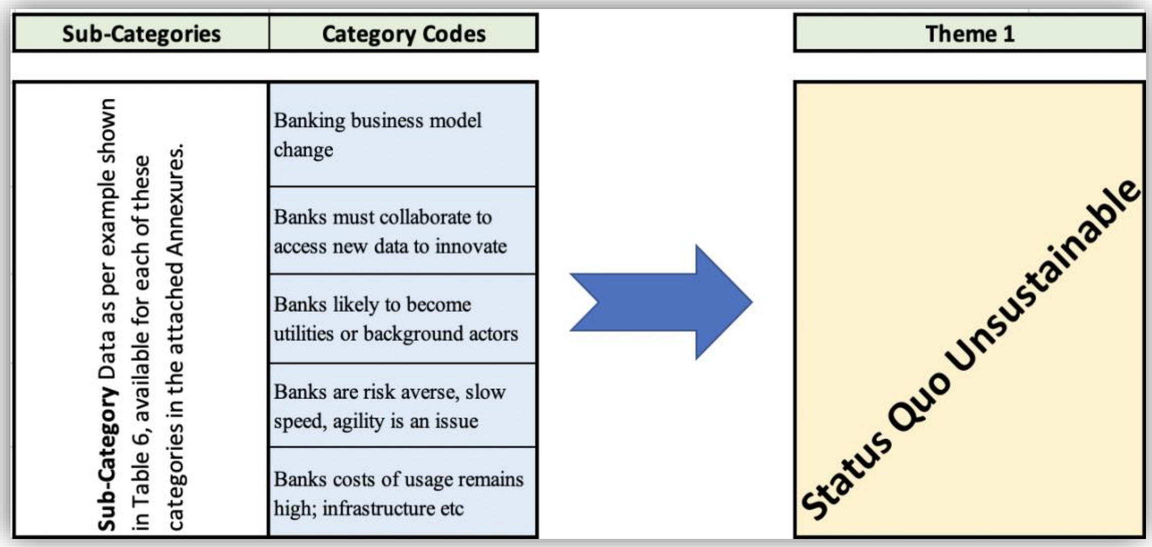
***Source: Zandamela – NVivo Analysis Sample***

### 4.5.1 The Data Analysis Process Arriving at Theme 1

*Table 8* below shows the reduction of the sub-category data in *Table 7* which have been coded into the category codes shown in *Table 8*. These category codes were subjected to further focused coding analysis resulting in the emergence of Theme 1, being the theoretical code which emerged from the analysis process.

It was especially interesting to note during the analysis of this data set that all the participants contributed data to this particular category, demonstrating their collective agreement that the current model by which banking is conducted is unsustainable, with the reasons supporting these views stated in the sub-category data.

*Table 8: Data Reduction Resulting in Theme 1*




***Source: Zandamela***

For ease of viewing the data generated per participant and to assist with the analysis process the sub-categorisation data reference codes are collected per participant and presented diagrammatically as shown in *Table 9* below. This enables a more elegant management and presentation of the category codes data making up each and every one of the 4 generated themes.

**Analysis of Category Codes' Data**

In the following section a summarised presentation of the data that was reduced to form each of the category codes takes place per participant, providing context of the source data as the journey to arrive at each of the final themes is demonstrated, in accordance with the steps illustrated in *Figure 22* in section 3.5.1 by Creswell (2014), which provides the detail for the chosen grounded theory advanced coding approach described by Charmaz (2014).

#### *4.5.1.1 Banking Business Model Change*

*Table 9* below illustrates that the category code **banking business model change** generated the most sub-category data of all the generated category codes, involving each and every participant in the study from both the banking and the FinTech perspectives without exception, suggesting this is the most agreed upon effect of the impact of open banking across the industry.

The participants all raised their concerns regarding the inadequacies of the current business models followed by banks generally globally and how these do not meet the needs of the consumers that they are supposed to provide services to, suggesting that the traditional business models were seen to be disbenefits to the open banking process.

Bank Exec 1 advanced a view that the new payments environment would contribute most significantly to the drive in banking transformation.

Bank Exec 2 pointed out that the current business model in which banks are mostly self-sufficient and own most of the value chain of their processes would need to be reviewed by banks as the changes in the business model may require a rethink of this. She further asserted that parts of the value chain would go to other parties and that the traditional banks would find themselves having to make these choices and decisions whether they wanted to or not, with dire consequences likely to befall those banks that were reluctant to comply with the phenomenon, as this is the nature of this evolution.

Participant Bank Exec 3 expressed the view that traditional banks would be required to rethink their structures and organisational design, suggesting that banks would evolve to become platform businesses with the need for physical infrastructure increasingly falling way and almost all transactional executions occurring digitally.

Issues around the whittling away of the infrastructure that traditional banks currently carry was also advanced by Bank Exec 4 who also suggested that the banks that did not fall to restructuring their business models to adapt to the changes would risk failure, which would be a decided disbenefit to a bank.

For banks to have experienced benefits coming out of the industry changes being brought about by the open banking regulations, Bank Exec 5 suggested that traditional banks would have needed to consider reinventing themselves lest they find themselves out of sync with the market around them. Bank Exec 6 submitted that open banking was able to change financial services in that it was transformative, reducing costs and improving digital efficiencies.

A view that traditional banks should consider adopting an attitude of a willing participant and *complementor* as opposed to being an *aggressor* was expressed by Bank Exec 7, who also suggested that this would have brought benefit to the banks.

Bank Exec 8 suggested that traditional banks, in transforming their business models could consider an ecosystem arrangement whereby they participate with FinTech (or third party providers) of services which they would normally have provided, such as identity verification. This would be due to the idea that the provider of this service would be more efficient, bringing these benefits to the banks which would reciprocate, adding their trust leadership to the relationship in a transformed business model.

Fin Exec 1 submitted that traditional bank business models would change due to the entry of third party competitors who themselves would bring new business models to the industry. This was agreed to by Fin Exec 2 who added that the revenue streams would also change considerably for traditional banks due to the entry of players that provided products and services at very low price points.

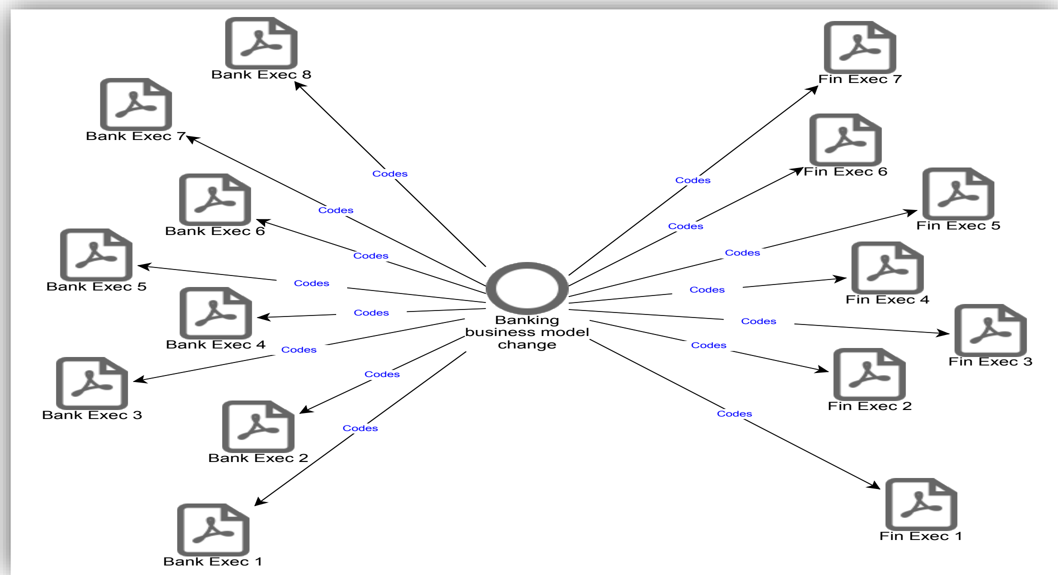
Fin Exec 3 suggested that traditional banks could also benefit from the proliferation in the use of APIs by changing their thinking from a business model that saw them as simply a provider of data, to a business model that saw them participating as consumers of data as well. Fin Exec 4 asserted that banks would become less recognisable as brands in the near future as their business models would be forced to change, with traditional banks becoming part of a super app ecosystem in partnership with FinTech players.

Fin Exec 5 commented that traditional banks would need to change their business models so as to ensure that they map out new revenue streams as the current revenue streams were tied to business models that would not serve them into the future. He further asserted that the traditional banks would do well to consider the position of trust that they have enjoyed and how to capitalise on this, whilst being open to letting go of the product development and distribution components of the banking value chain.

The contribution from participant Fin Exec 6 highlighted the importance for traditional banks to be alive to the potential benefits to be derived from playing the role of a platform business, collaborating with FinTech partners in an ecosystem which itself brings additional opportunities. A further contribution by this participant was regarding the trust that banks enjoy from consumers, a position which he asserts is not likely to change into the future, which stands to benefit the banks.

Fin Exec 7 submitted that in his view the traditional banks had a role to play into the future but that they would have to embrace the open banking phenomenon and banking transformation which was taking place whether they liked it or not, or risk losing relevance in the banking industry much like how Kodak lost relevance in the photographic industry.

***Table 9: Banking Business Model Change***




***Source: Zandamela – NVivo Analysis***

### 4.5.1.2 *Banks Must Collaborate to Access New Data to Innovate*

The category code **banks must collaborate to access new data to innovate** was generated by all the Bank Exec participants and all the Fin Exec participants save one, as shown in *Table 10* below, generating a total of 47 reference codes from 13 participants.

The participants from the Bank Exec perspective expressed positive views on the opportunity to collaborate with FinTech companies suggesting that these entities were nimble and able to understand customer product requirements more precisely, with this collaboration facilitating an improved experience and benefits for the consumer. The Fin Exec participants were more ready to collaborate than their banking counterparts, seeing the benefits to collaboration more readily than the bankers who, having seen the benefits to collaboration, seemed to be cautious about the approach they should follow based on their own limitations.

Bank Exec participants didn't always see the benefits to collaboration to the same extent as was articulated by the Fin Exec participants who tended to see the breadth of the opportunity more clearly. This suggested that Fin Execs were more visionary and innovative in their approach to the opportunity, to the point of suggesting possible ways that banks could develop new revenue streams which would be of benefit to them.

Some of the sentiment to collaborate expressed by Bank Execs was based on a survivalist mentality forced upon them as opposed to the reason being based in the benefits of the opportunity before them. This posture seems to suggest that banks generally require to be educated on the characteristics of FinTech companies so that the threat response is better mitigated, which would allow for a more productive coming together.

Bank Exec 1 submitted that banks would need to either make significant investments into technology to address legacy core banking systems or alternatively secure themselves through a partnership with a worthy FinTech.

Bank Exec 2 expressed a similar viewpoint around the need for traditional banks to partner with FinTech participants so as to navigate the future more effectively or face risk without the benefit of being able to mitigate it.

The response to either compete or collaborate by the traditional banks is one that would require careful consideration as the FinTech companies were bringing competition to the industry, was the statement made by Bank Exec 4, suggesting that the collaboration choice would be more cost effective for traditional banks to follow.

Bank Exec 5 submitted that some traditional banks tended to take an arrogant approach to the changes by adopting a myopic position in which they believed that they could provide the customer with everything that they needed through building the products and services themselves, yet the option to collaborate would make for improved benefit.

The data provided by Bank Exec 6 as regards this category was very brief reflecting the lack of depth in knowledge as this participant had recently been appointed into their senior executive role. The participant's submission was effectively that collaboration was believed to take place between traditional banks and FinTech companies and that this was likely to develop further as open banking deepened.

Bank Exec 7 provided data that demonstrated the size and opportunity differences between a traditional bank's own digital wallet system when compared to a wallet of a FinTech which collaborates in an ecosystem to provide products for consumer consumption. The bank's own system is limited and uncompetitive, with the participant submitting that greater benefit becomes available to the bank through collaboration with the FinTech.

By being open to collaboration, banks could tap into the benefits that accrue to the FinTechs that have entered the financial inclusion space and have developed new customers previously unavailable to traditional banks. This was the view of participant Bank Exec 8, to which he further added that through collaboration, banks could capitalise on their trust advantage to act as advisors and knowledge workers between FinTechs and the consumer, providing an important model for banks to maintain relevance into the future.

Fin Exec 1 suggested that collaboration would be a valuable stance for banks to adopt as this could assist in securing a viable future for traditional banks.

The ability to manufacture certain products quite well, for example the home loan, was posited by Fin Exec 3 as being the edge and value that traditional banks would bring to a collaborative relationship with other players. This would be a more valuable position to hold instead of assuming a competitive position against the many FinTech entities that would emerge across the different parts of the banking value chain.

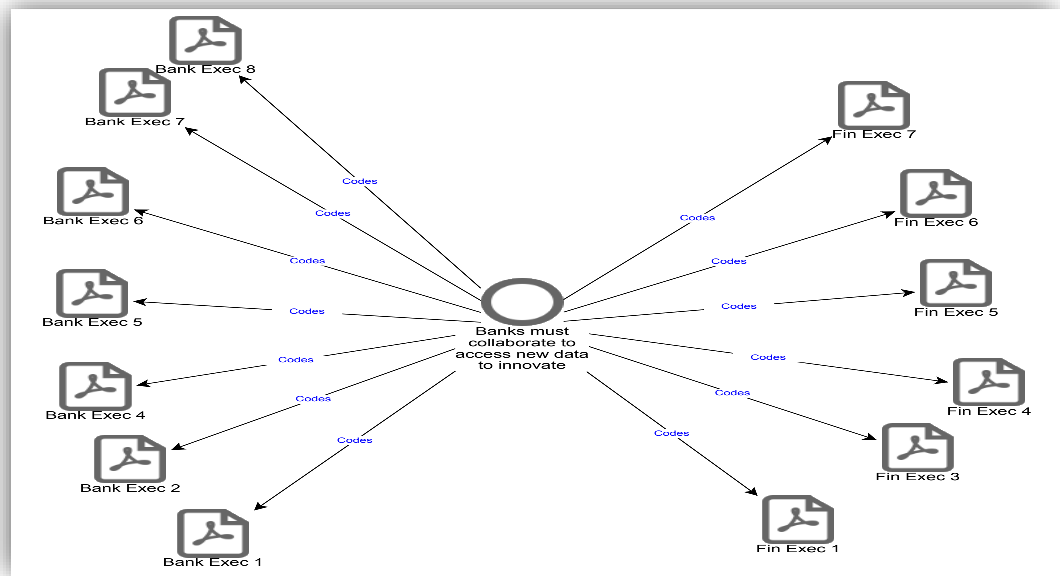
Fin Exec 4 stated her view that traditional banks that did not collaborate would be left behind to struggle without the benefit of functioning correctly to the point where they would eventually loose relevance to the client. This resistance would also prevent them from the opportunity of passing some of their costs on to those brands that would be able to benefit from such collaboration.

The benefit of being able to access the volumes that carry very low margins but are profitable due to the load they place on the business would be lost to those traditional banks that would pass by the opportunity to collaborate - this was a submission by Fin Exec 5. He further asserted that the agility of FinTechs would complement the staid experience and capital strong structures of the traditional banks, who would benefit by seeing the FinTech companies as an outsourced partner that attends to the research and development needs of the partnered entities, just as the FinTechs would equally benefit from the strength of the union. Such a union, he believes, would then be able to fend off the true threat and competition to the industry, which is presented by the Telco's.

Consumer benefit would include the ability to experience a true single view of their financial position across the industry, made possible by the collaboration between traditional banks and FinTech companies is a data submission by Fin Exec 6. Further to this was the perspective that this collaboration would benefit the banks by giving them access to ecosystems that they would never have been able to benefit from. This participant also expressed the view that the Telco's provided the industry with the greatest threat due to the amount of customer data they hold themselves, coupled with the great financial resources and reach that they enjoyed through their business models.

The views of Fin Exec 7 included the perspective that traditional banks would continue to be in a strong position should they elect to collaborate with FinTech entities due to the view that they held the age-old trust and relationship of the customer. He further suggested that the partnership would also benefit the traditional banks through the enhanced production of relevant advanced products that would emerge as a result of the collaboration, brought about by the agility of the FinTechs and their innovative ways.

*Table 10: Banks Must Collaborate to Access New Data to Innovate*




***Source: Zandamela – NVivo Analysis***

### 4.5.1.3 *Banks Are Likely to Become Utilities or Background Actors*

The code category **banks are likely to become utilities or background actors** is depicted in *Table 11* below in which it can be seen that this submission also carried a high data contribution rate from both Bank Exec and Fin Exec participants in equal measure, generating 46 reference codes from 12 participants.

Of the various views submitted Bank Exec 3 suggested that banks which embraced the opportunity could benefit from abilities to pre-score customer data more efficiently to arrive at improved contextual insights which could drive a superior customer experience in partnership with the FinTechs. Bank Exec 2 suggested that a possible and extreme scenario would see reluctant banks being eventually reduced to core infrastructure comprised to a large extent of a regulated core of an institution.

Bank Exec 5 makes comment that as the traditional banks seek out their new role in the evolving landscape, the trust aspect is something that they could capitalise on for the benefit of their ecosystem partners and not just themselves, suggesting that continued closed mindsets could close them off from potential benefits.

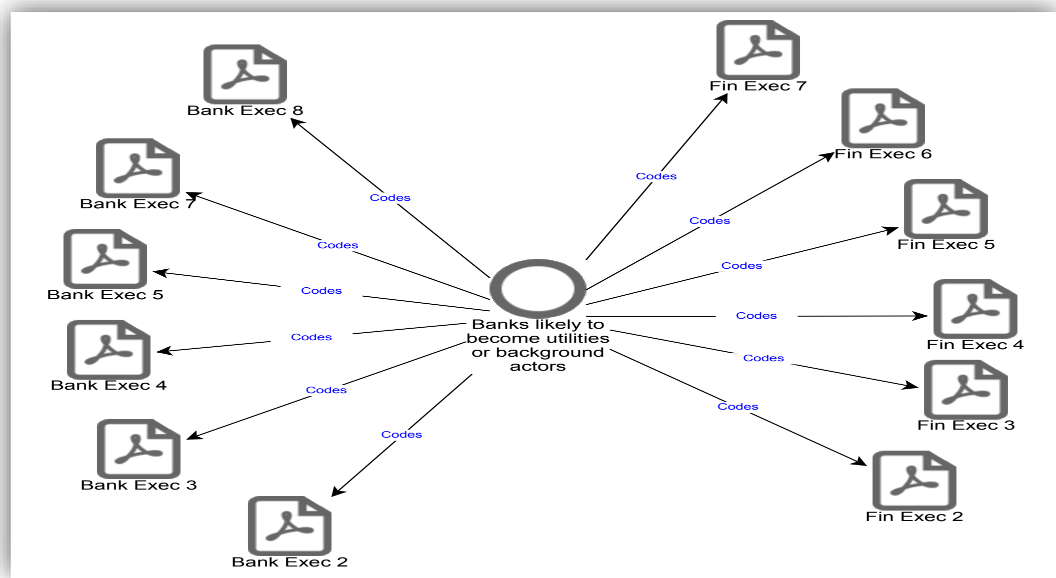
Fin Exec 2 submitted that his view was that customers in the financial services sector belong to the economy and not to a particular bank, suggesting that this would make the bank a utility that facilitated the occurrence of financial activities in that economy as a utility, operating in the background.

Fin Exec 4 proposed that banks may not be seen much as brands in the future, with them occupying new roles, possibly around new ways they would analyse the data they hold but no longer holding the top of mind position they held historically when customers needed finance. A further suggestion was that banks would participate in the emergence of super apps created by FinTech players from an ecosystem perspective, effectively partnering with the FinTechs.

Fin Exec 5 related the view that traditional banks held the upper hand with the provision of back office, compliance and regulatory matters, as well as the view that traditional banks also held the trust relationship with customers. This position could place them in key roles for the future as custodian of these and data security protection. Due to the trust relationship between banks and customers being as strong as it was, the participant further suggested that traditional banks would continue to nurture the relationship as best they could but they would have to contend with relinquishing the product development and ownership as well as the distribution channel ownership.

The discussion around trust continuing to be a central strength of the banks was also advanced by Fin Exec 6. Fin Exec 7 submitted that just as traditional banks had little option but to adopt the use of Automated Teller Machines or online banking so as to remain relevant and competitive at a particular point in the past, they would equally have to adopt open banking to survive, going as far as to suggest that had a bank opted not to adopt either of these earlier technologies in one form or another, they would most likely not have survived.

*Table 11: Banks Likely to Become Utilities or Background Actors*




***Source: Zandamela – NVivo Analysis***

### *4.5.1.4 Banks Are Risk Averse, Slow Speed, Agility is an Issue*

This code category is shown in *Table 12* below. The category carried 17 category code data submissions from 7 participants made up of 4 Bank Execs and 3 Fin Execs respectively. The summarised data provided per participant is expanded upon below.

Bank Exec 1 submitted views around the agility of the larger traditional banks, stating that these institutions tended to be held back, in part, by legacy core banking systems which presented a hurdle between them and effectively transforming to comply with the open banking regulations timeously. He further asserted the view that smaller banks were more able to respond to the regulations quickly as a result of the lower drag they experience, especially as they would be more likely to see the opportunities as being closer to grasp with less effort than their larger counterparts would.

Bank Exec 2 submitted the view that traditional banks seemed to be stuck in the pocket of worrying about the loss of their competitive position due to the increased competition brought about by the open banking regulations, perhaps focused on contending with the risks without appreciating the accompanying opportunities.

Bank Exec 3 also put forward the view that traditional banks tended to be saddled with legacy issues that stood in the way of them responding effectively, with the possibility of a muted appreciation at all levels for the accompanying risks of this level of inactivity.

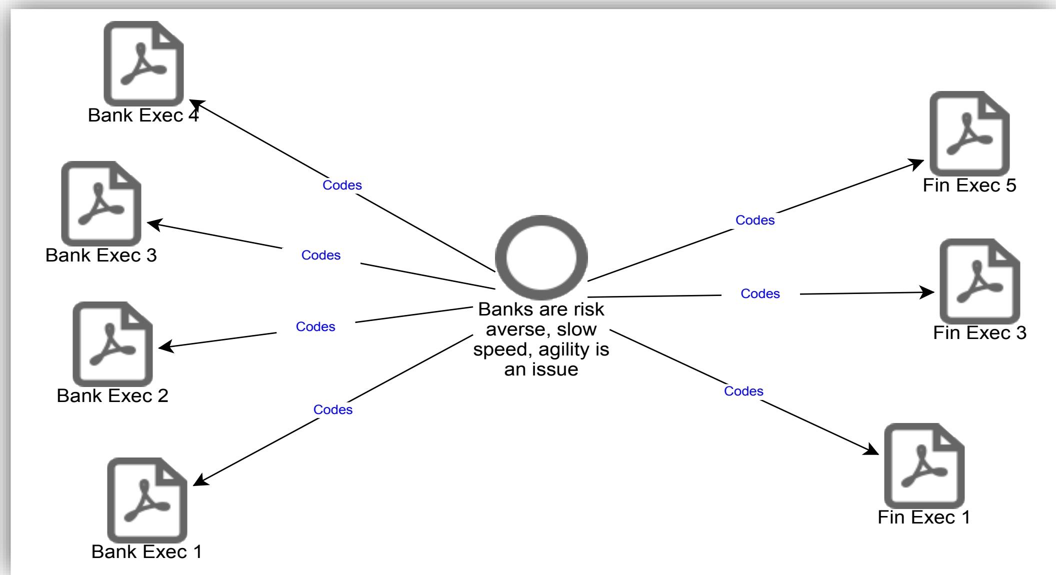
The view put forward by Bank Exec 4 reflected the traditional bank's tendency to push back against the regulations, defaulting instead to lodging complaints with the regulatory authorities.

Fin Exec 1 articulated the view that traditional banks were by nature quite risk averse and set in their ways, not responding particularly well to the opportunities brought about by *external innovation* brought to them for their consideration. Added to this was the risk averse nature and getting such a mindset to grapple with an understanding of what FinTech companies are.

Fin exec 3 presented some of the various hurdles that traditional banks have in their makeup which point at speed, agility and risk averseness when giving examples of these institutions not making their APIs readily available, which would benefit all parties better. Added to this, these institutions would respond positively to an innovative idea put before them only for different management levels in the bank to stall progress on adoption of the innovation.

The submission from Fin Exec 5 provided further data around the generally poor agility of traditional banks in the innovation space when compared to FinTech companies, made more evident by the aspect that FinTech companies do not have to contend with legacy issues which allows for agility in their operations. Despite this the participant sees the great potential for benefits to flow between the parties once the traditional banks address their risk aversion issues with respect to FinTech companies. The depth of this would sometimes affect near complete deals when a traditional bank would suggest a cooling off period before finalising a compelling agreement with a FinTech, which may be prudent but demonstrates the risk averse nature as the due diligence process is itself abused into becoming the handbrake process.

*Table 12: Banks Are Risk Averse, Slow Speed, Agility is an Issue*




*Source: Zandamela – NVivo Analysis*

#### 4.5.1.5 *Banks Costs of Usage Remains High due to Infrastructure etc*

*Table 13* below provides the data for the category code regarding the costs associated with the usage of products and services from traditional banks, which yielded 15 reference codes in total, produced by 7 participants. The 7 participants comprised 5 Bank Exec contributors and 2 Fin Exec contributors. The summarised form of their interview data contributions follow hereunder.

Bank Exec 2 provided her submission data from the perspective of customer service and how this will prove to be a differentiator for traditional banks through the depth of knowledge of the customer, which is all held together by the embedded infrastructure carried by the organisation.

Bank Exec 3 discussed the historically high barriers to entry into the banking industry due to regulatory, infrastructure (such as physical branch networks) and capital costs, which are effectively being circumvented through the regulation compelling traditional banks to work with FinTech participants and thereby allowing for an accelerated entry for these entities. He touched on the digitalisation of transactional flows across the industry as well, with the death of cheque issuance and the digitalisation of the credit processes, effectively reducing the human component and associated costs.

Bank Exec 4 made contribution on the comparatively low cost ability of mobile network operators to reach rural population groups compared to the historical inability of traditional banks to do so. Traditional banks could now participate in this area as well because this ability is now enabled for banks themselves through open banking FinTech partnerships, benefitting the banks. The participant further asserted that the high costs of conducting banking made it quite impossible for banks to reach sparsely populated rural areas with insufficient critical mass for a profitable delivery of banking services, resulting in underbanked areas.

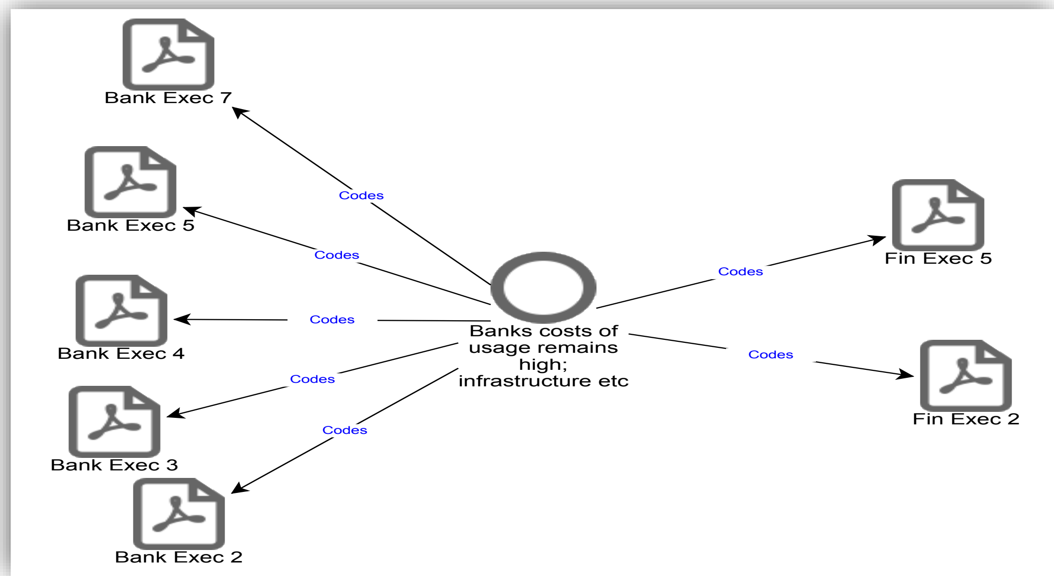
The participant Bank Exec 5 submitted a view on the infrastructure costs that banks would have to deal with due to regulation and legislation that they have to contend with, bringing embedded costs into their operational environment, which is a clear disbenefit to them brought about by the regulatory burden.

The contribution by Bank Exec 7 also submitted data on the costs brought onto banks by the regulatory burden that they face which is sometimes aligned to the regulator's need to address financial inclusion issues using expensive banking assets, which add significant costs to the operations of traditional banks. Partnering with FinTech companies enabled banks to extend their reach and also challenged banks to reduce their historic costs structures.

Fin Exec 2 contributed data on the high fee structures of traditional banks generally, which are usually as a result of their high cost structures.

The high costs of delivering traditional banking services to rural areas was discussed by Fin Exec 5 who outlined how these costs affected various communities negatively, especially rural communities, which have very few options available to them to conduct economic activities with these costs as part of their make-up.

*Table 13: Banks Costs of Usage Remains High due to Infrastructure etc*

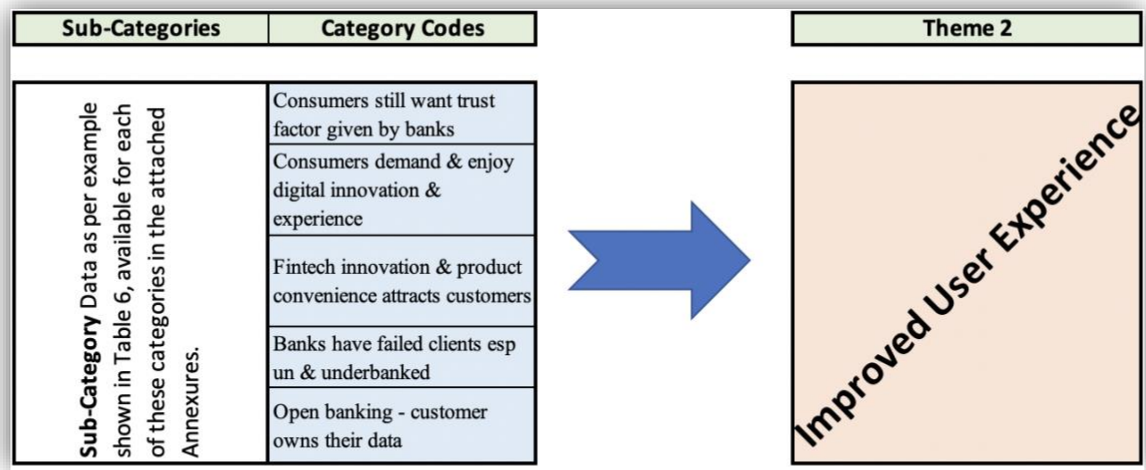



***Source: Zandamela – NVivo Analysis***

### 4.5.2 The Data Analysis Process Arriving at Theme 2

*Table 14* below illustrates the reduction treatment of the sub-category data shown, by way of example, in *Table 7* above. This sub-category data was analysed and coded into the category codes in *Table 14* using the NVivo analysis software programme. The Category Codes were also analysed further and the emergence of Theme 2 from the data took place, which follows the theoretical coding process described by Charmaz (2014). The sub-category code findings are presented hereunder in summarised form to demonstrate the build-up to the Category Codes from the analysed interview data, and subsequently the emergence of Theme 2.

*Table 14: Data Reduction Resulting in Theme 2*




***Source: Zandamela – NVivo Analysis***

**Analysis of Category Codes' Data**

As stated during the data presentation of Theme 1 above, the following section a summarised presentation of the data that was reduced to form each of the Category Codes takes place per participant, providing context of the source data resulting in the generation of Theme 2. This follows the step by step guidance of Creswell (2014), portrayed in *Figure 22 in section 3.5.1*, which provides the detail for the grounded theory advanced coding approach described by Charmaz (2014).

### 4.5.2.1 *Consumers Still Want Trust Factor Given by Banks*

*Table 15* below presents the performance of the participants when providing data by way of interview submissions which generated 18 reference codes from 7 participants made up of 3 Bank Execs and 4 Fin Execs respectively. The findings from their summarised data contributions are presented hereunder.

Participant Bank Exec 1 stated that customers generally still want to be able to see their correct and reliable financial position with their bank with relative ease.

Participant Bank Exec 2 articulated her views, stating that the ecosystem approach would be important as this structure would assist customers to identify a trusted party withing that system, suggesting that this may not necessarily be a traditional bank as FinTech relationship with customers evolve.

In his submission, Bank Exec 8 posited that the traditional bank within an ecosystem would most likely be the custodian holder of trust given by customers and that this position could also be used to advance a digitally based knowledge and advice system to deepen knowledge amongst customers.

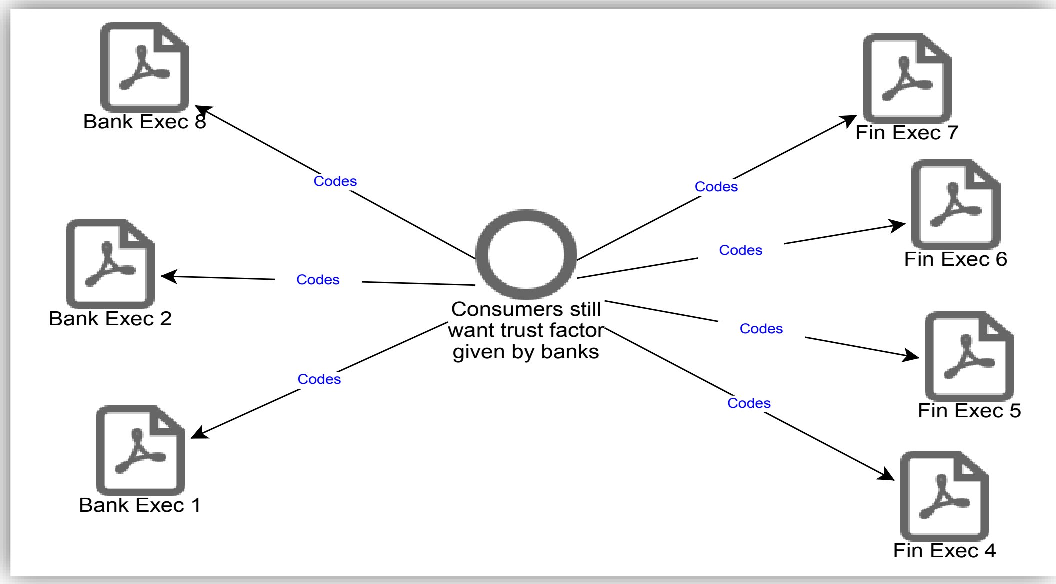
In her submission, Fin Exec 4 stated her view as being that the banks were in a better position to hold trust due to their historical relationships with customers spanning long periods of time, and that the new FinTech entities were still to prove themselves to customers in a bid to gain their trust.

Fin Exec 5 stated that traditional banks have held the trust factor for a very long time so they could possibly capitalise on this by focusing on being the custodian of various types of customer data in the ecosystem. The banks in such a situation could assume the role of a utility as the data would be added to other infrastructure services around a technology stack offering products such as screening, compliance and support for regulatory interactions.

Trust also featured as the core benefit to be provided by traditional banks expressed via APIs in to the future by Fin Exec 6. This included the provision of trust as a service provided to FinTechs around their wallet products, keeping the actual value in a trusted environment.

For Fin Exec 7, the same pattern was repeated around trust being the key service to be provided by traditional banks into the future along with regulation as a service to FinTech partners.

*Table 15: Customers Still Want Trust Factor Given by Banks*




*Source: Zandamela – NVivo Analysis*

### 4.5.2.2 *Consumers Demand and Enjoy Digital Innovation and Experience*

In *Table 16* below it can be seen that the participants contributed data to this category code by way of generating 37 reference codes collected from 12 interview participants. The analysis of the interview participants illustrates that these were composed of 5 Bank Exec contributors and all the 7 Fin Exec contributors. The summarised findings from the analysis of the sub-category data contributed are presented below.

The participant Bank Exec 1 stated that the benefits presented by the production of innovative products which also gave a particularly fulfilling user experience were not outweighed by the disbenefits of the mode by which these benefits were delivered, which was by using FinTech companies to achieve this. This suggested strong acceptance of FinTech companies by consumers.

Bank Exec 2 highlighted that the speed of demand from customers for innovative services is what drove the development of products and services from FinTech companies to meet this demand and enter the banking arena due to the inability of traditional banks to respond as required.

Participant Bank Exec 3 submitted that he saw benefits flowing to consumers through the ability to access better pricing for their banking needs, as well as increased mobility by being able to move between institutions more easily and that they would be able to access products that would provide them with an improved user experience. He further stated that this phenomenon was being driven by the consumer in his view, with banks trying to resist this pressure.

Improved mobility and the ability for a consumer to port his or her banking data from one institution to another was cited by Bank Exec 6 as a keen benefit to be enjoyed by the consumer, brought about by open banking.

The submission of data by participant Bank Exec 8 gave insight into his views that consumers would be able to manage their money across institutions more effectively through FinTech mechanisms and open banking enabled through a digital identification system aligned to seamless KYC. This would enable greater choice for the consumer who would experience reduced attachment to a particular traditional bank coupled with an ecosystem approach to product procurement, securing the most relevant product for their particular needs from the best provider for them. He saw these developments as ushering in an era where customer data itself is viewed as a product.

Fin Exec 1 contributed a key view that consumers are responsible for driving the change which brought about the phenomenon of open banking due to their desire for increased digitisation of the banking experiences.

Participant Fin Exec 2 submitted that a benefit the consumer will experience is as a result of increased competition for his or her attention, which delivers greater value at an improved cost. Furthermore, he stated that FinTechs would be able to meet the demands of the consumer by producing the advanced products and digital experiences that they seek.

Fin Exec 3 provided his view on the rate of use of third party applications by consumers, stating that in his experience this rate was higher than the rate of use by consumers of banking apps. He stated that he had analysed this occurrence and obtained evidence through the ratings submitted by consumers at the Apple® App Store and the Android® Play Store, which demonstrated the satisfaction enjoyed by consumers, of the advanced digital experience provided by FinTech offerings.

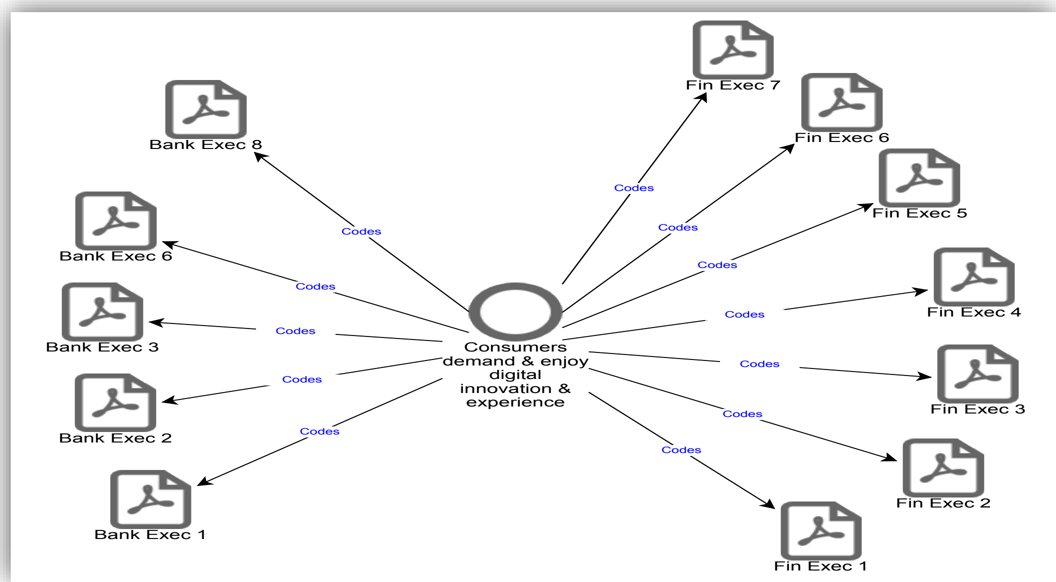
In her submission, Fin Exec 4 stated that her experience showed that consumers were demanding improved user experiences and that this demand would be increasing further with the passage of time as these demanded services are provided to them.

Fin Exec 5 shared the view that the benefits presented to consumers by FinTechs over traditional banks in the rapid and responsive delivery of demanded services resulted in the trend of consumers giving greater attention to FinTech offerings increasing. This, he stated, would most likely be due to the reluctance or probable inability and slow reaction speed of traditional banks to meet these same demands placed upon them by consumers.

In his submission on the benefits of open banking for consumers, Fin Exec 6 discussed the attractiveness that is presented to consumers by FinTech companies using open banking to provide a single consolidated view of account balances and facilities across various traditional banks . He further stated that this capability addressed a need that consumers have and gives them the ability to plan more effectively in reaching for their financial wellness .

Keeping to the same message during the submission of his data, Fin Exec 7 added a similar emphasis to the significance and importance of the benefit to the consumer of the single consolidated view of his or her accounts across various institutions. The participant added that the flow of data provided by the open banking framework allowed for the increase in services that are consumed by the customers demanding these very services, which give them greater monetary control and benefits.

*Table 16: Consumers Demand & Enjoy Digital Innovation & Experience*




*Source: Zandamela – NVivo Analysis*

#### 4.5.2.3 *Fintech Innovation and Product Convenience Attracts Customers*

*Table 17* below shows the qualitative interview results drawn from the participants that contributed findings which led to a data analysis producing the next category code. This category code was generated from 37 reference codes which were presented by 12 participants. The participants were made up of 6 Bank Exec and 6 Fin Exec participants respectively who contributed to this category code. The individual sub-category data findings presented by each participant that made up the category code were presented hereunder in summarised form.

Bank Exec 1 discussed the benefit of the convenience delivered by the technology available from the FinTech company product which presented a consolidated view of a consumer's banking products spread across various institutions.

Bank Exec 2 contributed data on the convenience brought about by the use of artificial intelligence that she saw being used by the FinTech companies in providing convenience to consumers and how she felt that this would increase further.

Bank Exec 3 reflected on the way in which the phenomenon commonly described as "Uberisation", which is where an industry is disrupted in the same manner by which the introduction of the company Uber® Technologies Incorporated to the global taxi industry disrupted that industry with new ways for customers to interact with taxis, is impacting the banking industry in a similar manner. This is being achieved through the introduction of open banking and the digitisation process brought about by the disruptive effects of FinTech companies, causing the market and industry to move.

The benefits provided by people getting access to finance and financial literacy and how this positively impacts the economy was the submission from Bank Exec 4 on the convenience provided through innovation which makes lives easier.

The submission from Bank Exec 5 touched on the ability of FinTech companies to provide a much improved and intuitive products experience to consumers, which was in stark contrast to the generally poor product innovation and convenience experience provided by banks. This, he asserted, was in part due to the near non-existent information feedback loops informing the product improvement processes or development actions by banks. He went on to state that traditional banks tended to believe that they knew what products the consumer wanted or needed with little feedback timeously shaping these products to the actual needs of consumers. This issue was resolved by FinTechs in an agile manner and consumers responded to this convenience.

Bank Exec 7 described the increased choice that consumers received from the spread of products developed by FinTechs which brought convenience and innovation to consumers, and which made for rapid adoption of these products that were also easier to use than those of traditional banks.

Fin Exec 1 spoke of the importance of an effective mobile based solution for any company to be able to attract customers, especially if the value proposition is designed to resolve a problem for consumers in a digital paper-free manner.

A very similar viewpoint was expressed by Fin Exec 2, who stated that whoever provided an improved value added solution would be the most likely to attract business as such an offering would be seen as competitive and potentially providing the consumer better value for money.

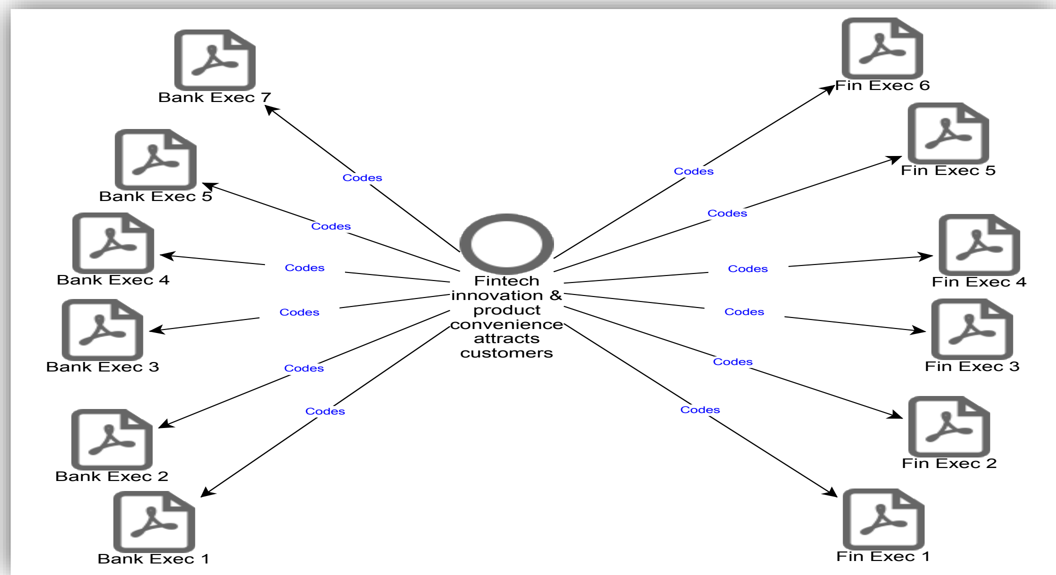
In his contribution, participant Fin Exec 3 stated that he believes that consumers prefer to use third party providers or FinTechs, more than they use traditional banking mobile applications due to the better user experience that they receive from these. Furthermore, with consumers taking products from different traditional banking institutions they are increasingly multi-banked and the experience of viewing one's total debt exposure consolidated in one application provided by a third party affords a superior experience to logging into the mobile banking applications of several banks to understand the total debt exposure. His further views were that traditional bank operating models did not typically equip them to create and participate in externally facing ecosystems of the type that FinTech companies create. He asserted that these ecosystems bring convenience and benefits that consumers are demanding, hence the attention turning to FinTech companies.

Participant Fin Exec 4 provided input around her views, stating that the convenience provided by the FinTech offerings were innovative and superior, meeting the needs of the consumer in ways that the traditional banks had not been able to, with the trend on this demand pull by consumers only set to increase further as consumers became better informed and financially educated. She further posited that the FinTech companies had been able to improve on certain processes that the traditional banks had been grappling with for quite some time without arriving at a smooth, safe, simple and convenient solution.

A similar position was taken by participant Fin Exec 5 who also discussed the benefits of innovative and simplified processes developed by the FinTech third party providers, which met the needs of the consumer in a more beneficial manner.

Participant Fin Exec 6 presented a very similar view to those that had been presented by the earlier participants, albeit from a different perspective, reflecting his uniquely different experiences. He particularly highlighted the sentiment that he expected the successes in innovation and delivery of benefits to consumers by third party provider FinTech companies, would increase and improve with time. He believed that this would prove to actually be a great assistance to traditional banks in breaking down their rigid siloed structures which actually impeded the free flow of data internally, for the development of convenient and beneficial products.

*Table 17: FinTech Innovation and Product Convenience Attracts Customers*




***Source: Zandamela – NVivo Analysis***

#### 4.5.2.4 *Banks Have Failed Clients Especially Unbanked and Underbanked*

This category code was comprised of 35 reference codes produced by the contributions made by 11 participants. The composition of the participants was made up of 5 Bank Execs and 6 Fin Execs respectively, as is depicted in *Table 18* below. The sub-category data submissions given during the interview process, which were subjected to the analysis process that was applied consistently, were reduced to the category code which is shown in the title above, and are presented in raw form but summarised hereunder, per participant.

Bank Exec 2 submitted that traditional banks have not been able to push for the development of alternative scoring mechanisms over all the years to seek for a more inclusive credit score which would go towards addressing the issue of the underbanked gaining access to finance. On the other hand, the FinTech companies have managed to make significant headway in this area in a relatively short time. She also submitted that her view on the definition of a banked individual revolved around those consumers that had a good credit score at a credit bureau.

Participant Bank Exec 4 stated that traditional banks were ill equipped to provide services to the consumers that fell into the lower income brackets as the cost of delivering services was too high. Further to this, the traditional banks were also unable to master their extensive data or to innovate around the development of inexpensive solutions to meet the needs of lower income consumers. The issue of the creditworthiness of an individual at the bottom of the pyramid is not being addressed with proposed alternatives, he further asserted.

The submission by participant Bank Exec 5 also reflected on the same issue of traditional banks failing to master and organise their vast warehouses of data to be able to provide a single view or to create an ecosystem or products that cater for various consumer groups, including those at the bottom of the pyramid.

Bank Exec 7 stated in his submission that the traditional banks found it very difficult to provide products to bank the informal sector and thereby impact financial inclusion positively, unlike the FinTech players that are nimble and are able to develop effective products delivered via mobile devices.

The issue of regulatory burden is advanced by participant Bank Exec 8 as being a key impediment which negatively impacts the ability of traditional banks to develop products for the lower income and informal sectors, causing them to only develop products for consumers they prefer to do business with. He states that in this way, traditional banks have actually been responsible for increasing inequality and disenfranchisement.

Fin Exec 2 submitted that traditional banks generally do not have the processing ability to deal with consumers that are in lower income segments and fall into the so called bottom of the pyramid. The entry activity of onboarding a customer is in itself so complex that it does not cater for this grouping of consumers, plus this complexity adds cost that is difficult to pass on to these consumers.

The submission from Fin Exec 3 highlights the typical product development process of traditional banks generally at the lower end of the market, whereby the executives tend to just tweak a product feature on existing products.

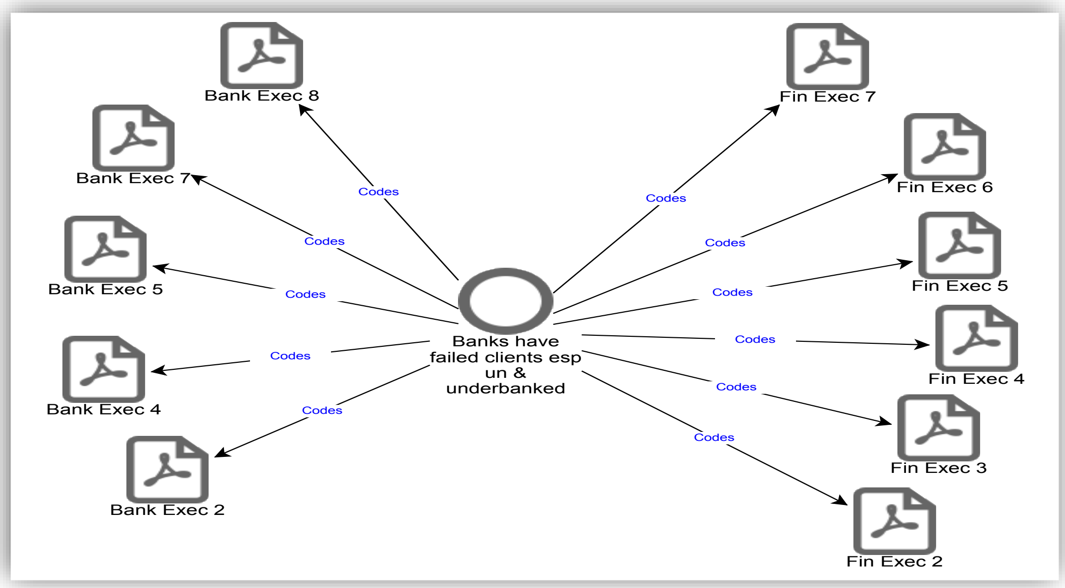
In her submission, Fin Exec 4 dealt with the generally unresponsive and unhelpful manner in which traditional banks tended to behave, showing general inflexibility. Add to this the current business models of traditional banks generally not being flexible enough to be stretched to make a business case for meaningful financial inclusion, leaving the sector to fend for itself.

Fin Exec 5 submitted data regarding a particular traditional bank which had developed a unique strategy to create a value proposition that set it apart from traditional bank models to enter the lower income market with great success, proving that this was possible. This business model focused on providing banking services to the underbanked.

Participant Fin Exec 6 discussed how traditional banks generally failed to provide products and services to the underbanked and unbanked markets, causing these sectors to fend for themselves by forming cooperative style savings entities called Stokvels in South Africa. He noted that this failure by the traditional banks was being corrected by FinTech entities due to the opportunity presented by the lack of attention given to these segments by traditional banks.

Fin Exec 7 stated that the traditional banks tended to underplay and have a negative view of the potential benefits that open banking could bring to the market with their participation, suggesting that they were responding to the fear of possible regulation directing them in a particular area, creating reluctance instead of them seeing this as an opportunity.

***Table 18: Banks Have Failed Clients Especially Unbanked and Underbanked***




***Source: Zandamela – NVivo Analysis***

#### 4.5.2.5 *Open Banking – Customer Owns Their Data*

This category code was comprised of 26 reference codes produced by the contributions made of 11 participants. The composition of the participants was made up of 4 Bank Execs and 7 Fin Execs respectively, as is depicted in *Table 19* below. The sub-category data submissions given during the interview process, which were subjected to the analysis process that was applied consistently, were reduced to the category code which is shown in the title above, and are presented in raw but summarised form hereunder, per participant.

Bank Exec 2 sated that traditional banks are concerned that the change in customer data ownership directly affects their ownership of the customer by implication, hence their reluctance to part with this. She further asserted that once customers understand that they own their own data, they would become quite demanding of their desires from banks and would associate this with an increase in their privacy as well.

Bank Exec 5 submitted that traditional banks would be forced by the regulation into conceding that customer data does not belong to the banks and that furthermore, these customers now had the right to access their data whenever they would wish to do so, even if this meant that they would do so through a permissioned third party provider. This new arrangement, he further asserted, had the effect of removing the control that banks used to exert over their customers, leaving them to grapple with the dilemma that they were now, in effect, merely the custodians of this data.

These points were also reflected on by Bank Exec 6, who saw the regulation as formalising the development of APIs for third party providers to gain access to customer data which had been guarded by traditional banks for all this time.

Bank Exec 8 asserted that the traditional banks have enjoyed control and ownership over customer data, as well as their transactional data for a long time, leaving them to now grapple with how to view their role and their options in this new environment where the customer is in control and ownership of their own data. He asserted that with this realisation, customers could even eventually demand that traditional banks hire the data from them instead, completely changing the control dynamic between banks and customers.

Fin Exec 1 raised the point that one of the questions that traditional banks had to figure out was around ownership of the customer, and how the ownership discussion now showed that banks no longer owned the customer, yet were deriving revenue from that customer.

In his submission, Fin Exec 2 submitted that the traditional banks were concerned with how best to retain the customer in this new environment, in a manner that caused the customer to continue viewing the bank as the preferred holder of their deposits and business.

In the submission by Fin Exec 3 he suggested that traditional banks could consider using the knowledge of the customer obtained from the data that they no longer own, as a bargaining point in their dealings with FinTechs in a bid to remain relevant from a customer relationship perspective.

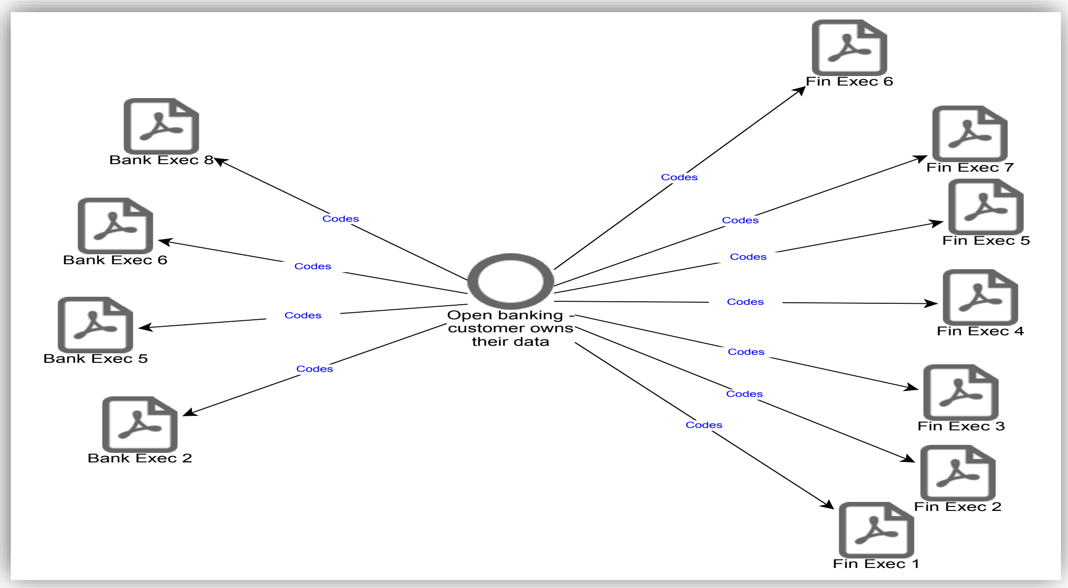
Fin Exec 4 asserted in her submission that the effect of the PSD2 regulation was quite extensive on traditional banks as it dug at the very foundation of their right to be the only entity to interact with customers that they have owned for a very long time, causing them concern around the nature of that relationship going forward. She further submitted that the regulations have sought to break the bank hold over that data so as to encourage competition and allow customers greater rights over their own data, which may result in them demanding more out of their bank relationship.

A similar perspective was advanced by Fin Exec 5, who added that traditional banks had been mistakenly viewing the customer data that they held as being their property merely because it remained under their care, a paradigm which had been shattered by the open banking regulations.

Fin Exec 6 submitted that he saw the question of data ownership at a more macro level than being just a traditional bank issue. He asserted that the question was more of a discussion around the sovereignty of the customer data and that this was an issue that countries wanted to maintain control over at that level.

Fin Exec 7 submitted that his view was that FinTech companies and banks were now both going to share the data with consent from the customer, who is now the true owner of his or her own data. He saw the sharing of the data between the two entities as being done with the consent from the customer for this to take place for his or her own benefit.

***Table 19: Open Banking - Customer Owns Their Data***

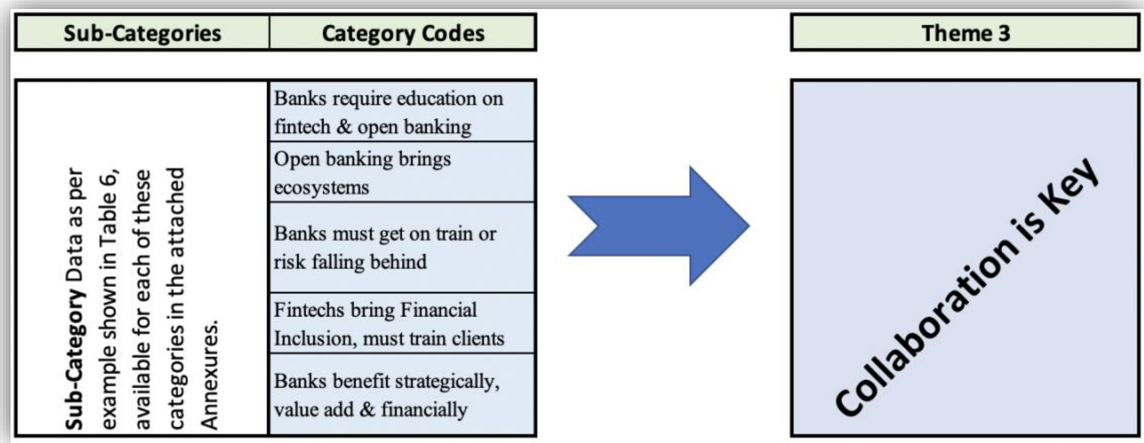



***Source: Zandamela – NVivo Analysis***

### 4.5.3 The Data Analysis Process Arriving at Theme 3

The analysis of further sub-category data that resulted in the emergence of the next set of category codes is shown in *Table 20* below. This process followed the same format described in the section above for the emergence of Theme 2 and is a continuation of that process in analysing and reducing the mass of data collected from the interview participants. As previously stated, the first step of the analysis of the data collected from the interview participants involved the analysis of the transcripts to achieve the first data reduction, which produced the sub-category data. The further analysis of these category codes led to the emergence of Theme 3 shown in the same table below, in a process adhering to the theoretical coding described by Charmaz (2014).

*Table 20: Data Reduction Resulting in Theme 3*




*Source: Zandamela – NVivo Analysis*

**Analysis of Category Codes' Data**

As stated during the data presentation of Theme 1 above, in the following section a summarised presentation of the data that was reduced to form each of the category codes takes place per participant, providing context of the source data resulting in the generation of Theme 3. This follows the step by step guidance of Creswell (2014), portrayed in *Figure 22 in section 3.5.1*, which provides the detail for the grounded theory advanced coding approach described by Charmaz (2014).

The presentation of the findings making up the 5 category codes in *Table 20* above, drawn from each of the interview participants continues hereunder.

### 4.5.3.1 *Banks Require Education on FinTech and Open Banking*

This category code was comprised of 32 reference codes produced by the contributions made of 11 interview participants. The composition of the interview participants was made up of 5 Bank Execs and 6 Fin Execs respectively, as is depicted in *Table 21* below. The sub-category data submissions given during the interview process, which were subjected to the analysis process that was applied consistently, were reduced to the category code which is shown in the title above, and are presented in raw but summarised form hereunder, per participant.

In her submission, Participant Bank Exec 2 stated that *whether we like it or not, this is a model that's here to stay*, which would then require a responsible response from the traditional banking community to better understand the possible benefits that they could draw from the open banking phenomenon and FinTech partnerships. A denial of this would be foolhardy.

In stating that banks are *going to have to change the way that they approach banking; the incumbent banks are going to have to think a lot more like tech companies*, Bank Exec 3 was highlighting the importance of the mindset and approach that traditional banks need to be mindful of in dealing with the issue of open banking.

Bank Exec 4 discussed how traditional banks react to FinTech competitive pressure with the first thought being around how to compete or to collaborate without really understanding the implications or consequences of either action. He went on further to state that *if they collaborate, then the FinTech can mine that data... and produce more revenue... or maybe come up with very tailor-made solutions which may be cheaper and less expensive for traditional banks*. He stated that as Chairman of the Banker's Association and Chairman of the National Switch he had witnessed complaints from traditional bankers yet had seen various benefits flowing. He stated that he had witnessed balance sheets growing and financial literacy improving through the impact of open banking but that the banks needed to understand these better to appreciate them properly.

Participant Bank Exec 5 highlighted the issue banks faced in determining their strategic direction when he stated that *the banks then that have the greatest to lose must obviously reinvent themselves in light of that future, which, as we said in the previous question, is a function of how they see their role changing*. He also mentioned that some bankers saw the TechFin, or big technology companies, as being the real threat to the traditional banks, suggesting that the banks were not quite clear on what direction to take as regards this treat. His further view was that open banking was an immediate event that required their active attention in most markets around the world already, with the laggard markets due to follow fairly soon. Being better equipped on these developments and opportunities through education would be beneficial to their strategic direction finding.

Bank Exec 8 gave examples of situations where traditional banks could find themselves as part of an ecosystem which includes FinTech companies, and the banks would have to navigate this system and find their way. The key example he gave was regarding identity authentication disappearing from banks, where *the bank has to rely on the authentication authority or the compliance of the RegTech provider on the platform… the data has* *probably already been authenticated by an authentication authority, which is a utility maybe on the platform.* Traditional banks being educated on the ecosystem possibilities is important, he asserts.

Participant Fin Exec 1 discussed his knowledge of a resource that banks could use to access education on FinTechs and the benefits of open banking to enable them to cope more effectively in the rapidly changing environment. He argued that he believe that this could be a resource that was *a platform for banks to have access to highly researched, curated, vetted fintech solutions*.

In his submission during the interview, Fin exec 3 made mention of the opportunity for the traditional banks to understand the possibilities before them through open banking and being in partnership with FinTechs. He stated that they could become the regulatory partner in the ecosystem as well as take the opportunity to be *great product manufacturers. And they just need to recognize that's the case. And there'll be one or two small percentage of the banks which transform themselves to become great customer distribution channels, but that will be the minority.* He asserted that traditional banks, as an example, would be the only ecosystem partner able to manufacture a great home loan and that they needed to become better educated in this to structure a strategic way forward.

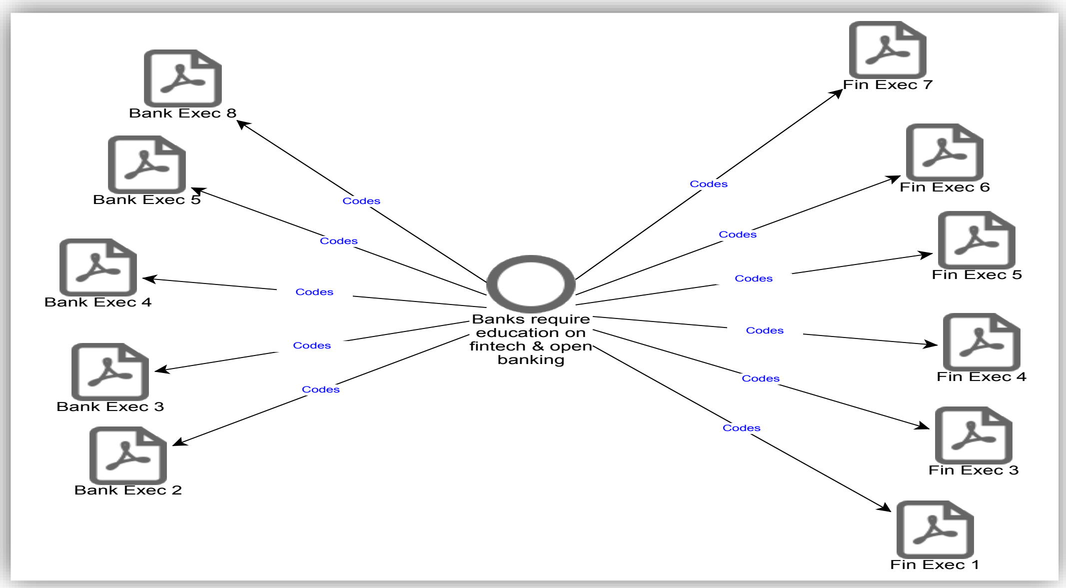
Stating that considerable scope existed for partnerships between traditional banks and FinTech companies based on her experience seeing some of the fruits of such collaboration, Fin Exec 4 also discussed some of the collaboration challenges that caused the banks to delay entering these partnerships because generally *fintechs do not meet their due diligence onboarding requirements. So I think that's an area where the banks are going to have to innovate and modernize significantly in order to make this possible.* For this to occur more readily, she posited traditional banks would need to become educated on the open banking phenomenon so as to deal with this from an open mindset, as well as appreciating and understanding the benefits being brought to them by the FinTech entities.

Fin Exec 5 submitted that he believed that he saw more opportunities than he did threats between traditional banks and the FinTech entities brought about by open banking and the sharing of data. He also mentioned that *there is a pool and a dynamic pool of fintechs,* *yes, I still read that some of the banks are still trying sometimes to down play some of the work that those fintechs are doing.* This occurs due to ignorance and a focus on the threats instead of the opportunities.

Fin Exec 6 stated that he saw a greater collaboration possibility between traditional banks and FinTech companies than between them and the big TechFin entities as these pose a greater threat to the banks. He believed that the smaller size and great agility of FinTechs brought advantages to traditional banks and a better fit and that the banks needed to learn this about the FinTechs.

The submission made by Fin Exec 7 also made mention of the great opportunity he saw for traditional banks to collaborate with FinTech companies and bring open banking to life for the benefit of both parties, provided that the traditional banks could learn to see beyond their own devices because, *if they don't, they will disappear like in one of my articles, or they can reposition themselves to be at the forefront of what the fintechs will bring to the banking world. So I don't see the banks disappearing and those who embrace open banking will stay at the forefront.* To fully embrace the opportunities, most traditional banks need to learn about this phenomenon.

***Table 21: Banks Require Education on FinTech and Open Banking***




***Source: Zandamela – NVivo Analysis***

#### 4.5.3.2 *Open Banking Brings Ecosystems*

This category code was comprised of 40 reference codes produced by the contributions made of 10 interview participants. The composition of the interview participants was made up of 5 Bank Execs and 5 Fin Execs respectively, as is depicted in *Table 22* below. The sub-category data submissions given during the interview process, which were subjected to the analysis process that was applied consistently, were reduced to the category code which is shown in the title above, and are presented in raw but summarised form hereunder, per participant.

Bank Exec 2 mentioned that consumers were drawn towards an ecosystem as this brought convenience into their lives because *what people do want is they want everything in one place.* She saw this convenience factor being extended to digital identification systems which gave consumers the ability to access and use digital forms of identification for their ecosystem based digital lives.

Participant Bank Exec 4 discussed the benefits that the consumer derives from the less expensive but more appropriate services provided by FinTechs that are in the same ecosystem as the traditional bank that they may be linked to, with each member of the ecosystem being able to make money. Traditional banks would benefit as well especially as these transactions would occur in areas where they didn’t have branches available but servicing was now available due to the ecosystem that contained the FinTech alongside the bank and the consumer.

Bank Exec 5 reflected on how the open API architecture system that is evolving due to open banking would bring partners together to participate with one another in a new ecosystem model. He saw these ecosystems bringing benefit to all parties, consumers, traditional banks as well as FinTech companies, especially where *every player in the ecosystem would benefit from improved authentication and verification and related services, where typically, even in government, certainly in South Africa, it's very disaggregated.*

As he discussed the challenges experienced in certain smaller markets in developing countries, Bank Exec 7 contributed that many of the traditional banks in that market had little option but to participate in ecosystem arrangements brought about by market forces.

Participant Bank Exec 8 stated that he saw many benefits arising from traditional banks participating in an ecosystem arrangement with other players, admitting as well that the *shift is almost impossible for those of us who are the sort of traditional bankers to absorb and envision a situation where the bank is not king and essentially the financial system is*. He spoke of a situation where consumer data is no longer authenticated by traditional banks, but rather by an authentication authority which was a third party provider in the ecosystem. Through this development, he stated that *data itself becomes a product in the new ecosystem, on open banking platforms, and it's an assets that is owned by more people than ever before, and I think that's one of the greatest benefits that you get out of it.*

Participant Fin Exec 3 discussed the benefits that ecosystems bring in that a consumer would be able to avoid having to login to two different banking applications to read disparate data on his or her account, but could rather login to one third party application and view all the data from the two banks in one convenient place. He went on further to mention research he had read which mentions that ecosystem business models are the most successful digital business models, adding that *convenience is going to come from the ecosystems. Banks just don't do ecosystems, simple as that.*

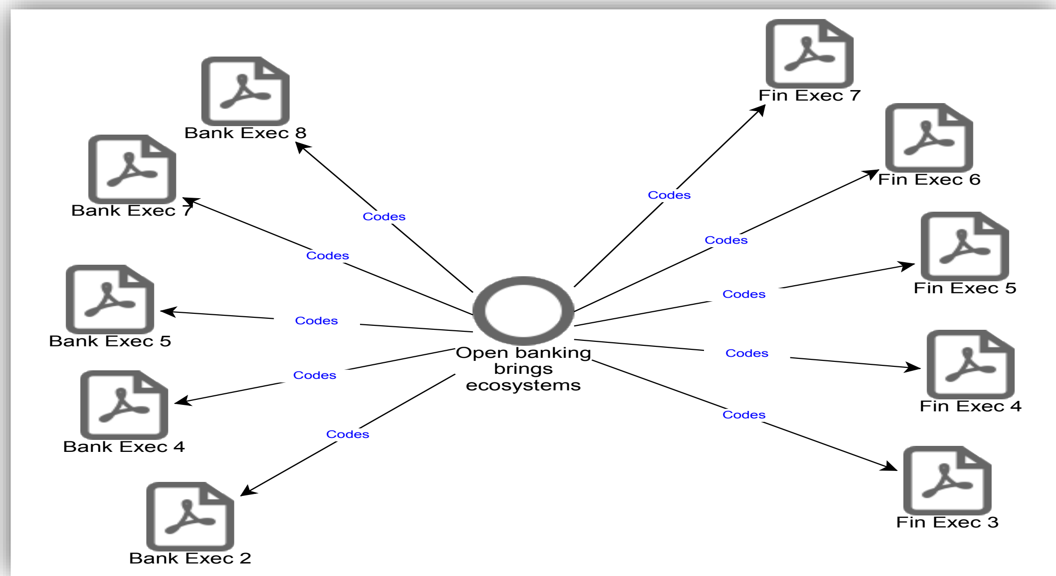
Fin Exec 4 stated that with the developments occurring under open banking, she foresaw a situation where traditional banks were no longer recognised as big brand names into the future as they became part of ecosystems, with consumers also not having strong relationships with them. These changes were the result of ecosystem structures and the platform business model that banks would evolve into.

Fin Exec 5 stated that he believed that ecosystems brought on by open banking encouraged traditional banks to expose their APIs to new ecosystem members as this brought new opportunities to them. He also believed that the traditional banks were beginning to realise that *it's no longer (that the) fintechs are competitors, Telco's are our competitors - no - they realized that the fintech can open up massive opportunities.*

A similar viewpoint was expressed by Fin Exec 6 when he stated *I do think what it will do is open up new market opportunities around collaboration and allowing for banks to become platform players, which will then enable them to extend their services into other* *ecosystems where they would not ordinarily have had access to.* He further added that he saw the role of traditional banks in the ecosystem as being the custodians of trust.

Participant Fin Exec 7 contributed that he saw part of the benefits to traditional banks as being the ability to tap into additional data themselves, which would enable them to enrich their products to consumers more effectively, creating a stickier value proposition. He added that he saw open banking making the opportunity space bigger for all members of the ecosystem.

***Table 22: Open Banking Brings Ecosystems***




***Source: Zandamela – NVivo Analysis***

### 4.5.3.3 *Banks Must Get on Train or Risk Falling Behind*

In *Table 23* below the interview participants contributed data to this category code by way of generating 45 reference codes collected from 12 interview participants. The analysis of the interview participants themselves illustrates that these were composed of 7 Bank Exec contributors and all the 5 Fin Exec contributors. The summarised findings from the analysis of the sub-category data contributed are presented below.

Participant Bank Exec 1 submitted his view during the interview, stating *you know, it's one of those things I think as a bank you either get on the train or you get left behind,* as he discussed the rapid rate of change of the open banking phenomenon across most markets.

Participant Bank Exec 2 stated that she believed that the situation presented traditional banks with *this dichotomy of do I or don't I with the fintechs, you know, they may eat me up, but without them they may eat me up anyway. And, you know, in many ways, I believe you either get on the bus or the bus will leave you behind.* She went on to discuss the business model changes that traditional banks would have to navigate around, including developing a strategy around their value chain and how they would share this with the FinTechs. She stated that the pressure was being brought to bear on the traditional banks by the consumers themselves as ... *customers want everything when they want it. And then I think, you know, that becomes a baseline.*

During his interview data submission, participant Bank Exec 3 made the statement that the traditional banks are *going to have to change the way that they approach banking. They're going to have to think; the incumbent banks are going to have to think a lot more like tech companies.* His view was that this was an unavoidable matter of strategic importance which the traditional banks would have to give consideration to. He went on to emphasise this view by stating that *it's going to be very difficult for old school incumbents with a lot of legacy to change and respond to this, to optimize on it. If they don't, it's going to be a threat.*

This theme was continued by Bank Exec 4 during his interview submission when he stated *I think the existence, the co-existence is important, but if the banks don't do much, they will be overtaken by open banking or the fintechs as we move forward.* He also added that traditional banks would have to strongly consider the suitability of their current business models, giving heed to the need to restructure and reduce their various cost lines and infrastructure make up in the process.

Bank Exec 5 submitted that the traditional banks needed to assess the options before them so as to take a path that would enable them to transform themselves and change their business model to fit with the future. He added that he saw the banks with the greatest to loose being the ones that had to take the situation seriously enough to reinvent themselves, shaping their future. A serious challenge, he further asserted, was facing those traditional banks which didn’t have the ability to manipulate their data sufficiently well to be able to meet the data requests placed upon them by clients that have elected to use the services of third party providers, which in turn place API calls through to these banks; these traditional banks were going to struggle quite seriously.

In Bank Exec 7's contribution he stated that traditional banks were not in any position to simply ignore the open banking phenomenon and expect that the pressure upon them to take decisive action would abate and fizzle away. *I think that banks cannot step back from the perceived threat. I think that they should take an attitude of being complementors as opposed to adversaries*, were the exact words he used to express his views, adding to the argument that banks had no choice but to deal with what they perceive as being a challenge before them, and take decisive action to secure their future relevance, or risk falling behind into possible obscurity and irrelevance.

Bank Exec 8 stated in his submission that the traditional banks would likely find themselves in a situation where many of their customers would spend less time with them as they increasingly interacted with third party service providers offering products that gave an improved user experience.

Participant Fin Exec 2 discussed his view that banks would be contemplating how to retain the customer as their depositor, as well as seeking ways to soften the impact to their non-interest income line with the advent of services provided by third party providers that were much more competitively priced, even free, yet providing a much improved user experience. He saw the consumer taking advantage of the more appropriate, cost effective products produced by the FinTechs which would leave the traditional banks with the need to restructure their business model and cost structures, overcoming the historic complacency which had been paid for by the consumer.

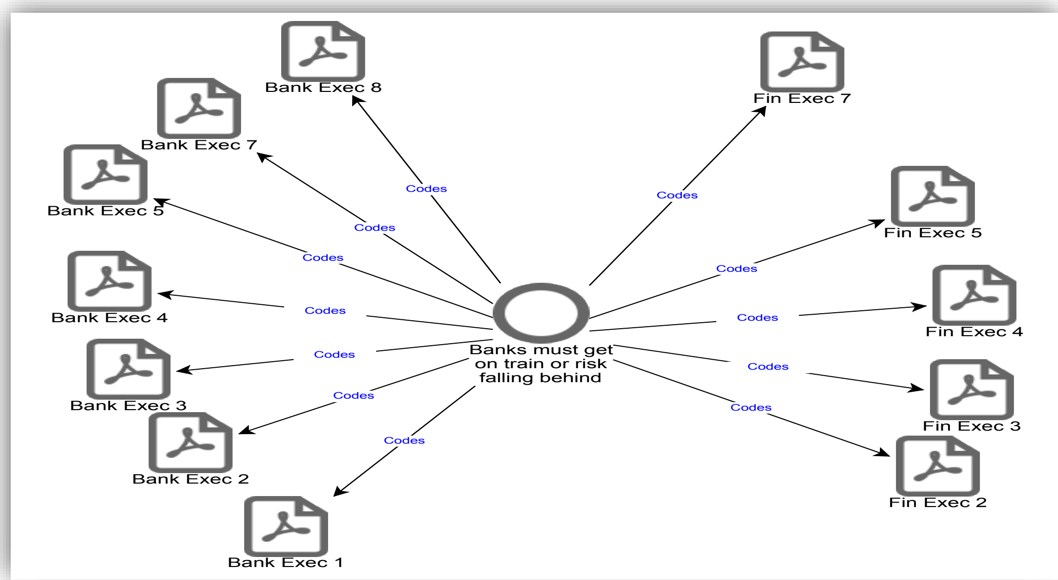
Fin Exec 3 stated in his opinion that traditional banks tended to view the developments brought on by the open banking phenomenon and FinTech companies with apprehension and risk due to their role of giving away access to data that only they held. He further submitted that if they were only to also focus on the prospect of the receipt of data through this link up, they would then be able to see this as being a new opportunity for them as well. *The banks who will see this in this way will be the winners in open banking,* he posited.

In her submission, participant Fin Exec 4 stated that the traditional banks that dragged their heels in accepting that open banking is a phenomenon that they needed to give urgent attention to would *find that they will struggle to compete in this new merged world. This* *was a world where you have banks that are developing new innovative solutions in-house or they're acquiring fintechs or they're incubating fintechs, or they are partnering with fintechs to create much more of a platform business and taking steps, the more innovative ones, into lifestyle ecosystems*. She maintained that open banking would shake up the traditional banking arena quite significantly for the benefit of consumers and the eradication of complacency, but for those traditional banks that did not respond to this in a timely manner, *then they are going to lose out.*

Fin Exec 5 stated that traditional banks needed to be concerned about the developments happening around them and that they had to focus on what their options would be so as to position themselves with a considered response.

Participant Fin Exec 7 submitted that consumers were driving the change they wanted to see and the regulators had to respond to this at a point in time to cater for these demands for new products and services, especially as these demands also drove the financial inclusion agenda. As a result, he believed that traditional banks would be wise to position themselves early on to take advantage of the opportunity to partner with FinTechs before they were forced to do so through consumer or regulatory pressure.

***Table 23: Banks Must Get on Train or Risk Falling Behind***




***Source: Zandamela – NVivo Analysis***

#### 4.5.3.4 *FinTechs Bring Financial Inclusion and Must Train Clients*

*Table 24* below illustrates the contributions from the interview participants which generated the category code on FinTechs and the issue of financial inclusion. The submissions generated 48 reference codes drawn from the raw interview data which was collected from 13 interview participants. The analysis of the interview participants themselves illustrates that the contributors to this category code were composed of 7 Bank Exec participants and 6 Fin Exec contributors. The summarised findings from the analysis of the sub-category data contributed are presented below.

Bank Exec 2 stated that FinTech companies brought *in alternative scoring mechanisms and using alternative data for scoring, that may provide a mechanism for the informal sector to get that foot on, I guess, the financial services ladder.* She further stated that for as long as people were continuing to use cash, they generally remained unbanked or underbanked, adding that in her view, the definition of being banked was that a consumer had a file at a credit bureau, effectively giving them access to financial services.

Bank Exec 3 submitted that in his view, getting more consumers onto a digital products pathway would assist in advancing financial inclusion but that this was also dependent on network connectivity to ensure that consumers were able to access the internet. For the digital experience to take root, new consumers required exposure or training for them to become adept in the use of these new products.

Participant Bank Exec 4 stated that FinTech companies brought down the cost of banking related services delivered via their platforms, making services more accessible, especially in the rural areas that were underserved. He further stated that rural communities were sparsely located over large areas, making it expensive for traditional bank branches to be located in such areas. FinTech companies, however, were able to distribute their products and services via the cellular network services. Bank Exec 4 added that FinTech enabled rural communities could become economically active in new and unconventional ways, which would be different to the effect brought about by traditional banks. This development had the potential to produce much improved economic benefits and outcomes, with much of this made effective through training of these new consumers. He made a key statement that FinTechs removed the travelling cost to get to a traditional bank branch for the excluded communities by bringing financial services to these population groups, thereby demystifying banking for these communities which generally saw banking as the preserve of the wealthy.

Bank Exec 5 stated that traditional banks were generally quite unaware of the unhelpfulness of some of their products, especially with respect to the area of financial inclusion as they were disconnected from an understanding of the true needs of consumers to be able to produce matching products. He added that he felt that *the tide will turn when those FinTechs get access to the data and when the development cycles for new products get shorter.*

Participant Bank Exec 6 believed that consumer education and training was required in the area of open banking and financial inclusion so as to get the benefits flowing to the targeted consumers.

Participant Bank Exec 7 mentioned the disbenefit which is brought about by the consumer not understanding the new products available to them unless an education campaign accompanies the introduction of the new products. Through the education and training on the new products, financial inclusion would become much more effective and long-lasting.

Bank Exec 8 made the point that for financial inclusion to be effective through FinTech companies reaching the underserved and unserved markets, regulation had to play a minimal role in this innovative environment as regulation was responsible for stifling the traditional banks in many ways. His pointed view was that the growth opportunities for traditional banks were actually being stifled by regulation and that *the large banks now appreciate that regulation is becoming an impediment to real growth.* It was critically important that this history did not repeat itself with the FinTechs as whilst it was accepted that the regulator had an important role to play to protect the consumer from abuse, they also had a duty to foster FinTech innovation as this brought about financial inclusion.

Participant Fin Exec 2 stated that in his view the traditional banks did not have the processes to correctly deal with the on-boarding of the unserved and underserved market due to the complexity to be found in their on-boarding processes. These complications did not exist with the FinTech companies as they had managed to simplify many complicated processes and they brought greater efficiencies with their processes.

Fin Exec 3 stated that the lower cost make-up of the FinTech companies added to their ability to bring the benefits of their lower cost business model to provide financial services to the underserved and unserved markets, thereby increasing financial inclusion. He further stated that it was also important to add education and support around the new financial products to the consumer to give better effect to the financial deepening process.

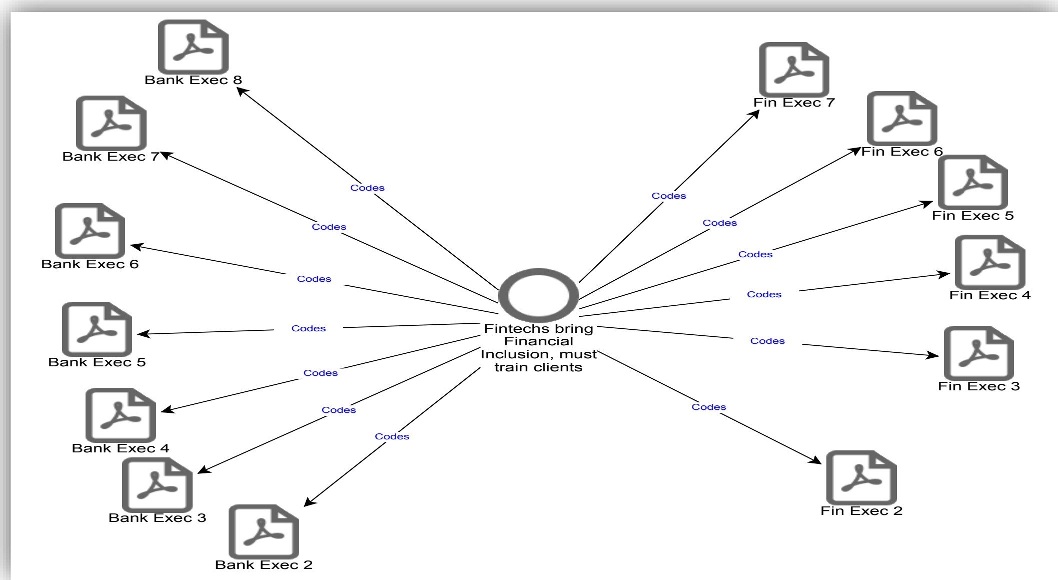
In her submission, participant Fin Exec 4 highlighted her experience with open banking in certain regions of the world where FinTechs were responsible for significant financial inclusion successes. She mentioned that for the traditional banks it did not make economic sense for them to pursue the underserved and unserved markets with their current business models, a challenge which did not face the FinTech companies as they were able to apply innovative solutions to address the challenge.

Fin Exec 5 highlighted the generally high cost of banking services provided by traditional banks, and how these were an impediment to banking the underserved and unserved population groups as these consumers were not able to pay the cost of these services. The opposite was true of the FinTech companies, he stated, in that they had demonstrated that they were able to deliver financial services to this market segment at a far lower cost. He stated that this was the case as *very often they leverage the phone that is already sitting in the hand of the customer and they start serving that customer completely remotely without having a branch or, you know, huge infrastructure.*

Participant Fin Exec 6 discussed the informal savings clubs found in many developing countries, in South Africa they are called stokvels, in Kenya they are called cooperatives, and they provide a very basic function to the underserved and unserved markets. He mentioned that the FinTech companies took the time to understand these savings clubs and developed products that met the identified needs, and they also partnered with the traditional banks to bring additional services to this market segment with the assistance of the FinTech channel.

Fin Exec 7 stated that the traditional banks opening up their APIs would assist the process of advancing financial inclusion through them partnering with the FinTechs, which in turn would deliver newly developed services to this historically ignored market segment.

*Table 24: FinTechs Bring Financial Inclusion, Must Train Clients*




***Source: Zandamela – NVivo Analysis***

### *4.5.3.5 Banks Benefit Strategically, plus Value Add and Financially*

*Table 25* below illustrates the contributions from the interview participants which generated the category code on how traditional banks benefitted from the FinTech relationship. The submissions generated 41 reference codes drawn from the raw interview data which was collected from 12 interview participants. The analysis of the interview participants illustrates that the contributors of these category codes were composed of 6 Bank Exec and 6 Fin Exec participants. The summarised findings from the analysis of the sub-category data contributed are presented below.

Bank Exec 2 discussed the benefits that would accrue to banks from a strategic perspective, by way of value addition to them by the FinTechs and financially when she mentioned that organisations she had spoken with in Europe about open banking showed her *that the banks were seeing that this has now been a catalyst for a different way of thinking.* Traditional banks believed that they now owned a marketplace in the financial ecosystem which provided them with certain benefits, such as... *every time you call my API, I'm going to take one cent. And it's that, you know, this is lunch of the banks that these companies are eating, and it has forced a change in the way of thinking of the banks.*

Participant Bank Exec 3 stated that the traditional banks that were able to take the strategic decision to embrace the open banking opportunity would likely find themselves able to mine the data they hold and receive much more data of value in return, packaging solutions with better contextual insights for the benefit of clients. He added that this would have a positive impact on the strategic direction and financial performance of traditional banks. He also expressed the view that the positive strategic directional changes adopted by banks through this cycle would likely result in the emergence of business models that would see them *become platform-based businesses to complete the digital execution, and digital channel app based executions. So banking will be sold via an app,*

Bank Exec 4 submitted that traditional banks could improve the effectiveness of their strategies through collaboration with FinTech companies as these would mine the data in ways that would most likely be more innovative, less expensive and more tailor-made than the traditional bank produced products, with this yielding more revenue as well. He mentioned that through his experience of being the chairman of the National Switch and other banking related associations, he had witnessed bank balance sheets benefitting from strategies that embraced open banking.

Participant Bank Exec 5 stated that his view was that the traditional banks fell into two categories. The first category included those banks that would develop strategies to resist complying with open banking regulation, likely at their own peril, and the second category would include those traditional banks that would develop strategies to compete with the third party providers by improving their services in a bid to achieve this. Through this activity these banks would most likely access the strategic benefits presented by open banking and attempting to meet the needs of the consumer in this way.

Bank Exec 7 discussed the challenges faced by traditional banks in planning for the future and how they would navigate the possible integration of FinTechs with their legacy core banking systems which have been seriously limiting for them. He believed that alliances between the two parties could yield strategic opportunities for the sharing of product development costs which could bring considerable benefit to the traditional banks.

Participant Bank Exec 8 stated that traditional banks which embraced open banking would be able to strategise for growth when he stated *I think a lot of us banks are talking about platform organizations and also talking about how we are going to create data assets that we can monetize in the future.* This approach would enable traditional banks to arrive at business models that would afford them a sustainable and profitable future.

He went on further to state - *in my opinion, that's the only way forward. Because if you think about it, the fintechs have been particularly good at addressing really important problems for consumers.*

Fin Exec 1 discussed his views around traditional banks positioning themselves for the future when he pointed out that *the incentive for the banks that do embrace it, it really forces them to think strategically about what they do and how they add value and how else they can make money. And so now they have embraced a business model where they are getting monthly recurring revenues from part of someone's subscription fee.*

Participant Fin Exec 3 contributed that he had seen that some of the traditional banks he was aware of had already taken the strategic decision to embrace open banking and had commenced implementation of integration activities with FinTech entities that had approached them, primarily because the result of their strategic review was that *they saw the opportunities, the business model and what they could do with the fintechs as well. They have to deal with a bit of apprehension because when they think of giving away their data, then all of a sudden it's a risk, but if they look at it as - I am giving away my data, but I also have access to everyone else's data, then all of a sudden it's an opportunity.*

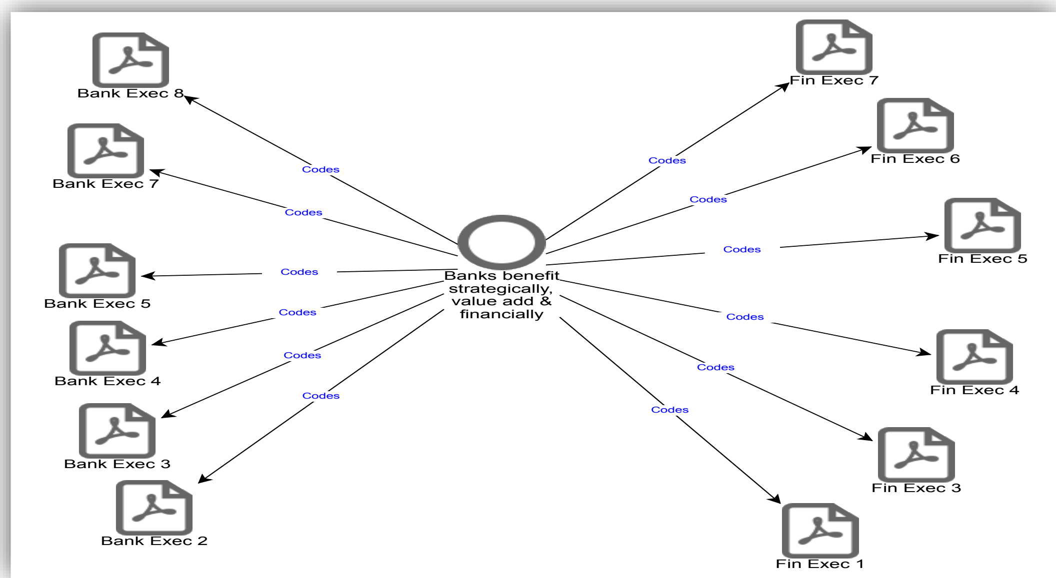
Participant Fin Exec 4 stated that a number of traditional banks have taken a strategic decision to modernise their business model and to transform their legacy core banking system into a digital platform which affords them greater agility and an increased ability to integrate with FinTech companies. She went on to mention she believed that those traditional banks that took proactive positions to meet the challenge positively would be able to take up fairly dominant positions in the developing ecosystems, thereby resisting being relegated to the role of a utility despite losing grip on the customer relationship, effectively benefitting from a carefully curated strategy.

Fin Exec 5 submitted that *the feedback I've sort of gathered is that the return on the investment has been incredibly fast. In fact, they reckon that hundreds of millions of euros will have generated sufficient value added for a return over three to four years, and we are now only 18 months down the line.* He added that he saw traditional banks seeking out ways to monetise API calls, also mentioning that he understood the challenge the banks had to deal with regarding their change in status from being the big, well recognised brand to relinquishing that dominant role and being seen more as a utility. This change however, could result in considerable access to a valuable role in the ecosystem, coupled with financial rewards.

Fin Exec 6 spoke of the strategic benefits of joining the ecosystems developing due to open banking, which would provide traditional banks with access to channels by which bank products and services would be consumed by third party members of the ecosystem. This could increase the reach of the banks and bring financial rewards.

Fin Exec 7 stated that for traditional banks to benefit from a strategy that positions them to take advantage of open banking, they would have to accept that customer data belongs to the customer. With this understood, the banks would then be in a position to appreciate that data sharing could become a two way street with financial benefits attached to this. Data enrichment of banking mobile apps also becomes possible for the benefit of the consumer through this process.

***Table 25: Banks Benefit Strategically, plus Value Add and Financially***



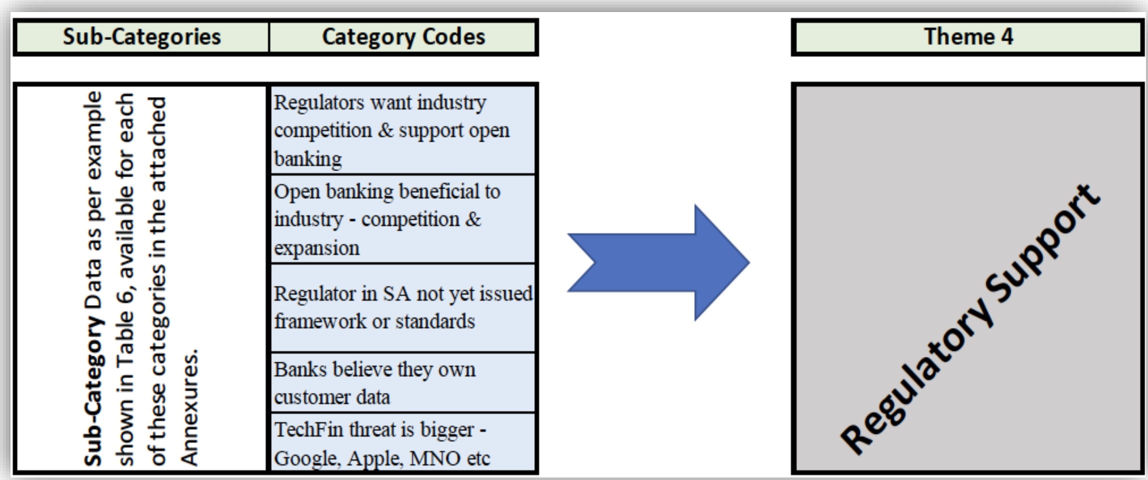

***Source: Zandamela – NVivo Analysis***

### 4.5.4 The Data Analysis Process Arriving at Theme 4

For the purposes of this study the analysis of the next sub-category data was the final analysis performed on the drawn primary data and resulted in the emergence of the last set of category codes as shown in *Table 26* below. Again the process followed during this analysis maintained the same format described in the previous sections which saw the emergence of the previous 3 themes and is a continuation of the analysis process resulting in the reduction of the mass of data collected from the interview participants. Here too the first step in the analysis of the data collected from the interview participants involved the analysis of the transcripts to achieve the first data reduction, yielding the reference codes and sub-category data. Further analysis of these saw the emergence of the category codes, which when further analysed led to the emergence of Theme 4 shown in the table below, in keeping with the theoretical coding process described by Charmaz (2014).

This constant method in the treatment of the primary data resulted in the emergence of all 4 themes and served this study well in ensuring that a standard and process was maintained for consistency and accuracy.

***Table 26: Data Reduction Resulting in Theme 4***




***Source: Zandamela – NVivo Analysis***

### Analysis of Category Codes' Data

Creswell's (2014) clear guidance portrayed in *Figure 22 in section 3.5.1* remains the framework used as stated in the previous sections dealing with the earlier themes with nothing changed for the analysis in this section.

Furthermore, Charmaz's (2014) stated approach for advanced coding in the grounded theory methodology was also used in the following analysis.

The presentation of the findings making up the 5 category codes in *Table 26* above drawn from each of the interview participants continues hereunder.

#### 4.5.4.1 *Regulators Want Industry Competition and Support Open Banking*

This category code was comprised of 28 reference codes produced from the contributions made of 12 interview participants. The composition of the interview participants was made up of 7 Bank Execs and 5 Fin Execs respectively, as is depicted in *Table 27* below. The sub-category data emerging from the transcribed interview data, which was drawn from the interview process, was reduced to the category code which is shown in the title above, and are presented in raw but summarised form hereunder, per participant.

Bank Exec 2 submitted that she saw the main barrier to entry to participating in the traditional banking industry in particular and the financial services sector in general, as being the regulatory environment. This was mostly due to the burden that this places on industry participants. She also saw open banking being the main way in which the industry would evolve into the future, supported by a favourable regulatory environment.

Participant Bank Exec 3 believed that the traditional banks were not too accommodating or in favour of the advent of open banking but that they were being forced by pressure from consumers demanding greater choice and an improved digital experience. From the regulatory standpoint he felt that *we can't allow arbitrage of a regulation, but how you implement that regulation and respond to it is going to need to be innovative*, especially when it came to open banking. He added that this would ensure that all parties are proactive, responsive and responsible in terms of adhering to privacy laws and data protection laws.

Participant Bank Exec 4 highlighted the pressures on regulators to grasp the nature of the different value propositions presented by the different types of FinTech entities presenting differing risk profiles. These entities also presented advanced products and services which appeared to be challenging to regulate yet presented innovative solutions demanded by consumers. He added that he felt this state of affairs *requires the regulators to move faster in their thinking and investing in lot of knowledge and stop researching in the traditional way of researching and begin to research more in the future.*

Bank Exec 5 laid out his view when stating *I think my understanding of the regulation, first of all, is that it will force banks to recognize the data that they house, as... belonging not only to the customer, but then also giving the customer the right to access it however they want, even through a nominated third party, even at the risk of disintermediating* *themselves in the process. I think the legislation is intending to create and dismantle a little bit of the monopoly that banks have on customer's data and ultimately recognize that it is the customer's data (and) that the bank is just the custodian of it,* with this effectively ensuring that competition is introduced into the traditional banking system. He added that he believed that some banks would respond positively to this development, partnering with FinTechs, whilst they would not be as accommodating, preferring instead to respect the regulation but also take a competitive stance against FinTechs.

Bank Exec 6 stated that he saw the introduction of open banking regulation in the South African market being modelled on the European format, instructing the traditional banking industry to open client data up to third party participants.

Participant Bank Exec 7 presented some of the aspects that form the environment that the mobile network operators run their business model on with their considerable resources and liquidity, operating in a part of the traditional banking value chain, mostly free of bank regulatory attention, pointing out that this is actually where the greatest challenge to traditional banks is to be found.

Bank Exec 8 discussed how the regulators have to work to understand how to deal with the FinTech new entrants quickly because they also have to come to understand that discussion of inclusive participation in the financial economy cannot take place without that section of the economy being opened up. It is the FinTech companies that are facilitating access to the financial economy and this is occurring due to a lack of regulation on them, which in itself is a caution to the regulators because *banks are struggling, you know, to step out of the regulatory shackles that they sit with to be able to extend themselves beyond what the regulator allows them to do. So that, I think, is the real advantage that the FinTechs have over the banks in this new world of open banking.*

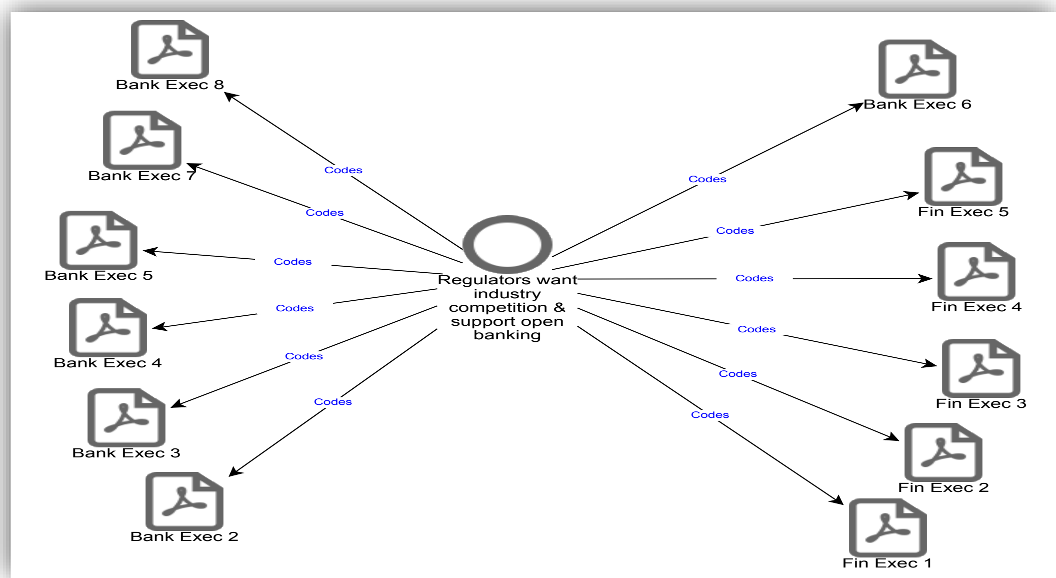
Participant Fin Exec 1 gave his views around the UK regulator and how *open banking PSD2 was, to my mind, just an extension of the desire to promote competition in financial services.* He added that in his view the traditional banks would never have responded positively to moves to increase competition and allow the emergence of FinTech companies without a regulatory push.

Participant Fin Exec 2 submitted that traditional banks required regulation to usher in open banking as this would be needed *so you move away from this kind of cartel-like behaviour where banks sort of collaborate to kind of move prices in a certain direction to suddenly an environment where they are real competitors now, to compete*. She saw that open banking regulation also provided a legal framework by which traditional banks could share customer data externally in a permitted manner, adding *don't think that the conservatism of the South African regulatory system is contradictory to open banking. I think what they're trying to do is to try and firm up the regulation so they can cover all the different types of banks that they have.*

Fin Exec 3 stated that open banking regulations permitted the sharing of information with the customer’s consent to take place with the support of the regulators, in a manner that gave third party FinTech companies the ability to gain access to that data to produce products that would be of benefit to customers. In the same breath, this move increased competition in the banking industry.

Fin Exec 5 stated that the regulators were creating an environment whereby the consumers would be able to derive benefit which they were not able to receive from the traditional banking industry, benefits which the consumer demanded and which FinTech companies were quick to provide. The creation of this environment by the regulators had the added advantage that it also encouraged more competition in the traditional banking environment.

*Table 27: Regulators Want Industry Competition & Support Open Banking*




***Source: Zandamela – NVivo Analysis***

### 4.5.4.2 *Open Banking Beneficial to Industry – Competition and Expansion*

This category code was comprised of 22 reference codes produced from the contributions made of 11 interview participants. The composition of the interview participants was made up of 5 Bank Execs and 6 Fin Execs respectively, as is depicted in *Table 28* below. The sub-category data submissions given during the interview process, which were subjected to the analysis process that was applied consistently, were reduced to the category code which is shown in the title above, and are presented in raw but summarised form hereunder, per participant.

Bank Exec 2 stated that he believe that open banking is a business model that is beneficial to the industry and is the model of the future, despite the likelihood of the traditional banks having to go through some pain. This discomfort would be necessary to bring in competition and expansion. Speaking of the current situation, she described it as being *where, you know, to date, there's been I guess you can't quite call it a monopoly, maybe an oligopoly, so I think that's probably it...*

Participant Bank Exec 3 mentioned that the industry will benefit from the rapid entry of FinTech companies into the industry as *with digitization, FinTechs are going to be able to get into banking a lot quicker without having to go through all those previous barriers to entry. They're going to get access to customer data and insights without having to* *endure all the costs that banks incur...* Through this, the industry would expand with greater competition.

Looking forward into the future in sharing his views, Bank Exec 5 stated that he saw the current situation evolving into a competition between ecosystems over the next decade to decade and a half, with traditional banks being just a part of these ecosystems. The driving force of the ecosystem would lie in the hands of the consumer themselves, with them enjoying ultimate and extreme choice, unlike the predominantly product led position the traditional banks have forced consumers into currently, with little choice on product relevance.

Bank Exec 6 highlighted a practice that developed as a result of the reluctance of banks to participate fairly with third party providers, a practice which has an unintended consequence of increasing risk to consumers – the practice of screen scraping. FinTech companies developed this as an alternative practice to circumvent the non-availability of APIs provided by the traditional banks. The introduction of open banking will mitigate this risk which is essentially being borne by the consumer.

Bank Exec 8 discussed the shifts in control and power provided by the open banking phenomenon which moves these away from the traditional banks, which have enjoyed regulatory protection to retain this control for a long time. With the advent of open banking the control of data moves from the banks to the consumers who now own their own data and through this, will be able to place their data with whichever industry player they wished to. He went on to further mention that this presented a significant mind shift for the industry as a whole.

Participant Fin Exec 2 mentioned that the industry benefitted from open banking due to the fact that the practice opened up the market. He stated that *open banking in developing countries makes sense because it opens the playing field and gets competition to all the big players, in that it allows more small players to come into the market, which is what you want.*

Fin Exec 3 submitted his view that traditional banks would benefit by adopting an open minded approach and avoiding their usual risk averse approach when dealing with open banking or FinTechs and instead of viewing these as risks, they would be well advised to rather plan ahead and cater for the future. He further stated that whilst open banking was beneficial to the industry, certain traditional banks did not play fairly by adhering correctly to agreed standards, thereby effectively impeding competition.

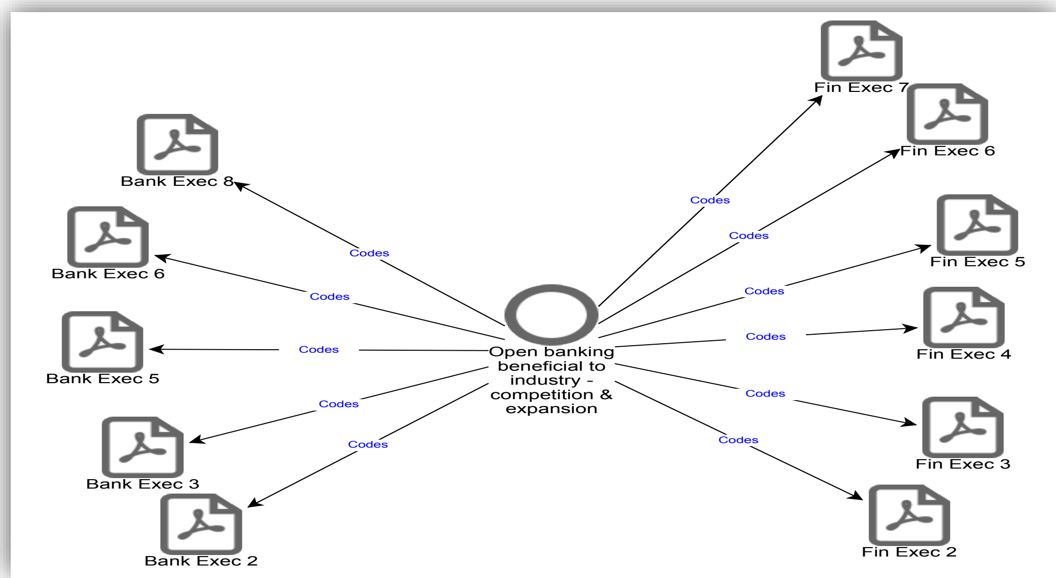
Participant Fin Exec 4 stated that open banking was an effective tool to bring the non-bank and non-insurance entities into the traditional banking and insurance industries, ushering in much needed competition. She went on to mention that the general approach that traditional banks followed in partnering with third party entities tended to make it challenging for partnerships to form and onboarding to take place effectively.

Participant Fin Exec 5 submitted that in his view open banking *from what I read, seems to benefit the economy as a whole. You know, all the stakeholders stand to benefit from PSD2 and are reaping some of the benefits,* adding that *my reading now is that it seems to have created an incredibly dynamic environment.*

Fin Exec 6 mentioned that he was aware that the PSD2 regulation was developed, in part, as a result of the actions of the Competition Markets Authority, with the objective of ensuring that competition was fostered in the traditional banking industry following their findings around the issue of collusion in the industry. Added to this was the desired outcome of increased innovation in the industry as well. He also made mention of the threat that the traditional banks now faced from the TechFin establishment due to their vast capabilities.

In his excited submission, participant Fin Exec 7 stated that *this space is going to get bigger and bigger and bigger and there's room for everybody that wants to play, I think. I'm just so excited about open banking, whether it comes through regulation, I don't think it matters,* explaining his view on the market expansion opportunity brought by open banking to the traditional banking markets.

*Table 28: Open Banking Beneficial to Industry - Competition & Expansion*




***Source: Zandamela – NVivo Analysis***

### 4.5.4.3 *Regulator in South Africa Has Not Yet Issued a Framework or Standards*

In this section, the singling out of the South African regulator occurred as a result of a few participants being located in South Africa and knowing that the researcher was also located in South Africa. This was not done to the exclusion of regulators of other countries nor does this signify that the findings on this regulator necessarily translate to any other regulator located in another country.

*Table 29* below shows the qualitative interview results drawn from the participants that contributed findings which led to a data analysis that produced the next category code being reported on. These category codes were generated from 27 reference codes which were presented by 10 participants. The participants were made up of 5 Bank Exec and 5 Fin Exec participants respectively who contributed to this category code. The individual sub-category data findings presented by each participant that made up the category code were presented hereunder in summarised form.

Bank Exec 4 discussed the view that *the regulators or the personnel in regulation haven't moved on in terms of understanding fintechs to the extent that they have to regulate them.* He saw the regulators as currently falling behind the curve in this rapidly evolving and innovative environment.

Participant Bank Exec 5 expressed the view that the regulation would be slightly different in South Africa especially when considering the historically conservative nature of this regulator. He also saw this as being beneficial to the consumer as open banking brought significant choice to him and reduced their reliance and bondage to the traditional banking system.

Bank Exec 6 submitted his view that when the open banking regulations were issued in South Africa, they would very likely follow the general format and structure of the PSD2 regulations issued in Europe. He also suggested that technical standards would very likely be issued for the South African industry.

Participant Bank Exec 7 suggested that the regulatory universe was still mostly unchanged from its historical makeup, focusing on the traditional banks. He added that the general state of regulation of the FinTech industry being mostly thin at the moment as regulators work on deepening their understanding of these new third party entrants to the market and how to consider a regulatory approach.

In sharing his views on the successes that FinTech players were able to achieve through unlocking the opportunities at the lowest end of the market, Bank Exec 8 suggested that the rapid rate at which this was happening was too quick for the regulators to keep pace, resulting in the ability of the FinTechs to develop well designed products that meet the *lifestyle needs of customers and they've addressed the most important challenges that customers are facing, whereas banks are struggling, you know, to step out of the regulatory shackles that they sit with to be able to extend themselves beyond what the regulator allows them to do. So that's, I think, the real advantage that the fintechs have over the banks in this new world of open banking.* He added that any new regulations being considered for FinTechs would need to take this into account and avoid stifling this innovative and beneficial phenomenon because *once the regulators wake up and realize this, we can't talk of inclusive economies and inclusive banking or inclusive financial services without actually opening up all the doors to allow everybody - or at least give everybody the opportunity to come in, which is the problem we have with today's regulation.*

In echoing the statements of Bank Exec 8, Fin Exec 2 stated that whilst most people saw regulation as a barrier to entry, he saw this as a competitive advantage because the regulator would be providing a framework for the sharing of data whilst protecting the consumer's deposit. He expressed the view that any regulation developed for open banking would most likely seek to follow the same pattern.

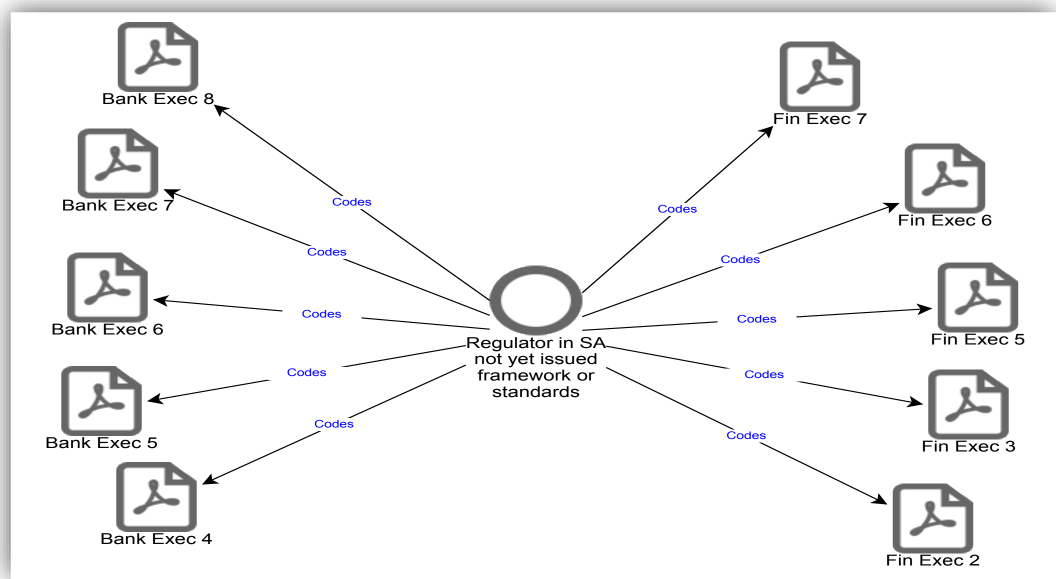
Participant Fin Exec 3 recalled having to write up policies and guides internally to control certain behaviours of a FinTech due to the lack of basic regulatory frameworks in the South African financial services sector, to give guidance to FinTechs.

Fin Exec 5 advanced his view that South Africa stood to benefit from the introduction of open banking and the opening of APIs to third party participants in the traditional banking industry as he saw more opportunities than threats being created through this move. He recounted the regulatory approaches of two markets in Africa that followed different regulatory paths; Ghana had chosen a strict regulatory path as opposed to Kenya where regulation of microlenders was viewed as lax, resulting in abuse taking place.

Participant Fin Exec 6 suggested that a more effective regulatory framework could possibly take on the structure of the regulator using the existing banking regulatory environment to reach the FinTech participants, in that *the reserve banks, instead of them trying to get a thousand fintechs to comply with a piece of legislation , it would be probably easier for them just to do two, three, four, five or six banks; in that, again, you know, trust's sitting at the core in terms of the bank's proposition.* He added that for the South African environment, *any fintech trying to come in is going to be up against not just the banks, but also going up against MTN®. I can guarantee you they'll crush you, unless you've got regulation that somehow gets put in place to ensure that that crushing doesn't happen.*

Fin Exec 7 highlighted recent papers that were issued by the South African regulatory authorities, namely the November 2020 Consultation Paper on Open Banking Activities in the National Payments System and the National Payment System Framework and Strategy Vision 2025, suggesting that he saw these as being quite theoretical at this stage, being more of conversation starters than direction pointers. He also stated that in conversations held with some of the key traditional banks in South Africa he didn't see any excitement surfacing regarding the discussion papers, which he viewed as an understandable response as they would be the entities that would have to adjust to comply with the eventual new regulations on open banking.

*Table 29: Regulator in SA Has Not Yet Issued a Framework or Standards*




*Source: Zandamela – NVivo Analysis*

### 4.5.4.4 *Banks Believe They Own Customer Data*

*Table 30* below shows the interview results that contributed findings which led to a data analysis that produced the next category code being reported on. These category codes were generated from 28 reference codes which were presented by 11 participants. The participants were made up of 5 Bank Exec and 6 Fin Exec participants respectively. The individual sub-category data findings presented by each participant that made up the category code were presented hereunder in summarised form.

Bank Exec 2 stated that consumers were not aware that they in fact held sway to a considerable amount of power in their relationship with their traditional bank, and being unaware of this power resulted in them remaining very stuck to their bank. Traditional banks in turn were very worried about their ownership of the customer and his data and the threat that open banking presented to this ownership structure. Part of the reason for this was probably due to the understanding that it was clear that the consumer gained access to an ecosystem that the bank didn't have control over, which was concerning for traditional banks, as they were used to controlling almost all aspects of their customer.

Participant Bank Exec 4 submitted that in his view the traditional banks were historically generally unable to make good use of the vast data they held in their data warehouses for various reasons, data they believed they owned, yet mostly didn't know how to use effectively. On the other hand, he continued, the FinTech participants were able to conduct a beneficial analysis of customer data and had an innovative and improved approach to credit which resulted in better services at better prices. This met the needs of consumers through more relevant and appropriate products which made for happier customers.

In his submission, participant Bank Exec 5 stated that *my understanding of the regulation, first of all, is that it will force banks to recognize the data that they house, as you know, belonging not only to the customer, but then also giving the customer the right to access it however they want, even through a nominated third party, with banks at the risk of disintermediating themselves in the process.*

Bank Exec 6 stated that open banking regulation would most likely put forward the standardisation of APIs for the traditional banks, thereby allowing *non-traditional players to get access to the data that banks have generally hogged and seen as a "holy grail"*.

Giving his views on the data ownership position of traditional banks, Bank Exec 8 stated *the banks have, I suppose, in a way, controlled and owned KYC data, as well as transactional data relating to their customers and regulation has protected the banks under other rules of confidentiality and in some cases consumer protection, in some cases competitive behaviours. I think the shift from an open banking point of view, which is a mindset shift for the industry, is now when customers actually own their own data and they're able to put this data from one player to the next.* He went on further to map out an interesting point when stating that traditional banks would need to be strategic and forward-thinking to see the new data led opportunities in that *monetization will actually require us to be able to either buy or hire the data from the customer before we can aggregate and use that data to monetize.*

Interestingly, Fin Exec 1 submitted near identical information to that given by Bank Exec 8 above, stating that *for banks, I think that they generally in the beginning will see open banking as a threat because it is forcing them in the regulated sense to share customer data and therefore potentially share customer relationships. But the incentive side for the banks that do embrace it, it really forces them to think strategically about what they do and how they add value and how else they can make money.* This resistance to the regulation and to sharing being brought about through the entitled sense of ownership of customer data.

Participant Fin Exec 2 stated that traditional banks work hard to protect their customer bases vigorously, perhaps even jealously. Perhaps driven to an extent by a sense of ownership of the customer and his data.

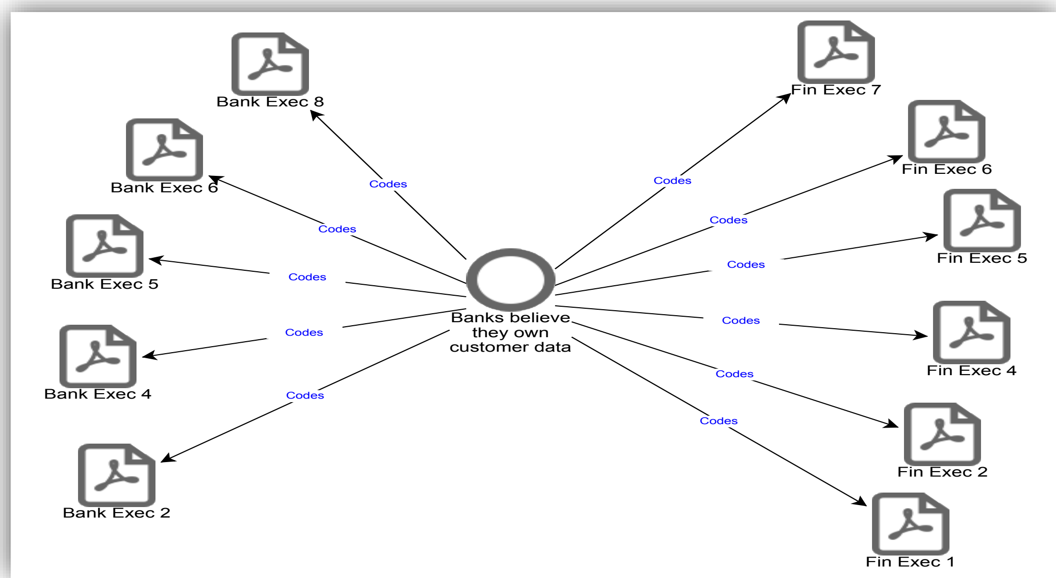
In her submission, Fin Exec 4 made mention of the pervasive view of traditional banks in that *the banks have viewed it as their data, and that has been largely the fortress that protects them from competitive fintechs, which, of course, is the whole reason for the open banking regulations in the first place.* She added that the sense of ownership of the data by the traditional banks led them to design products and loyalty programmes that they wish to push onto consumers, instead of developing products and programmes that are actually needed by consumers.

Participant Fin Exec 5 discussed the customer data issue from the regulatory intent perspective, stating *I think the premise is that the consumer data belongs to the consumer, even though it is sitting with the banks. It is not the property of the banks and I think that's the thing that was difficult for banks to accept in the first place.*

Fin Exec 6 stated that he believed that this was more of a global issue around data ownership sovereignty and how data is owned at a national level, as well as how data is exchanged between the various countries that transact in that data and the respective banks of those countries.

In his submission on the data ownership issue, Fin Exec 7 stated that he saw the main benefit of open banking being the data sharing aspect where this operates as a two way street. He added that consensus worldwide was that customer data belonged to the customer and not to the banks, despite the views held by banks as regards this, where traditional banks did not necessarily see this as being the case.

*Table 30: Banks Believe They Own Customer Data*




*Source: Zandamela – NVivo Analysis*

### 4.5.4.5 *TechFin Threat is Bigger – Google®, Apple®, MNOs and others*

*Table 31* below shows the qualitative interview results drawn from the participants that contributed findings which led to the data analysis that produced the final category code being reported on. These category codes were generated from 22 reference codes which were presented by 8 participants. The participants were made up of 4 Bank Exec and 4 Fin Exec participants respectively who contributed to this category code. The individual sub-category data findings presented by each participant that made up the category code were presented hereunder in summarised form.

Bank Exec 1 submitted his views around the TechFin phenomenon, mentioning the example of Facebook® engaging various banks in India to make use of WhatsApp® as a payments platform.

Participant Bank Exec 4 made mention of how the activities of MNOs were expanding rapidly in parts of Africa, in part due to the lower regulatory burden they faced in comparison to the regulations that the traditional banks operated under. He also mentioned that banks held massive stores of customer data yet were unable to leverage this to any meaningful extent, effectively losing any competitive advantage that could have accrued to them in a bid to fend off the MNOs.

Bank Exec 7 stated that from his knowledge, the MNOs in some African countries had dominated the lower market segment, stating that *the MNO models are very nimble, they're far reaching and the benefit of those models to the broader public are obviously easy to gauge due to the simplicity with which to transact, the bouquet of products that are available just on your cell phone, and all those good things play through to market to where there's a large mass market and a large informal market.*

Participant Bank Exec 8 recounted from his experience of comparing the KYC regulations that govern the traditional banking industry in certain African countries, against those governing the KYC equivalent regulations directed at the MNOs in those same African countries, the burdens were not equal. The regulations governing the traditional banks were far more stringent and complex than those governing the MNOs, resulting in an imbalance in the experience of the consumer entering these two segments, with the MNOs enjoying an advantage.

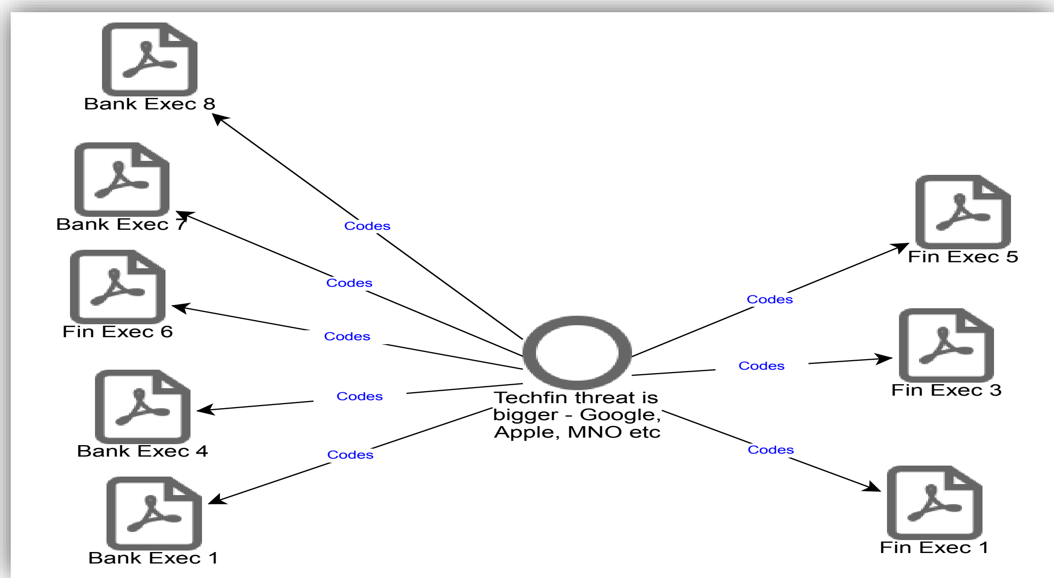
Fin Exec 1 detailed some of his views regarding the expected TechFin priorities, suggesting that the large technology companies were generally mostly interested in selling more of their own products or disrupting the traditional banking industry.

Participant Fin Exec 3 provided his context to the TechFin discussion when he stated that *you're going to have this massive layer of the Googles® and the Facebooks® all over it, and others that we don't know of will pop up and take parts of the relationship away. There's no point trying to compete with all of those guys, but ultimately, none of them know how to manufacture a great home loan, great mortgage and to price it based on risk or relationship - banks know how. Banks have great assets there, so you know, they do that well.*

Fin Exec 5 stated that the MNOs in South Africa were trying out new mobile money products in South Africa, having failed to make a success of such a product a few times in the recent past for reasons that were not clear. He went on to highlight the threat posed due to their incredible reach as well as their existing massive customer bases which were larger than those of the traditional banks, adding that *the cooperation with FinTech is super healthy, and I see it though lucky, I think banks have changed their mentality; it's no longer that FinTechs are competitors, the Telco's are our competitors. Banks realized that the FinTech can open up massive opportunities.*

Participant Fin Exec 6 echoes similar sentiments on the subject, stating that the TechFin contenders presented a much greater threat to the traditional banks in his opinion, due to various reasons including the current regulatory status whereby TechFin companies were not obligated to share customer data yet the traditional banks were required to do so through the terms of PSD2 regulation, creating an uneven playing field which some of the European banks have objected to the regulators about. He added *I think in the context of around Telco's and the tech companies, these are the Facebooks®, Googles®, Amazons® and so forth - I think there it's a bit different. I think banks will be far more open to partner with FinTechs because FinTechs are smaller and they're nimble, but whether they would extend the same opportunity to the tech companies and even to the Telco's in South Africa is a bit different because these are giants sitting on so much of data, they have so many clients and they're seen as a threat.*

***Table 31: TechFin Threat is Bigger - Google®, Apple®, MNOs and others***




***Source: Zandamela – NVivo Analysis***

## 4.6 Heat Map of Findings

*Table 32* below presents a summary analysis of the data collected and previously analysed using the NVivo software, now illustrated by way of a heat map showing the individual participant responses against the category codes. This gives the reader a sense of the interviewee's perceptions being either positive or negative on those particular aspects that they were providing data on, relating to open banking.

It is important for the reader to also note the apparent correlation between the persistence of a no response rate response rate by a participant and the depth of their industry experience in their role, as presented in *Table 1,* located in section 3.5.2.

An analysis of the responses reveals that out of a total of 300 responses, 211 responses representing 70% were positive for their respective codes, 2 responses, representing 0.6% were negative, with 87 no responses received, representing 29% of the responses.

With the data analysis and category codes already completed in NVivo, together with the respondent's perceptions already coded as positive or negative for the category codes being assessed, the creation of the heat map was a simpler matter not requiring additional programming software, but achieved through the use of this functionality in Excel.

*Table 32: Heat Map - Participant Findings against Codes*

| Top 20 Participant Interviewee Overall Perceptions' Findings | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category Codes | Bank Exec 1 | Bank Exec 2 | Bank Exec 3 | Bank Exec 4 | Bank Exec 5 | Bank Exec 6 | Bank Exec 7 | Bank Exec 8 | Fin Exec 1 | Fin Exec 2 | Fin Exec 3 | Fin Exec 4 | Fin Exec 5 | Fin Exec 6 | Fin Exec 7 |
| Banking business model change | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive |
| Banks must collaborate to access new data to innovate | Positive | Positive | No Response | Positive | Positive | Positive | Positive | Positive | Positive | No Response | Positive | Positive | Positive | Positive | Positive |
| Banks likely to become utilities or background actors | No Response | Positive | Positive | No Response | Positive | No Response | No Response | No Response | No Response | Positive | No Response | Positive | Positive | Positive | Positive |
| Banks are risk averse, slow speed, agility is an issue | Positive | Positive | Positive | Positive | No Response | No Response | No Response | No Response | Positive | No Response | Positive | No Response | Positive | No Response | No Response |
| Banks costs of usage remains high; infrastructure etc | No Response | *Negative* | Positive | Positive | Positive | No Response | Positive | No Response | No Response | Positive | No Response | No Response | Positive | No Response | No Response |
| Consumers still want trust factor given by banks | Positive | Positive | No Response | No Response | No Response | No Response | No Response | Positive | No Response | No Response | No Response | Positive | Positive | Positive | Positive |
| Consumers demand & enjoy digital innovation & experience | Positive | Positive | Positive | No Response | No Response | Positive | No Response | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive |
| Fintech innovation & product convenience attracts customers | Positive | Positive | Positive | Positive | Positive | No Response | Positive | No Response | Positive | Positive | Positive | Positive | Positive | Positive | No Response |
| Banks have failed clients especially un & underbanked | No Response | Positive | No Response | Positive | Positive | No Response | Positive | Positive | No Response | Positive | Positive | Positive | Positive | Positive | Positive |
| Open banking - customer owns their data | No Response | Positive | No Response | No Response | Positive | Positive | No Response | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive |
| Banks require education on fintech & open banking | No Response | Positive | Positive | Positive | Positive | No Response | No Response | Positive | Positive | No Response | Positive | Positive | Positive | Positive | Positive |
| Open banking brings ecosystems | No Response | Positive | No Response | Positive | Positive | No Response | Positive | Positive | No Response | No Response | Positive | Positive | Positive | Positive | Positive |
| Banks must get on train or risk falling behind | Positive | Positive | Positive | Positive | Positive | No Response | Positive | Positive | No Response | Positive | Positive | Positive | Positive | No Response | Positive |
| Fintechs bring Financial Inclusion, must train clients | No Response | Positive | Positive | Positive | Positive | Positive | Positive | Positive | No Response | Positive | Positive | Positive | Positive | Positive | Positive |
| Banks benefit strategically, value add & financially | No Response | Positive | Positive | Positive | Positive | No Response | Positive | Positive | Positive | No Response | Positive | Positive | Positive | Positive | Positive |
| Regulators want industry competition & support open banking | No Response | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | Positive | No Response | Positive | No Response | No Response |
| Open banking beneficial to industry - competition & expansion | No Response | Positive | Positive | No Response | Positive | Positive | No Response | Positive | No Response | Positive | Positive | Positive | Positive | Positive | Positive |
| Regulator in SA not yet issued framework or standards | No Response | *Negative* | No Response | Positive | Positive | Positive | Positive | Positive | No Response | Positive | Positive | No Response | Positive | Positive | Positive |
| Banks believe they own customer data | No Response | Positive | No Response | Positive | Positive | Positive | No Response | Positive | Positive | Positive | No Response | Positive | Positive | Positive | Positive |
| TechFin threat is bigger - Google, Apple, MNO etc | Positive | No Response | No Response | Positive | No Response | No Response | Positive | Positive | Positive | No Response | Positive | No Response | Positive | Positive | No Response |

***Source: Zandamela***

## 4.7 Summary

In this chapter the researcher presented the findings generated from the qualitative interviews held with the participants selected for the primary research undertaken. The findings reported in this chapter reveal a strong relationship between the responses of each of the individual participant as well as their responses within their respective professional groups, namely traditional banking executives on the one hand and the FinTech executives on the other. These participants were located across various countries and continents and being top executives, all of them boasted considerable experience in their professions, however one of them was fairly recently appointed to a senior executive role.

The interview protocol that was followed during the interviews with the participants was described, during which the interview guide was used as a prompt when necessary to motivate the interviewee during their submission.

Their submissions were held over the Zoom platform which were recorded and then transcribed using the NVivo for Mac software. The NVivo software was then used to conduct the analysis of the data, resulting in the emergence of sub-category codes of data and subsequently category codes of data which then yielded the final themes drawn from the data, representing groupings of the category codes.

## 4.8 Linking Comment

As this chapter comes to a close, the reader was taken through the presentation of the findings, culminating in the development of a heat map which assisted in the analysis process.

Chapter 5 brings forward the discussion of the findings, the researcher's interpretations and the implications thereof, for the research questions.

# 5 Discussion

## 5.1 Introduction

The research aim of this qualitative grounded theory study, as stated in section 1.5, was to address the identified gap in the literature by researching the following:

*What benefits accrue to the traditional banks and FinTech companies through open banking and how can these institutions be encouraged to collaborate to take advantage of this, thereby increasing the benefits to consumers?*

In this chapter the research undertaken and findings presented in the previous chapter are discussed and summarised with a view to building towards the identification of the emergent theory, which is presented in chapter 6. A summary of the key findings from the research is presented in this chapter and this section is followed by the researcher's interpretation of the findings. The subsequent section deals with the implications of the findings, bringing the chapter to a close.

The relationships between the main actors to this study, being the consumers, the banks and the FinTech companies are also explored in the context of the purpose of the study, specifically as regards the benefits brought about by open banking, as mentioned above. For this to be set effectively into context we draw guidance from Breese (2012) who states that the benefits which would accrue to the parties involved would need to be based on a clear understanding of these benefits against the backdrop of the investment cost to be absorbed. This would be especially true of the banks, as activating compliance with open banking regulations or choosing the path to embrace open banking in the absence of regulation requires a clear appreciation of these benefits, or the deliberate decision to ensure that these benefits are in fact realised. From the data drawn from the interview participants there is little doubt that benefits are evident in embarking upon an open banking path for the banks. Breese (2012) cautions organisations on the importance of effectively managing the benefits cycle as the realisation of benefits may prove to be marginal or elusive if not effectively managed, sometimes converting into a disbenefit as a result. For the traditional banks this aspect does pose as being an execution threat as the data suggested that disconnects may well occur between top management, who would set the strategy seeking to activate the benefits of becoming innovators through the opportunities presented by open banking, yet the senior management execution layer in the bank could act in a manner that is incongruent with the strategy, raising the level of risk and reducing the chances of realising the benefits expected, as warned by Bradley (2010).

As regards the benefits for the FinTech participants, the data suggests that these are numerous and available, however, execution of the strategy to partner with the traditional banks and realisation of these benefits would require that FinTechs become sensitive to the tremendous change that the banks would be required to undergo, exacerbated by the pressure to effect this change brought on by various stakeholders, especially two key ones, namely the consumer and the regulator. Unfortunately for the traditional banks, external change, as Bradley (2010) puts it, is most likely to accelerate and the appropriate response for organisations is for internal change to track and follow suit as there is no viable alternative, other than to stop being a viable institution.

Bradley (2010) further states that change can become a very valuable catalyst for great potential and opportunity, however, this requires that the organisation marshals its resources carefully and manages them so as to realise the benefits successfully through the change cycle. This holds critically true for the traditional banks navigating this phenomenon, and with this being the case, it would be worthwhile for traditional banks to adopt a formal benefits management approach in managing this particular change process, thereby bolstering their project management and change management capability as stated by Breese, Jenner, Serra & Thorp (2015).

The chapter 2 literature review dealt with the available literature in the subject matter which focused mainly on the research performed on the consumer with scant literature published on the traditional banks or FinTech entities. Therefore in relating the findings to the literature the perspective of the benefits to the consumer are to be drawn from the fairly extensive research conducted on the consumer with the identified gap in the literature conducted on the two other actors being covered by the qualitative research conducted during this study. Having stated this, some aspects of the benefits accruing to consumers also came through during the course of the interviews conducted in this research so these will be brought forward as well.

## 5.2 Summary of Key Findings

Flowing from the research aim of this study as stated in the section above, the key findings drawn from the qualitative research conducted during this study are summarised and discussed in this section.

### 5.2.1 Status Quo Unsustainable

The research findings from the data revealed that traditional banking conducted as it had been for a very long time was no longer sustainable. The issue of sustainability referred to here was not based on the usual accounting basis discussions on sustainability but rather on the viability of a business from a customer growth perspective. This sustainability was based on the needs of the customer and the inability of the traditional banks to meet those needs, creating a unique form of risk to banks not seen before (Yip & Bocken, 2018). Both traditional banking executives and FinTech executives concluded that existing banking business models were in a state of flux and seemed to no longer meet the needs of the majority of consumers that were existing customers. From the findings, it was clear that the typical risk aversion stance that traditional banks tended to hold onto resulted in them becoming almost detached from the reality of the situation before them, not recognising that their consumer client base were looking for a more immersive and innovative experience.

Whilst some banks may well argue that they were robustly innovative and at the cutting edge of banking technology, the research suggested that this approach predominantly resulted in a product centric strategy, and ignored the fact that the consumer was looking for more than what he or she was informed was available from the one institution. Choice was now a key driver, and for a traditional bank to respond in an adequate manner, the research suggested that they needed to give serious consideration to the collaboration opportunities presented by innovative third party providers of products and services. These new industry actors, the research suggested, brought speed and agility where the traditional banks lacked these attributes. Furthermore, it would also seem that their participation in collaboration with the banks would enable a reduction in the current costs of doing business that the existing banking business models tended to carry. The data further suggested that the direction and rate of change in the banking industry was of such a nature that traditional bank business models were unlikely to remain unaffected by the pressures which assailed them from various directions, pressures which could see banks being redefined as utilities or background actors in the industry that they have led since the dawn of modern banking.

With these changes unfolding in the industry, the research findings suggested that the cost of banking business would need to reduce for banks to remain relevant and for them to compete in an environment which is rapidly moving to an open architecture across various industries. Open banking is and has been at the forefront of this industrial restructure and this is set to continue for quite some time as this is still in its infancy, with open finance being touted by some as being the successor to open banking, which is a strange idea as the two are more likely to intersect than for one to replace the other. Herwartz and Walle (2014) explain quite plainly the importance of the open economy architecture driving growth through the resultant development of the financial system of an economy, brought about by the phenomenon of openness which open banking is a key component of.

### 5.2.2 Improved User Experience

The research findings yielded data on the consumer, which was otherwise catered for and presented in detail from the available literature, in chapter 2. The data presented on consumers through this research was drawn from traditional bank top executives as well as FinTech top executives, providing key input which meaningfully impacts the discussion around the consumer, providing a different viewpoint to that found in the literature, allowing for a more complete picture to be appreciated due to the data becoming interrogable from both the consumer and supplier side perspectives. This will be exposed in this section, as well as when these findings are related to the literature review in chapter 2, in section 5.3 below which is designed with the purpose of relating the findings to the literature.

The findings that fall under this theme reveal that consumers still tend to view banks as trusted partners in the financial landscape, which they have earned over long periods of time, and through which they continue to provide comfort on. Knell & Stix (2015) provide key research evidence on the issue of trust in banks, yet again revealing the long held understanding that the public hold their monies in institutions that they trust to hold their funds, otherwise this could lead to a lack of trust and a subsequent run on a bank, as was observed in the data pre and post the global financial crisis of 2008. From this perspective, it would therefore appear that traditional banks would not necessarily be competing with

FinTech companies in the area of requiring the trust of the consumer in the provision of data security and privacy, especially as the trend to collaborate between these parties keeps the bank as an involved party in the trust relationship equation (Anand & Mantrala, 2019; Gallup Inc, 2016); this also satisfies the requirements of regulation, especially as regards deposit taking activities.

The findings provide a clear view that consumers are pressing for and enjoy the benefits of digital innovation and a superior user experience which is provided through the type of digital products that are provided by third party providers. Furthermore, these product capabilities provided by third party providers attract the attention of customers who seem to prefer these products due to various reasons, which include relevance of the product to the needs of the user and ease of use especially with regard to the financial inclusion angle. This is an area in which banks have historically failed significant numbers of customers, leaving them outside of the formal bank service environment, according to the data drawn in this study. In measuring financial inclusion, Jajah, Anarfo, & Aveh, (2020) posit that the traditional definitions have been fairly limiting as they have tended to measure aspects such as the number of bank branches in an area, or of ATMs deployed or number of credit cards issued. These traditional definitions of financial inclusion tend to be centred around the presence or lack of traditional banking products in a given market, which appears to be a dated definition. An updated definition, when viewed from the perspective of the new and innovative products provided by FinTech players that grant customers access to virtually all financial products, would suggest that the issue has now evolved to being about markets no longer being underserved, as they are now being served with access to financial products by FinTechs. This is as opposed to being about markets being unbanked or underbanked due to the lack of access to banks as a specific measurement. This approach resonates with the literature (Navaretti et al. 2018).

In chapter 4 it was demonstrated that economic activity has developed in deep rural parts of Africa based almost entirely on the provision of services based on mobile devices hosting FinTech solutions provided specifically by FinTech companies or by MNOs. It is therefore posited that this debate should also evolve into being about the provision of financial services to rural communities, rather than being about financial inclusion provided by traditional banks, as the debate is really about being a served or an underserved community. This approach would provide a better measurement which accounts for the provision of FinTech services connecting rural communities to financial mediation and the resultant ability for economic upliftment plus contribution to Gross Domestic Product (GDP).

The findings further revealed data about the improved user experience and products developed by third party providers and the need for consumers to become more aware of ownership of *their* data held in the traditional banking environment. The full understanding of this shift would empower the consumer to make more improved decisions regarding their financial health and transactability so as to take full advantage of the opportunities provided by open banking. With this new data ownership lies the responsibility for the education of the customer around matters of ethics, privacy and security in addition to the benefits presented by open banking, as discovered by Aitken et al. (2021) in their recent focus group study into digital innovation in banking.

### 5.2.3 Collaboration is Key

The findings also revealed the theme around collaboration as being key. The data suggested that generally the bulk of traditional banks seemed not to be very well informed about the opportunities and possibilities that were made available by the open banking phenomenon and the benefits that could potentially accrue to them through collaborating with FinTech third party providers. In their recent study, Phan, Narayan, Rahman, & Hutabarat (2020) found that their hypothesis held in that a correlation existed between the growth of FinTech entities, in Indonesia specifically, and a drop in bank profitability. These results seem to contradict the findings presented by a FinTech participant in this study where the initial performance results experienced by traditional banks in Europe were somewhat depressed, however this trend was reversed over a period of time. Further research on this aspect is called for as the Indonesia study seemed to maintain its focus on the financial performance metrics, categorically stating that they view the research purely as an empirical study. The challenge with such an approach is that it reduces the debate to a backwards view only, without necessarily taking into account the strategic response of the sample of banks, if indeed there was a response, to restructure the institutions to become more nimble as they redeveloped their business models, or if an attempt was made to change the business models. The strategic response would target all aspects of the sustainability of the institution, especially around its cost structure and it's competitive response, amongst other issues (Deloitte, 2014).

Further findings from this study revealed that a key consideration for traditional banks to contemplate was regarding the development of ecosystems that were brought into the industry by the FinTech companies, with this potentially presenting significant opportunities for the banks to access through participation by collaboration with FinTechs. These ecosystems created new revenue opportunities for the traditional banks to benefit from but for this to occur successfully, these institutions would have to adopt the attitude of joining with the FinTech movement – getting onto the train, as it were, or risk falling behind the growth and opportunity curve. In the literature, a Gallup Inc (2016) survey found that millennials trusted FinTech companies with their innovation and digital experience needs and trusted banks with their security, privacy and security needs, which was also found to hold true in the research, giving rise to a strong support argument in favour of collaboration opportunities that existed between the actors.

The findings provided data which revealed that FinTech companies contributed significantly and positively in the effort to advance financial inclusion and the upliftment of communities that were underserved by the traditional banks, also found to be the case by Jagtiani & Lemieux (2018) in their study of FinTech lenders in the developed market of the US. This has taken place in ways that are unique and have provided the opportunity for economic activity to far rural areas that do not enjoy any banking representation. The advance of inclusion has taken pace rapidly based on the use of mobile devices to make available the products and services of the FinTech companies to the new customers that previously had no access to financial intermediation. The data also reveals that it is important that financial literacy training and education is also provided along with the access to the financial products as this will serve to increase adoption and use.

The findings also reveal that traditional banks would benefit strategically and financially through the value addition brought about by open banking and collaboration with FinTech companies. The very recent study conducted by Wang, Xiuping, & Zhang, (2021) found from empirically based research that the total factor productivity of traditional commercial banks was *improved* by the introduction of FinTech alliances, together with a re-development of their business model. The total factor productivity method was used to stand proxy for variables which took into account different aspects of the performance make up of a bank, with the ultimate calculation result demonstrating that traditional banks benefitted strategically as profits increased, costs reduced, risks were mitigated and a culture of innovation developed by partnering with FinTechs through open banking

(Drasch, Schweizer, & Urbach, 2018). This study sheds a further questioning spotlight onto the findings of Phan et al. (2020) stated above, again suggesting that aspects of strategy and business model development may well have been overlooked in their study, which add critical dimensions to this debate.

### 5.2.4 Regulatory Support

The research findings inform that the regulators have provided support for the development of open banking through the promulgation of regulation that creates an enabling environment for this to take place in. The release of the regulatory frameworks has been taking place in different countries at different times, dependent on the readiness of the authorities to implement such guiding principles, which has resulted in some countries effectively lagging behind the mainstream thrust advancing across the majority of key financial markets. The regulatory community has shown that they are keen to support the innovation and competition that is brought about by the FinTech phenomenon and are keen to attempt to keep pace with the rapid evolution unfolding through various mechanisms that encourage collaboration between regulators and FinTech entities as well as between regulators themselves on a global level (Chatzara, 2020) and this is in agreement with the literature (Ramsden, 2018; Carney, 2017).

Further to this, the findings revealed that apart from the regulators being keen to support open banking for the various reasons that they had, the industry professionals that were interviewed submitted that open banking was itself beneficial to the banking industry and to traditional banks in that it brought about fresh competition. This competition was much needed to move out the apparent complacency that had established itself in the industry. In addition to this, the industry professionals stated that one of the many benefits brought about by open banking was that the FinTechs brought about additional opportunity through the expansion of the market. An example of the expansion of the market is where customers with weak or “thin” files at credit bureaus were given the opportunity to access credit through going through the alternative credit scoring methodology of a FinTech lender, based on alternative data points to those used by the traditional credit bureaus, giving rise to credit being granted to customers with no worse a risk profile than the usual customer (Jagtiani & Lemieux 2018).

The findings also revealed that the historically conservative South African regulator has not yet issued any regulation in the open banking arena thus far. A process of high level consultation has commenced with the regulator engaging with some industry players from amongst both the traditional banks as well as the FinTech groups with the issuance of consultation papers for debate. The regulator has formed the Intergovernmental FinTech Working Group (IFWG) which is a formal interface between the various regulatory agencies, under the aegis of the Prudential Authority, and the financial services sector to advance the FinTech agenda. This regulatory agency has created a regulatory sandbox environment for the piloting of financial technologies that fall into the open banking experimental domain (Intergovernmental FinTech Working Group, 2019). The intention is for the safe piloting of these technologies which predominantly fall outside of the already established regulations and frameworks.

From a global perspective, the findings gleaned also inform that for open banking to work effectively, the regulators seem to have drawn a line in the sand regarding the question of customer data ownership, forcing the traditional banks to give secure access to customers over their own data. This access gives traditional bank customers the right to give consented use to third party providers who would proceed to provide products and services that would benefit the customer – this is a simplistic view of a rather complex and layered process. Banking practice has seen traditional banks tend to hold the view that customer data in their possession belonged to them, however, the finding show that the granting of access to third party providers stimulates innovation and competition (Financial Stability Board, 2019).

Another key finding from the data shows that the real threat to the traditional banks lies in the advances of the TechFin organisations, also referred to as BigTech, being the large technology companies that have started entering the financial sector through the provision of certain services in competition with the banks (Hill, 2018). Zetzsche, Buckley, Arner, & Barberis (2017) discuss the characteristics of TechFin companies, stating that they are essentially data intermediaries which are very large in size and usually have deeper relationships with their customers than traditional banks do, competing with traditional banks as well as with FinTech companies, which in comparison are financial intermediaries that partner with banks in the provision of financial services.

TechFin organisations are generally not constrained by the regulatory oversight that the traditional banks have to contend with yet have enormous resources at their disposal and great global customer reach with access to massive customer data from their existing operations. The findings suggest that part of the concern lies around these entities gaining further customer insight on the financial behaviour and other financial data on customers through open banking from the banking industry, giving them an added, unassailable advantage. The Financial Stability Board (2019) has expressed their concern at how this could threaten the stability of the global financial systems, suggesting that this development would require close continual monitoring. The banks have expressed this concern to regulators, citing the uneven playing field and the regulators have taken heed of the issue, proposing new rules to rein in BigTech's expected dominance of data (Chee, 2020). In their recent survey of consumers in the US, PYMNTS.com (2020) found that almost 41% of young consumers would be motivated to switch their financial service provider, typically from a traditional bank to a BigTech, once a superior financial app were to be offered to them. This is in keeping with the findings expressed in other research in the literature (Unidays, 2019).

## 5.3 Interpretations of the Findings

In this section two objectives will be met. Firstly, the researcher's interpretations of the findings are given and these are related to the literature. Secondly, the interpretations of the findings will simultaneously seek to respond to the research questions developed in chapter 2, section 2.10, whilst also identifying and highlighting findings that either confirm the literature, informs the literature or presents the study with a new aspect to the literature altogether.

### 5.3.1 The Consumer

The results of the findings, in presenting the perspectives of senior participants offering their perspectives on the needs of the customer, suggest that consumers do indeed experience benefits from the provision of products and services developed by third party providers, being these FinTech companies or BigTech giants. These views are drawn from both traditional banking top executives as well as FinTech company top executives alike. This position confirms the existing literature which revealed that consumers experience benefits when using the products developed by FinTech companies and made available to them through the open banking framework (Navaretti, et al., 2018; Williams & Nelson, 2015; Ramsden, 2018). Consumer loyalty to traditional banks is reported to be a matter which is likely to be dependent on the ability for the banks to continue to provide innovative products, a situation which most traditional banks grapple with due to the legacy core banking systems that they sit with. Banks are only likely to be able to fulfil the objective of attaining much improved, competitive innovation status in collaboration with FinTech companies through an open banking partnership by which consumer data could be shared. Here too the finding confirms the existing literature (Anand & Mantrala, 2019) and responds to the second research question.

The findings revealed that the area of trust was one that was key for consumers, giving rise to the ability for a consumer to entrust their savings and wealth to a traditional bank based on the trust element that the banks have enjoyed with the body of consumers for a very long time. Trust is therefore a pre-requisite that the consumer seeks out to be able to establish a banking relationship, which is then layered with the innovation that is provided by a FinTech, suggesting that the two parties may not necessarily be mutually exclusive to the consumer, but are generally treated as a package deal, especially in the urban areas where banks are strongly represented and have a strong brand reputation, as was also confirmed to be the case in the existing literature (Boot, 2017). The same trust argument however does not seem to hold true in the underserved markets where traditional banks do not have a brand presence or reputation, with no trust value of any significance; this finding is a new finding that is not in the literature and responds to both the research questions in that consumers in underserved markets would now derive direct benefits from a FinTech solution, as well as traditional banks could benefit from the ecosystem effect by being aligned to the FinTechs serving these markets. In such areas, the consumer may not necessarily recognise the need for the trust factor from a bank, simply because this has never been a factor for consideration. The emergence in such an environment of a FinTech solution would be welcomed as being a vehicle through which financial intermediation could be achieved, coupled with the ability to become economically active (Pearce & Borgstein 2018; Anand & Mantrala, 2019). This makes a contribution to practice.

### 5.3.2 The Traditional Banks

The data presents the finding around the status quo of traditional banking being unsustainable and requiring a significant overhaul based on pressure coming from the customer. This pressure brings to bear upon the banks the need for a business model change due to the choices that the customer has made to seek out more innovative and appropriate products from third party FinTech providers; this finding confirms the literature (Ozili, 2018), whilst it also presents a new aspect to the literature in respect to the business model change discussion, presenting a contribution to practice and knowledge. The traditional banks need to understand that they need to collaborate with the FinTech companies to gain access to their superior agility and ability to respond to and meet the needs of the customer in ways that bring benefit to them. This acceptance by the banks will allow them to derive benefit from open banking through gaining access to the new ecosystems established, and to access new income streams that they did not have access to previously, amongst some of the other benefits reported in chapter 4, such as participation in an expanded market, gaining access to this through collaboration with FinTech companies and gaining access to new data by participation in the ecosystems. This finding confirms the literature in that Botta et al. (2018) posit that traditional banks could succeed under open banking by understanding the roles that they would be well suited to match new customer journeys in the new environment, which addresses both research questions.

Further to this, the findings in the data also reveal that traditional banks that hold on to their old ways may very well find themselves in risky and compromised situations due to the fact that they would be poorly positioned to take advantage of the unfolding opportunities to remain relevant in the process. This general resistance is what makes the traditional bank example provided in the existing literature by Acar and Çıtak (2019) to take on a business-as-usual flair due to their embedded approach for dealing with FinTech prospects, demonstrating an already compliant and activated institution. This finding informs the literature, and a contribution to practice exists here, whilst it also responds to both research questions. The advanced method by which the bank in that example behaved is quite different to the "existential threat" mentality many traditional banks find themselves locked into when contemplating open banking and partnering with FinTechs, for various reasons.

The data further suggests that the evolving role of the banks in the future would likely see them becoming some sort of utility organisation in the new ecosystem, no longer holding the central role that they have been enjoying. This finding is new to literature and is also presents a new contribution to practice, also responding to the second research question. Part of the business model change that banks would have to undergo would require a fundamental change to their cost make up for profitability to remain within reach, otherwise the mechanistic observations of Phan, et al. (2020) could become the unfortunate reality for these institutions, instead of the decidedly more holistic observations of Wang et al. (2021) where the evidence is that banks benefit from open banking. This aspect informs the new finding identified earlier in this paragraph and underpins the contribution to practice and knowledge. For this differentiation to become more widespread amongst the traditional banks, the research suggests that the traditional banks do require to become educated in the benefits of open banking and partnering with FinTech actors, with this finding presenting a new contribution opportunity to practice in relation to the second research question. A failure to fully understand the benefits of this process could unfortunately result in a strategic misalignment between where the bank finds itself historically, and where it needs to consider its future to be and what the resulting business model looks like. One of the key inputs to the re-assessment process would be an acceptance of what is now clearly a restatement of their long-held view that banks own customer data, as opposed to an understanding that their role is more that of a trusted custodian of said data.

The findings further reveal that the traditional banks have been a critical point of failure in the attempts by various parties including domestic central banks and governments in developing countries especially, to improve levels of financial inclusion, being a confirmation of the literature (Navaretti et al. (2018). Various reasons may be advanced for this situation, including but not limited to the profit motive of banks, which generally cause them to exit catchment areas where branches operate in marginal or loss making circumstances. These circumstances would typically arise when bank branches would be located in lower income areas or lower footfall traffic zones, thereby limiting servicing opportunities and the ability to monetise their presence in that area. Furthermore the operational challenges that branches may face in outlying areas sometimes may cause unacceptably higher levels of risk to be faced in rendering services within acceptable performance parameters, prompting a withdrawal from that location. These are some of the operational or economic considerations that banks face when managing a portfolio of branches and a pressured bottom line, and dependent on the strategic plan, such costs and risk may well prove to be unworthy for a continued presence in a given area, resulting in a loss of access to customers in that catchment area and the subsequent economic downturn and de-inclusion. Whilst some of the examples given may be understandable, sometimes traditional banks are the direct cause of financial inclusion woes due to them taking deliberate decisions against supporting lower income areas in favour of pursuing a more lucrative direction with potentially higher yields (Pearce & Borgstein, 2018; Navaretti et al., 2018).

The bottom line of all of these considerations that traditional banks have to contend with is that they carry responsibility for the lack of financial inclusion in many countries around the world, both developing and developed.

The findings also provide insight on the customer data ownership issue whereby the banks see themselves as the owners of this data, which is now proving to be a treasure trove in the era of big data and its value. Unfortunately for the traditional banks, it would appear that their attitude of ownership has generally not been exploited fully over the years to the general unhappiness and dis-benefit of their customer base, resulting in accusations being levelled against the banks for being unimaginative and lacking the innovation prowess to develop more relevant and needed products, thereby allowing a gap to develop which was now being filled by the FinTech actors, this finding informing the literature (Financial Stability Board, 2019). From the findings, part of the issue at play would be as a result of the general lack of agility in the traditional banks with long product development cycles as being the norm, coupled with a product-centric approach to product development instead of developing products that customers actually need, a finding that is new to the literature and responds to both the research questions. The technological capability of the banks is another factor that inhibits their ability to innovate at the level of FinTech companies because their legacy core banking systems have challenges and work in certain ways which don't support the more modern requirements; this widespread threat of aging bank legacy systems could be an area for further research especially when considered against the concentrated systemic stability risk of these banks occurring simultaneously across several countries. This thesis does not have the scope to delve into this topic to do it any justice.

The literature shows that the regulatory approach followed across most jurisdictions places a considerable bind on the ability for traditional banks to conduct business in ways that may seem to be risky in certain respects, possibly introducing unacceptable levels of systemic risk, yet in other ways the regulations still allow for oversight gaps to be exploited by the banks which resulted in various historic negative financial system stability events, including the financial crisis of 2008 (Zandamela, 2009). Whilst the findings confirm the literature that the regulators have shown their firm support for open banking and have promulgated regulations to enforce data sharing frameworks in support of this, it would appear that an aspect of open banking which concerned the regulators is that this introduced fragmentation brought about through the effect of several FinTech entities occupying parts of the banking value chain, possibly exposing the financial system to several points of failure, which would be sub-optimal (Vives, 2017). As a result of the history of oversight failure with the financial crisis of 2008 arguably being the most destructive in recent times, a more progressive regulatory approach to be encouraged would be the fostering of an alternative mindset, one that sees this development as being the democratisation of the banking value chain with more failure redundancy switch-over points built into it rather than a few massive points of failure represented by the systemically important financial institutions (SIFI) of a given market, a position presented in the findings which confirms the literature (Dombret, 2018; Magnuson, 2018). The regulation could therefore be shaped to encourage such an outcome through the collaborative efforts between the FinTechs themselves, as well as between them and the traditional banks, effectively de-risking the stability of the financial system in this manner. This argument which is based on an interpretation of the findings parallels Magnuson's (2018) discussion in the literature, especially regarding the concentration risks posed by the large traditional banks in any jurisdiction.

### 5.3.3 The FinTech companies

Regarding the FinTech companies the findings show that these entities derive support for the evolution of open banking from the enthusiastic response received from the grateful ranks of customers enjoying the user experience that they provide through advanced digital innovation, through to the regulatory support enjoyed from the authorities, confirming the literature and responding to the first research question (Deloitte, 2014). The findings also present the position that the FinTech companies have taken to the task of providing services where the banks have failed to, effectively bringing financial inclusion and economic advancement to many areas in the developing world, positively impacting the GDP of catchment areas as well as that of countries. FinTechs have created new ecosystems that bring new value to banking value chains and have welcomed partnerships with the traditional banks, a finding which confirms the existing literature (Drasch, Schweizer, & Urbach, 2018) and contributes to practice.

However, the findings suggest that the FinTech community have also not always acted in a responsible manner with some actors abusing the goodwill that the movement has been able to garner, a position that informs the literature. Some spectacular failures and abuses have taken place in the more exotic FinTech area of cryptocurrencies and exchanges, which threatens the general industry's growth trajectory through the possible introduction of regulation to control this (Godoy & Reuters, 2021). Whilst regulation is an important consideration where public funds are involved, the heavy regulatory burden faced by the banking industry would not be a viable overlay onto the FinTech industry for several reasons, especially as these entities run off a light cost structure, relying on technology to effect processes. Regulatory oversight would arguably be best served from a RegTech perspective so as to use innovation to regulate in step with the advanced nature of the FinTech way, thereby allowing for better cost management whilst still achieving oversight (Vives, 2019). This finding contributes to practice from a regulatory standpoint.

From the findings, other suggested regulatory approaches included the regulation of FinTech via the regulatory oversight already in place with the banking industry, rather than a direct model. This presents a new aspect to the literature and contributes to practice. Dependant on how this would be structured there may well be unintended consequences to such a choice in that the banks could arbitrarily choose to simply shrug off what they could rationalise as being yet another unnecessary regulatory burden. This could have the unintended consequence of giving the traditional banks the power to determine the fate of open banking through allowing it to slowly die off, defeating the objectives to foster competition in the industry, and further delaying the benefits that accrue to customers, as happened through financial exclusion, with this informing the literature (Ramsden, 2018).

It would therefore seem that some form of regulation, even if this took the basic form of a register of these entities with some level of fit and proper screening of the key executives, could be beneficial in ensuring that the industry maintains a basic form of accountability and credibility, which would assist in the building of trust amongst the customer base, especially as FinTech entities interact with the public in matters of finance, whether or not they have direct access to customer monies in their particular FinTech business model.

The findings suggest that FinTech companies have a significant role to play in advancing society on a path that brings financial advancement down to the level of the individual in a manner that has not been experienced before, in both developed and developing countries (Navaretti et al. 2018), with this finding informing the literature and illustrating a benefit from the perspective of the research questions. This requires that FinTechs understand the key role that they have started to play in society as well as the expectations placed on them at this early stage by their participating customers and the public as a whole. This development in fact suggests that a degree of trust has already been given to these actors by customers, requiring that the FinTech companies in turn keep lock-step with this great responsibility (Aitken et al., 2021). As a result of this, some form of light regulation would assist in bolstering the seriousness of the situation and may underscore the need for maturity to be instilled into the leadership teams of these entities, as opposed to the prime motivation for starting up a FinTech being the profit motive. A sobering thought for the founders of a FinTech to consider would be for them to debate the issue regarding the typical approach to longevity that the founders of a bank would take, all plans working out as forecasted and industry consolidations aside.

Whilst FinTech entities are usually privately held companies with the ability to decide their own fate and direction, cognisance needs to be taken by their leadership teams of their societal role and importance of their contribution to the stability of the financial sector as is the case with the traditional banks. All too often FinTech strategies seem to feature a build-operate-sell mentality which may harm the innovative thrust of the industry, especially when such sales take place to traditional banks. FinTech companies have a responsibility to their customers to maintain the innovative edge and ensure that competition continues in the industry, all plans and forecasts working out as expected, and in the absence of unavoidable consolidation. Several mega deals have taken place in the industry with some of the purchases of FinTech companies being concluded by traditional incumbents; some of these purchases have been blocked by anti-competition authorities as being deleterious to innovation and competition, for good reason (CNN Business, 2021).

Based on the foregoing discussion of the findings, it is argued that the research objectives and the research questions have been satisfactorily met in this section. Through the researcher's interpretations of the findings from the analysed data, the emergence of theory becomes clearer. With the research objectives and research questions having thus been met, the grounded theory process moves forward, using this data on the research questions and the interpretations to discuss the emergence of theory.

## 5.4 Implications of the Findings

The literature regarding the FinTech phenomenon is quite broad and varied with respect to the phenomenon, and research is being conducted across the disparate parts of the subject, as stated in chapter 2. The focus of this research study was deliberately narrowed down to the identified gap in the literature, which was seen to be specifically in the area of understanding the benefits presented by open banking. In this focused niche area, the literature that is available appears to be mostly located in an empirical approach to what is, for the purposes of this research, a social issue. As a result, the literature appears to be still emergent and somewhat scant.

The research aim of this study, as stated in section 1.5, was to address the recognised gap in the literature through a qualitative inductive approach study, by which the selected grounded theory method would lead to the emergence of the theory for this study. As shown earlier in this chapter, the findings do correlate and support the existing literature save for the findings of Phan et al. (2020) which seem not to take account of the deeper structural and strategic issues that are involved in the running of a banking business, issues which if taken into account, could well make a significant impact on the findings of their research, as demonstrated in the findings of Wang et al. (2021).

The implications of the findings are therefore quite significant in that the traditional banks that may not be aware of the benefits which could accrue to them through open banking could adopt an ill-informed or imperfect posture when mounting a response to the regulation, or, in the absence of regulation, they could adopt a negative mindset in considering a position in the matter. From the literature it is quite clear that traditional banks have felt the pressures of the open banking phenomenon upon them with some embracing this change, enjoying the benefits of having taken a decision to participate, yet it is also quite clear that possibly the bulk of banks have not been able to reach this level of acceptance, thereby opening themselves up to risk which could become perilously systemic, possibly negatively impacting the stability of a national banking system. It is for this reason that the issue requires the attention of all those that may be able to assist. In Mckeown's (2015) words these institutions may be showing a managerial thinking based response as opposed to a strategic thinking based response which could give rise to a deficient response being fashioned.

As regards the potential benefits of open banking to consumers, the focus of the research conducted to collect primary data was aimed at the decision makers in the industry rather than at the individual consumer segment because this was the strategy designed to access the valuable data from these particular professionals so as to meet the needs of this study. Data findings on the consumer segment were also provided by the interviewees as reported in section 4.10.2, building on the existing data from the literature as reviewed in chapter 2, which provides a satisfactory result in presenting the benefits enjoyed by consumers through the implementation of open banking. FinTech companies are known to use technology solutions which they are able to develop in an agile manner and that address the actual needs of consumers, providing solutions to identified pain points in the process (Zetzsche et al. 2017).

For the FinTech companies the implications of the findings are clear as well, supporting the literature as regards the benefits enjoyed by these entities through the implementation of open banking, with collaboration and a welcoming attitude generally being their key intentions towards the traditional banks. From a strategic standpoint, the continuation of this collaborative attitude is important as the two entities require a good working relationship to achieve effective partnership through the implementation of open banking.

Bringing the attention back to the traditional banks and the implications of the findings on these entities, it becomes apparent from the data that these institutions may have a generally negative understanding of how to navigate their entry and participation in this evolution of the industry, principally brought on by some of the negative academic and professional reports around the impact of the FinTech movement on their profitability and sustainability. This would be heightened by a lack of appreciation for, or an outright refusal to acknowledge the benefits that the banks could enjoy from the inward data sharing opportunities presented by the FinTech ecosystems. These would also introduce technology based solutions, financial inclusion efforts and more, presented through collaboration, with this effectively increasing the available market that the banks could participate in through the addition of new, previously underserved consumers. It would therefore seem that the implication for this situation is for the development of a methodology to assist traditional banks with plotting a path whilst keeping sight of the key variables so as to reduce the likelihood of arriving at uninformed conclusions which could otherwise cause instability for the institution. The researcher has developed a suggested methodology which is presented in chapter 6 below.

Whilst the regulatory supervision aspect of banking is not central to the aims or objectives of this research the role played by this body of actors is crucial to all parties due to the regulatory-heavy nature of the industry. For this reason the literature review chapter contained a section on the regulatory dimension and this has flowed all the way through the subsequent chapters. This also provides the research with a more balanced view of the issues and provides a research outcome for the regulatory fraternity to consider as they attempt to keep in tandem with developments in open banking. In this regard, the implications of the findings for the regulators are in step with the literature. However, it is recommended that particular note should be taken of Zetzsche et al. (2017) as a balanced strategic discussion is laid out in this piece which regulatory bodies should find illuminating in their consideration of a way forward in the possible development of regulation for the FinTech players.

## 5.5 Summary and Linking Comment

In this chapter the researcher presented the discussion of the findings presented in chapter 4, articulating the interpretations of the researcher and the resultant implications of the data, and how this would be taken forward.

Chapter 6 deals with the key conclusions of the study and delves into the contributions to knowledge and to practice are articulated. Limitations of the study and suggestions for future research are touched on, with a section on personal reflection bringing the study to a close.

# 6 Key Conclusions

In this chapter the key conclusions were presented and the emergent theory from the inductive grounded theory research process that was followed, was shared as the contribution to academic knowledge. The contribution to practice was presented along with the limitations of this study and the discussion of possible future research directions, which could go some way towards addressing the scant literature on the specific subject matter and related matters (Goldstein, Jiang, & Karolyi 2019). The chapter was brought to a close with a section on personal reflection.

## 6.1 Responding to the Research Aim

With the research objectives stated in section 1.6 satisfactorily responded to in section 5.3, this sets the foundation for a review of the research aim presented in section 1.5, which will be responded to in this section. The stated research aim of this thesis was articulated as being:

*What benefits accrue to the traditional banks and FinTech companies through open banking and how can these institutions be encouraged to collaborate and take advantage of this, thereby increasing the benefits to consumers?*

The research findings presented in chapter 4 and the subsequent discussion and interpretation in chapter 5 revealed the elements which respond to the research aim, articulating the benefits of open banking to consumers, banks and FinTech companies, as well as addressing the gap in the literature. This gap is concerned with how traditional banks understand the benefits available to them brought about by embracing and participating in open banking in partnership with the FinTech companies. The final interpretation in chapter 5 came to the nexus that many traditional banks may require a strategy, process or method by which they could evaluate their readiness, and become better educated on the benefits of participating in an accepting and embracing manner which could bring on a winning mindset that is critical for accepting the significant change to be undertaken in the redesign of the bank's business model.

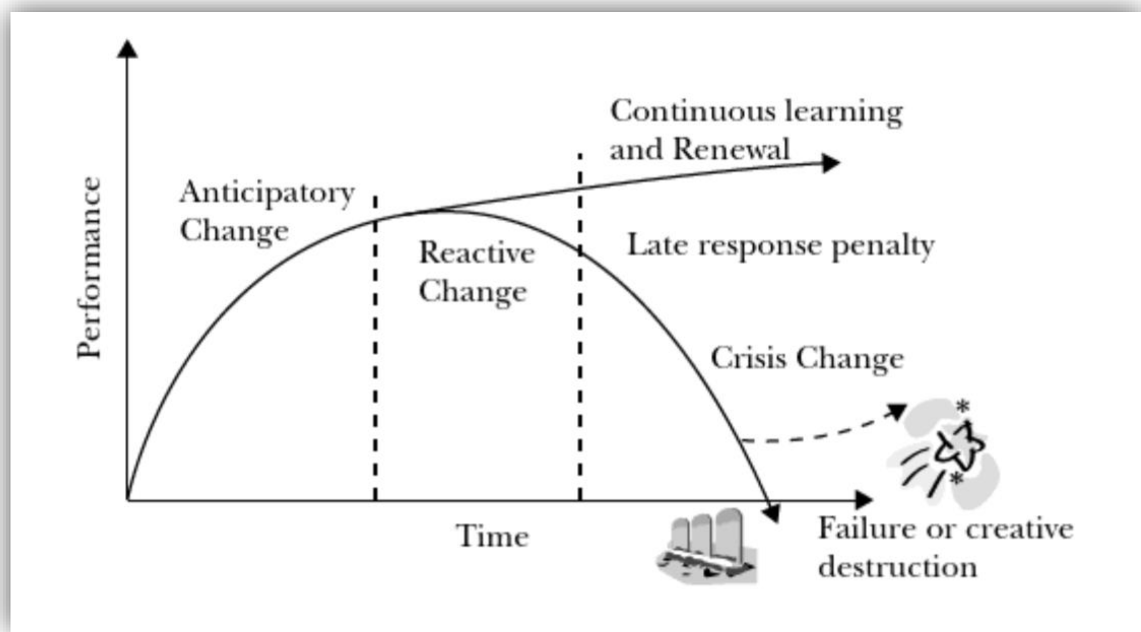
Anand and Mantrala (2019) developed and proposed a conceptual model that was presented as being the first “strategic response matrix” for traditional banks to use in determining their way forward in the open banking environment as the business was pressured to confront the situation and plot a response. The broad response options that were proposed in this matrix are arrived at after considering a raft of inputs which are all outward facing and consider the technological resources available to mount a response to a FinTech challenge, or what they refer to as a business model innovation disruption, that may be market centred or technology centred. The result of this process culminates with a choice of 5 possible responses for the incumbent to consider, being to either (1) hold their position in a business as usual pattern, (2) make, or build the innovation internally in order to respond to the business model innovation presented by the challenging FinTech, (3) to ally with the challenging FinTech by way of collaboration, (4) to buy the challenging FinTech and internalise it, or to (5) exit that segment of their business or market being challenged more effectively by a FinTech. Whilst the matrix proposed by Anand and Mantrala (2019) is considered useful in the process of mounting a response, it still does not cater for the critical aspects that an incumbent must undergo, which commences with a strategic review process to test for the strategic and change readiness to create a transformed organisation having developed a new business model for implementation and to ensure an understanding of the benefits. This would bridge the performance issues raised by Phan et al. (2020) and follows the high level guidance of Botta et al. (2018).

To commence the journey to arrive at a transformed organisation, a traditional bank would need to embark upon an internal process of evaluation which would be developed with the aim of understanding readiness and adaptability of all stakeholders and to ensure a common understanding of the extent of the transformation and resultant business model. Kumar Basu (2015) discusses the role of change management in the transformation process of a business, with this being the process by which transformation is achieved. However, here we are referring to what is believed to be more than change management in that the business first needs to be educated on the reasons for the change, the opportunities that could lie ahead and how these need to be exploited, before the change management process gets underway. This process will assist in lifting the leadership team from the arena of managerial thinking into the required arena of strategic thinking, which will enable them to systematically prepare for the strategic thinking and change management processes to urgently remodel their business (Kotter, 2012; Mckeown, 2015).

The strategic review process would form the first phase of a comprehensive integrated 3 phase approach developed by the researcher to guide the traditional banking institution through the seminal change that it needs to go through in preparation for a future based on a new business model which seeks to maximise on the extraction of the benefits of open banking to the institution.

This integrated process would be critical in reaching and modifying the team's mindset around the transformation and the change issues before them (Lane & Maznevski, 2014; Nilakant, 2006). Dweck (2012) posits that a mindset is just a belief system that a person or group of people hold in their minds about something. Whilst being powerful beliefs, the individual is able to change their mind and this belief system. The proposed integrated strategic review process, which is spread across Phase 1 and Phase 2, is an intervention designed to employ mindset change tools which usher in the change that Dweck (2012) discusses as being the need to break and challenge an existing mindset and to learn and understand different perspectives to an issue. Lane & Maznevski (2014) suggest that a determination of the required change must take place prior to the change process commencing, which is captured in step 1 of *Table 35*, and they emphasise the importance of the involvement of top management through the process, which adds the layer of sincerity that the employees would be looking for throughout the change process.

*Table 33: Strategic Change and Renewal Process*




*Adapted from: Lane & Maznevski (2014)*

*Table 33* above illustrates the three different attitudes (or mindsets) that an organisation would potentially find themselves in at the inflection point of change review and the then current performance of the entity, namely, anticipatory, reactive and crisis. Knowledge of the organisational location would also assist the transformation journey and its impetus. The preferred trajectory is for an organisation to realise the need to change in either the Anticipatory or the Reactive stage so as to be able to act with sufficient time and adjust. A late realisation of the need for renewal occurs when a crisis event is already upon the organisation, resulting in either a late response penalty if the crisis is salvageable, or a failure event.

**Integrated Strategic Review Process**

The leadership of the traditional bank would need to embrace the idea that the process that would be undertaken would require their direct participation so as to embed the urgency of the situation and the scale of the required transformation, which involves the entire organisation and shift it's make-up from the current, to a new envisioned structure, and includes a robust change and transformation process (Kotter, 2012).

**Phase 1 Review**

1. The first step would start with a process to educate the incumbent at a deep and factual level on the *nature* of open banking as a concept, accepting that up to this point it is

most probable that there have been assumptions built on the negative emotions driven by the resistance to being forced, through regulation, to share data which the bank views as its own, amongst other issues.

2. The next step would include the reasons behind the driving force, such as the changing consumer demand for independent advanced digital products that meet their actual needs as well as the desire by regulators to mitigate the concentration risks, to increase competition and to increase the rate of innovation which could accelerate financial inclusion.
3. The following step would involve an internally focused review of the strategic readiness of the leadership team to embark upon the change to develop the new business model. Should a gap be identified at this stage, this would need to be addressed conclusively as hard decisions may need to be taken in the creation of the new business model.
4. The design of the business model would take place at this point, with the earlier learnings on open banking being kept central to the process. With the leadership team being alive to change resistance, a key deliverable must be a deeply reduced cost structure.

The above process is developed into a model which is presented in section 6.3 below.

A professionally constructed change management process would then be developed as phase 2 of the integrated strategic review process as briefly stated below. The outputs of phase 1 would feed into the phase 2 review.

**Phase 2 Review**

The phase 2 review would be comprised of two components as follows:

1. An organisational development culture assessment intervention which would pursue the current state of the leadership at an individual level as well as at a team level using the appropriate tools. The outcome of the assessment would contribute to the development of a programme to take the individuals and the team through to a state of readiness for the achievement of the desired commitment to the future state culture. This would be crucial to ensure leadership buy-in to cascade the transformation across the organisation.
2. Following on the culture assessment of the leadership individuals and team, a robust change management model would be implemented; this would be a significant,

specialised programme which would address the key organisational development needs to prepare for the transformational change to the future state ensuring buy-in at all levels.

Various change and transformation models could be considered as a basis to support the phase 2 change management process, however, a comprehensive 8 step process for leading change was developed by Kotter (2012) which would be recommended as a comprehensive method to guide the process for a traditional bank.

The phase 2 review process would itself be a significant intervention which would exceed the scope of this research in order to cater for the required detail, therefore the high-level outline summarised above will suffice as a guide.

The preferred case scenario would be for a bank to go through the Phase 1 and Phase 2 reviews successfully with the result that a new business model is developed and the bank charts a new path, positively concluding their transformation journey at this point.

**Phase 3 Review**

Should the phase 1 and phase 2 review sessions prove to be inconclusive and unsuccessful, with minimal buy-in from the leadership team, or end in failure for whatever reason, it would then be necessary for the team to go through the strategic response matrix as proposed by Anand and Mantrala (2019), which would be the final, hard discussion for the leadership team to conclude on as this matrix does not seem to suggest or require the incumbent to go through a process to build a new business model. The challenge with this approach is that the incumbent would not have understood the potential benefits that a new business model adds to the business. The model tends to approach the issue from the threat perspective and not from the opportunity perspective, as can be seen in *Table 34* below. This suggests more of a managerial thinking mindset when approaching the development of this model, which was designed to be a strategic response model, yet this does not seem to take into account the real strategic inputs that would precede reaching a crucial decision and response of this nature, for a traditional bank to make (Mckeown, 2015).

*Table 34: Strategic Response Matrix*

| | | Perceived level of Fintech entrant's technology-centered business model innovation (BMI) threat | |
|---|---|---|---|
| | | Low | High |
| Perceived level of Fintech entrant's market-centered business model innovation (BMI) threat | Low | 1: HOLD | 3: ALLY |
| | High | 2: MAKE | 4: BUY or EXIT |

***Adapted from: Responding to disruptive business model innovations: the case of traditional banks facing fintech entrants, Anand and Mantrala (2019).***

This would conclude the proposed integrated strategic review process that a traditional bank would follow to effectively ensure preparedness for participation in open banking whilst maintaining stability across the organisation as a new business model is fashioned and cascaded across the company on successful completion of the Phase 2 Review.

## 6.2 Contribution to Knowledge

The FinTech phenomenon has been the subject of some research by academics with an interest in the developments affecting the financial services sector, resulting in the production of an increasing number of publications in various journals. The research has been key in bringing awareness of various aspects of the phenomenon and how this impacts traditional banks, mostly with empirical studies being the focus, based on performance metrics and how banks fare in the new normal, giving very useful data and findings to inform and shape our understanding of the changes that are taking place in the industry.

This study has approached the issue from a different perspective altogether with the focus being about the benefits that are now available for consumers to enjoy through the implementation of open banking, with the same perspective followed to investigate the benefits available for traditional banks to realise through active participation in open banking. This process was also applied to investigate the benefits that would accrue to FinTech companies through their participation in open banking as well, following the same path.

The selected methodology to achieve the goals of this study were discussed in chapter 3, and selected as being the inductive grounded theory qualitative approach as it was felt that this lends itself best to the task at hand, which from the findings, has proven to be the correct choice, yielding the desired outcomes.

As the contribution to knowledge from a theoretical perspective, the emergent theory generated from the grounded theory research findings based on the themes is posited as follows:

Traditional banking business models do not appear to be sustainable in their current form as customers expect independent innovative products, providing a convenient and advanced mobile user experience. For banks to deliver on this expectation, collaboration through open banking provides benefits to banks and customers alike through a supported regulatory framework.

The detail behind the contribution to knowledge in this research were articulated across chapters 4 and 5 and are summarised as follows:

1. The research suggested that benefits do accrue to consumers through the implementation of open banking, even to the point where in one particular African country, a sector of the economy which was considered hazardous to the public was saved from closure by legislators and given credibility through the introduction of FinTech solutions based on an early open banking framework.
2. The study presented findings which articulate the benefits of open banking accruing to traditional banks that participate in the phenomenon as it unfolds, especially as regards the subsequent opportunity they could use to redeem themselves with respect to past failures in financial inclusion efforts.
3. FinTech participants in open banking derive benefits which are evident, as presented in the findings.

A further contribution to knowledge is made through the development of the Strategic Transformation Model discussed in detail in section 6.3 below. This model is illustrated by *Table 35* being the Phase 1 Review Model for the **inputs** side of the strategic intervention, and *Table 36* being the Phase 1 Review Model for the **outputs** side of the strategic intervention, the detail of which was discussed in section 6.1.

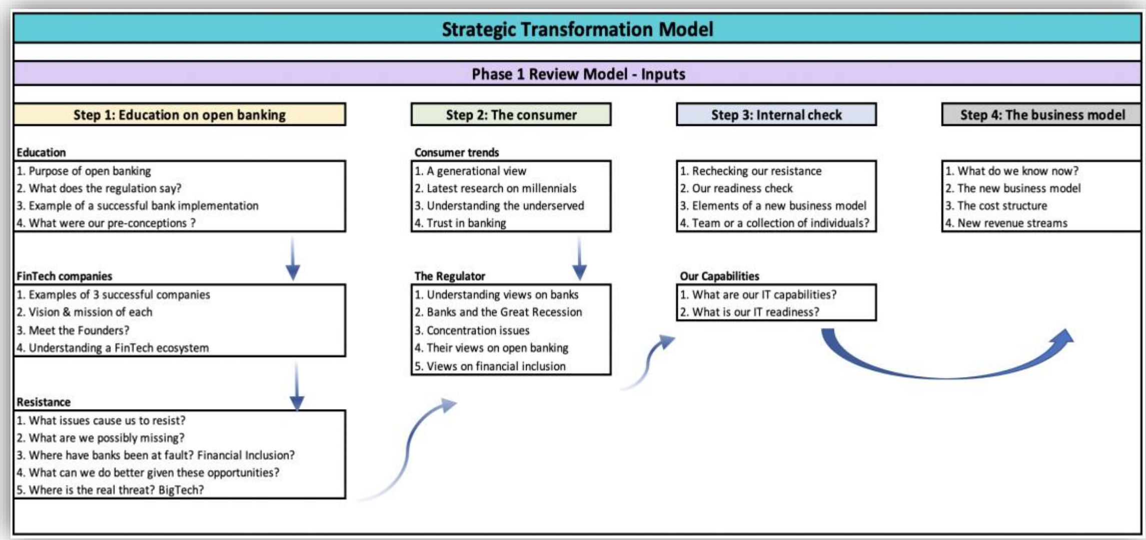
## 6.3 Contribution to Practice

### 6.3.1 Traditional Banks

The contribution to practice from this study is articulated across chapters 5 and especially 6. This is comprised of an Integrated Strategic Review Process made up of 3 phases to capture a structured approach proposed for a traditional bank to follow when commencing upon the journey to evaluate the open banking opportunity and eventually arrive at a response. The response would be developed after having methodically considered the various aspects which may require attention. For those institutions seeking a structured guide to improve their chances of considering the various aspects in a more logical manner, the model proposed below may be of some value. *Table 35* below provides a view of the first part of the proposed model, the Strategic Transformation Model which forms phase 1 of the Integrated Strategic Review process described in 6.2 above. Using *Table 35* as a guide, the top leadership of the bank are taken through an in-depth 4 step process to interrogate various dimensions of their present frame of mind and understanding of open banking, with an emphasis on their education and enlightenment of the phenomenon. Upon completion of this input stage, the top leadership team is then to self-assess and plot where they would locate themselves as a team on the grid given in *Table 36*, which would then capture the output of the work conducted during the input section.

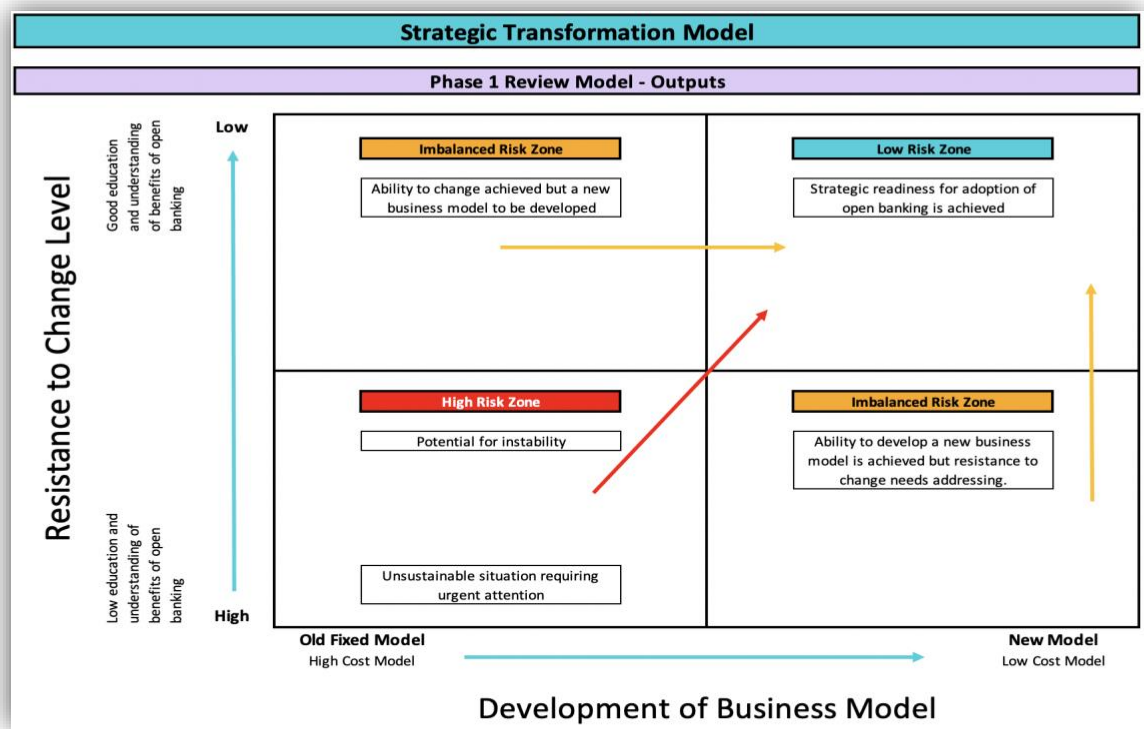
*Table 36* presents most of the possible outcomes of the education and subsequent evaluation process. The top leadership team would then attempt to locate their state of readiness and the state of the organisation, with the target quadrant being the top right hand quadrant.

*Table 35: Phase 1 Review Model – inputs (sessions)*




***Source: © Zandamela, 2021***

*Table 36: Phase 1 Review Model – outputs (quadrant)*




***Source: © Zandamela, 2021***

On completion of this phase, the top leadership structure of the bank, usually the executive committee, should be in a stronger position to then proceed with the Phase 2 Review, which formally activates the change management process.

### 6.3.2 FinTech Companies

For the FinTech companies the contribution to practice is along the following lines:

1. The FinTech teams are encouraged to adopt a non-threatening and collaborative use of language towards the traditional banking industry, even where they have developed a product that clearly competes with those of the banks. Therefore, it would be well advised that the language adopted speaks to the facts as opposed to being derogatory towards the products of the banks, as far as possible.
2. Whilst these are private companies taking up an identified opportunity in the banking and financial services market, FinTechs would be well advised to understand the importance of their role and contribution to the continued stability of the financial system in which they operate. It is expected that this would eventually have the positive outcome of lowering their general risk profile in the eyes of the traditional banks and the regulators.
3. It is recommended that FinTechs seek out opportunities to self-regulate as this would demonstrate a level of maturity and responsibility which the regulators would notice and appreciate.

### 6.3.3 Regulatory Supervision

A further contribution to practice in the regulatory management space would be for the regulators to consider the development of regulation to maintain oversight over the FinTech industry, as narrowly defined in this study, that is those companies specifically involved in open banking activities in partnership with traditional banks, along the following lines:

1. A process for the registration of these specific FinTech entities with a focus on ensuring that these entities understand their duties and responsibilities towards the maintenance of the stability of the banking system of that country. This is considered key as most FinTech executives have no prior senior banking experience, exposure to regulators or knowledge of banking legislation.
2. A process to test the fit and proper credentials of the leadership team or "prescribed officers" of these FinTech entities, in a manner which is not dissimilar to the process which key bank executives in most countries are subjected to. Allowances need to be made for the diversity of talent in this industry as not all key individuals would be

bankers, however but the purpose here is for the regulator to be aware of the key executives.

3. For the regulators to consider a modality of effectively regulating the FinTech companies through monitoring the banks themselves. This would be best achieved in a way that does not increase the regulatory burden on the banks. The reason for this is to protect the innovation that is advancing the financial sector in ways which may otherwise be stifled by increased regulation on either the banks or the FinTech companies.
4. For the regulators to consider the development of a standardised innovative “SupaTech” approach to *light* FinTech supervision, if they found themselves having no option but to impose some form of direct supervision of FinTech companies.

## 6.4 Limitations and Future Research

The contributions made through this research to both knowledge and practice have been comprehensive with significant implications for traditional banks as well as for regulators. The emergent theory from the research makes a contribution to the academic field which should lay a foundation for researchers to work with as further research directions are taken in this fast paced area, with a specific focus on the open banking aspect of the FinTech phenomenon.

As is the case with most research conducted, this study has its limitations despite the successful methodological approach that was selected. Other research approaches or techniques may well yield results that could add a different dimension to the findings presented through this investigation. This would be useful in confirming the findings, adding a triangulation dimension or to see if alternative discoveries emerge.

A limitation that was unforeseen was as a result of the advent of the Covid 19 pandemic which created an overlay of stress across almost all aspects of the research process in that the daily activities of life changed significantly which meant that the process of identifying and recruiting participants took longer and was more difficult than envisaged. This prevented any possibility of the researcher undertaking any further primary research as a follow-up, such as in exploring the application of the management tools developed in the research. For example, The Strategic Transformation Model proposed in through *Tables 35* and *36* has not been tested or implemented in the field with a candidate bank as yet. Such a test would present for interesting future research to demonstrate the contribution to practice.

Areas for further research could include a study on the issue that regulators have with financial system stability, as well as the dimension of competition, by investigating the impact of FinTech companies and open banking on systemically important financial institutions as this is where the concentration risk for financial stability is more of a concern.

An additional area could involve a study into the similarities or differences between challenger banks or "neobanks", and FinTech companies operating through open banking as these findings could shed some additional light on the future directions of regulation for supervisors to consider, without stifling innovation through regulatory burden.

## 6.5 Personal Reflections

The journey that I have managed to finally complete in this DBA programme has been a challenging and stretching time during which I questioned myself a few times, wondering if I would be able to stay the course to complete this all-important journey. It is well known that most doctoral candidates go through these feelings along this unique journey and I was not spared this part of the path at all. There are a few reasons why I questioned myself about completing the course, none of which have anything to do with the programme itself, which I shall touch on presently, but had everything to do with environmental factors which consumed me and the time I had committed to set aside to "do the work" as it were.

I have found the programme to be extremely rewarding, educational and testing of my ability to maintain the discipline that has always been able to sustain me through the various activities I undertook. On reflection, the first two years of the programme which comprised the main taught sections of the programme flowed smoothly with no issues at all. The real challenge started when one had to manage personal time yet work responsibilities changed from the normal to the abnormal, upending what was a manageable schedule. I would urge aspirant part-time candidates to be aware of the challenges of life's professional shifting sands in this respect, for this is the best way to describe these events. From my observations, the corporate world's long spans of stability are fairly certainly a thing of the past as the pace of change keeps increasing, and unfortunately this does have an ever increasing impact on one's personal time management. Needless to say, the global events since March 2020 have, simply put, multiplied this situation several-fold, yet we must adapt and persevere, which is how I managed to remain focused in bursts and complete the programme, supported by cohort members, directors of supervision, friends and the indefatigable support of family; for all your support – thank you.

The doctoral programme itself has been an excellent journey of learning and experience which I would recommend highly to those considering embarking upon such an undertaking, bringing with it along the way and especially upon completion, a personal satisfaction that is difficult to equal by other means. The area of research has been particularly relevant for me as a former traditional bank CEO turned open banking FinTech founder and CEO, observing the process unfolding at all stages with very keen interest and anticipation and despite my long and varied professional experience, I have learnt a lot and grown immensely, even more dedicated to the cause of making a difference and helping others.

And the usual question that one would ask is – given the chance to choose again, would I go through the DBA programme again? Yes indeed I would, without a shadow of doubt.

# References


Acar, O., Çıtak, Y. E. (2019). Fintech Integration Process Suggestion for Banks. *Procedia Computer Science Journal*, *Volume 158*, Pages 971-978. Retrieved from https://doi.org/10.1016/j.procs.2019.09.138.

Aitken, M., Ng, M., Horsfall, D., Coopamootoo, K.P.L., van Moorsel, A., Elliott, K. (2021). In pursuit of socially-minded data-intensive innovation in banking: A focus group study of public expectations of digital innovation in banking. *Technology in Society International Journal, Volume 66.* Retrieved from https://doi.org/10.1016/j.techsoc.2021.101666.

Aitken, M., Toreini, E., Carmichael, P., Coopamootoo, K., Elliott, K., & van Moorsel, A. (2020). Establishing a social licence for Financial Technology: Reflections on the role of the private sector in pursuing ethical data practices. *Big Data and Society,* 7(1) Retrieved from https://www.scopus.com/record/display.uri?eid=2-s2.0-85081301849&origin=resultslist&sort=plf-f&src=s&st1=elliott&st2=karen&nlo=1&nlr=20&nls=count-f&sid=6eeb77225959f6dfebfee434aabef96a&sot=anl&sdt=aut&sl=35&s=AU-ID%28%22Elliott%2c+Karen%22+56435541600%29&relpos=3&citeCnt=5&searchTerm=

Alvesson, M., & Sköldberg, K. (2009). *Reflexive Methodology: New Vistas for Qualitative Research.* (Second edition). London: SAGE.

Anagnostopoulos, I. (2018). Fintech and RegTech: Impact on regulators and banks. *Journal of Economics and Business, Volume 100*, Pages 7-25. Retrieved from https://doi.org/10.1016/j.jeconbus.2018.07.003.

Anand, D., & Mantrala, M. (2019). Responding to disruptive business model innovations: the case of traditional banks facing fintech entrants. *Journal of Banking and Financial Technology.* Retrieved from https://doi.org/10.1007/s42786-018-00004-4

Arner, D., Barberis, L., Buckley, R. (2016). The Evolution of Fintech: A New Post-Crisis Paradigm? *Georgetown Journal of International Law.* Retrieved from https://www.researchgate.net/publication/313365410_The_Evolution_of_Fintech_A_New_Post-Crisis_Paradigm

Babbie, E. (2013). *The Practice of Social Research***.** (13th ed.). Wadsworth/Cengage Learning.

Bank for International Settlements. (2021). About BIS – Overview. Bank for International Settlements. Retrieved from https://www.bis.org/about/index.htm

Bank for International Settlements - Basel Committee on Banking Supervision. (2019). Report on Open Banking and Application Programming Interfaces. Bank for International Settlements. Retrieved from https://www.bis.org/bcbs/publ/d486.pdf

Birks, M., & Mills, J. (2015). *Grounded Theory : A Practical Guide.* (Second edition.). London: SAGE.

Boot, A.W.A. (2017). The Future of Banking: From Scale & Scope Economies to Fintech. *European Economy, Banks, Regulation and the Real Sector* - Fintech and Banking. Friends or Foes? Retrieved from https://european-economy.eu/2017-2/the-future-of-banking-from-scale-scope-economies-to-fintech/

Booth, A., Sutton, A., & Papaioannou, D. (2016). *Systematic approaches to a successful literature review* (Second edition.). SAGE.

Botta, A., Ulissi, T.J., Sasia, E., Digiacomo, N., Höll R., Jain, R., Oakes, L. (2018). PSD2: Taking advantage of open- banking disruption. *McKinsey.*
Retrieved from
https://www.mckinsey.com/industries/financial-services/our-insights/psd2-taking-advantage-of-open-banking-disruption

Bradley, G. (2010). *Benefit realisation management, a practical guide to achieving benefits through change.* (2nd ed.). Gower Publishing.

Breese, R. (2012). Benefits realisation management: panacea or false dawn? *International Journal of Project Management, 30* (3), 341-351. Retrieved from https://doi.org/10.1016/j.ijproman.2011.08.007,

Breese, R., Jenner, S., Serra, C.E.M., and Thorp, J. (2015). Benefits management : lost or found in translation. *International Journal of Project Management, 33* (7), 1438-1451. Retrieved from https://doi.org/10.1016/j.ijproman.2015.06.004

Brodmann, J., Rayfield, B., Hassan, M. K., & Thu Mai, A. (2018). Banking characteristics of millennials. *Journal of Economic Cooperation and Development*, Pages 43 to 73.

Carney, M. (2017). The Promise of FinTech – Something New Under the Sun?, *Bank of England. Deutsche Bundesbank G20 conference on "Digitising finance, financial inclusion and financial literacy"*, Wiesbaden.
Retrieved from https://www.bankofengland.co.uk/speech/2017/the-promise-of-fintech-something-new-under-the-sun

Carrier, R., Karo, I., Stansfield, J., Narayanan, S. (2022). Biometric Data: Humanity's Most Precious Data. *ForHumanity*. Retrieved from
https://forhumanity.center/web/wp-content/uploads/2022/02/ForHumanity.center_FHCA_Biometric_systems.pdf

Cassell, C., & Symon, G. (2004). *Essential Guide to Qualitative Methods in Organizational Research*. London: SAGE.

Charmaz, K. (2006). *Constructing grounded theory : a practical guide through qualitative analysis*. SAGE.

Charmaz, K. (2014). *Constructing grounded theory* (2nd edition.). SAGE.

Chatzara, V. (2020). FinTech, InsurTech, and the Regulators. In: Marano P., Noussia K. (eds.) InsurTech: A Legal and Regulatory View. *AIDA Europe Research Series on Insurance Law and Regulation, vol 1.* Springer, Cham. Retrieved from https://doi.org/10.1007/978-3-030-27386-6_1

Chee, F.Y. (2020). EU bets on industrial data, new rules to catch up in global tech. *Reuters Brussels*, Retrieved from https://www.reuters.com/article/us-eu-tech/eu-bets-on-industrial-data-new-rules-to-catch-up-in-global-tech-idUSKBN20D00V?feedType=RSS&feedName=technologyNews&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+reuters%2FtechnologyNews+%28Reuters+Technology+News%29

Claessens, S., Frost, J., Turner, G., Zhu, F. (2018). Fintech credit markets around the world: size, drivers and policy issues. *Bank for International Settlements Quarterly Review*. Retrieved from https://www.bis.org/publ/qtrpdf/r_qt1809e.pdf

CNN Business. (2021). Visa and Plaid scrap $5.3 billion merger agreement. New York, *Cable News Network*. A Warner Media Company. Retrieved from https://edition.cnn.com/2021/01/12/business/visa-plaid-terminate-merger/index.html

Corporate Finance Institute. (2022). What is Systemic Risk? Retrieved from https://corporatefinanceinstitute.com/resources/knowledge/finance/what-is-systemic-risk/

Creswell, J. (2014). *Research Design.* (Fourth Edition). London: SAGE

Deloitte. (2014). Banking Disrupted: How technology is threatening the traditional European retail banking model. *Deloitte LLP*, London, United Kingdom. Retrieved from https://www2.deloitte.com/uk/en/pages/financial-services/articles/banking-disrupted.html

Deloitte. (2016). PSD2 – Payment Services Directive 2: What is new? Retrieved from https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/Banking/lu_psd2-payment-services-directive2.pdf

Dombret, A. (2015). Banks – Allowing Them to Fail. Member of the Executive Board of the Deutsche Bundesbank, at the Euromoney Conference. Bank for International Settlements, *Euromoney Conference on Germany,* Berlin. Retrieved from https://www.bis.org/review/r150519h.pdf

Drasch, B. J., Schweizer, A., & Urbach, N. (2018). Integrating the 'Troublemakers': A taxonomy for cooperation between banks and fintechs. *Journal of Economics and Business, 100*, 26–42. Retrieved from https://doi.org/10.1016/j.jeconbus.2018.04.002

Dweck, C. (2012). *Mindset*. Robinson.

Eickhoff, M., Muntermann, J., & Weinrich, T. (2018). What do FinTechs actually do? A Taxonomy of FinTech Business Models. *In ICIS 2017: Transforming Society with Digital Innovation. Association for Information Systems*. Retrieved from https://www.researchgate.net/publication/320215812_What_do_FinTechs_actually_do_A_Taxonomy_of_FinTech_Business_Models/references#fullTextFileContent

European Commission. (2022). What is the Payment Services Directive 2? Retrieved from https://ec.europa.eu/commission/presscorner/detail/en/qanda_19_5555

Ferrari, R. (2015). Writing narrative style literature reviews. *Medical Writing. 24*. 230-235. Retrieved from https://doi.org/10.1179/2047480615Z.000000000329

Financial Conduct Authority. (2022). Regulatory Sandbox. Retrieved from https://www.fca.org.uk/firms/innovation/regulatory-sandbox

Financial Stability Board. (2019). FinTech and market structure in financial services: Market developments and potential financial stability implications, Basel, Switzerland Retrieved from https://www.fsb.org/wp-content/uploads/P140219.pdf

Fratianni, M. (2006). Central Bank Cooperation at the Bank for International Settlements, 1930 1973. By Gianni Toniolo with the assistance of Piet Clement., New York: Cambridge University Press, *The Journal of Economic History*, p.268 – 270. Retrieved from https://www.researchgate.net/publication/4855759_Central_Bank_Cooperation_at_the_Bank_for_International_Settlements_1930_1973_By_Gianni_Toniolo_with_the_assistance_of_Piet_Clement_New_York_Cambridge_University_Press_2005_Pp_xxii_729_125

Fuscaldo, D. (2020). Lending Club Buys Radius Bank Marking First FinTech Purchase. *Forbes Magazine.* Retrieved from https://www.forbes.com/sites/donnafuscaldo/2020/02/19/lendingclub-buys-radius-bank-marking-first-fintech-purchase/#7e7a091e48e7

G20 Global Partnership for Financial Inclusion. (2017). Digital Financial Inclusion: Emerging Policy Approaches, *World Bank Group*. Retrieved from https://www.gpfi.org/sites/gpfi/files/documents/Digital%20Financial%20Inclusion-CompleteReport-Final-A4.pdf

Gallup Incorporated. (2016). How Millennials Want to Work and Live. Retrieved from https://www.gallup.com/workplace/238073/millennials-work-live.aspx

Glaser, B.G, & Strauss, A.L. (1999). *The Discovery of Grounded Theory: Strategies for Qualitative Research.* In The Discovery of Grounded Theory (1st ed.). Routledge. Retrieved from https://doi.org/10.4324/9780203793206

Global Open Finance Centre of Excellence. (2022). About us. Retrieved from https://www.globalopenfinance.com/about-us/

Godoy, J., & Reuters. (2021). Calif. fintech, founders settle SEC crypto fraud claims. Reuters. *Thomson Reuters*. Retrieved from
https://www.reuters.com/legal/transactional/calif-fintech-founders-settle-sec-crypto-fraud-claims-2021-08-04/

Goldstein, I., Jiang, W., & Karolyi, G. A. (2019). To FinTech and beyond. *Review of Financial Studies.* Oxford University Press. Retrieved from
https://doi.org/10.1093/rfs/hhz025

Goulding, C. (2002). *Grounded theory a practical guide for management, business and market researchers*. Sage.

Grant, M.J. & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal, 26: 91-108*. Retrieved from
https://doi.org/10.1111/j.1471-1842.2009.00848.x

Green, B.N., Johnson, C.D., Adams, A. (2006). Writing Narrative Literature Reviews for Peer-Reviewed Journals: Secrets of the Trade. *Journal of Chiropractic Medicine*, Volume 5, Issue 3, Pages 101-117. Retrieved from
https://dx.doi.org/10.1016%2FS0899-3467(07)60142-6

Herwartz, H., Walle, Y.M. (2014). Openness and the finance-growth nexus, *Journal of Banking & Finance, Volume 48*, Pages 235-247. Retrieved from
https://doi.org/10.1016/j.jbankfin.2014.06.031.

Hill, J. (2018). FinTech and the Remaking of Financial Institutions, *Academic Press*, Retrieved from
https://doi.org/10.1016/B978-0-12-813497-9.00015-9.

Institute of Electrical and Electronics Engineers. (2022). About. Retrieved from
https://www.ieee.org/about/technologies.html

International Monetary Fund. (2019). FinTech in Sub-Saharan African Countries : A Game Changer? The African Department, International Monetary Fund, Washington DC. Retrieved from
https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2019/02/13/FinTech-in-Sub-Saharan-African-Countries-A-Game-Changer-46376

International Monetary Fund – World Bank. (2019). FinTech: The Experience So Far. International Monetary Fund Policy Paper No. 19/024. Retrieved from
https://www.imf.org/en/Publications/Policy-Papers/Issues/2019/06/27/Fintech-The-Experience-So-Far-47056

International Standards Organisation. (2022). ISO Focus. Retrieved from
https://www.iso.org/files/live/sites/isoorg/files/news/magazine/ISOfocus%20(2013-NOW)/en/2020/ISOfocus_139/ISOfocus_139_en.pdf

Intergovernmental FinTech Working Group. (2019). FinTech Scoping in South Africa. IFWG members: (South African Reserve Bank, Financial Intelligence Centre, Financial Sector Conduct Authority, National Treasury, National Credit Regulator, and South African Revenue Service), The World Bank Group, The Swiss State Secretariat for Economic Affairs (SECO). Retrieved from https://www.masthead.co.za/wp-content/uploads/2020/01/2020_02_04_Fintech-Scoping-in-South-Africa.pdf

Intergovernmental FinTech Working Group. (2022). Regulatory Sandbox FAQs. Retrieved from https://www.ifwg.co.za/IFWG%20Documents/Regulatory_Sandbox_FAQs.pdf

Jagtiani, J. and Lemieux, C. (2018). Do fintech lenders penetrate areas that are underserved by traditional banks?, *Journal of Economics and Business, Volume 100*, Pages 43-54. Retrieved from https://doi.org/10.1016/j.jeconbus.2018.03.001.

Jajah, Y.I., Anarfo, E.B., Aveh, F.K. (2020). Financial inclusion and bank profitability in Sub-Saharan Africa. *Int J Fin Econ. 2020*; 1– 13. Retrieved from https://doi-org.hallam.idm.oclc.org/10.1002/ijfe.2135

Knell, M., & Stix, H. (2015). Trust in Banks during Normal and Crisis Times-Evidence from Survey Data. *Economica (London)*, *82*(s1), 995–1020. Retrieved from https://doi.org/10.1111/ecca.12162

Kotter, J. P. (2012). *Leading Change*. Harvard Business School Press.

Kumar Basu, K. (2015). The Leader's Role in Managing Change: Five Cases of Technology-Enabled Business Transformation. *J. Org. Excell., 34*: 28-42. Retrieved from https://doi.org/10.1002/joe.21602

Lame, G. (2019). Systematic Literature Reviews: An Introduction. *22nd International Conference on Engineering Design (ICED19)*, Delft, The Netherlands, 5-8 August 2019. Retrieved from https://www.cambridge.org/core/services/aop-cambridge-core/content/view/40D4CEA7A7CC3FB6ED6233E79A0A2A1F/S2220434219001690a.pdf/systematic_literature_reviews_an_introduction.pdf

Lane, H.W., Maznevski, M.L. (2012). *International management behavior: global and sustainable leadership* (Seventh edition.). Wiley.

Lee, I., Shin, Y.J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons, Volume 61*, Issue 1, Pages 35-46. Retrieved from https://doi.org/10.1016/j.bushor.2017.09.003.

Martin, V.B., & Gynnild, A. (Eds.) (2012). *Grounded theory; the philosophy, method, and work of Barney Glaser*. Brown Walker Press, Boca Raton.

Magnuson, W. (2018). Regulating Fintech. *Vanderbilt Law Review, 71*(4), 1167–1226. Retrieved from http://search.proquest.com/docview/2060911888/

Maume, P. (2017). In Unchartered Territory—Banking Supervision Meets Fintech. *Corp Finance*, 272, 373–388. Retrieved from SSRN: https://ssrn.com/abstract=3051837

McAuley, J. (2014). *Organization theory challenges and perspectives* (Second edition). Harlow: Pearson. Pages 34-35.

McFeely, S., & O'Boyle, E. (2018), 4 More Ways Banks Can Win and Keep Millennial Customers. Advanced Analytics, Gallup Incorporated. Retrieved from https://www.gallup.com/analytics/237695/ways-banks-win-keep-millennial-customers.aspx

Mckeown, M., (2015). *The Strategy Book. 2nd Edition*. FT Publishing International.

Miller, L., and Lu, W. (2018). Gen Z is Set to Outnumber Millennials Within a Year. *Bloomberg*. Retrieved from https://www.bloomberg.com/news/articles/2018-08-20/gen-z-to-outnumber-millennials-within-a-year-demographic-trends

Mothibi, K. (2020). Covid 19 Triggers Quick Innovation, Disruption and Re-Invention in Financial Services Sector. *FinTech Unit, Financial Sector Conduct Authority*. Retrieved from https://www.fsca.co.za/Documents/FSCA%20Fintech%20Innovation%20August%202020.pdf

Navaretti, G.B, Calzolari, G., & Pozollo, A.F. (2018). FinTech and Banking. Friends or Foes? *European Economy, Banks, Regulation and the Real Sector – SSRN Electronic Journal* pp. 121–142. Retrieved from https://blog.iese.edu/xvives/files/2018/02/EE_2.2017.pdf

Nilakant, V. (2006). *Change management: altering mindsets in a global context*. Sage

Omarini, A. (2018). 'Banks and Fintechs: How to Develop a Digital Open Banking Approach for the Bank's Future'. *International Business Research, 11*(9), p. 23. Retrieved from https://doi.org/10.5539/ibr.v11n9p23

Ozili, P.K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review, Volume 18*, Issue 4, Pages 329-340. Retrieved from https://doi.org/10.1016/j.bir.2017.12.003.

Pearce, B., Borgstein, C. (2018). Measuring Progress: Financial inclusion in SADC 2018. UNCDF FinMark Trust. Retrieved from https://finmark.org.za/system/documents/files/000/000/184/original/ME_Report.18.pdf?1601965010

Phan, D.H.B, Narayan, P.K., Rahman, R.E., & Hutabarat, A.R. (2020). Do financial technology firms influence bank performance? *Pacific Basin Finance Journal, 62*. Retrieved from https://doi.org/10.1016/j.pacfin.2019.101210

PYMNTS.com. (2020). The Building A Better App: Banks And The Innovation Imperative Report. Retrieved from
https://www.pymnts.com/wp-content/uploads/2020/02/Building-a-Better-App-Report-Feb.-2020.pdf

Ramsden, D. (2018). The Bank of England – Open to Fintech. Bank of England. Retrieved from https://www.bankofengland.co.uk/speech/2018/dave-ramsden-speech-hmts-international-fintech-conference

Reakal, R. (2018) What is the Bank for International Settlements? Investopedia. Retrieved from
https://www.investopedia.com/articles/03/120903.asp

Restoy, F. (2020). Regulating fintech: what is going on, and where are the challenges? European Money and Finance Forum, SUERF Policy Note, Issue No 134. Bank for International Settlements. Retrieved from
https://www.suerf.org/policynotes/10355/regulating-fintech-what-is-going-on-and-where-are-the-challenges#f1

Sy, A.N.R., Maino, R., Massara, A., Perez-Saiz, H., Sharma, P. (2019). FinTech in Sub-Saharan African Countries: A Game Changer? Departmental Paper No. 19/04, International Monetary Fund – Africa Department. Retrieved from
http://dx.doi.org/10.5089/9781484385661.087

Thomas, A.B. (2006). *Research concepts for management studies*. Routledge.

TransUnion. (2020), Gen Z Uncovered. TransUnion LLC. Retrieved from
https://solutions.transunion.com/international/south-africa/gen-z/?utmsource=LINKEDIN_SPONSORED&utm_medium=Social&utm_campaign=FS-19-476770:%20Global%20Gen%20Z%20Campaign%20Phase%20I&utm_source=LINKEDIN_SPONSORED

Unidays. (2019). Gen Z Insights. Retrieved from
https://cdn2.hubspot.net/hubfs/4000540/content-reports/reports-pdf-versions/UNiDAYS-Zs-and-Money-What-You-Need-to-Know-UK-Report.pdf

Vives, X. (2017). The Impact of FinTech on Banking. *European Economy, Banks, Regulation and the Real Sector – SSRN Electronic Journal* pp. 97. Retrieved from
https://european-economy.eu/2017-2/the-impact-of-fintech-on-banking/

Vives, X. (2019). Competition and stability in modern banking: A post-crisis perspective. *International Journal of Industrial Organization, Volume 64*, Pages 55-69. Retrieved from https://doi.org/10.1016/j.ijindorg.2018.08.011.

Wang, Y., Xiuping, S., & Zhang, Q. (2021). Can fintech improve the efficiency of commercial banks? An analysis based on big data. *Research in International Business and Finance, 55*. Retrieved from https://doi.org/10.1016/j.ribaf.2020.101338

Williams, S., Nelson, B. (2015). Millennial Banking Customers: Two Myths, One Fact. Business Journal, Gallup Incorporated. Retrieved from https://news.gallup.com/businessjournal/187364/millennial-banking-customers-two-myths-one-fact.aspx

Wood, J. (2018). Generation Z will outnumber Millennials this Year. World Economic Forum. Retrieved from https://www.weforum.org/agenda/2018/08/generation-z-will-outnumber-millennials-by-2019/

Yin, H. (2020). The Impact of Fintech on Systemic Financial Risk - Empirical Research Based on Time Series Data. *10th International Economics, Management and Education Technology Conference (IEMETC 2020)*. Retrieved from https://www.clausiuspress.com/conferences/AETP/IEMETC%202020/IEMETC2020003.pdf

Yip, A.W.H., Bocken, N.M.P. (2018). Sustainable business model archetypes for the banking industry, *Journal of Cleaner Production, Volume 174*, Pages 150-169. Retrieved from https://doi.org/10.1016/j.jclepro.2017.10.190.

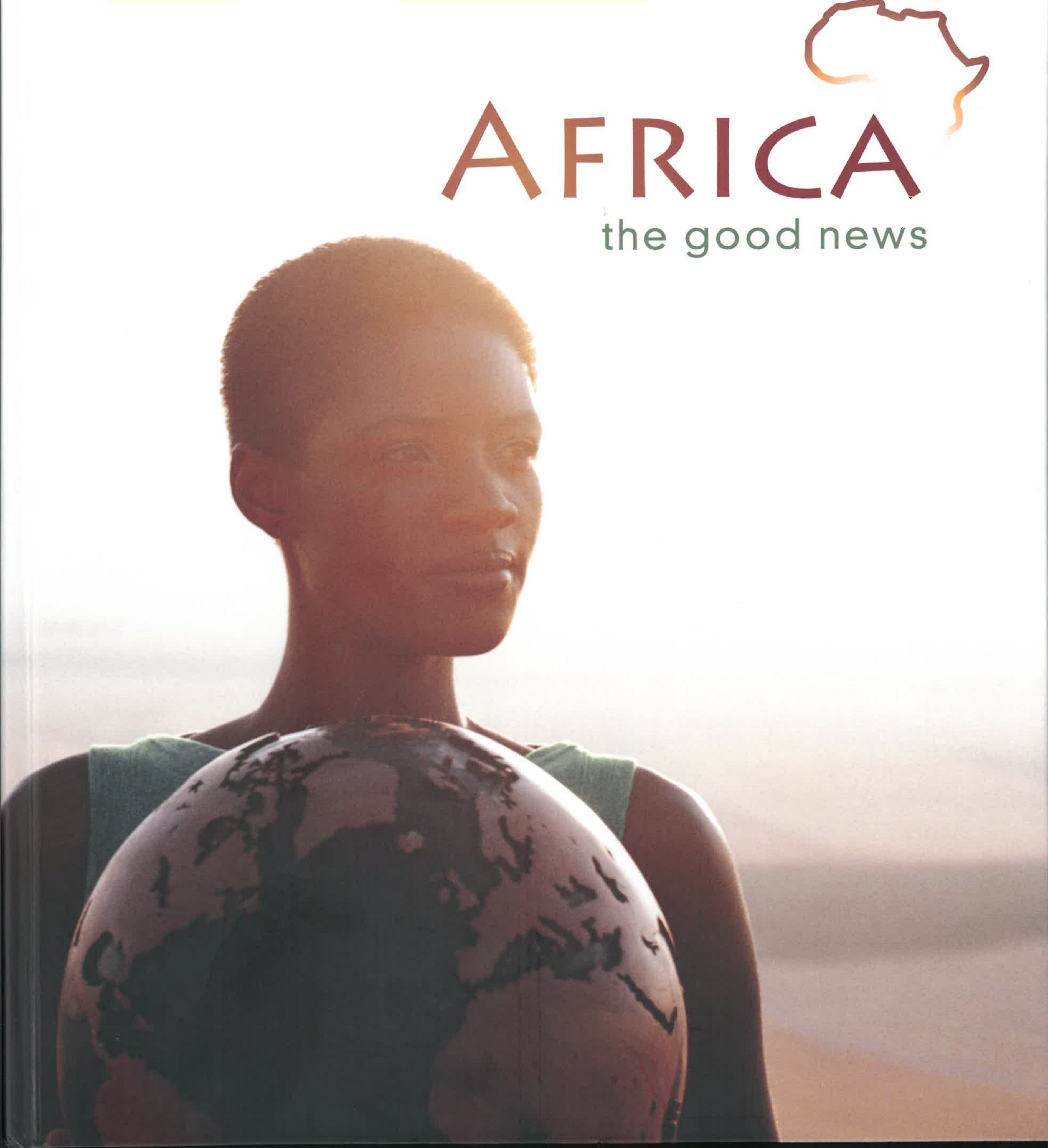
Zandamela, D.H. (2008). *Banking and Finance: Reaching the Unbanked*, Africa The Good News, South Africa – South Africa: The Good News, Sandton, South Africa.

Zandamela, D.H. (2009). *Investigating the Global Financial Markets turmoil and banking crisis of 2008 and the strategic management implications for First National Bank of Botswana Limited*. Dissertation for Master of Science in Strategic Management. University of Derby.

Zetzsche, D., Buckley, R., Arner, D., Barberis, J. (2017). From FinTech to TechFin: The Regulatory Challenges of Data-Driven Finance, *New York University Journal of Law and Business*. Forthcoming, European Banking Institute Working Paper Series 2017 - No. 6. University of Hong Kong Faculty of Law Research Paper No. 2017/007, University of Luxembourg Law Working Paper No. 2017-001. Retrieved from http://dx.doi.org/10.2139/ssrn.2959925

# Appendix 1 – Africa the Good News

*Follows on the next page*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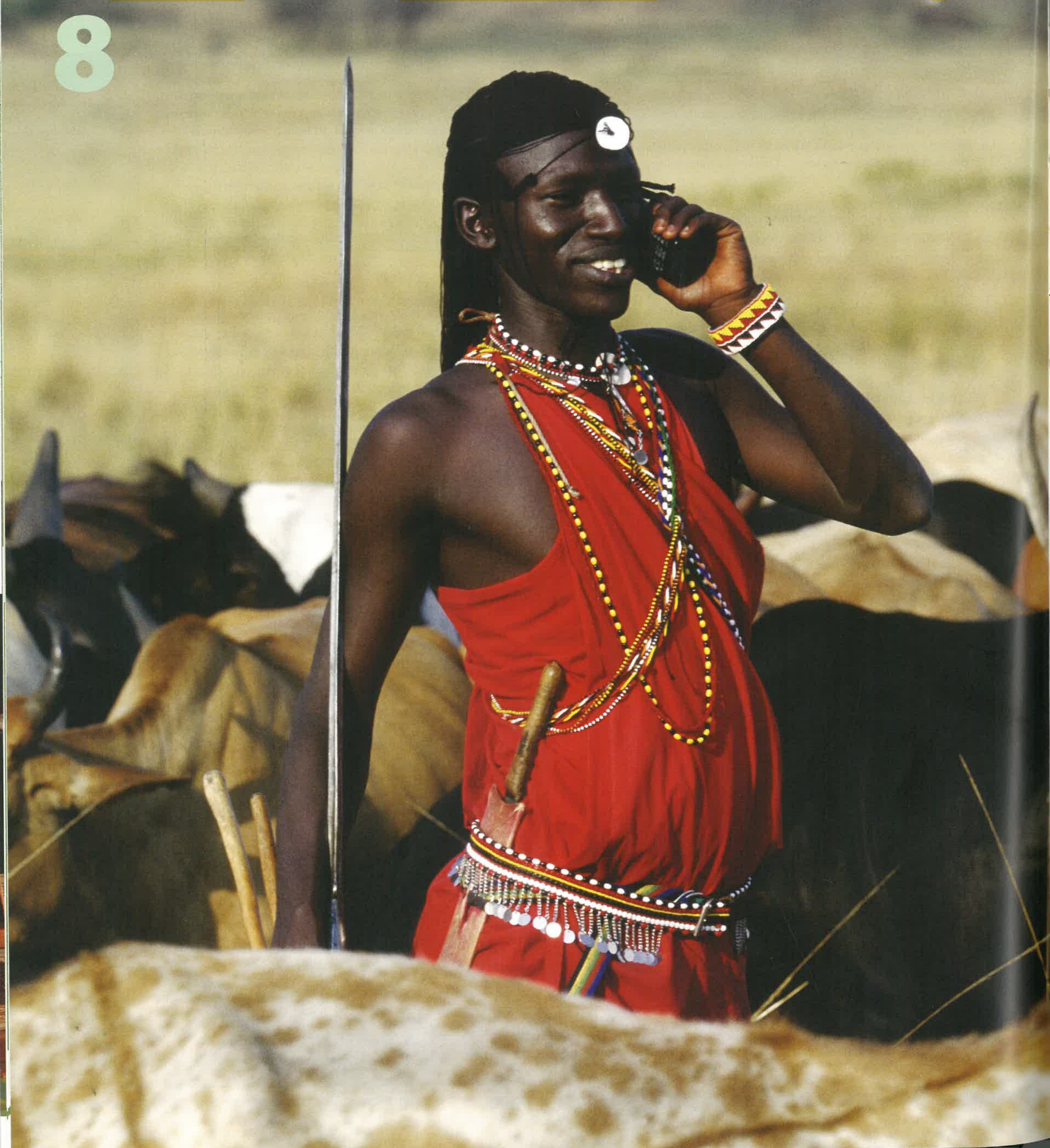
### NOTE FROM THE EDITORS

This book comprises contributions from 43 different authors and the views expressed in the various chapters do not necessarily reflect the views of the editors or the sponsors. Where the editors have made additions this is clearly noted and may not reflect the views of the author.

In addition, authors have used different sources of information in putting together their chapters and this has sometimes resulted in contradictory views and perspectives. In order to respect the editorial integrity of each author and encourange debate, we have allowed this. Many facts were also difficult to verify as information and research on the continent is limited, sometimes incomplete, and often dated. Please inform the publishers of any inaccuracies.



# AFRICA: CONTINENT OF GROWTH AND OPPORTUNITY

Investing in Africa is not charity, it makes business sense. With a sizeable and youthful population that is largely un-serviced, and a growing consumer class, Africa presents a lucrative market for companies that take time to understand it and meet its demands. Businesses that are operating on the continent are realising this market's potential and expanding. And Africa is making it clear to the rest of the world that it does not want to be left behind in the global marketplace – the growth of new technologies in Africa, such as cell phones, have outstripped all expectations. Africans are embracing new technologies in ways not seen elsewhere in the world and are adapting them to meet specific needs, in many instances leapfrogging the rest of the world in terms of innovation.

# BANKING AND FINANCE: REACHING THE UNBANKED

**Danny Zandamela** | Chief Executive Officer,
First National Bank of Botswana Limited

The African continent is one of rich diversity and one marvels at the considerable potential to grow and develop her many peoples – financially and economically. In Africa, we have the resources to raise the standard of living and to provide food security to all the people of our continent and beyond; what we need to cultivate is the belief that we can indeed do this, and then we must set about doing it.

The political will of Africa's leaders to provide the necessary framework that guides legislation toward creating the enabling environment is critical. The entrepreneurial spirit of our people will then be given the space to blossom and bear the fruit we seek. This has started to happen!

**Banking in Africa: the big picture**

Access to finance and the levels of financial growth and development have a direct bearing on the rate of real economic growth and real incomes of a country; as a result Africa's ability to deepen her financial sector is critically important for sustainable real growth.

The relatively high cost to increasing physical representation by a bank or financial institution inhibits its ability to rapidly deploy access to services, thereby limiting the speed of economic growth potential.

Banking penetration levels across Africa vary greatly by region and country; but generally most urban areas have a much higher representation by banks and other financial institutions – upwards of 60%. However, outlying and rural areas with sparse populations make physical representation a challenge and penetration levels are estimated to be below 20%.

A recent report produced by the United Nations Environment Programme Finance Initiative tells us that only 5% of Malawi's population is banked. In Senegal the figure is 7%. Research by the World Bank suggests that Ethiopia, Tanzania, Madagascar, Namibia and Botswana have amongst the lowest bank penetration of 99 countries surveyed. (However, the research did not separate urban from rural penetration and these countries also have amongst the lowest population density statistics in the world, which does give a distorted view).

Automated Teller Machines (ATMs) are also not extensively located across Africa, especially in the less urbanised areas and are virtually non-existent in the rural areas.

**That said, countries like South Africa and increasingly Nigeria have developed ATM networks. According to a PricewaterhouseCoopers survey released last year South Africa had around 15 600 ATMs at 2006 end and the number is projected to climb to 20 500 by 2010. While the Nigerian banking sector had installed only 1 200 ATMs by 2006, this value is expected to swell to 5 700 by 2010.*

**Innovative solutions to unique challenges**

As a result of the unique access challenges facing the continent, new and innovative methods are being developed by banks and other financial institutions to achieve low cost solutions suited to sparse population densities.

In Kenya, Equity Building Society, a microfinance institution with 252 000 predominantly rural dwelling, low- to mid-income earning customers, has pioneered an innovative method for reaching widely dispersed clients. Equity has developed mobile banking vehicles that are part of an outreach programme into the rural areas, providing almost all the services that would normally be available through their branch network, with the customer paying a small fee for this service. Equity's success has been tangible with a 50% to 70% growth rate achieved by the bank over each of the last eight years.

In Botswana, First National Bank (FNB) is a pioneer in improving access to banking services with the successful introduction some years ago of a unique device called a mini-ATM which can be located substantially further from the established bank branch network than a conventional ATM, bringing encashment facilities to very remote areas across the country.

With great foresight, as far back as 1999, the Reserve Bank of Malawi established a division (now a subsidiary company) called Malswitch which has developed new banking products and services linked to smartcards using innovative biometric technology which ensures that customers' transactions are secure. With the majority of Malawi's population being unbanked, this solution allows for the efficient delivery of services coupled with the efficient use of resources and reduced cash holdings. Further to this, greater technology advancement such as Real Time Gross Settlement and Electronic Clearing House solutions are being developed.

IN BOTSWANA, FIRST NATIONAL BANK (FNB) IS A PIONEER IN IMPROVING ACCESS TO BANKING SERVICES WITH THE SUCCESSFUL INTRODUCTION SOME YEARS AGO OF A UNIQUE DEVICE CALLED A MINI-ATM WHICH CAN BE LOCATED SUBSTANTIALLY FURTHER FROM THE ESTABLISHED BANK BRANCH NETWORK THAN A CONVENTIONAL ATM, BRINGING ENCASHMENT FACILITIES TO VERY REMOTE AREAS ACROSS THE COUNTRY

Nigeria has seen the introduction of an innovative scheme to fund the growth of the small, medium and micro enterprise (SMME) sector through equity investment. The programme, promoted by the Central Bank of Nigeria, is known as the Small and Medium Industry Equity Investment Scheme and it requires that all banks set aside 10% of pre-tax profits towards an equity fund to support access to finance by small businesses.

The establishment of stock exchanges across Africa is another important step in the development of financial sophistication across the continent with the mobilisation of investment activity and capital raising opportunities. **In 1989, only five sub-Saharan African countries had stock markets but today there are over 20 stock exchanges in Africa.*

**Mobile telephony bridges the gap**

Mobile commerce is widely seen as the vehicle that will enable the successful delivery of banking products and services to Africa's multitude of unbanked and under-banked.This is due to existing high cellular phone penetration. Cellular phone penetration is estimated to be at levels over 50% in most African countries with some estimates suggesting penetration of over 80%, especially in sub-Saharan Africa. As such, a number of innovative payment and transfer solutions have been developed in African countries in west, east and southern Africa.

An example of a successful non-bank mobile commerce solution has been developed in Kenya. Called M-Pesa, it allows for various functionalities such as the transfer of funds between people and businesses, the ability to effect third party payments and the viewing of statements. **Kenya is the first country in the world to use this service, which is offered in partnership between Safaricom and Vodafone. M-Pesa is available to all members of the public (even if they do not have a bank account or a bank card).*

## FAST FACTS

- International banks from overseas generate much higher returns in Africa than in almost any other of their markets with returns on equity in excess of 50% being achieved.
- In 2007 the Industrial and Commercial Bank of China (ICBC) purchased a 20% stake in Standard Bank of South Africa. At the time, the transaction was the largest international investment completed by a Chinese company.
- Mobile banking technology in Africa is the most advanced and innovative in the world. Source: DFID
- Non-traditional banks such as WIZZIT, MTN Banking and Safaricom's M-PESA allow new business models and are proving successful in reaching the unbanked and under-banked.
- It is estimated that remittances sent home through formal channels to developing countries by migrant workers exceeded $301billion in 2006, outgrowing foreign direct investment and official development aid. Source: African Banker Magazine/IFAD
- In 1989, only five sub-Saharan African countries had stock markets. Today, there are over 20 stock exchanges in Africa. Between 1992 and 2002, the capitalisation of African stock markets more than doubled from $113 billion to $245 billion. Source: africaninvestmenthorizons.com

*Other non-traditional banks that are providing alternatives to those that do not have access to bank branches include WIZZIT, a start-up officially launched in South Africa in 2005 with plans to expand into the continent, and MTN Banking.*

Botswana has also received mobile banking capability with the launch in 2006 of a bank-owned solution. First National Bank of Botswana commenced its FNB Cellphone Banking with multi functionality to pay funds across banks from an FNB account, pay third parties, transfer funds between the customer's FNB accounts, receive real-time confirmation of transactions on FNB bank accounts, purchase utilities such as pre-paid electricity, purchase pre-paid airtime and view statements in real-time using any cellular network at anytime.

**Writing in the* African Banker *magazine, Dr Mohan Kaul, director general of the Commonwealth Business Council, points out that Africa can actually look to export these innovative technologies to meet the challenges of providing services to the unbanked, even in the most advanced of nations. "Interestingly and perhaps surprisingly, the population of the unbanked in the US exceeds that of both South Africa and Kenya, and could potentially be addressed through business models that have proven successful in those markets."*

KENYA IS THE FIRST COUNTRY IN THE WORLD TO USE THIS SERVICE, WHICH IS OFFERED IN PARTNERSHIP BETWEEN SAFARICOM AND VODAFONE. M-PESA IS AVAILABLE TO ALL MEMBERS OF THE PUBLIC (EVEN IF THEY DO NOT HAVE A BANK ACCOUNT OR A BANK CARD)

**Growing international interest**

There is a growing international focus on emerging market economies. Africa is no exception.

A great deal of new interest has come from the oil-rich investors from the Middle East. Much of the wealth that has been created from oil revenues is being directed into vast investment portfolios across various sectors. The recent licensing and establishment in Kenya of two banks from the Gulf, First Community Bank and Gulf African Bank, is one such example.

India is also pouring huge investment into Africa. Bank of Baroda has an extensive presence on the continent having first landed in Kenya in 1953. Its first West African branch was recently opened in Ghana. In addition, credit lines are being offered by Indian institutions to counterparts in Africa, such as the recent $14.5 million line from Indian Exim Bank to Gabon for an affordable housing project.

Europe continues to give attention to Africa; recent transactions in the banking arena have seen Barclays Bank plc return to some countries in Africa with more focus, pouring huge investment into a number of countries including Zambia, Mozambique and South Africa. Francophone Africa has been dominated by large French banks for many years and Lusophone Africa has historically been dominated by large Portuguese banks.

China has had its eye on Africa for a long time and in 2007 the largest bank in the world by market capitalisation value, the Industrial and Commercial Bank of China (ICBC), purchased a 20% stake in Standard Bank of South Africa. At the time, the transaction was the largest international investment completed by a Chinese company.

**As has been said on more than one occasion, "the smart money is coming to Africa".*

CHINA HAS HAD ITS EYE ON AFRICA FOR A LONG TIME AND IN 2007 THE LARGEST BANK IN THE WORLD BY MARKET CAPITALISATION VALUE, THE INDUSTRIAL AND COMMERCIAL BANK OF CHINA (ICBC), PURCHASED A 20% STAKE IN STANDARD BANK OF SOUTH AFRICA. AT THE TIME, THE TRANSACTION WAS THE LARGEST INTERNATIONAL INVESTMENT COMPLETED BY A CHINESE COMPANY

**Banking unusual**

The African banking and finance scene holds much opportunity for the committed, visionary player who realises and accepts the challenges presented by the population density issues described in this report. In my opinion, the situation across the continent is not one of "banking as usual" but one of banking unusual. Innovation is necessary to develop the products, services and delivery channels required to address and substantially overcome the challenges presented by the continent.

Africa's population is young and continues to grow, increasing demand for food security, employment and economic growth. Technology is the most important driver of change and transformation in the banking and finance sector. National authorities need to facilitate an enabling environment for the development, growth and support of the small, micro and medium enterprises. Innovation combined with entrepreneurship is the best way to address issues of unemployment and economic activity.

As NEPAD seeks a fairer deal from the world for Africa an increasing number of international banking and finance players are looking to do business in Africa. While they may relish claiming their share of the attractive returns and margins that are still available, it is the African players that are better placed to take up the development space as they already have the natural affinity for the people of the continent. Courage and speed is needed to explore the opportunities quickly.

Take for example Access Bank in Nigeria which has just announced their entrance into the Zambian market with the intention of establishing 50 new branches in their first trading year. If Africa is to stand on its own two feet we need more of this – African banks for Africa!

** Editor's additions*

DANNY ZANDAMELA

Danny Zandamela was born in Johannesburg, South Africa but grew up in Swaziland, Zambia and spent some university time in Mozambique. His banking career spans 25 years working at 3 banks in 4 African countries. He is a member of the Young President's Organisation and recognised as the 2007 Member of the Year (Africa) with Madison's Who's Who.

## INTRA-AFRICAN INVESTMENT ON THE RISE

Intra-African investment activity is also taking place across various sectors, including the banking and finance arena.

For example:

- South African-based microfinancier Blue Financial Services has expanded into nine African countries to offer its suite of micro loans and other services.
- In 2008 Malawi-based First Merchant Bank expanded across border for the first time to open up as Capital Bank in Botswana.
- South African-based FirstRand Bank Group, trading under various distinct brands such as First National Bank, WesBank and Rand Merchant Bank, has also taken its business across borders into a number of countries in Africa.
- Nigerian banks have joined in the expansion drive with Access Bank acquiring operations in a number of African countries simultaneously, following a 2007 decision to expand across the continent.

The growing trend for international and African banks, and financial institutions to expand across the African continent heralds a new era of confidence in the continent, and highlights the attractiveness of the returns that investors are able to make on the continent. Returns earned on the continent are amongst the most attractive, with many African stock exchanges featuring as top performers in annual global rankings.

# Appendix 2 – Permission to use content

*Follows on the next page*

Re: Permission to use content - 2008 article - Sent

Message

Delete Reply Reply to All Forward Meeting Attachment Move Junk Rules Read/Unread Categorise Follow Up

## Re: Permission to use content - 2008 article

Danny Zandamela <danny@[redacted]co.za> Today at 14:35

To: Steuart

Hello Steuart,

Thank you for your prompt response and for the permission approval, this is much appreciated.

All the best to you too!

Kind regards,

Danny Zandamela

---

**From:** Steuart <ste[redacted]>
**Date:** Thursday, 09 September 2021 at 10:07
**To:** Danny Zandamela <danny@[redacted]>
**Subject:** Re: Permission to use content - 2008 article

Hi Danny
Permission granted! Good to hear from you.
Best of luck

Steuart Pennington, **CEO**
**South Africa - The Good News**
ste[redacted]
www.sagoodnews.co.za Subscription link:
https://confirmsub[redacted]
Mobile: [redacted]
P O Box [redacted]

*"Being democratic is not enough, a majority cannot turn what is wrong into right. In order to be considered truly free, countries must also have a deep love of liberty and an abiding respect for the rule of law."*
**Margaret Thatcher**

---

**From:** Danny Zandamela <danny@[redacted]>
**Date:** Thursday, 09 September 2021 at 1:58 AM
**To:** <contact@[redacted]>
**Subject:** Permission to use content - 2008 article

Dear Steuart,

I trust that you are well and keeping safe during these strange times?

I don't know if you recall – in 2008 FNB was one of the sponsors of the Africa the Good News hardcover publication and I was requested by our then FNB Head of Brand, Derek [redacted] to author a piece titled *Banking and Finance: Reaching the Unbanked*, which appeared on page 93 of that publication. At the time I was CEO of First National Bank of Botswana Limited.

I am now completing my doctoral thesis on the benefits of open banking to consumers, banks and FinTech companies and I hereby kindly request your permission to cite the article that I had written and to attach a copy of it as an annexure to the thesis document.

Thanking you in advance.

Kind regards,

Danny Zandamela

# Appendix 3 – Participant Consent Form

*Follows on the next page*

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Sheffield Hallam University

# PARTICIPANT CONSENT FORM

**TITLE OF RESEARCH STUDY:**

What are the expected benefits to traditional banks, FinTech companies and consumers through their participation in Open Banking.

*Please answer the following questions by ticking the response that applies*

| | YES | NO |
|---|---|---|
| 1. I have read the Information Sheet for this study and have had details of the study explained to me. | ✓ | ☐ |
| 2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point. | ✓ | ☐ |
| 3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher. | ✓ | ☐ |
| 4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet. | ✓ | ☐ |
| 5. I wish to participate in the study under the conditions set out in the Information Sheet. | ✓ | ☐ |
| 6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes. | ✓ | ☐ |

**Participant's Signature:** [redacted] **Date:** 30/3/2021

**Participant's Name (Printed):** A [redacted] A

**Contact details:** +256 [redacted]

a[redacted]com

**Researcher's Name (Printed): Danny Zandamela**

**Researcher's Signature:** [redacted]

**Researcher's contact details:**
Danny Zandamela
P O Box [redacted] Durban, KwaZulu-Natal, South Africa, 4420
Email: dan[redacted]co.za
Mobile:+27 [redacted]

**Please keep your copy of the consent form and the information sheet together.**

# Appendix 4 – Participant Information Sheet

*Follows on the next page*

Appendix 4

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**Participant Information Sheet**

**University:**

**Sheffield Hallam University, UK,** *in partnership with*
**Business School Netherlands.**

## Doctoral Research Project:

What are the expected benefits to traditional banks, FinTech companies and consumers through their participation in Open Banking?

## Legal basis for studies:

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of **public tasks that are in the public interest.** A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study has been agreed under university ethical approval procedures. Further information at https://www.shu.ac.uk/research/ethics-integrity-and-practice

## Opening Statement

You are hereby invited to participate in qualitative academic research to investigate the benefits of open banking to traditional banks, FinTech companies and consumers. This is a recent development in the financial services sector and is the subject of much debate and introspection in the banking industry particularly.

## Why have you asked me to take part?

You are a leader in the industry and would be knowledgeable of the key discussions and strategies around this key transformation in the industry. You would be an influencer of this process and your views would therefore be important to build up the body of academic literature in this new area. This is the basis for your selection as a participant.

## Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question. Your identity will not be revealed in the output of the study.

## What will I be required to do?

You will be required to discuss your views and experiences regarding the research topic. Some guiding questions will be posed to give some directional structure to the discussion.

## Where will this take place?

The interview will take place by way of video conference between the researcher and the participant using a platform such as Zoom or Skype. A mutually agreed date and time would be set aside for the session. The discussion will be recorded and transcribed by the researcher.

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## How often will I have to take part, and for how long?

Typically an interview would be held for about an hour to a maximum of about 90 minutes. This would be the extent of your participation, however, if you would be available for follow up questions during a second session this would be greatly appreciated.

## Are there any possible risks or disadvantages in taking part?

There are no risks or disadvantages that are apparent to taking part in this research, especially as the submissions shall be anonymised with participants not individually identifiable in the final thesis.

## What are the possible benefits of taking part?

The importance of being a part of the process of contributing to academic literature could be a benefit to the participant's self-esteem and may assist in further shaping one's viewpoint and beliefs through the thought out articulation of personal experiences and views.

## When will I have an opportunity to discuss my participation?

Should any unanticipated effects take place through the process then a short debriefing session would be advisable to correct this. Follow-up contact would be made in such an event.

## Will anyone be able to connect me with what has been recorded and reported?

No, your submission is held in strict confidence according to the Ethics Regulations of the university and GDPR. Furthermore, coding software is used (NVivo) to codify all submissions so as to de-personalise the collected primary data, showing the data as trends defined by groupings, with no names of participants involved at all.

## Who will be responsible for all the information when the study is over?

The researcher maintains responsibility for the data according to a Data Management Plan which is overviewed by the Director of Studies. The data shall remain encrypted in an enterprise-grade secure cloud based Vault storage system which is access protected by a 2 factor authentication process. The data is also registered with the SHU Research Data Archive at the university.

## Who will have access to it?

Access is limited to the researcher and authorised personnel who manage data services for Sheffield Hallam University.

## What will happen to the information when this study is over?

The raw data shall be kept for a maximum of 5 years according to the University's data storage regulations. At the end of this period the data will be destroyed. The raw data shall not be passed on to other people or used in other studies.

## How will the findings be used?

The findings are to be used in the production of a doctoral thesis for the **Doctor of Business Administration** degree.

Appendix 4

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## How long is the whole study likely to last?

The research study concludes in May 2021.

## How can I find out about the results of the study?

A request may be placed with the researcher to share his final findings with the participant. A copy of the final thesis document will be placed in the Sheffield Hallam University Research Archive which will, after a period of time, be publicly available.

## Any further questions or clarification

Should you have any further questions or seek any additional clarification this can be addressed at the end of the session(s).

**Researcher Details:**
Danny Zandamela
Email: da[redacted].co.za or da[redacted]@[redacted].shu.ac.uk
Mobile: +27 83 201-0013

**Director of Studies:**
Dr Richard Breese
Senior Lecturer, Sheffield Hallam University
Email: [redacted]@shu.ac.uk

| **You should contact the Data Protection Officer if:** | **You should contact the Head of Research Ethics (Professor Ann Macaskill) if:** |
| --- | --- |
| • you have a query about how your data is used by the University<br>• you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)<br>• you would like to complain about how the University has used your personal data<br><br>[redacted]@shu.ac.uk | • you have concerns with how the research was undertaken or how you were treated<br><br>[redacted]@shu.ac.uk |
| Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT<br>Telephone: 0114 225 5555 | |

# Appendix 5 – Reference codes – Banking Business Model Change

*Follows on the next page*

Files\\Bank Exec 1 - § 1 reference coded [ 0.18% Coverage]

Reference 1 - 0.18% Coverage

I think payments is probably going to drive more changes in banking than anything else.

Files\\Bank Exec 2 - § 8 references coded [ 4.76% Coverage]

Reference 1 - 0.28% Coverage

what we've done is we've mapped out a matrix of the different roles that we as a bank could play in a marketplace type econom

Reference 2 - 0.52% Coverage

But then as we start to move across to say, OK, well, there is a bank that is offering non-traditional banking products and potentially that could be via alternative channels and it could be white labeled products, you know

Reference 3 - 0.42% Coverage

And Capitec just done it right? I now offer home loans, but they're actually not my product. You'll come and buy from me. But actually the provider in the background is SA Home loans

Reference 4 - 0.75% Coverage

And then I think there is the converse of this where you can then offer your own APIs on a marketplace. And so we can see already in the banking industry that all the banks are doing this. They all have their own marketplaces where they are publishing or let me not say all, you know, Nedbank has it, we've got it, Standard Bank has it

Reference 5 - 0.43% Coverage

So if if a real estate agent wants to do a indicative offer or a indication of eligibility for a loan, they could use our API embedded in their website and we don't even need to get involved

Reference 6 - 0.93% Coverage

But I do think that some of the banks and I chatted to one of the European banks a couple of weeks ago, about a whole range of topics, I think that the banks are seeing that this is now been a catalyst for a different way of thinking. And I think the the business models that potentially could emerge is it could be an intermediate. So I own a marketplace. And every time you call my API, I'm going to take one cent.

Reference 7 - 0.48% Coverage

And so I think if you talk about the business models, it is about what part of the value chain you want to own? Banks own it endto-end today for the most part. But do they want to maintain that ownership into it end?

Reference 8 - 0.96% Coverage

But perhaps, you know, lending or transactional banking goes to someone else or even subsets of that value chain. And I believe the banks will be forced to make this choice. You know, the journey's started. And so I think PSD2 probably highlited different business models and those that are most reluctant and slowest to move will lose the battle, those that quickly understand that this is where the world is going.

Files\\Bank Exec 3 - § 5 references coded [ 3.75% Coverage]

Reference 1 - 0.67% Coverage

But they're going to have to change the way that they approach banking. They're going to have to think the incumbent banks are going to have to think a lot more like tech companies.

Reference 2 - 0.42% Coverage

They're going to have to change their organisational design the way that they are structured and put together.

Reference 3 - 0.69% Coverage

I'm sure so I think we are going to become platform-based businesses so complete the digital execution digital channel app based executions, so banking will be will be sold via an app,

Reference 4 - 0.64% Coverage

The need for physical branches will become less. I think they'll still need branches for a long time. Branches will be will become less. It will become a digital execution.

Reference 5 - 1.33% Coverage

I see, South Africa is already killing cheques. Cash will disappear. It'll become digital payments; app based digital-type payments. So, yeah, I think the old way of doing banking through the physical with old bills of exchange like cash and cheques will disappear. Digital execution will be the way forward. Physical points of presence will disappear.

Files\\Bank Exec 4 - § 3 references coded [ 0.90% Coverage]

Reference 1 - 0.25% Coverage

But obviously the banks have, still have the, the huge infrastructure of the past, the high street space.

Reference 2 - 0.25% Coverage

banks for the future and anyone who doesn't adapt to the new ways of banking, they would just they'll just die.

Reference 3 - 0.40% Coverage

So they leave the retail banking and small business to MNOs and focus on more structured investment banking and still survive and reduce the workforce and infrastructures.

Files\\Bank Exec 5 - § 3 references coded [ 3.67% Coverage]

Reference 1 - 1.15% Coverage

So I guess you've got to philosophically pick one of those three broad options and then transform yourself to make the most of it. And I guess the ones that are going to push back against it are obviously going to be subject to free market forces and probably find themselves in the dinosaur age, then a bank like Nedbank that then decides, well, they can be a very good utility, you know, are going to be subject to a race to the bottom for a very commoditised service, which is not a bad thing
if you can build the right operating model around that.

Reference 2 - 0.78% Coverage

So the benefit, I think, is dependent on its maturity and certain capabilities that the disadvantage, I think, that will occur is where banks in that product centric architecture have not consolidated their data sources and any request for information or integration actually creates a lot of cost and friction internally just to comply with the legislation

Reference 3 - 1.73% Coverage

And how does the bank reimagine its role in being the the partner of that customer in their life journey and the different life stages, offering financial products and services, not just something that they think the customer wants, but something that the customer genuinely understands they need because they've got an aggregator combining their data from other places as a result of which the bank can now produce products and services that are far more contextual and relevant and valuable to them, as opposed to keeping the customers ransom or holding them to ransom because they've got all that data. So yeah, benefits, I think, will require a repositioning. Disbenefits will be cost and friction and infrastructure that is bolted onto the existing architecture just to comply with the legislation

Files\\Bank Exec 6 - § 1 reference coded [ 1.14% Coverage]

Reference 1 - 1.14% Coverage

OK, I'll go with the following - it changes, consumer habits and
technology advancements. It has the ability to transform financial services. It forces and drives low value, real time electronic payments.

Files\\Bank Exec 7 - § 6 references coded [ 3.72% Coverage]

Reference 1 - 0.57% Coverage

the traditional banking business models, I think the regulations are skewed towards banks because some regulators in many markets have not necessarily got their hands firmly around the fintech topic. I think it's such a rapidly developing topic that that for them to keep up with that, it's very difficult

Reference 2 - 0.66% Coverage

all the measures of solvency, capital, liquidity, etc. that banks have to comply with, your MNOs don't have to comply with. So MNOs can can keep vast amounts of of trust, trust moneys with with a bank and they they they use that liquidity, which is your money, basically, because because you've put that in your wallet through your bank and they earn a turn on it.

Reference 3 - 0.66% Coverage

Very interesting. I think that banks cannot step back from the perceived threat. I think that they should take an attitude of of being complimentors as opposed to adversaries. So and the reason why I say that is that things are happening so fast, tech spend is probably most likely now the biggest ticket in any bank. Once upon a time, it was branches now it's tech,

Reference 4 - 0.93% Coverage

Vodacom's not going to lend out their own money, but that could aggregate or get an aggregator, a fintech aggregator to to to do these small loans across the market based on analytics, on your phone and usage that gives you, Danny, a quick R200 quick, quick loan, for seven days. But who's going to hold the risk? The bank will hold the risk behind the scenes. Similarly, if you don't, a fintech won't have a banking licence to hold a deposit, therefore, they can stand in the chain and the bank can hold the deposit.

Reference 5 - 0.68% Coverage

So I think that the role of banks is very important, but as a complementor and not as an aggressor, because because I think that that you will always just be running and
wasting wasting valuable IT spend or technology spend trying to compete versus trying to to grow a market, in fact, exponentially, because you can't reach rural Tanzania. But the cell phone companies can.

Reference 6 - 0.21% Coverage

It's going to take a few years to peel back branches and convince their clients etc on different ways of banking.

Files\\Bank Exec 8 - § 4 references coded [ 2.51% Coverage]

Reference 1 - 0.94% Coverage

so if you can imagine a platform where all the banks are - they are there, the data is probably already been authenticated by an authentication authority, which is a utility maybe on the on the on the platform. So you don't have to take your documents to a bank. So the bank has to rely on the authentication authority or the compliance of the regtech provider on the platform. That your data - the data that you own about yourself, about your I.D. stuff, all of that stuff that we spend a lot of time dealing with in the banks is gone.

Reference 2 - 0.56% Coverage

If all the authentication and all my data is available, it can be independently authenticated. And then I think that that shift is is almost impossible for those of us who are the
the sort of traditional bankers to to absorb and envision a situation where the bank is not king and essentially the financial system is.

Reference 3 - 0.44% Coverage

So the benefits for the banks is really, in my own opinion, the fact that we are being forced to move to the other side of the equation, not sit behind the counter in the old traditional sense where the customer comes to your desk to beg for something.

Reference 4 - 0.57% Coverage

But for banks, I think it's trust I think there's still a space within banks where traditional banks can still play into the psychographical changes that are taking place and participate in the bigger financial literacy domain and become actually knowledge workers and disseminators of knowledge to the public.

Files\\Fin Exec 1 - § 3 references coded [ 0.48% Coverage]

Reference 1 - 0.19% Coverage

some core aspects of the bank's business are going to change and are going to change, both from new competitors entering, but also new competitors offering new business models.

Reference 2 - 0.17% Coverage

So the point is, what do banks do? Well, they keep your money safe. They have a deposit, you keep a deposit, they will extend a loan to you when you need a loan

Reference 3 - 0.12% Coverage

Banking will change the next five years that you'll be able to get loans as a consumer from multiple sources.

Files\\Fin Exec 2 - § 2 references coded [ 1.46% Coverage]

Reference 1 - 0.72% Coverage

So you'll see a turnaround in traditional banks, especially the bigger ones, where now move to the income statements to a non interest income, we'll see a sharp fall in that, let's say, a flattening of that. And then they have to find other ways of income and maybe move back to the way traditional banking was to cover their losses or else I think we will see a shrinking of those big banks so we could create gaps in the market for other banks to come.

Reference 2 - 0.74% Coverage

So I think that we'll see a complete shift and I think they're going to struggle to find to find other ways of of compensating for the income loss, because such a large amount of their income is based on non interest income, that anybody that can offer the same service at a better price, or even better at no charge, will get that business. But they don't necessarily get the deposit. But those guys will be looking at different business models altogether.

Files\\Fin Exec 3 - § 4 references coded [ 1.42% Coverage]

Reference 1 - 0.20% Coverage

They are doing it because they see the opportunities, the business model and what they can do with the fintechs also.

Reference 2 - 0.27% Coverage

So they could actually not just be a provider of apps, but also be a consumer of APIs, and they could become one of the aggregators and really benefit from it

Reference 3 - 0.49% Coverage

So in summary, if the banks just do the regulatory part only because the investment to do regulatory is quite
substantial, if they stop rate regulatory and not think about what real benefits they can bring to the customer, they could be potentially putting themselves at risk.

Reference 4 - 0.46% Coverage

The they they deal with a bit of apprehension because if you think of only I'm giving away my data, then all of a sudden it's a risk. But if you look at it as I am giving away my data, but I also have access to everyone else's data, then all of a sudden it's an opportunity.

Files\\Fin Exec 4 - § 4 references coded [ 4.86% Coverage]

Reference 1 - 0.77% Coverage

OK, I think the impact is going to be extensive and has already been extensive, essentially PSD2 has enabled open banking, which is the, obviously the data sharing and the more more and more than just the data sharing it's giving the consumers ownership of that data that their data, which is a complete sea change to how the banks have been viewing it and quite a few of them still are

Reference 2 - 0.52% Coverage

So I've not explained that very well, but essentially is using the data insights for hyperpersonalization to make it a real value proposition for the customer,
but also to pass on the costs of the rewards to the brands that are benefiting from that exposure.

Reference 3 - 1.20% Coverage

I think, yeah, I think I think a bank will be I'd like to see the banks being an enabler of more of a lifestyle, Eco-System. So I would say I think that they are they are still going to hold, I think I think the banks largely are still going to hold a lot of the same positions and roles that they've they've always had, because you've got to have that that treasury, you've got to have all of the compliance aspects and all the rest of it. So I think they're still going to be the ones that are holding the reserves of money and dishing it out and doing all of the cross-border staff and all the currency type stuff.

Reference 4 - 2.37% Coverage

But I think we won't see them as much as a brand. I don't think people will have the same relationship with them that they currently do. I don't think the bank would be the first person you'd turn to for a loan. I don't think the bank would be the first person you'd automatically go to, to provide you with a card, so I think that the I don't think they'll disappear. I think that I think that they will adapt. They won't allow themselves to become just a pipe, a utility. But I think that you'll see many more, many more sort of partnership relationships and ecosystems emerging, and I think that the the bank may well be quite dominant, as a brand within that, but the experience for the customer will probably be more of a marketplace personalized platform with insights coming from different ways of analyzing their data, different A.I. and so forth, so I think we'll we'll see it. I think we'll see sort of more super apps emerging and a bank will be part of that, or that may be the driving force of the super app, but I think that it'll be more of a team effort in terms of an ecosystem of different players. I don't see any one bank having that whole offering or relationship with the customer.

Files\\Fin Exec 5 - § 8 references coded [ 4.56% Coverage]

Reference 1 - 0.56% Coverage

And now if the consumer is willing to share that data and of course, the aspect and the premise of consent is fundamental, but if the consumer entrusts a 3rd party, or trusts enough a 3rd party to be willing to share some of his data with that party, then it should happen - and it should happen freely. So that has opened up plenty of business models and business cases and use cases that no one anticipated really, in all sorts of spaces

Reference 2 - 0.30% Coverage

I think if banks and financial institutions don't change their ways and find new revenue models or new, or new appealing use cases for consumers, they stand to lose even a bigger chunk of the funds that they are sitting on at the moment,

Reference 3 - 0.21% Coverage

if I would be a banker today I'd be really concerned about, about this, new, what's happening. And I would be urgently focusing on what can be - what are my options,

Reference 4 - 0.60% Coverage

So some will choose to still hold on to it and still probably choose to to remain, to build proprietary products with proprietary or semiproprietary, very selective partners that they still can control, manage or who basically play by the rules of of, of their strategy, others will be for, you know, others probably will disappear from the customer face, but they will still have a major role to play. Maybe more of a back office or platform marketplace where

Reference 5 - 0.81% Coverage

So where do I see ourselves go? I think I think ourselves - the banks, I think I think the models are going to change. Typically, if you look at the economics of payments, I think payments potentially will bring zero revenue to a bank in the next few years. I think the interchange - that model is going to disappear, I think payment, I think payment, you know, the payment will be in terms of data processing capability, et cetera, will be so represents so little that that will be very difficult to explain why it costs anything in the first place or - right. It will, so it will always come at a cost, but it will, it's such a small cost.

Reference 6 - 0.67% Coverage

So for me, the role of the bank should be and to keep that customer relation, they should deal with the one hundred requests they have received. They will satisfy and say, yes, us with our balance sheet we're going to satisfy those 20 first guys because they qualify and meet our criteria. But then the next 80, I'm going to make sure I hand them over to another third party provider who might have a different risk appetite, has different criteria, assessment and evaluations and whatever, and a different balance sheet.

Reference 7 - 0.37% Coverage

Look, I think there are multiple, there are multiple directions that I would say - all banks, wil not become utilities, some will choose to be a utility, that's the strategy and that's something that's probably something that they have to choose and to and to decide, decide, upon now.

Reference 8 - 1.04% Coverage

So the utility - utility for me, it's really somebody who will eventually relinquish both the product ownership and the distribution ownership. So where does that leave them? You know, it will leave them with providing other players the core infrastructure. And and that's the utility, it's really a non customer facing - it's more of a technology / regulatory compliance stack that sits behind doing the anti money laundering, the surveillance that is required on transactions, the screening and all of that. That's that's what I see the role of a utility bank yes, that's very much becoming a technology stack, but a trusted, again, entrusted technology stack, licensed and regulated to do what they're doing, but far less visible and and not so focused on the products and the distribution.

Files\\Fin Exec 6 - § 4 references coded [ 3.97% Coverage]

Reference 1 - 0.59% Coverage

Around benefits for the banks, I do think what it will do is open up new market opportunities around collaboration and allowing for banks to become platform players, which will then enable them to extend their services into other ecosystems where they would not ordinarily have had access to.

Reference 2 - 1.74% Coverage

right, but with open banking and, and through the establishment of a broader ecosystem, and I think I must give credit to the techfin companies, the likes of Alibaba, even Google, for that matter, which have actually proven that you can extend your services beyond just your traditional, let's call it business lines, and I think open banking will present those type of new benefits and opportunities and the evolution of how we see a bank whereby banks will become almost invisible in the background, but extend their services into so many places beyond just banking, through the provision of their capabilities, through APIs, which has an indirect benefit for them, because that means they can extend and get access to consumers that they would not ordinarily have had access to. I think those are for the winners in the financial services, in the banking space.

Reference 3 - 1.10% Coverage

I mean, if we just look back in the 80s, 90s through the ATM, through branch networks, through Internet banking, it was mainly - OK, I've got my customers, I've got these channels, and I'll provide them access to these channels, you know, through my infrastructure, but now with open banking you can go beyond your own infrastructure and extend yourself into other ecosystems where your services can still be consumed by by some of those players within that ecosystem. So it's a definitely an evolution of the traditional banking model, as we know it.

Reference 4 - 0.54% Coverage

Look, traditionally, if you go back to when banking first started, right, it was all based around trust. I would put my money with you as a bank and you would take that money, lend it out (signal break) down to trust, and I do think going into the future, that will not change.

Files\\Fin Exec 7 - § 2 references coded [ 2.50% Coverage]

Reference 1 - 0.67% Coverage

For me, there's two ways this can play out for the incumbent banks they can resist it, and what's going to happen is there's enough momentum and other methods of data sharing, whether that's screen scraping

OCR, there's enough other ways for fintechs to access data about customers through bureaus, whatever it might be, to start offering services of value to consumers.

Reference 2 - 1.83% Coverage

I see that always being, certainly in the next 10 years, being still regulated and therefore the incumbents having a role to play. And it's really up to them whether they embrace this open banking journey. If they don't, they will disappear like in one of my articles, Kodak or Nokia, or they can reposition themselves to be at the forefront of of what the fintechs will bring to the banking world. So I don't see the banks disappearing and those who embrace open banking will stay at the forefront. Yeah, it's kind of like if you look at things like ATMs and online banking, if you as a bank said, we want everyone to come to our branches, we are not going to put an ATM out in the market. We're not going to have online banking because branches are the way to go. No
bank which had make that decision would have survived. They were forced to have ATMs that are forced to go onto online banking because that's what the customer wanted. And the same thing is going to happen with open banking. They don't have a choice if they want to survive.

# Appendix 6 – Reference codes – Banks are Risk Averse & Slow

*Follows on the next page*

# Reference codes - Banks are Risk Averse & Slow



Files\\Bank Exec 1 - § 5 references coded [ 1.65% Coverage]

Reference 1 - 0.51% Coverage

I think it really depends on the legacy systems, the amount of of the investment they've got in their banking infrastructure and how, you know, how easy it is for their technology provider or technology partner to to integrate and get the information

Reference 2 - 0.18% Coverage

And, you know, if they if they can get a quick win, then they'll get out there and provide it.

Reference 3 - 0.46% Coverage

And so the ability is there a lot of the big banks, even though it's enabled for PSD2 a lot of them actually haven't done anything about it, probably because the size of how to do it. I mean, some of them would have millions of customers

Reference 4 - 0.24% Coverage

it's your smaller players that are getting in there quicker and quicker turnaround because they're a lot more agile

Reference 5 - 0.26% Coverage

We see issues rather than opportunities, and I think the smaller, more agile banks probably somewhat see more opportunities

Files\\Bank Exec 2 - § 1 reference coded [ 0.42% Coverage]

Reference 1 - 0.42% Coverage

And I think that, you know, first off all, the view from the banks is I'm going to lose my competitive advantage and I'm going to you know, there is a greater flight risk for my customers.

Files\\Bank Exec 3 - § 1 reference coded [ 0.62% Coverage]

Reference 1 - 0.62% Coverage

So it's going to be very difficult for old school incumbents with a lot of legacy to change and respond to this, to optimize on it. If they don't, it's going to be a threat.

Files\\Bank Exec 4 - § 1 reference coded [ 0.15% Coverage]

Reference 1 - 0.15% Coverage

So it leaves the the banking industry complaining quite a lot.

Files\\Fin Exec 1 - § 3 references coded [ 0.65% Coverage]

Reference 1 - 0.20% Coverage

And what allowed me to do was really understand how hard it is to bring external innovation to a large corporation and in particular to a bank, which by its nature is very risk averse.

Reference 2 - 0.34% Coverage

And myself and my co-founder at the time started the company based on the realisation that the fintech revolution was happening from about 2011, that increasingly banks all around the world were feeling nervous and they were all trying to understand what is fintech and what does it mean and what does it mean for us?

Reference 3 - 0.11% Coverage

made lots of dire predictions about all the risks that they were introducing into the financial system.

Files\\Fin Exec 3 - § 2 references coded [ 1.28% Coverage]

Reference 1 - 0.64% Coverage

look, if you have an API, we would love to have your API because that would make our life easier. But guess what? If you don't use the API, we are doing it anyway. Yeah, right. Yes. And they had they had a better product than what the bank had, simple as that, you know, so banks should just embrace this idea and say, OK, you know, regulation allows this to be more controlled

Reference 2 - 0.64% Coverage

And you start working with a bank, and the bank also likes your idea. Right. But then all of a sudden they go to their tech guys or risk guys and say, hey, my fintech, needs some data to prove their model or prove their proposition. And they see no problem. And then 12 months goes by and they still haven't gotten their data right. And they're running out of money right?

Files\\Fin Exec 5 - § 4 references coded [ 2.45% Coverage]

Reference 1 - 0.77% Coverage

So, of course, the fintechs are usually fast, quick at trying things, they don't have legacy, heavy legacy infrastructure so they can be more nimble and fast and more agile that allows them to focus on certain niches and to and to understand those niches and provide to those niches through - thanks to - not, it's not all due to to PSD2 or to APIs, which are clearly the thing of the past two, three years, right, it's also the fact that more and more people or a vast majority of people now have access to mobile phones and devices and technologies, digital technologies that enable many more models.

Reference 2 - 0.43% Coverage

And in fact, my read is that if such a substantial portion of it has moved into the hands of neobanks and challenger banks it's because the incumbents have been too slow at actually understanding what what was happening and reacting to it in a proactive manner and in a
positive fashion, right, so because they've been reluctant. I

Reference 3 - 0.43% Coverage

collaboration between traditional banks and fintech companies?
41:19 One hundred percent, I think there is more than! I mean, it's more than room, I think it's it's a necessity or, you know, banks who will not collaborate because they will just not admit that they are too slow and they will not see, see past by them because... T

Reference 4 - 0.83% Coverage

You know, I remember talking to banks on on, even financial transactions, you know, you want to make an investment. You look on paper, it looks great, and I remember always the banker said, OK, well, let's revisit or let's yeah, let's review that - they were ready they were ready to sign, they were all over, set up the partner had ticked all the boxes and the bank just said, let's give let's take a month, you know, to, like, sleep over it and let's see if in one month's time we still have the same conviction. That is part of the process. It's part of the mentality. It's part of the thorough due diligence and the role of the bank to be cautious.

# Appendix 7 – Reference codes – Banks Believe They Own Customer Data

*Follows on the next page*

Files\\Bank Exec 2 - § 3 references coded [ 1.44% Coverage]

Reference 1 - 0.58% Coverage

So I think what what customers will get from this is security, trust and hopefully less violations of their privacy. I think they will get access to an ecosystem where you can go and do many different related or interrelated or non related activities.

Reference 2 - 0.26% Coverage

I think what what banks are really worried about is ownership of customer. You know, that is that sits at the centre

Reference 3 - 0.59% Coverage

I think the consumer holds more power than they think they do, and it always it always fascinates me how sticky customers are and you know, how reluctant customers are to change banks as an example, because that dilutes their ability to shape what they want.

Files\\Bank Exec 4 - § 3 references coded [ 1.21% Coverage]

Reference 1 - 0.47% Coverage

data analysis, the big, big data warehouse analysis, which banks didn't do in the past, you know, they are sitting with huge data, that has got, this is very rich in history and they don't even how to use it.

Reference 2 - 0.32% Coverage

But using the fintech system it would produce - give the same customers better service at a much cheaper (rate) and the customer is happy.

Reference 3 - 0.42% Coverage

So the big data warehouse or due to better analysis and improved credit understanding are the benefits that the fintech brings because - which the banks were not bringing in the past.

Files\\Bank Exec 5 - § 3 references coded [ 2.60% Coverage]

Reference 1 - 0.78% Coverage

Yeah, well, I think my understanding of the regulation, first of all, is that it will force banks to recognize the data that they house, as you know, belonging not only to the customer, but then also giving the customer the right to access it however they want, even through a nominated third party, even at the risk of disintermediating themselves in the process.

Reference 2 - 1.05% Coverage

And then I guess the banks that are going to put out their own competing aggregator type of models, they're going to have to contend with then the risk or the, or the decision about having a single view of customer broader than just their own ecosystem and that's going to be interesting from an from an anti-competitive point of view that the banks that understand the regulation may then also benefit them as well as the customer probably, I think would be in the in the advantageous position.

Reference 3 - 0.78% Coverage

So the benefit, I think, is dependent on its maturity and certain capabilities that the disadvantage, I think, that will occur is where banks in that product centric architecture have not consolidated their data sources and any request for information or integration actually creates a lot of cost and friction internally just to comply with the legislation

Files\\Bank Exec 6 - § 1 reference coded [ 0.98% Coverage]

Reference 1 - 0.98% Coverage

what its also done is ensured the formalisation of APIs and allowed non-traditional players to get access to the data that banks have generally hogged and seen it as a holy grail.

Files\\Bank Exec 8 - § 8 references coded [ 3.45% Coverage]

Reference 1 - 0.24% Coverage

is that the banks have, I suppose, in a way, controlled and owned KYC data, as well as transactional data relating to their customers

Reference 2 - 0.67% Coverage

And regulation has protected, the banks under other rules of confidentiality and in some cases consumer protection, in some cases competitive behaviours, I think the message shift from an open banking point of view, which is a mindset shift for the industry, is now when customers actually own their own data and they're able to put this data from one player to the next.

Reference 3 - 0.53% Coverage

And the role that banks then play in an environment where I as a customer own my own data and I can decide who uses my data and on which platform. I think a lot of us banks are talking about platform organizations and also talking about how we are going to create data assets that we can monetize the future

Reference 4 - 0.36% Coverage

But the reality is in an open bank environment, that monetization will actually require us to be able to either buy or hire the data from the customer before we can aggregate and use that data to monetize.

Reference 5 - 0.21% Coverage

So, so, so the real owners of the assets within the open platform actually are now varied and they are across the board.

Reference 6 - 0.39% Coverage

So that's a fundamental shift in mindset for us. Going from a place where we are asking customers to fill in forms, to open a bank account where the customer says, well, I'm already on the platform, my details are with me

Reference 7 - 0.48% Coverage

Which is a totally different - because the choice now actually shifts to to to the customer, the owner of the data, because they will say, look, I need you to buy hire this data from me for purposes of providing a service or product that I need to achieve something else.

Reference 8 - 0.56% Coverage

If all the authentication and all my data is available, it can be independently authenticated. And then I think that that shift is is almost impossible for those of us who are the
the sort of traditional bankers to to absorb and envision a situation where the bank is not king and essentially the financial system is.

Files\\Fin Exec 1 - § 1 reference coded [ 0.11% Coverage]

Reference 1 - 0.11% Coverage

regulated sense to share customer data and therefore potentially share customer relationships.

Files\\Fin Exec 2 - § 1 reference coded [ 0.19% Coverage]

Reference 1 - 0.19% Coverage

Traditionally banks have been largely institutions that want to protect the customer base, and they always do that.

Files\\Fin Exec 4 - § 4 references coded [ 3.63% Coverage]

Reference 1 - 0.77% Coverage

OK, I think the impact is going to be extensive and has already been extensive, essentially PSD2 has enabled open banking, which is the, obviously the data sharing and the more more and more than just the data sharing it's giving the consumers ownership of that data that their data, which is a complete sea change to how the banks have been viewing it and quite a few of them still are

Reference 2 - 0.82% Coverage

So the banks have viewed it as their data, and that has been largely the fortress that protects them from competitive fintechs, which, of course, is the whole reason for the open banking regulations in the first place, so, the impact of the regulations is that even the banks that are slow to embrace this, a lot of banks have taken steps forward that have been required of them in a fairly unenthusiastic way.

Reference 3 - 1.12% Coverage

So, we've all got loyalty programs with our banks where you get money back or you get points and you can spend the points in different ways. And my bank has a scheme for premier customers where it offers me tickets to football, tickets to theater or whatever. 90 percent of what they offer me is a miss because it's not stuff I'm interested in. So they're missing an opportunity and it means I don't pay attention to the rewards scheme that they have in place. What CashOff are doing is using all of these data insights to hyper personalize reward schemes as well.

Reference 4 - 0.93% Coverage

So they can. And I forget all of the detail off the top of my head, but essentially they can, by looking at your transaction history, they can work out what products you like, what what what you might be doing at this particular stage in your life, whether you're buying a pram so you might be about to have another baby or whatever and give you offers specifically tailored to you, which I think is the next step in the relationship chain for a lot of the fintech techs.

Files\\Fin Exec 5 - § 2 references coded [ 0.86% Coverage]

Reference 1 - 0.45% Coverage

And I think the premise is that the consumer data belongs to the consumer, even though it is sitting with the banks. It is not the property of the banks. And I think that's that's the thing that was difficult for for banks to accept in the first place; they see: this is my customer, my data created the realities that that data belongs to the consumer.

Reference 2 - 0.41% Coverage

Of course, yes the treasury in which remains the customer data and yeah, and maybe and maybe, yes, maybe leverage - as an infrastructure technology play or whatever, maybe leverage more AI, artificial intelligence, big data to go through millions of points and basically make sure you enrich that identity over time.

Files\\Fin Exec 6 - § 1 reference coded [ 0.50% Coverage]

Reference 1 - 0.50% Coverage

I think and this is a global issue. I think open banking is great, but I think this is a more societal problem statement around data data sovereignty. Who owns the data? You know, how is data exchange between the different countries, different banks?

Files\\Fin Exec 7 - § 1 reference coded [ 0.51% Coverage]

Reference 1 - 0.51% Coverage

So for me, the main benefit of open banking or banks is data sharing is a two way street. You have a certain set of data around your customer, and by the way, the sort of consensus - worldwide consensus is the data belongs to the customer, not to the bank; banks don’t always see it that way.

# Appendix 8 – Reference codes – Banks Must Collaborate to Access New Data

*Follows on the next page*

Files\\Bank Exec 1 - § 2 references coded [ 0.41% Coverage]

Reference 1 - 0.21% Coverage

So they wouldn't you know, some even need to invest themselves or they need to choose a really good partner

Reference 2 - 0.19% Coverage

or they partner across a couple of other organizations so that they can offer banking services.

Files\\Bank Exec 2 - § 3 references coded [ 0.85% Coverage]

Reference 1 - 0.30% Coverage

So it's this dichotomy of do I or don't I with the fintechs, you know, they may eat me up, but without them they may eat me up anyway.

Reference 2 - 0.21% Coverage

And then I think so, so that's a you know, that's the concept of drawing in other partners.

Reference 3 - 0.35% Coverage

And it's that, you know, this is this is lunch of the banks that these companies are eating. And it has forced a change in the way of thinking of the banks.

Files\\Bank Exec 4 - § 2 references coded [ 1.11% Coverage]

Reference 1 - 0.43% Coverage

I think the first thing is that the fintechs or open banking brings in competition into the banking space, and the first thought of a banker is to how to either compete or collaborate. It

Reference 2 - 0.68% Coverage

So with the coming in of fintech, if they collaborate, then the fintech can mine that data and cut the different segments or different pieces and produce more revenue or produce or maybe come up with a very tailor-made solutions, which are maybe cheaper and less expensive for traditional banks

Files\\Bank Exec 5 - § 4 references coded [ 4.04% Coverage]

Reference 1 - 1.34% Coverage

So I guess I guess I would see it as falling into two broad camps all along a spectrum of banks that will dig down and resist the regulation and look for ways to impede it, or obstruct it, and possibly even find the loopholes that protect their dominance of being able to access that data.
Speaker
01:59 And then on the other side of the spectrum, I think it'll be an incentive for for for for banks to improve their services by then competing and almost seeing the gap in their existing services that those disintermediators are hoping to fill by acting on behalf of the of the customer to access his or her data in that bank's databases.

Reference 2 - 1.05% Coverage

And then I guess the banks that are going to put out their own competing aggregator type of models, they're going to have to contend with then the risk or the, or the decision about having a single view of customer broader than just their own ecosystem and that's going to be interesting from an from an anti-competitive point of view that the banks that understand the regulation may then also benefit them as well as the customer probably, I think would be in the in the advantageous position.

Reference 3 - 0.94% Coverage

And from what I've seen in my own organization, is that, you know, that that philosophical position affects really that the design of your platform and the openness with which you design integration into partners, and third parties, et cetera, and the risk of being sort of very close minded in your thinking and assuming that you can build everything and provide everything to the customer in a one stop shop is quite a bold position to take.

Reference 4 - 0.70% Coverage

collaboration between traditional banks and fintech companies?
Speaker 22:56
I do, and I think we've seen an example of that in the block chain prototype that obviously the SARB, I guess, sort of initiated and which I think all the big banks participated in, but they also had to trade that off against the cost of being excluded.

Files\\Bank Exec 6 - § 1 reference coded [ 0.98% Coverage]

Reference 1 - 0.98% Coverage

collaboration between traditional banks and fintech companies in South Africa?
10:09 Yes, and there's quite a few examples of it in South Africa, so to answer you quickly, yes.

Files\\Bank Exec 7 - § 6 references coded [ 3.48% Coverage]

Reference 1 - 0.50% Coverage

benefits perhaps would be excuse me if if the if the alliances can be formed to share, to share products and to share developments, opportunity or cost or find the opportunity cost in the in the Dev costs, I think then alliances can be formed, which can be beneficial to banks.

Reference 2 - 0.66% Coverage

Very interesting. I think that banks cannot step back from the perceived threat. I think that they should take an attitude of of being complimentors as opposed to adversaries. So and the reason why I say that is that things are happening so fast, tech spend is probably most likely now the biggest ticket in any bank. Once upon a time, it was branches now it's tech,

Reference 3 - 0.93% Coverage

Vodacom's not going to lend out their own money, but that could aggregate or get an aggregator, a fintech aggregator to to to do these small loans across the market based on analytics, on your phone and usage that gives you, Danny, a quick R200 quick, quick loan, for seven days. But who's going to hold the risk? The bank will hold the risk behind the scenes. Similarly, if you don't, a fintech won't have a banking licence to hold a deposit, therefore, they can stand in the chain and the bank can hold the deposit.

Reference 4 - 0.70% Coverage

So if you're going to put seed capital to a bunch of fintechs to see who wins and who can actually integrate into your systems, then then you - I think that's where banks need to focus their attention because banks with legacy systems, they've got the issues to deal with. It's going to take a few years to peel back branches and convince their clients etc on different ways of banking.

Reference 5 - 0.39% Coverage

but our eWallet is very small compared to MPESA in Tanzania and it depends on the market who got there first. So instead of trying to fight them, we rather play with them - do bank to wallet, wallet to bank integrations

Reference 6 - 0.29% Coverage

So, (yeah), you you do believe that there is room for collaboration between traditional banks and fintech companies?
Speaker Researcher 25:38 Yes, I do.

Files\\Bank Exec 8 - § 5 references coded [ 3.01% Coverage]

Reference 1 - 0.94% Coverage

so if you can imagine a platform where all the banks are - they are there, the data is probably already been authenticated by an authentication authority, which is a utility maybe on the on the on the platform. So you don't have to take your documents to a bank. So the bank has to rely on the authentication authority or the compliance of the regtech provider on the platform. That your data - the data that you own about yourself, about your I.D. stuff, all of that stuff that we spend a lot of time dealing with in the banks is gone.

Reference 2 - 0.44% Coverage

So the benefits for the banks is really, in my own opinion, the fact that we are being forced to move to the other side of the equation, not sit behind the counter in the old traditional sense where the customer comes to your desk to beg for something.

Reference 3 - 0.44% Coverage

So open banking, by the time it's opened up, the fintechs will have captured the bottom end of that triangle and the banks will now be looking to partner with fintechs to be able to allow this open banking opportunity to play out in their own favour.

Reference 4 - 0.67% Coverage

And banks need to drift into that space where we become digital advisors, digital enablers and digital exchanges of knowledge and digital exchanges of goods between producers and consumers. And therein lies the trust element that is built into that relationship. And I think that's, in my own opinion, that's how you can sustain the traditional banks into the future.

Reference 5 - 0.52% Coverage

room for collaboration between traditional banks and fintech companies?
Speaker
22:04 In my opinion, that's the only way - that's the only way forward. Because if you think about it, the the the fintechs have been particularly good at addressing really important problems to consumers,

Files\\Fin Exec 1 - § 1 reference coded [ 0.15% Coverage]

Reference 1 - 0.15% Coverage

Banks are going to see unless they figure out a different positioning, are going to see death by a thousand cuts, not as they used to think.

Files\\Fin Exec 3 - § 5 references coded [ 1.96% Coverage]

Reference 1 - 0.20% Coverage

They are doing it because they see the opportunities, the business model and what they can do with the fintechs also.

Reference 2 - 0.31% Coverage

So, you know, banks should just focus on what they're really good at, creating great products at great price and selling lots of it and leaving the distribution to somebody else.

Reference 3 - 0.38% Coverage

Because they know so much about the customer. So they don't have to own the customer. They need to agree with you on how much of that customer information they will have visibility of so that they can price the offer best.

Reference 4 - 0.36% Coverage

Open Open Bank is trying to do that without really saying this right, but I don't think banks get it even if the banks get it. Banks don't want to act on it today, but the smart ones, will, smart ones will get smart

Reference 5 - 0.70% Coverage

the Googles and the Facebooks all over it and others that we don't know of will pop up and take parts of the relationship away. It's not no no point trying to compete with all of those guys, but ultimately, none of them know how to manufacture a great, great home loan, great mortgage and to price it based on risk or relationship - banks know. Banks have great assets there, so you know, they do that well

Files\\Fin Exec 4 - § 3 references coded [ 1.92% Coverage]

Reference 1 - 0.84% Coverage

But the ones that are dragging their heels, they're going to find that they will struggle to compete in this new, merged world where you got banks who are developing new innovative solutions in-house or they're acquiring fintechs or they're incubating fintechs, or they are partnering with fintechs to create much more of a platform business and taking steps, the more innovative ones, into lifestyle ecosystems.

Reference 2 - 0.55% Coverage

And I think that the that sort of platform offering that sort of by-your-side side product line is where people once they realized that that's available and possible, that's where they're going to go. And we know that the banks know this and they've known it for quite a while.

Reference 3 - 0.52% Coverage

So I've not explained that very well, but essentially is using the data insights for hyperpersonalization to make it a real value proposition for the customer,
but also to pass on the costs of the rewards to the brands that are benefiting from that exposure.

Files\\Fin Exec 5 - § 7 references coded [ 3.57% Coverage]

Reference 1 - 0.20% Coverage

At least those that are that embraced, you know, embraced PSD2 and and created the partnerships that are, you know, that that basically PSD2 opens to.

Reference 2 - 0.32% Coverage

And that is the and that to me is really the opportunity for the banks, the opportunity to partner with fintechs to now play the volume base, very low margins, much lower margins than what they are accustomed to, probably, but they clear the volumes.

Reference 3 - 0.67% Coverage

So for me, the role of the bank should be and to keep that customer relation, they should deal with the one hundred requests they have received. They will satisfy and say, yes, us with our balance sheet we're going to satisfy those 20 first guys because they qualify and meet our criteria. But then the next 80, I'm going to make sure I hand them over to another third party provider who might have a different risk appetite, has different criteria, assessment and evaluations and whatever, and a different balance sheet.

Reference 4 - 0.85% Coverage

some will choose to be more of a utility, some will choose to be more of a full service provider in the face of the customer and and try to hold on to their brands as long as possible. Others will decide to be more of what I see as almost a supplier, my view. But but the supplier is basically - they will focus on offering still proprietary products, but they will relinquish, for example, the distribution. So they will not be the face, so more of a supplier of product that are still proprietary products to them. And others will probably position on just the opposite, I mean, they want to be just the interface, they would want to concentrate on distribution.

Reference 5 - 0.43% Coverage

collaboration between traditional banks and fintech companies?
41:19 One hundred percent, I think there is more than! I mean, it’s more than room, I think it’s it’s a necessity or, you know, banks who will not collaborate because they will just not admit that they are too slow and they will not see, see past by them because... T

Reference 6 - 0.74% Coverage

The fintech are just the opposite. So the fintechs they want, you know, they are your agile, nimble, move fast, fail fast, trial, make errors, et cetera. So how do you structure that? It’s super difficult for a fintech to survive without the help of a corporation behind because you need you need some form of funding, for sure, in order to be able to experiment, explore. It’s very much outsourcing your R&D and then having as many as possible, as many as you can afford, rather than having, probably your internal R&D department that has delivered very little or too little.

Reference 7 - 0.37% Coverage

The cooperation with fintech is super healthy, and for me, you know, I see it though lucky, I think banks have changed their mentality, it’s no longer fintechs are competitors, telcos are our competitors - no - they realized that that the fintech can open up massive opportunities.

Files\\Fin Exec 6 - § 4 references coded [ 3.19% Coverage]

Reference 1 - 0.66% Coverage

open banking presents the ability for clients to have a single view around their financial position, because currently data sits in silos, in various systems, in their banking systems. And to get that single view sometimes is difficult, and that single view can assist from a budgeting and a financial management perspective

Reference 2 - 0.59% Coverage

Around benefits for the banks, I do think what it will do is open up new market opportunities around collaboration and allowing for banks to become platform players, which will then enable them to extend their services into other ecosystems where they would not ordinarily have had access to.

Reference 3 - 0.89% Coverage

for collaboration between traditional banks and fintech companies?
21:51 Um, yes, I do. I think it’s, you know, at the end of the day, I think it’s it’s - banks want to continue remaining relevant, right, to their customers and hence if their customers are voting with their feet to join services provided by fintechs, then I think, you know, those partnership models are what will remain where banks would continue to partner with fintechs.

Reference 4 - 1.06% Coverage

I think in the context of around telcos and the tech companies, these are the Facebook's, Google's, Amazon's and so forth - I think there it's a bit different different. I think banks will be far more open to partner with fintechs because fintechs are smaller and they're nimble.
Speaker
22:46 But whether they would extend the same opportunity to the tech companies and even to the telcos in South Africa is a bit different because these are giants sitting on so much of data, they have so many clients and they're seen as a threat.

Files\\Fin Exec 7 - § 4 references coded [ 3.98% Coverage]

Reference 1 - 0.23% Coverage

So the benefit I see to the banks is if there is data sharing they will get data from sources they currently don't have access to.

Reference 2 - 1.58% Coverage

But the incumbents are also best placed, and this is the key for me, the incumbent is best placed because they currently have that relationship with the customer. So if the incumbent of - partners with a fintech, develops new services, they can still retain the customer, but offer them more services, which the fintech would then help to provide, because as you know, banks are not as nimble, that can't build all these things themselves. So I think those. Yeah. So from a fintech point of view, huge opportunity. I think if - you're going to have fintechs that want to partner with banks and you'll have fintechs that want to eat the banks lunch and both models can work, I think it'll work. You're going to eat the bank's lunch where the bank is slow to react. And where the banks partner, I think they will benefit, so I think both parties will be benefited by that and will have a bigger pie.

Reference 3 - 1.34% Coverage

Obviously, if you have a line in the sand with regulation, then suddenly the inflection point narrows to a particular timeframe because suddenly everybody has to meet a certain deadline. So that would accelerate the inflection point for me, and those that are ready for it would benefit more than those who aren't. But I see, I see a WinWin outcome. And internationally, that's already happening, there're lots of main banks that have partnered with fintechs that are offering their customers more services, they're are not losing customers, they're are making more revenue because they've got more things to sell and process and transact and charge fees on and it's an exciting journey we're on so it will be interesting to see where we end up.

Reference 4 - 0.83% Coverage

collaboration between traditional banks and fintech companies?
Speaker
29:01 Absolutely. I don't think any bank or any company, for that matter in the world can keep up with the pace of innovation without collaboration. And to be fair, the banks have always collaborated, they might not be called fintechs back then, but yeah, they collaborate with SAP, they collaborate with Microsoft for various services, and the same way, the same thing will happen here.