

Strategic decision-making in the context of crisis and uncertainty

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A research project submitted to the Gordon Institute of Business Science,
University of Pretoria, in partial fulfilment of the requirements for the degree of
Masters of Business Administration.

1st December 2020

ABSTRACT

In times of crisis, leaders are faced with deep uncertainty and effective crisis management requires strategic decisions to ensure long-term sustainability. There are opposing academic views on the types of cognition and philosophies used in crisis decision-making, thus raising a need for empirical evidence. Coupled with this, increasing turbulence in the business environment has created a renewed interest in research on management decision-making in uncertainty. The novel coronavirus pandemic represents an unprecedented challenge which has accelerated these research agendas. This study explores how business leaders in the banking sector respond to crisis and uncertainty in their organisational strategic decision-making process.

Using a qualitative approach, twenty-one semi-structured interviews were conducted with business leaders. This study found that crisis and uncertainty created opposing forces for decision makers which led to a combination of intuition and analysis being applied, shifts in strategy were identified and a three-stage approach was applied in decision-making using a pragmatic philosophy.

This study contributes to literature by providing an in-depth understanding of the strategic decision-making process used by business leaders in banking during the coronavirus crisis, revisiting the roles of intuition and analysis in decision-making and proposing a framework which could lead to effective and sustainable strategic-decision making.

KEYWORDS

Strategic decision-making; crisis; uncertainty

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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ABBREVIATIONS

Abbreviation / Acronym	Full Description
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
IFRS 9	International Financial Reporting Standards 9: Financial Instruments
KPI	Key performance indicator
NDM	Naturalistic decision-making
Resp.	Respondent
RPDM	Rapid Prime Decision Model
SMEs	Subject Matter Experts

1 CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1 Introduction

During times of crisis, turbulence and uncertainty in the external environment tests the ability of business leaders to make effective decisions. The coronavirus pandemic has caused social and economic disruption on a global scale; an unprecedented crisis of this magnitude presents a unique opportunity to explore the strategic responses taken by leaders to ensure business sustainability. The objective of this study is to gain an understanding of leaders' perceptions of uncertainty during the crisis and the resultant impact on the strategic decision-making process. Insight gained from this research could add to the existing body of knowledge in the fields of crisis management and strategic decision-making. The section below elaborates on the background to the problem caused by the coronavirus crisis.

1.2 Background to the problem

The Covid-19 coronavirus was first detected in December 2019 and due to its high transmission rate, the virus quickly spread across the world and was declared as a global pandemic in March 2020 (WHO, 2020). To respond to the highly contagious disease, borders of countries have been closed for international trade and national lockdowns have been invoked to protect citizens. These responses have resulted business trading being suspended and have led to major financial losses. These events represent an unprecedented challenge in modern history, with the United Nations (2020) describing Covid-19 as not only a health crisis but a crisis of economic and social significance as well.

With the lockdown measures being instituted, from a social perspective Covid-19 coronavirus may not be the deadliest viral pandemic in history (Hamit & Zontur, 2020), but from an economic perspective it may be the most costly (Nagarajan, 2020). The coronavirus crisis has been declared the worst global financial crisis since the Great Depression in 1929 (BBC, 2020). The banking sector is leveraged to the economy through the extension of credit to various sectors and its exposure to macroeconomic factors such as movements in interest rates. Accordingly, the negative impact of the crisis on the banking industry has been substantial and will affect the long-term profitability of the sector (PWC, 2020). This places the pandemic beyond the realm of traditional scenario planning, thus creating a need for research into the impacts of this novel crisis on strategic decision-making.

1.3 Problem statement

A crisis is an unexpected event which causes disruption to the existing patterns that leads to change, uncertainty, and conflict (Bundy, Pfarrer, Short & Coombs 2017; Isabella, 1990; Osborn, Hunt & Jauch, 2002). Responding to a crisis requires sensemaking and action to increase understanding of unknown environments and decrease errors in decision making (Weick, 1988). However, actions taken can serve to inadvertently intensify a crisis, especially when facing non-routine, interconnected and complex issues that may not be fully understood (Weick, 1988). The coronavirus crisis poses a significant threat in the banking industry, as it has disrupted the economic patterns used to make decisions on credit extension, which is an essential service to businesses. Leaders in banking are therefore faced with the difficult decision of whether to take action to reduce credit extension to protect the profitability of the banking sector or increase credit extension to support other business sectors in a time of need. A failure to support other businesses would have an adverse economic impact and create further uncertainty over the long-term.

Nunamaker, Weber & Chen (1989) defined organisational crisis as a time of high uncertainty and explained that perception of threats is a matter of interpretation by the decision-maker. In a crisis, people look to a leader to make sense of the environment to inform their subsequent decisions and actions needed to respond (Ansell & Boin, 2019; Weick, Sutcliffe & Obstfeld, 2005). Leaders in banking who incorrectly perceive the impact of the crisis may make incorrect decisions in their responses which could negatively affect their businesses and their customers' businesses.

A crisis has both organisational- and individual-level consequences, which include constriction in the ability to process information and a lack of readiness to make decisions (Nunamaker et al., 1989). In a crisis, decision-making patterns are changed, as leaders consider fewer options, focus on tactical as opposed to strategic issues, make more errors in calculations and are less able to predict outcomes (Nunamaker et al., 1989). One of the steps of effective crisis leadership is critical decision-making, which requires leaders to make strategic decisions to help the organisation survive the crisis (Ansell & Boin, 2019). Leaders in banking are forced to make critical strategic decisions when dealing with the immediate threats created by the coronavirus crisis.

Threat rigidity theory (Staw, Sandelands & Dutton, 1981) postulates that when stress levels are high, people cope by reverting to known as opposed to novel solutions, therefore ignoring the need for change. Contemporary literature on crisis and complexity warn against using tried and tested solutions from past experience, as these learned rules can be over-generalised and may not work on “wicked” problems that are without precedent (Shivakumar, 2014; Snowden & Boone, 2007; Stanovich, West & Toplak, 2011). As the coronavirus pandemic poses extraordinary problems, the traditional solutions used in the banking industry are likely to be ineffective and will thus require different strategic choices to be made.

Garcia (2017) explains that the word “*Krisis*” in ancient Greek, referred to a choice that was a turning point in an actor’s destiny. Evaluation and selection of options is a distinguishing function for management, as the choices made by leaders, will determine an organisation’s profitability and future (Harrison, 1996). As the degree of uncertainty increases in the business environment, it becomes increasingly difficult to make predictions (Mcgrath & Sargut, 2011; Snowden & Boone, 2007). Therefore, the risk of making incorrect strategic decisions is heightened in contexts of crisis-induced uncertainty and this could lead to organisational failure. Accordingly, it is of interest to understand the cognitive processes used by key decision-makers in banking when making critical strategic choices.

Dual process theory distinguishes between two types of cognitive processes, intuitive and analytical, and suggests that a dichotomy exists between the two systems of thought (Goel, Buchel, Frith & Dolan, 2000; Stanovich et al., 2011). While intuitive thinking has the advantage of being fast, the risk of error is high and although analytical decision-making may be more accurate it is slow and suffers from a lack of information during a crisis (Ansell & Boin, 2019; Doherty & Kurz, 1996; Silveira-dos-Santos, Bandeira-de-mello & Cunha, 2016; Sweeny, 2008). Cognitive continuum theory postulates that decisions are made using a combination of intuition and analysis; however, not many studies have been done in a management context to provide empirical evidence to prove this theory (Dhimi & Thomson, 2012; Hammond, 1996). A few scholars highlight that the normative view of decision-making favours rational thought processes whereas the descriptive view proposes a judgemental cognition (Dhimi & Thomson, 2012; Mishra, Allen & Pearman, 2015). This mismatch between theory and practice reinforces the need to gain insight into the cognitive processes used to deal with crisis and uncertainty.

In times of crisis and uncertainty, traditional rational approaches to decision-making are not effective due to incomplete or inaccurate data and a pragmatic philosophy is instead suggested (Ansell & Boin, 2019). Pragmatic schools advocate that the decision maker should accept uncertainty and be willing to improvise with the information available (Ansell & Boin, 2019; Klein, 2008; Nash, 2003). In contrast, traditional schools of thought promote a rational model which tries to reduce uncertainty during a crisis by acquiring and analysing information (Kramer, 1999; Sweeny, 2008). The coronavirus crisis presents a unique context to conduct a study to clarify which of these approaches are used in practice.

1.4 Context and scope of the study

The term “VUCA” combines four different types of challenges, but it is important to distinguish between volatility, uncertainty, complexity and ambiguity as each require different types of responses (Lemoine & Bennett, 2014). To distinguish risk from uncertainty, Teece & Leih (2016) clarify that risk can be quantified whereas uncertainty cannot. Mousavi & Gigerenzer (2017) define an uncertain situation as one in which the options and outcomes are unknown, and the probabilities of outcomes cannot be calculated. Progress has been made in the field of complexity science to address ambiguity and complexity (Osborne & Hinson, 2011; Snowden & Boone, 2007), and risk (volatility) has been studied extensively as a central part of management sciences (Nohria, 2006). However there is renewed interest in this topic of uncertainty in the current environment (Alvarez, Afuah & Gibson, 2018; Teece & Leih, 2016), as such uncertainty will be included in the scope of this study on strategic decision-making.

This study will focus on the strategic level as it concerns irreversible long-term decisions and it is difficult to train people to respond to crises and uncertainty at this level (Ansell & Boin, 2019; Brockmann & Anthony, 2002). At an operational level, staff and managers are generally trained to respond to accidents and emergencies (Ansell & Boin, 2019). While operational decisions are necessary to respond to issues on the ground, strategic decisions require a significant commitment of resources and also change the direction of an organisation (Shivakumar, 2014). To understand the strategic decision-making process, leaders of business units in various banks will be engaged.

The banking sector has been selected due to its interconnected relationships across

various sectors of the economy that have been impacted by the coronavirus pandemic. As an essential service, a failure at the bank level will have serious implications for the broader economy, thus increasing the need for effective strategic decision-making. Banks expect to experience material financial losses arising from loan defaults and lower transactional volumes; and whilst still uncertain, SA's big four banks reported an average drop in full year earnings of at least 20% due to the coronavirus pandemic (Bloomberg, 2020). Academic literature explains that people make sense of an experience after the event has taken place, as interpretations and collective viewpoints need time to emerge (Brockmann & Anthony, 2002; Isabella, 1990). The timing of this study will take place approximately five months after the coronavirus outbreak, at which time the pandemic would still be ongoing, and will therefore be a good opportunity for business leaders to reflect on the impact of the crisis.

1.5 Purpose of the study and research objectives

This study will explore how business leaders in the banking sector respond to uncertainty and crisis in their organisational strategic decision-making process.

This research aims to:

1. Understand the perception of business leaders of the level of uncertainty in the environment during the crisis.
2. Explore the impact of crisis-induced uncertainty on the strategic decision-making process.
3. Identify the philosophy and approach to strategic decision-making under crisis-induced uncertainty.

The purpose of this study is to draw attention to and describe the strategic decision-making process in crisis and uncertainty as a basis for future studies that aim to develop prescriptive models for strategic decision-making in this context.

1.6 Relevance of the study

While there have been studies around the changes in decision making during a crisis, both from a behavioural and cognitive perspective (Isabella, 1990; Klein, 2008; Mishra et al., 2015), the current environment provides a novel context which warrants further exploration. Previous studies on crisis included industry- or company-specific events, however, the coronavirus pandemic is a global crisis that has disrupted the supply chains of many businesses from the primary to tertiary sectors (Choi, Rogers

& Vakil, 2020). Ansell & Boin (2019) distinguish between routine emergencies and crisis, and emphasise that it is more difficult to manage a rare crisis where there are “unknown unknowns”. The more unfamiliar a crisis is, the more stressed and less capable decision makers feel, thus increasing the risk of poor decision making (Nunamaker et al., 1989). Therefore, gaining an understanding of strategic decision-making during the novel coronavirus crisis could add value to the existing body of knowledge.

Extant literature presents opposing views on the best way to approach decision-making in the contexts of crisis, with some scholars suggesting a rationalistic approach (Nunamaker et al., 1989; Sweeny, 2008) and others proposing that an intuitive approach is applied in practice (Klein, 2008; Mishra et al., 2015). In concluding their study on decision-making during emergencies, Mishra et al. (2015) advance a research agenda of decision-making in emergency that seeks to understand the drivers that contribute to an effective response. The coronavirus pandemic should provide valuable empirical data to add to this literature.

In the twentieth century, academic focus has been on developing decision-making models to manage risk (Alvarez et al., 2018; Nohria, 2006; Teece & Leih, 2016). The current business environment is turbulent due to rapidly changing technology and the increased interconnectedness of globalisation (Kail, 2011; Teece & Leih, 2016). In the twenty first century, more decisions are being made under uncertain conditions than before, and this has created renewed interest in the study of uncertainty in management theory (Alvarez et al., 2018; Nohria, 2006; Teece & Leih, 2016). Sweeny (2008) suggests that specific research be undertaken in the context of a negative event to ascertain the level of certainty that a decision-maker needs to choose a response. Learning how to deal with uncertainty in strategic decision-making is an essential skill for leaders in a VUCA environment (Kail, 2010) and the coronavirus crisis will accelerate this agenda.

In turbulent times, Mintzberg (1987b) asserts that strategy provides order and consistency that reduces uncertainty and aids decision-making. A survey done on the CEOs of the Fortune 500 companies gives insight into potential future strategic considerations stemming from the coronavirus crisis. Over 50% of CEOs indicated their top three concerns as being an increased focus on employee safety, heightened concern for the continuity of their customers’ businesses and deeper uncertainty over

economic forecasts for demand of their company's products or services (Murray, 2020). The change in focus areas could lead to different strategic decisions being taken to respond and a deeper understanding of this process will provide valuable practical insights for business leaders.

1.7 Conclusion

In this section the theoretical and business needs for this research were detailed and the coronavirus pandemic was positioned as a major crisis that induces deep uncertainty. The unique context for this study on was highlighted and valuable empirical evidence on the strategic decision-making could be gained. The different schools of thought on cognitive processes used in decision-making were outlined, and the contrast was noted to highlight a need for practical insight. Traditional literature on decision making has focused on risk, but there is a recent interest in the concept of uncertainty which is more relevant in the current VUCA environment of business. This study seeks to understand the process of strategic decision-making with leaders in the banking sector under crisis-induced uncertainty. The subsequent section provides a review of literature in the relevant fields and includes the theory base used for this study.

2. CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In the previous chapter, the importance of effective strategic decision-making during a crisis was highlighted and the renewed interest in the area of uncertainty was acknowledged. This chapter will form the main academic argument of the study by reviewing the extant literature on the key constructs of the research which are crisis, uncertainty, and strategic decision-making.

The flow of the literature review performed is illustrated in Error! Reference source not found. below. Firstly, clarity was gained on the types of decisions (strategic vs operational) and the significance of strategic decision-making was explained. Secondly, with the current context requiring effective crisis management and leadership, relevant frameworks were identified and the need for critical decision-making in crisis was highlighted. Lastly, as an unexpected disruption creates deep uncertainty for business leaders, it was important to understand the cognitive processes (intuitive vs analytical) used to deal with such uncertainty. Literature was also studied to understand the gaps that may exist in the field of management decision-making in the contexts of crisis and uncertainty. Together, this knowledge will help position this study to explore the impact of crisis and uncertainty on the strategic decision-making process used by business leaders in banking during the novel coronavirus pandemic.

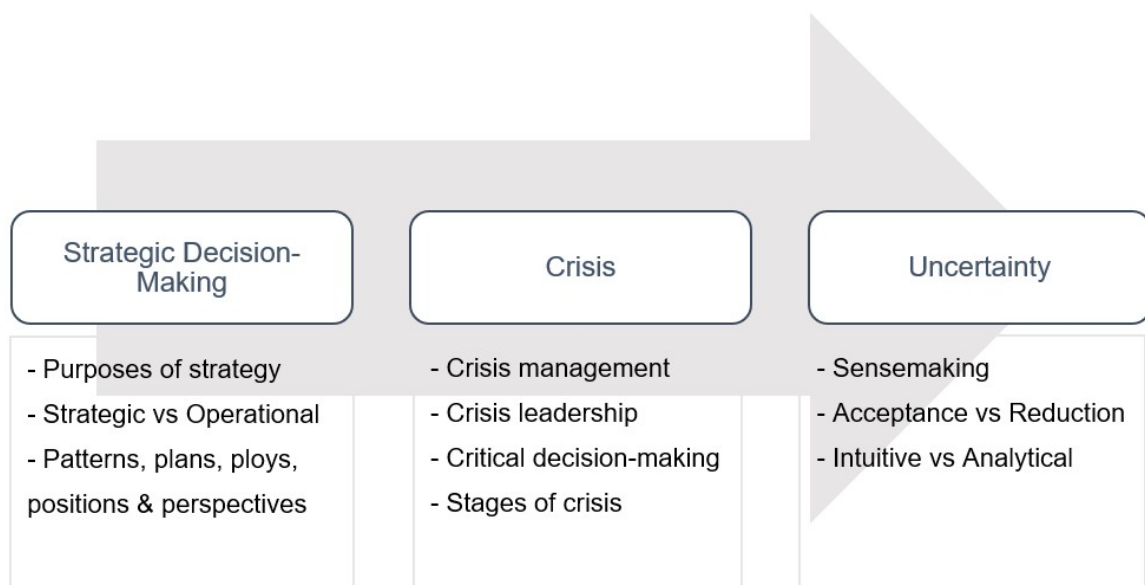


Figure 1: Conceptual approach to literature review
(Source: Author's own creation)

2.2 Significance of strategic decision-making

According to Mintzberg (1987b), the purpose of strategy is to provide direction, create consistency and reduce uncertainty; which allows an organisation to manoeuvre through turbulent environments. A decision is identified as strategic in nature if it affects the relationship of the whole organisation to the external environment and provides operational guidance to all major functions for long term success (Harrison, 1996). Various scholars assign the role of strategic decision-making to the top management team and explain that strategic decisions are key to overcoming challenges, shaping the course of an organisation and ensuring its survival (Eisenhardt & Zbaracki, 1992; Elbanna, 2006; Haider & Mariotti, 2016). Therefore, the strategic decision-making process will be crucial for leaders to guide their teams through the coronavirus crisis and ensure long-term sustainability.

Shivakumar (2014) outlines four types of management decisions which are strategic, neo-strategic, tactical and operational. This classification is based on two dimensions, firstly the degree of commitment of organisational resources (cost and effort) and secondly the level of impact on the scope of the organisation, in terms of its products, services it offers and the markets it targets. Strategic decisions require a significant commitment and significantly alters the scope or direction of an organization (Mitchell, Shepherd & Sharfman, 2011). Therefore, it is of interest to explore in what situations leaders make strategic decisions to change the direction of the bank.

Mintzberg (1987a) offers five possible definitions of strategy as being a i) pattern, emerging from consistency in behaviour, ii) plan, a preconceived course of action, iii) ploy, a manoeuvre to mislead the competition, iv) position, a placement in the business environment that generates a profitable advantage and v) perspective, which is a collective perception that leads to invention. As summarised by Mitchell et al. (2011), hostile (threatening) environments lead to reduced rationality and more erratic strategic decision-making which negatively impacts profit and growth outcomes for the organisation. In the context of the threats posed by the coronavirus crisis, patterns and plans may be disrupted, positions may need to change along with changes in the environment and perspectives could shift in line with changes in strategic priorities.

2.3 Crisis leadership and decision-making

An organisational crisis represents an unexpected and salient event which threatens the organisation's ability to meet its high priority goals and allows for little response time (Bundy et al., 2017; Osborn et al., 2002). Consequently, crisis materially impacts the context in which a business operates, which therefore requires a change in leadership approach and further impacts the strategic decision-making process (Osborn et al., 2002). This study aims to identify potential shifts in strategy as a result of the crisis and the impact of those shifts on decisions made by leaders.

Bundy et al. (2017) characterise a crisis as a process (not just an event) of uncertainty, disruptive change, that causes social and behavioural impacts and poses a threat to stakeholders who may have conflicting needs. Kahn, Barton & Fellows (2013) advocate that the needs of other stakeholders are as important as shareholders or owners. The coronavirus pandemic represents a health, economic and social crisis and will thus require leaders to balance the needs of various stakeholders, such as staff and customers, with the profit objective of shareholders.

Silviera-dos-Santos et al. (2016) further discuss the factors that leaders need to address during a crisis which include crisis types and crisis stakeholders. The type of crisis influences a leader's ability to respond, Bundy et al. (2017) gives examples of crises categorised by the perceived level of responsibility ranging from weak to strong, such as victim crises, accidental crises and preventable crises. It is typical in the banking industry to prepare for financial crisis; therefore, the economic impacts of the coronavirus may not have been prepared for by management.

Crisis stakeholders are all the parties affected by the crisis (Silviera-dos-Santos et al., 2016). According to Kahn et al. (2013) successful crisis management is exemplified by stabilising operations and minimising losses to stakeholders. It will be important for leaders to stabilise operations quickly to ensure that essential banking services are available to key stakeholders during the national lockdown.

According to Ansell & Boin (2019) effective strategic crisis leadership requires sensemaking, critical decision-making, coordinating and meaning-making. Sensemaking involves gathering information to form an understanding of the threat which leaders can then use to provide direction to the organisation (Weick, 1988). In clarifying the purpose of corporate strategy, Mintzberg (1987b) highlighted that strategy sets the direction for an organisation to navigate through crises.

Critical decision-making is focused on strategic not operational issues and includes both short- and long-term decisions (Ansell & Boin, 2019). The need for decision-making was also identified as central to three of the crisis leadership challenges identified by Silveira-dos-Santos et al. (2016), which included identifying constraints, adapting the organisational structure and developing solutions to respond to the crisis. This study seeks to understand the critical decisions taken by leaders to respond to the coronavirus pandemic.

Coordinating involves gathering networks of individuals to work together to respond to the crisis. Mintzberg (1987b) explains that one of the purposes of strategy is to weave together different individuals and coordinate various activities across the organisation, in order to focus efforts. And lastly, meaning-making entails explaining problems and advising solutions to help move individuals forward (Ansell & Boin, 2019). Uitdewilligen & Waller (2018) reaffirm the need for information sharing to facilitate sensemaking, coordination and high-quality decision-making in crisis management teams.

During crisis, information is shared in three ways, i) fact sharing, where teams share basic objective data collected on the crisis, ii) interpretation sharing, which combines expert knowledge with facts to give meaning to stimuli and iii) projection sharing, that includes anticipations of future states (Uitdewilligen & Waller, 2018). This study will investigate how factual banking data collected during the crisis was interpreted and used in the projections needed for strategic decision-making.

The ability to lead effectively during a crisis is affected by conditional factors, for example, the competency of leadership to make rapid decisions, organisational resources used to respond to crisis and the impact of time pressure on strategic decisions (Bundy et al., 2017; Hannah, Uhl-bien, Avolio & Cavarretta, 2009; Shepherd & Rudd, 2014). A hostile external environment has a pervasive influence and could lead to a less rationalistic approach and erratic strategic decision-making (Harrison, 1996; Shepherd & Rudd, 2014). It is of interest to understand how the conditional factors in the context of a developing nation such as S.A. affects the strategic decision-making process of leaders when responding to a crisis.

Pragmatism is defined as a practical and flexible mentality, where one is willing to compromise to reach solutions (Ansell & Boin, 2019). The pragmatist philosophy is unlike traditional rational models, where thought precedes action. Similarly, the

Cynefin framework proposes that during a crisis (chaotic context), a leader must first act to create stability and thereafter seek to make sense of the situation and respond with the objective of moving the system back toward order (Snowden & Boone, 2007). Mishra et al. (2015) found that when responding to a crisis, due to time pressure, emergency response personnel admit that it is better to act first to stabilise the situation and thereafter seek to improve it.

In a recent study on crisis management in the Brazilian energy sector, Silviera-dos-Santos et al. (2016) analysed the stages of crisis to identify the different management responses taken in each stage. The stages of crisis investigated were prevention, response and recovery. Similarly, Nunamaker et al. (1989) advanced a framework for crisis management that was split into three sets of activities which are pre-crisis activities, crisis activities and facilities and post-crisis activities. There is a close correspondence between the stages used by Silviera-dos-Santos et al. (2016) and the activities proposed by Nunamaker et al. (1989).

In the prevention or pre-crisis phase, leaders must ensure that signals can be detected and acted upon to prepare for the impending crisis; as well as to anticipate and avert crisis where possible. The response phase is also known as the critical period in which all the negative impacts of the crisis are felt. Crisis activities in this phase include the monitoring of events and the management and support of resources, all of which require fast decision-making. Lastly, the recovery phase aims at resolving the effects of the crisis in order to establish a new normal state. Post-crisis activities include an evaluation of performance that helps improve crisis management processes to respond to future threats (Nunamaker et al., 1989; Silviera-dos-Santos et al., 2016). This study took place in the critical period of the coronavirus pandemic and sought to understand the types of decision-making processes used during a crisis.

2.4 Coping with crisis

Sweeny (2008) integrates coping theories with decision making theories and proposes that the response process used in a crisis occurs in three stages, namely i) assess the severity of the crisis by gathering of data on the causes and outcomes and reflection on similar past events for comparative information, ii) determining response options, within the constraints of the perceived controllability of negative outcomes and the resources available to cope with the event, which determines the

feasibility of the response, and iii) evaluating each option against the resources needed, the direct- and indirect- consequences of the response. After weighing up the pros and cons of each option, a decision is made (Sweeny, 2008).

As the coronavirus crisis poses threats in three different areas which are health, economic and social, leaders may lack the expertise to assess each option and the strategic decision-making process may require the consultation of non-financial experts. Sweeny (2008) highlights that to cope with crisis, people seek the help of outside parties which includes experts who are more knowledgeable on the type of challenges being faced and can make the decision-making process less complicated.

Similarly, Mishra et al. (2015) describes the conflict management model used by emergency services teams which assesses the threat and then selects the best tactical option through a process of elimination. These approaches to decision making in crisis suggests that decision-makers apply a rational approach of seeking information and determining their options before choosing to act. Shepherd & Rudd (2014) found that top management teams who are highly educated and experienced will tend to use a more rationalistic approach to strategic decision-making. This study will explore how experienced leaders in banking formulate and assess their different crisis responses and long-term strategic options.

Naturalistic decision making (NDM) proposes that instead of comparing options and calculating probabilities, people use pattern recognition and mental simulations to make rapid decisions when under severe uncertainty and time constraints (Klein, 2008; Klein, Lipshitz, Orasanu & Salas, 2001). The Recognition-Primed Decision Model (RPDM) explains that, using past experience, people form patterns that help recognise situational cues, rapidly categorise situations and suggest reactions that match the situation in order to make decisions quickly (Klein et al., 2001).

Osborn et al.(2002) explain that experience is used by members of the organisation to form “if-then” scenarios that facilitates faster decision-making and allows for responses to be practised, thus promoting NDM. Klein (2008) elaborates that in a crisis the risk of using a purely analytical approach is responding too slowly; therefore, the RPD model uses intuition for pattern matching, as well as analytical processes to perform mental simulations in deciding on a course of action. This study will investigate the strategic decision-making processes of seasoned business

leaders in banking, many of whom would have experienced previous financial crises.

Mishra et al. (2015) found that in a crisis, decisions need to be made frequently and constantly, which prohibits a purely analytical approach. As decisions are based on incomplete information and information becomes available in a piecemeal fashion during a crisis, it follows that decision makers change the course of prior decisions made, as new information comes to light (Harrison, 1996; Mishra et al., 2015).

Notwithstanding the contrasting approaches in literature outlined above, there are some similarities as to how to lead the decision-making process in crisis and uncertainty. For example, in the rationalistic approach, Nunamaker et al. (1989) assert that crises require collaboration of teams and resources to improve the effectiveness of decision-making. Likewise, in the pragmatic philosophy, Ansell & Boin (2019) propose that in order to limit the impact of a crisis, a leader must coordinate the implementation of plans by facilitating the efforts of partners in their network who may have better expertise to respond to threats. In the field of contextual leadership, Osborn et al. (2002) emphasise the importance of developing networks in order to source strategic information that is needed for making decisions relevant to the context. It is further highlighted that when a crisis is unprecedented, coordination is more likely to emerge as needed (Ansell & Boin, 2019). As such, it is of interest to observe if and how leaders in the banking sector collaborate to respond to the novel coronavirus crisis.

2.5 Addressing uncertainty

Organisational crises represent unexpected events that create both high urgency and high uncertainty (Nunamaker et al., 1989; Osiyevskyy & Dewald, 2018). To manage the scope of this study, the Knightian definition of uncertainty will be applied, which states that uncertainty exists when both the possible outcomes and the probability, neither propensity nor relative frequency, of occurring are unknown to the decision-maker (Alvarez et al., 2018; Mousavi & Gigerenzer, 2017). This study seeks to understand how leaders in business perceive the level of uncertainty in their environment and how that uncertainty affects their strategic decision-making process.

Unlike previous crises, the duration of the coronavirus and the subsequent lockdown has been an area of significant uncertainty. Silveira-dos-Santos et al. (2016) describes the critical period of a crisis as usually being brief, but also warns that the

various phases of a crisis can either be short-lived or prolonged, this depends on the type of crisis. In the case of the coronavirus pandemic, the duration of the crisis is unknown as it depends on the discovery of a vaccine to remedy the virus. This makes it extremely difficult for leaders to plan a strategic response.

Various scholars refer to environments of deep uncertainty as realm of the “unknown unknowns”, where decision makers are not sure when an event could occur, what impact it could have and who will be affected (Ansell & Boin, 2019; Snowden & Boone, 2007; Teece & Leih, 2016). When decision makers have not thought of the possibility of an event, such as the coronavirus, it creates an unexpected shock that causes deep uncertainty, and this requires cognitive and organizational leadership skills to be managed effectively (Ansell & Boin, 2019; Teece & Leih, 2016).

One possible impact is that stress and uncertainty impedes the ability to properly process information, which leads to a resistance to change and decision makers resorting to established routines for doing business (Osiyevskyy & Dewald, 2018; Staw et al., 1981). Earlier decision-making theory proposed that for an organisation to survive a crisis it must acquire and use information to make intelligent decisions. This analytical approach to decision-making revolved around the ability to learn and to leverage information technology (Nunamaker et al., 1989). These schools of decision-making tried to reduce uncertainty by acquiring or generating information to cope in a knowledge-driven complex world.

According to Kramer (1999), the motivation to reduce uncertainty drives information-seeking behaviour and people may use passive or active approaches, to either indirectly or directly gather data. Nunamaker et al. (1989) explained that scenario generation or planning is an example of an information-based tool that enables leaders to plan for the worst-case situation, which helps reduce stress and build the confidence needed to respond to crisis events. This aligns with the process posited by Sweeny (2008) where the decision-maker gathers information on and assesses different scenarios before selecting the best option. Various scholars highlight that the rationalistic approach to decision-making has been the preferred method in academia and forms the basis of formal disaster management guidelines (Elbanna, 2006; Mishra et al., 2015).

However, some scholars advocate that the “looking glass” of a pragmatic philosophy should be applied when making decisions under uncertainty, as the lack of

information prohibits a rational approach from being effective (Ansell & Boin, 2019; Nash, 2003). In uncertain situations there is incomplete information regarding i) how the situation started, ii) the situation itself, iii) the possible future outcomes of decisions (Nash, 2003). Teece & Leih (2016) expand on this by indicating that both day-to-day (operational) and long term (strategic) decisions need to be made with incomplete information.

In the context of project management, Kvalnes (2016) relates pragmatism and uncertainty, and advocates that the decision-maker needs to get comfortable with not knowing every detail. The pragmatic philosophy is built on four attitudinal components of fallibility, anti-dualism, experimentalism and bricolage (Ansell & Boin, 2019). With these attitudes the decision-maker accepts imperfection in themselves and the environment around them, avoids a binary mentality of “do or die”, uses experimentation to learn and improvises with the resources that are available. Pragmatists reject the need to search for certainty but rather to accept uncertainty and adapt decision-making to use imperfect pieces of information (Ansell & Boin, 2019; Nash, 2003). A major challenge for leaders will be to formulate strategic plans for the future using incomplete information on the coronavirus.

It follows that pragmatism favours an intuitive approach to decision-making, Nash (2003) further elaborates on the need for leaders to gain experience in making “practical judgements” in uncertainty, in order to understand the conditions and information needed for successful intuitive decision-making. Eisenhardt & Zbaracki (1992) advise that the use of intuition requires a deep knowledge of the specific situation and Elbanna (2006) explains that the number of years of experience is positively related to the effectiveness of intuitive decision-making. It is therefore expected that seasoned leaders will be able to apply their experience to make practical judgements to respond to the crisis at hand.

The principle of bounded rationality (Simon, 1979) further supports the view that decisions should be made with an element of intuition, as humans are not capable of making perfectly rational decisions but instead will seek to satisfice or compromise. Harrison & Pelletier (2001) explain that a computational (analytical) strategy overestimates the capacity of the decision-maker and incorrectly assumes a level of certainty in outcomes; whereas a judgemental (intuitive) strategy accepts the reality of uncertainty which results in better strategic decision-making.

Mousavi & Gigerenzer (2017) assert that uncertainty requires an ecological rationality as opposed to a logical rationality, and that one of the ways of dealing with uncertainty is through the use of intuitive tools such as heuristics. According to Maitland & Sammartino (2015), heuristics enable the efficient application of knowledge to enhance strategic decision-making in uncertain contexts without needing to analyse large volumes of information. Heuristics help decision makers focus their cognitive ability on the task as opposed to overanalysing surrounding data, specifically the discovery heuristic is used to guide data gathering and analysis (Maitland & Sammartino, 2015). While an increase in the level of information is generally associated with a decrease in the level of uncertainty, it is possible that more information could lead to more uncertainty, if the information is unusual and not well understood (Kramer, 1999). Given the disruption caused by the coronavirus pandemic, it is likely that data collected during the crisis may seem unusual when compared to its historical trends, thus requiring an element of intuition to be applied.

This study will offer rare insight on how modern-day leaders practically approach a crisis of global magnitude. Uncertainty intensifies as large problems place greater stress on the perceived capability of the decision maker to provide a response. Ansell & Boin (2019) suggest that, in a crisis, a pragmatic philosophy to decision making may be applied by using incremental decision-making rather than avoiding decisions because they are perceived to be large and irreversible. Similarly, Mintzberg (1987b) postulates that taking things one step at a time and moving slowly can be beneficial in that it allows for quick changes to strategy.

Congruent with these views, the “strategy of small wins” proposes that large problems be divided into smaller more manageable pieces of work, to ensure that the optimum level of arousal or stress is maintained (Weick, 1984). This strategy could be appropriate for the coronavirus crisis as leaders may need to break challenge of responding down into smaller decisions to ensure that stress levels are not so high that it paralyses the team but at the same time avoid stress levels falling too low such that people become apathetic.

Kvalnes (2016) advises that rather than becoming paralysed by the opposing forces of intuition and rationality, the decision-maker should directly confront uncertainty and embrace the opportunities it may present. Silveira-dos-Santos et al. (2016) found that sensemaking and decision-making simultaneously took place in an

emergent manner during a crisis. The Cynefin framework proposes that rapid decisions are needed to first stabilise the environment, and thereafter as patterns of information emerge, the decision maker can engage in sensemaking to contemplate further responses (Snowden & Boone, 2007).

Mintzberg (1987a) highlights the importance of distinguishing between deliberate and emergent strategies, with the former being predetermined and the latter developing unintentionally from patterns of behaviour. The disruption caused by the coronavirus pandemic will probably render previous strategic plans void and leaders would therefore have to take action whilst uncertain about the exact plan. This may therefore require a flexibility in leadership to allow for strategy to emerge rather from the data collected during the crisis.

It was explained above that crisis creates urgency which leads to faster decision-making, and naturally it should follow that the same applies to dealing with uncertainty. However, Mitchell et al. (2011) found, contrary to expectation, that when an environment is both hostile (threatening) and dynamic (uncertain), dynamism acts as an opposing force to hostility by reducing erratic strategic decision-making. This means that uncertainty slows down the strategic decision-making process and prevents reactive responses. Kvalnes (2016) points to the tension between experience and thought, where experience is used for fast intuitive responses in a pragmatic philosophy and thought refers to slower analysis in a rationalistic approach to dealing with uncertainty.

Despite the above discussion on uncertainty, there has been waning interest in the field of uncertainty, resulting in a gap in recent literature (Alvarez et al., 2018). The need to understand management decision-making under uncertain conditions has been highlighted, as traditional risk management tools are ineffective when faced with deep uncertainty (Teece & Leih, 2016). The coronavirus crisis induces uncertainty into the business environment and elevates the need to understand how to make decisions when working in the realm of the unknown.

In summary, there are commonalities in the literature in the acceptance that there is no perfect rationality (Simon, 1979). However, the pragmatic schools accept uncertainty which differs from the traditional schools that try to reduce uncertainty (Kramer, 1999; Nash, 2003). Pragmatic philosophies encourage action and then allow sensemaking to emerge, whereas rational schools seek information to first

make sense of the environment and assess the options available before action can be taken (Snowden & Boone, 2007; Sweeny, 2008). This study will compare the actual perceptions and decisions of leaders under extreme uncertainty to the suggested frameworks for decision-making in crisis leadership, both from a traditional (rational) and pragmatic perspective.

2.6 Thinking through crisis and uncertainty

In evaluating how decisions are made in addressing crisis and uncertainty, it is important to understand the different types of cognitive systems and processes used in decision-making. Evans (2003) describes the two systems of human thought and explains that System 1 contains instinctive behaviours formed by associative learning, and decisions are made in a rapid and automatic fashion. Whereas System 2 works with memory and is used for abstract reasoning, decisions are made in a slow, deliberate and sequential manner. Similarly, Kahneman (2011) explains that System 1 is associated with fast decision-making as it utilises heuristics to immediately perceive events and System 2 is used for slow decision-making that requires the gathering and analysis of data.

Evidence for the existence of two systems was provided through experiments based on the belief-biased effect, which shows that participants are influenced both by the logic of an argument (analytical cognition) and the prior believability of its conclusion (intuitive cognition) (Evans, 2003). Further, neuropsychological evidence was obtained, using functional magnetic resonance imaging, to show that logical thought occurs in the right inferior pre-frontal cortex of the brain and intuitive responses took place in the ventral medial prefrontal cortex; which confirmed the existence of two separate biological networks that are used for syllogistic reasoning and decision-making (Goel et al., 2000).

Similarly, Stanovich et al. (2011) assert the dichotomy between cognitive processes for making decisions and distinguishes between intuitive and rational thinking modes, which access knowledge bases that are unique to each cognition. Type 1 processes are intuitive, whereby information is processed holistically, and memory is used to recognise patterns for rapid decisions, similar to NDM above (Klein et al., 2001). Type 2 processing is rational, slow, and uses formal structures to conduct analysis before reaching a decision, which is consistent with the analytical process described above (Sweeny, 2008).

Stanovich et al. (2011) further explain that when faced with a task that requires estimation, the two separate processes can be used in parallel, by using a Type 1 process to determine the direction of a decision and then fine-tuning the decision using Type 2 for accuracy. In communicating the concept of dual-processing, Kahneman (2011) advocates that an understanding of the two different systems of cognition is an important part in the process of making decisions that are without bias. This study will explore whether leaders use an intuitive, analytical, or combined process for strategic decision-making when faced with crisis-induced uncertainty.

Keren & Schul (2009) point out that scholars have used the terms “Dual System” and “Dual Process” interchangeably and that a differentiation should be made, with a process being classified as more specific than a system. While various scholars argue as to whether the systems of thinking are in fact isolable and operate independently (Dhami & Thomson, 2012; Doherty & Kurz, 1996; Hammond, 1996), the conflict between analytical and intuitive thought processes is acknowledged (Keren & Schul, 2009); the typology presented above and its opposing relationship are useful distinctions for the purposes of this study. In the context of strategic decision-making and organisational politics, Elbanna (2006) highlighted the gap between incrementalism (intuition) and synoptic formalism (rationality) and raised the need for further empirical studies. It is of interest to distinguish which types of cognitive processes are used to deal with crisis and uncertainty respectively.

Different types of knowledge are utilised in each of the cognitive processes, Stanovich et al. (2011) depict that the autonomous (intuitive) mind uses an encapsulated knowledge base that is built up over time. Similarly, Brockmann & Anthony (2002) suggested that tacit knowledge is used to fill information gaps when making decisions under uncertain conditions. Tacit knowledge is the practical know-how that is gained from work experience and is used for sensemaking in contexts of ambiguity (Brockmann & Anthony, 2002). As decisions move along the continuum from simple to complex, the types of decision-making and the types of knowledge change accordingly. There is a parallel between the spectrum of decision types, from analytical to intuitive, and the types of knowledge, from explicit to tacit respectively (Brockmann & Anthony, 2002). Thus, complex problems such as those presented by the coronavirus crisis may require the use of tacit knowledge of leaders in an intuitive decision-making process.

Contrary to the dichotomy detailed above, Hammond (1996) argues that decision-making occurs between two poles of intuitive and analytical cognitive processes, with the middle ground being described as “quasirationality”. Keren & Schul (2009) argue that there is insufficient empirical evidence to prove the existence of two isolatable systems of thinking and contend that the characteristics used to split the two systems, belong to the same mental system and are in fact continuous as opposed to distinct. In their evaluation of two-system theories, a plea is made for conceptual clarity and further rigorous empirical testing in order to prove the cognitive dichotomy claimed by many scholars. Instead, the question raised is whether a hybrid system of thinking exists (Keren & Schul, 2009). Under the pragmatic philosophy of crisis leadership (Ansell & Boin, 2019), anti-dualism encourages that decision makers avoid using oversimplified dichotomies, such as “now or never”, to make complex decisions that require deliberation. The pressures of the coronavirus crisis could lead to reactive behaviour that could either result in emotional and rushed decisions or becoming paralysed through excessive analysis of data. It is however possible that leaders may use a combined cognitive approach to cope with the crisis.

Following from this, it is expected that leaders should not use a single approach in addressing uncertainty. Despite an advocacy for pragmatism, Kvalnes (2016) concedes that there are some types of uncertainty that should be reduced as a part of good corporate governance, but disclaims that the process to distinguish between the types uncertainty that should be embraced and the types to be minimised needs to be further explored. This study seeks to identify the different approaches used to address uncertainty in practice.

In a recent study on the use of heuristics to address uncertainty, Maitland & Sammartino (2015) admitted that to imply that long term strategic decisions are based on bounded rationality is overly pessimistic and that there is a need for analysis even when applying expert judgement. As stated by Mishra et al. (2015, p.421), “A judicious but context-sensitive mix of type 1 and type 2 styles seems, on the basis of the evidence presented here, to be the most appropriate direction.”

As further elaborated by Doherty & Kurz (1996), decisions can be ordered from analytical to quasirationality to intuitive; and the type of decision-making processes used is driven by the characteristics of a task. Specifically, when time pressure is high and prior knowledge of a task is low, intuitive cognition is utilised which is

considered to be faster than analytical processes (Doherty & Kurz, 1996). Dhimi & Thomson (2012), summarised that normative theory favours analytical cognition, whereas descriptive theory suggests intuitive cognition; and have highlighted that studies of the concept of decision-making in a continuum were extremely rare in a management context.

Similarly, Elbanna (2006) highlights that academic research on strategic decision-making has placed more emphasis on rationality and further studies on intuition are needed. Mishra et al. (2015) highlights the mismatch between decision-making in theory and practice and proposes that management decision-making in emergencies is more intuitive than the classical schools of thought suggest. For example, Gomez, Insua, & Alfaro (2016) advocate that acknowledgement as opposed to reduction of uncertainty in the organisational budgeting process promotes transparency. This study aims to explore the cognitive processes used in strategic decision-making by business leaders in practice when faced with crisis and uncertainty.

2.7 Conceptual framework

Using the dual process model from Stanovich et al. (2011) and the characteristics of the different types of cognitive processes identified in the literature review above, the following framework in **Figure 2** was developed to be used for the interpretation of the findings of this study. The model distinguishes between the two types of decision-making processes (Evans, 2003; Stanovich et al., 2011) and the accompanying attributes of the approach to uncertainty (Ansell & Boin, 2019; Kramer, 1999; Nash, 2003), the use of tacit or explicit knowledge (Brockmann & Anthony, 2002), the option selection strategy (Klein, 2008; Klein et al., 2001; Sweeny, 2008) and the speed of decision-making (Kahneman, 2011). Note however, that the separation between the two types of cognition is not a solid straight line, but a discontinuous curved line indicating that there is no boundary between the two types of thought processes. This reflects the possibility of a continuum along which decision-makers oscillate between intuitive and analytical processes, depending on the characteristics of the task (Hammond, 1996).

The model in **Figure 2** below serves as a framework to enable the researcher to identify the types of decision-making process being used during the crisis, based on the respondents' disposition toward uncertainty, the type of knowledge the respondent applies in arriving at a decision, whether a respondent performs an

assessment of options available or simply matches the crisis situation to a similar event and lastly the speed of decision-making. While the results could indicate one of the two types of thought processes being used by leaders in practice, the researcher is aware of the possibility of both types of cognition being used in combination.

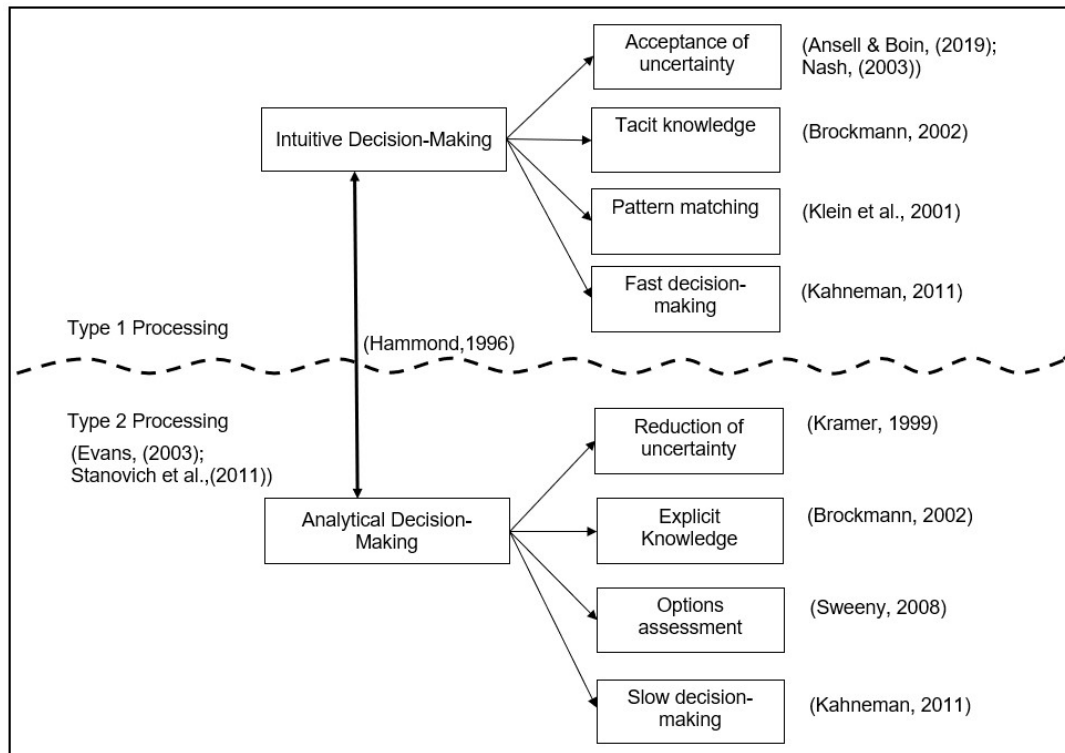


Figure 2: Conceptual framework

(Source: Author's own creation adapted from Stanovich et al. (2011))

2.8 Conclusion

The literature review in the above section was performed to gain an understanding of the significance of strategic decision-making, the philosophies for effective crisis leadership, methods of coping with crisis and approaches to address the uncertainty that a crisis creates. The above discussion bears testament to the ongoing debate over the most approaches to decision-making in coping with crisis and addressing uncertainty. The similarities, contradictions, and gaps identified in the literature will help formulate the research objectives and research questions for this study, which can help determine the impacts of the coronavirus crisis on levels of uncertainty in the South African banking environment and how that then affects the strategic decision-making process. Key concepts from literature were summarised into a model that will guide the data collection process to explore the research objectives and questions outlined in the section below.

3. CHAPTER 3: RESEARCH QUESTIONS

3.1 Introduction

Having set the context of the novel coronavirus pandemic, in Chapter Two it was explained that strategic decisions made by top management are essential in ensuring the survival of an organisation and that there is a need for critical decision-making during a crisis. Gaps in the literature highlighted the need to further study the impacts of uncertainty on management decision-making and a need to gather empirical evidence on the types of cognitive processes used in a management context to deal with crisis and uncertainty. This study therefore aims to add to the body of knowledge on strategic decision-making in crisis and uncertainty. The research questions below were formulated to explore the strategic decision-making process of business leaders in the banking sector when faced with crisis-induced uncertainty.

3.2 Research questions

From the above literature review it was found that, due to a lack of time and incomplete information, crisis creates a sense of urgency and uncertainty (Nunamaker et al., 1989; Osiyevskyy & Dewald, 2018). This places pressure on the ability of leaders to process information and thus make effective strategic decisions. The need for research on management decision-making under uncertainty was raised by various authors (Alvarez et al., 2018; Nohria, 2006; Teece & Leih, 2016). Due to global connectedness and technological advancements, uncertainty forms a part of business as usual, however in the context of crisis, this study seeks to identify areas of deep uncertainty arising from the coronavirus pandemic and the subsequent lockdown that has materially impacted business as usual. Therefore, uncertainty in this study relates to the realm of the “unknown unknowns” as described in Chapter Two (Ansell & Boin, 2019; Snowden & Boone, 2007; Teece & Leih, 2016), as this deep uncertainty may lead to changes in strategy which will require a different approach to strategic decision-making. Research question 1 aims to identify the areas of uncertainty created by coronavirus crisis for business leaders in banking.

Research Question 1:

During a crisis, how do business leaders in the banking sector perceive the level of uncertainty in their environment of business?

It is expected that the strategic decision-making process may be impacted by the coronavirus crisis, as noted in literature it is the role of leaders to respond to both the negative impacts of the crisis in the short term and the potential increase in uncertainty over the long term (Eisenhardt & Zbaracki, 1992; Haider & Mariotti, 2016). Firstly, effective crisis leadership requires critical decisions to be made in order for a business to survive the coronavirus pandemic and national lockdown (Ansell & Boin, 2019; Bundy et al., 2017). Secondly, strategic decisions which impact the direction of the bank (Mintzberg, 1987b; Shivakumar, 2014) will need to be made amid crisis-induced uncertainty. Research question 2 aims to identify potential shifts in strategy in response to the crisis and resultant uncertainty, which could impact the strategic decision-making process.

Research Question 2:

How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?

Lastly, at the core of this study is the need to understand the cognitive processes and underlying philosophies used by leaders for making decisions to cope with crisis and address uncertainty. Approaches to decision-making in crisis were reviewed with contrasting views being identified. Formal guidelines on disaster management promote a rationalistic approach which is line with the analytical school of thought (Nunamaker et al., 1989; Sweeny, 2008), whereas some studies of decision-makers in crisis have shown that an intuitive approach is applied in practice (Klein, 2008; Mishra et al., 2015). Intuitive decision-making has the benefit of being fast and automatic could result in errors, whereas the analytical cognitive process is deliberate and possibly more accurate but may be too slow to respond to the urgent demands of a crisis (Kahneman, 2011). Lastly, there is ongoing debate as to whether the two cognitions are dichotomous (Evans, 2003; Stanovich et al., 2011) or operate in combination on a continuum of thought processes (Dhimi & Thomson, 2012; Doherty & Kurz, 1996; Hammond, 1996). It is therefore of interest in the last research question to understand what types of cognition are used in the strategic decision-making process of business leaders in banking during the coronavirus crisis.

While the first research question sought to identify the areas of uncertainties created by the crisis, the last research question seeks to understand the thought processes

and philosophies applied in addressing those uncertainties. Literature shows opposing views on how to approach uncertainty when making decisions in a management context. Traditional approaches promote the reduction of uncertainty through the collection and analysis of information (Kramer, 1999); whereas pragmatic philosophies accept and manage uncertainty (Ansell & Boin, 2019; Nash, 2003). Therefore, research question 3 seeks to contribute to the literature by collecting empirical data on the strategic decision-making process in the context of crisis and uncertainty.

Research Question 3:

What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?

3.3 Conclusion

This chapter set out the three research questions which will guide the data collection process which takes place during the coronavirus crisis. The conceptual framework developed in Chapter Two above will be used to assess the process of strategic decision-making used by business leaders in banking. The following section covers the research methodology and design that will be used by the researcher to conduct the exploratory study on strategic decision-making in crisis and uncertainty.

4. CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

This section will include the methodology used to conduct the research with reference to guidance from extant literature and best practice. The literature review performed and the proposed research questions served as the basis for the methodology and have guided the research design, population that was sampled, data collection and data analysis processes. Consideration is given to quality assurance and ethical compliance. Lastly, limitations are highlighted and mitigation plans are discussed, given the current context of the coronavirus pandemic, as well as inherent shortfalls in the selected methodology or chosen sample.

4.2 Research methodology and design

As this qualitative study sought to understand how business leaders dealt with crisis and uncertainty in their strategic decision-making process, the research **philosophy** applied was that of interpretivism. Interpretivism is well suited to complex business problems that “represent a particular set of circumstances and individuals coming together at a specific time to create a unique social phenomenon” (Saunders & Lewis, 2018, p. 109). Subjective interpretation was applied by the researcher to the results of the interviews performed with business leaders. The interview transcripts were analysed and interpreted against the theoretical decision-making model in **Figure 2** above in order to identify the cognitive processes used during a period of crisis and uncertainty.

Given the need for research raised by academic scholars in the field of management decision-making under crisis (Mishra et al., 2015; Sweeny, 2008) and uncertainty (Alvarez et al., 2018; Teece & Leih, 2016), an inductive **approach** was used to develop theory using the data collected. According to Creswell & Creswell (2018), in a qualitative study the researcher starts with an inductive approach by organising the primary data into themes and thereafter applies a deductive approach by comparing those themes to existing theory and to decide when saturation is reached. In this study, the collected data was arranged into themes from the bottom up (inductive) and it was compared to the theoretical model in **Figure 2** above to identify and understand the type of strategic decision-making processes being used in practice.

A **mono-method** was used in that interviews were conducted to collect data; this was considered the most efficient approach considering the cost and time constraints of this study. In a recent study of decision-making in crisis, (Uitdewilligen & Waller, 2018) collected data from 12 multidisciplinary management teams that participated in crisis training simulations. For this study, it was not necessary to use experimental methods such as vignettes or simulations, as the coronavirus pandemic represented a real-world scenario that needed to be further understood. Further, the social distancing requirements of the national lockdown, made it impractical to apply mixed methods using large groups of individuals. Using a singular method of data collection such as one-on-one interviews provided the benefit of consistency and allowed for the collection of rich data that would facilitate a deeper analysis of the impacts of the novel coronavirus crisis on the strategic decision-making process. In a study of how managers interpret change, including unexpected change (crisis), Isabella (1990) utilised a mono-method design to conduct interviews on a sample of 40 managers in financial services institutions.

The **purpose** of the exploratory design selected for this qualitative study was to address the need for new insights in the field of management decision making under uncertainty as noted in recent literature (Alvarez et al., 2018; Teece & Leih, 2016). The context of the coronavirus crisis in has served to accelerate the need for research on this topic in 2020. Similarly, Silviera-dos-Santos et al. (2016) used a qualitative approach to interview stakeholders in order to discover new findings in the context of a crisis in the Brazilian energy sector. Using open-ended questions, a broad understanding can be gained as to the strategic decision-making processes being used by leaders who are under the pressure of crisis-induced uncertainty. This broad insight can serve as a basis for future descriptive or explanatory studies that seek to investigate particular factors more deeply using quantitative methods.

Using an interpretive philosophy, a qualitative **strategy** was employed to explore the effect of crisis-induced uncertainty on the strategic decision-making process of business leaders in the banking sector. A qualitative study is characterised as an inductive process used to gain an understanding, where the researcher serves as the primary instrument to collect rich descriptive data (Merriam & Tisdell, 2016). In distinguishing between a basic qualitative approach and other specific types of research strategies, Worthington (2013) explains that qualitative designs attempt to uncover participants' experiences, the meaning ascribed to those experiences and

the process of dealing with such experiences or events. This study seeks to understand the experience of leaders during the coronavirus crisis and uncover their process for strategic decision-making given the deep uncertainty introduced into the business environment.

The **timeframe** for this research will coincide with the critical stage of the coronavirus pandemic (Nunamaker et al., 1989; Silviera-dos-Santos et al., 2016); cross-sectional data was collected over several weeks during the period August to October 2020 to ensure that authentic and unique data was gathered from leaders as they experienced the crisis. Given the time constraints of this study, a longitudinal study would have not been efficient and since data needed to be collected during this specific period of the crisis, a cross-sectional approach more effective. During this period of deep uncertainty, business leaders in the financial services industry were asked to describe their perception of the unfolding changes in their business environment, as well as discuss any impact that these events may have on their strategic decision-making process.

Semi-structured interviews were employed as the **data collection technique**, and open-ended questions were used to allow for a broader exploration of the interviewee's experience. In a recent study on strategic decision-making during crisis, the use of semi-structured interviews was motivated as it allowed for a comprehensive analysis of complex issues, new practical examples were gathered to add to existing theories and the researcher was able to observe the personal interpretations of the interviewees (Bakonyi, 2018). Mishra et al. (2015) point out that observation was a superior way to gain insight into the decision-making process of crisis-responders in real time, and while it was too risky to observe an actual crisis, the next best solution was to observe emergency response teams while conducting training exercises. While it would have been beneficial to observe the strategic decision-making process in real time, this was not possible given the sensitive nature of the strategic information being discussed.

4.3 Population

Creswell (2012) defines a **population** as a group of individuals who have the same characteristic. The defining characteristic under this study was a business leader that participates in strategic decision making, as this leader was responsible for the critical decisions needed for the organisation to survive the crisis (Ansell & Boin,

2019). In order to narrow down the target population, focus was placed on the banking sector. The banking sector was deemed an essential service during the national crisis (South African Government, 2020), as a failure in this sector will have a consequential effect on the financial stability of the broader economy. This places greater emphasis on the need for effective strategic decision-making in the banking sector. Conversely, as banks have a client base that covers a broad range of industries and with banks being leveraged to the economic cycle, failures in these industries will negatively impact the business performance of the bank. Thus, collecting data from leaders in banking will allow for a broader perspective to be obtained as to the impact of the crisis on the economic environment.

According to the South African Reserve Bank (SARB), there are 13 locally controlled banks, five foreign controlled banks and four mutual banks that are registered in SA. There are also over 40 foreign banks with representative offices or branches based in SA (SARB, 2020). For these foreign banks, the strategic decision-making process was controlled outside of SA thus placing them beyond the scope of this study. Focus was placed on banks with head offices registered in SA which will allow for easier access to strategic decision makers. These business leaders were approached using the contact details provided by the SARB and by leveraging professional networks of the researcher who previously worked in the banking industry.

4.4 Unit of analysis

The **unit of analysis** in this study was the individual leader involved in strategic decision-making. According to Ansell and Boin (2019), experience and skill are especially important in crisis management and a precondition is that the decision-maker has enough autonomy to engage in sensemaking.

4.5 Sampling method and size

A non-probability **sample** was used to collect data using a purposive sampling method. The benefit of a non-probability sample is that it is less costly, and it is a quicker method to gather data, however the limitation of this method is that the results observed are less generalisable (Etikan, 2016). The intention of this study was not to generalise findings to all employees or the entire population, but to explore the phenomenon of strategic decision-making under crisis-induced uncertainty at the top managerial level, as it is this level that impacts the performance of organisations

through key strategic decisions. To this end, Creswell (2012) notes that a nonprobability sample can provide useful information for answering questions and research propositions.

In purposive sampling, the researcher applies judgement to select individuals based on a selection criteria (Zikmund, 2003). A sample of 21 leaders was selected using judgement to ensure leaders with adequate experience and appropriate strategic decision-making mandate were included, as well as ensuring that the different product areas of the bank were represented. This sample size is consistent with a similar study performed by Mishra et al. (2015), who interviewed 20 emergency services personnel to understand the decision-making processes used in crises. Specific criteria used to select the purposive sample will include i) individuals with at least 12 years of experience in leadership, as they would have therefore experienced the global financial crisis of 2008 which represented a recent critical event that may or may not have had an influence on the strategic decision-making process used to respond to the coronavirus crisis, ii) individuals who are involved in strategic formulation and implementation processes at a business unit or organisational level during the current crisis. For the first criteria, it was important that the leader had prior experience as this may be used formulating responses during a crisis (Klein, 2008; Klein et al., 2001). The second criteria is in line with recent studies on strategic decision-making during critical events, where interviews were held only with top managers who were involved in strategic decision-making (Haider & Mariotti, 2016).

Larger banking groups offer products and services in Banking, Insurance, Asset Management and Telecommunications. It was expected that each of these industries are impacted differently by the coronavirus pandemic and therefore the impact on the business units of the bank servicing that industry will experience the crisis differently. Therefore, the sample included leaders from different banks and was spread across business units servicing a variety of industries. A broad sample will also increase the representativeness of the population (Galvin, 2015). Therefore, the sample also spanned over different functional areas such as general management, sales, operations and financial management, to ensure that different aspects of strategic decision-making are considered, as the experience of the crisis may differ amongst functional areas. Functional areas that are client-facing may be more strongly affected by the crisis than internally-focused support functions.

In an attempt to provide practical guidance for non-probabilistic sample sizes, Guest, Bunce & Johnson (2006) found that saturation could be reached with 12 interviews. Factors that allow for small sample sizes include, i) the use of semi-structured interviews, thus limiting the number of themes to be explored performed, ii) studying a relatively homogeneous population, as interviewees are selected based on a specific set of criteria, it increases the likelihood of consistency in views expressed by similar individuals, iii) exploring a widely distributed experience and iv) the level of themes sought by the researcher is overarching as opposed to granular (Guest et al., 2006). In this study, the aim was to explore the broad impacts to the strategic decision-making process under the widely shared experience of the global pandemic. As the business leaders were selected from the same industry and using criteria to distinguish their level of experience and involvement in strategic decision-making, there was homogeneity in the sample. Given the time-intensive nature of qualitative research, a small sample would be practical considering the time and cost constraint of this study (Mason, 2010).

In a more recent attempt to determine appropriate non-probabilistic sample sizes, Galvin (2015) applied statistical methods using a binomial distribution to determine the recommended number of interviews to be performed in a qualitative study. The sample size (n) is calculated using the logarithmic formula, $n = \frac{\ln(1-P)}{\ln(1-R)}$, where R is “the minimum proportionate level of occurrence of themes within the population that the researcher wishes to identify”, and P represents “the level of confidence he or she wishes to have that all such themes are represented in the sample,” (Galvin, 2015, p.8). For example, to obtain evidence for views held in 10% or more (up to 90%) of the population, with 95% confidence that all issues have emerged from the sample, 29 interviews are required; whereas to identify views held by 20% or more (up to 80%) of the population at the same confidence level, 14 interviews would suffice (Galvin, 2015). Considering the homogeneity of the population, a sample of 21 leaders could provide the views held by a large percentage (up to 87%) of the population. According to Mason (2010) the sample needs to be large enough to ensure that the diverse opinions of different participants are uncovered, however the concept of saturation will still be the guiding principle as to the ultimate sample size in a qualitative study.

The interview process was stopped at the point of saturation, where no further themes emerge from the data (Mason, 2010), this is illustrated in **Figure 3** in section

5.4 below. While saturation was reached at 17 interviews, the researcher continued with four more interviews to confirm that no new codes arose. This was relevant given that interviews were scheduled with leaders over a six-week period during the crisis, which meant that as events unfolded it could have given rise to new areas of uncertainty. Some respondents also highlighted that the strategic decision-making process was evolving as new information emerged from the crisis.

4.6 Measurement instrument

Tourish (2019) advocates that leadership research on complex topics requires a deeper level of engagement than questionnaires and experiments. With the context being the coronavirus, semi-structured interviews were performed with each of the business leaders on a one to one basis. The advantages of interviews include the ability for interviewees to provide rich historical information as to their experience with crisis management, as well as providing organizational and personal contextual information surrounding their strategic decision-making process (Creswell & Creswell, 2018; Thomas, 2001). The interview duration was between 30 to 60 minutes, which allowed for time to ask clarifying questions.

The interview guide displayed in Appendix Two was used to direct the overarching discussion in line objectives listed in section 1.5. Appendix One shows the consistency between the research questions, the literature, and the interview questions. The interview questions were open-ended to allow for a deeper exploration of the interviewee's view on the impacts of the crisis on strategic decision-making and to gain insight into their thought processes when making strategic decisions. Using semi-structured interviews allows for open dialogue that can provide diverse information from a small sample of interviewees (Thomas, 2001).

An advantage of interviews as a data collection method, is the ability of the researcher to control the line of questioning (Creswell & Creswell, 2018). In an interview, the researcher serves as the key instrument for knowledge creation by facilitating the discussion to ensure an interchange of views (Brinkmann & Kvale, 2019). In line with the specific research goals on strategic decision-making, probing questions were used to guide the discussion to obtain further clarification on the themes that emerged during the conversation (Thomas, 2001). As physical interviews were not possible due to social distancing requirements under the current coronavirus crisis, virtual interviews were conducted using the relevant video-

conferencing software. All interviews were recorded using an audio device and transcribed to enable detailed qualitative analysis.

4.7 Data gathering process

Text data was gathered from the fieldnotes taken during the interview and non-text (audio) data that was obtained from the interview recording. The benefit of using virtual conferencing software to conduct interviews was the ability to record data that was used at a later stage. The recordings were transcribed verbatim for further analysis. Pilot interviews were conducted to test the effectiveness of the interview questions proposed in Appendix Two. The pilot interviews yielded quality data that was included in the final sample; however, the interviews were too short and did not produce the deep insights desired for this research. To adjust for this, while the key questions remained unchanged, further probing questions were used in subsequent interviews and a conversational approach was applied to facilitate a deeper discussion.

4.8 Method of analysis

Thematic analysis is a method that provides flexibility in uncovering patterns in data when investigating a novel social phenomenon and provides a deep understanding that paints a full picture of the overall experience of an event (Hawkins, 2018). In line with methodology applied in similar studies (Bakonyi, 2018; Haider & Mariotti, 2016; Isabella, 1990; Uitdewilligen & Waller, 2018), detailed transcribed notes from the interviews were categorized into common concerns, similar -details, -observations and -perceptions. Analysis was performed using the Atlas.ti software application. Coding units were identified as key words that appear frequently or ideas that were emphasized by the interviewee, these units were then be arranged into a coding frame for further analysis (Hussey & Hussey, 1997). Similar codes were arranged into code groups and groups were thereafter joined to form higher level themes.

4.9 Quality assurance

Creswell & Creswell (2018) propose several techniques to ensure the validity of the qualitative research, these include thick description, clarification of bias, spending a prolonged time in the field and member-checking. In this study, business leaders provided responses with a thick description of the setting in which the study was performed to make the findings more realistic and richer. Further, Brinkmann & Kvale

(2019) posit that objectivity and reliability are increased by allowing interviewees to speak for themselves and to object to any misinterpretations by the interviewer.

The possibility of bias introduced by the researcher has been clarified in section 4.11 below and steps were taken to mitigate this risk. The researcher has spent a significant period of time in the banking sector and has participated in strategic decision-making at a business unit level. This experience helped to facilitate the conversation with interviewees to not only gather rich data but also ask clarifying questions thus allowing members to immediately check and confirm the accuracy of their responses. Lastly, due to the confidential nature of the discussion on corporate strategy, some members requested copies of the interview transcripts to check the accuracy and to keep for their own records.

To enhance reliability Creswell & Creswell (2018) suggests checking transcripts, review of codes and cross-checking with different researchers. The interviews were recorded and transcribed using software first, thereafter the researcher will perform a second manual review of the transcription for accuracy against the recording. Further, by including a broader range of banks from the big four to second tier, this allowed the researcher to triangulate the different responses received and ensured that the data was not skewed by a particular organisational strategy or culture. This approach enhanced the credibility of responses received from the various business leaders in the banking sector.

4.10 Ethical considerations

Audio as opposed to video recordings were taken to ensure that the identity of the interviewee is kept confidential. Findings were reported without identifiers, however certain demographic information such as position or level of seniority were used for contextual value, this is illustrated in **Table 1** in section 5.2 below. All recordings will be stored safely for a period of 10 years and were backed up to cloud storage which is access controlled. Written consent was obtained from interviewees prior to conducting interviews, albeit in some cases due to lockdown measures and remote working arrangements, this was done via email or verbally at the start of the interview recording.

4.11 Limitations of the study

In probability samples, such as simple random sampling, all interviewees have an equal chance of being selected, whereas in the non-probability samples, such as purposive sampling, the researcher applies judgement in selecting the sample units. This results in Selection bias (Neil & Rasmussen, 2019), where it is possible that the sample characteristics differ from the population characteristics. Galvin (2015) explains that the mathematical reliability of the data is limited when the sample is not truly random and that a belief or experience may be over-represented in the sample as compared to the beliefs or experiences of the population. Furthermore, the strategic decision-making process for an organisation can be specific to that business or even the problem being faced at the time (Simon, 1979). These factors, coupled with the data being collected only from the banking sector, will limit the generalisability of the findings of this research.

However the aim of this qualitative study was not to generalise the results but to explore, to interpret the meaning of a social phenomenon and to create awareness around the difficulty of strategic decision-making under deep uncertainty (Mason, 2010; Tye-Williams, 2018). The sample will include members of leadership whose experiences will provide insight for other decision makers in the business, as it is the duty of top management teams to provide sensemaking and meaning-making to the rest of the organisation during a crisis (Ansell & Boin, 2019). Understanding the meaning of the changes in the strategic decision-making process during crisis and uncertainty could help different levels of management adapt their approaches to their strategic decision-making process in business.

Creswell & Creswell (2018) suggests that qualitative research should be conducted in the natural setting of the interviewee to allow for objective observation in the relevant context; but this will not be possible during the coronavirus lockdown measures. However, as leaders are becoming accustomed to working remotely, this new environment has become the normal setting for the strategic decision-making process.

As the researcher was a previous employee of some of the banks to be included in the sample, this introduced potential researcher bias. To mitigate against bias, the sample included leaders that were not previous work colleagues. Where a previous relationship did exist between the researcher and the interviewee, it did introduce

some difficulty when the interviewee skipped over a response on the assumption that the researcher was already aware of the information, thus expecting the researcher to fill in the blanks, which would have impaired the objectivity of the data. To mitigate this, clarifying and probing questions were used to get the interviewee to elaborate on their responses.

As interviews will take place during the coronavirus crisis, the data collected may be skewed with bias of the interviewee and may be influenced by current news events. However, given that the crisis has been ongoing for a few months, business leaders had time to form their own views on the future and assess internal business and customer data, as opposed to relying solely on information from the news.

4.12 Conclusion

The section above explained the research design and methodology for this qualitative study. Using an interpretive philosophy and exploratory strategy, a sample of leaders from the banking sector were interviewed using a semi-structured questionnaire. This study took place during the coronavirus pandemic and therefore provides a unique set of rich cross sectional data. By applying an inductive approach, data was coded and analysed for key themes to be compared to the adapted model of decision-making in **Figure 2** above. By interviewing experienced business leaders in the banking sector, rich and meaningful data was collected to contribute toward the objectives of this study. The sample of 21 leaders was more than sufficient, as saturation was reached. To ensure quality of data, the transcripts were done by the researcher and reviewed against the audio recordings from the interviews. Limitations of the study, including researcher bias, were acknowledged and mitigated where possible. The interview process provided a wealth of data as leaders reflected on their experience of the uncertainties created by the coronavirus crisis and described their approach to strategic decision-making, these findings are presented in Chapter Five below.

5. CHAPTER 5: RESULTS

5.1 Introduction

The results of this qualitative study on strategic decision-making in crisis and uncertainty are presented in this chapter. In line with the methodology described in Chapter Four, semi-structured interviews were conducted with business leaders in the banking industry. Interviews were conducted using the detailed questions presented in Appendix Two and in alignment with the study objectives and research questions outlined in Chapter Three. Findings from the comments of interviewees are presented below, along with a thematic analysis, to highlight the key insights from the research performed. A description of the companies and interviewees is provided below for contextual purposes.

5.2 Sampling description

The sample consisted of 21 senior managers and leaders in the banking industry and was selected across a variety of banks, including the big four banks and two second tier banks listed on the JSE. All banks have head offices based in SA and have therefore been subject to the national lockdown restrictions introduced in response to the coronavirus pandemic. Leaders of these banking institutions have therefore experienced the deep uncertainty first-hand over the last few months and have been responsible for the strategic response to the crisis. Both leaders in business and other functional areas were interviewed in order to provide a diversity of perspectives on the strategic decision-making process.

A summary description of the sample is presented in Table 1 below. In order to maintain confidentiality, the specific business area of the bank and title of the interviewee will not be disclosed. The generic title will be presented to provide an idea of the level of strategic influence of the leader that was interviewed. The number of years of experience was a criterion for selecting the purposive sample, as described in chapter 4.5, and is therefore presented below. Candidates with a significant number of years of experience are key to the strategic decision-making process in the banking industry, also these leaders would have experienced previous crises such as the Dot.Com bubble of 2001 and the Global financial crisis of 2008. From the literature review, it was important to determine to what extent, or if at all, leaders rely on experience when dealing with crisis and uncertainty.

Table 1: Description of interview sample

No	Bank indicator	Client Segment of Bank	Business area of bank	Position of interviewee	Years of experience
1	Big 4 Bank A	Retail Segment	Strategic planning	Programme Manager	>15 years
2	Big 4 Bank C	Commercial Segment	Strategic planning	Executive Head	>20 years
3	Big 4 Bank A	Commercial Segment	General Management	CEO	>20 years
4	Second Tier Bank A	Commercial Segment	Transactional banking	COO	>20 years
5	Second Tier Bank A	Commercial Segment	SME Transactional banking	CEO	>20 years
6	Big 4 Bank C	Commercial Segment	Strategic planning	Executive Head	>15 years
7	Second Tier Bank A	Commercial Segment	Term Lending	COO	>10 years
8	Second Tier Bank B	Commercial Segment	Finance	Head	>10 years
9	Big 4 Bank A	Retail and Commercial Segments	Insurance Brokerage	CEO	>15 years
10	Big 4 Bank A	Commercial Segment	Sales	Regional Head	>15 years
11	Big 4 Bank A	Retail and Commercial Segments	Finance	Deputy CFO	>15 years
12	Big 4 Bank A	Commercial Segment	Term Lending	CEO	>20 years
13	Big 4 Bank A	Retail Segment	Telecommunication	CFO	>15 years
14	Big 4 Bank B	Retail Segment	Digital	Executive Head	>15 years
15	Big 4 Bank B	Retail and Commercial Segments	Strategic planning	Executive Head	>20 years
16	Big 4 Bank D	Retail and Commercial Segments	Lending	Executive Head	>20 years
17	Big 4 Bank A	Retail Segment	Transactional banking	CFO	>10 years
18	Big 4 Bank B	Retail and Commercial Segments	Strategic planning	Executive Head	>20 years
19	Big 4 Bank A	Commercial Segment	Lending	CEO	>15 years
20	Big 4 Bank A	Retail Segment	Transactional banking	CEO	>10 years

No	Bank indicator	Client Segment of Bank	Business area of bank	Position of interviewee	Years of experience
21	Big 4 Bank A	Commercial Segment	Sales	Regional COO	>10 years

(Source: Author's own creation)

5.3 Reliability and validity

Brinkmann & Kvale (2019) speak to the validation process that happens during the interview itself, whereby the researcher validates the interviewees' responses by using clarifying questions. The researcher summarised and confirmed his understanding of each response in order to improve the objectivity of the data collected as the interviewee had the opportunity to object to any misinterpretation in the interview process. Where requested, copies of transcripts were made available to interviewees for them to check the accuracy of the transcribed data.

5.4 Coding themes

Thirteen core categories arose from the data collected and three themes were identified through the analytical process. The details of the codes, categories and themes are listed in Appendix Three. Themes that emerged included the paradoxical impacts of crisis and uncertainty, the stages of decision-making in crisis and a pragmatic philosophy of leadership and strategic decision-making in crisis and uncertainty. These themes are explained further in Chapter Six below. The graphs below summarise the codes identified throughout the interview process, on the left the total number of codes are displayed and on the right the number of new codes per interview are shown.

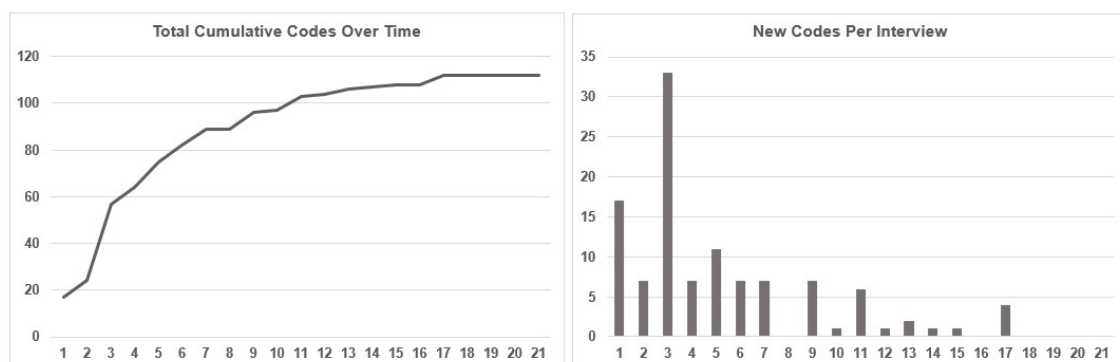


Figure 3: Analysis of interview codes
(Source: Author's own creation)

The graphs above illustrate the process of reaching saturation, whereby the number of total codes reached a maximum of approximately 120 codes and no new codes were discovered after the 17th interview. The first two interviews were pilot interviews and feedback was used to enhance the interview approach, therefore the number of new codes identified increased significantly from the third interview onward. In some interviews, respondents were not able to comment in detail due to confidentiality, thus it was not possible to gain new insights. Saturation was reached after the 17th interview, however a few more interviews were conducted to confirm that no further new codes could be identified by performing similar interviews in the current context.

5.5 Results

The findings below are grouped by types of codes and presented in order of the research questions which guided the data collection process.

5.5.1. Research question 1

RQ1: During a crisis, how do business leaders in the banking sector perceive the level of uncertainty in their environment of business?

i. Areas of uncertainty

The perception of business leaders was that the coronavirus crisis had increased the level of uncertainty in the banking sector. As multiple sectors of the economy were impacted by the crisis, uncertainties were created across the value chain of the business.

There was uncertainty about whether there would be a disruption in services provided by suppliers.

*17:7 "there are **suppliers** that are dependent on you as an organisation in ensuring that they have certainty as to what they are going to receive from you..." [Respondent (Resp.) 17]*

Uncertainty was raised over the internal components of the business, such as staff, products, business processes, and the financial stability of the bank. Leaders needed to protect their staff from the health risks of the pandemic, whilst also maintaining productivity.

19:1 “how do we ensure that **our people** are safe firstly. What initiatives or plans do we put in place to make sure that the staff are safe and they are still able to operate in terms of the pandemic from a home perspective.” (Resp. 19)

Respondents doubted whether the traditional set of products would serve the needs of customers during the crisis.

1:3 “the **need for credit** drops but there's an increase in terms of their insurance requirements that they have.” (Resp. 1)

19:10 “remember that we are helping a customer based on his **financial requirement** over a period of time, now the client did not know what the future holds and that's where a lack of visibility made it very **difficult to apply normal solutions**. So, normal solutions would be that we would take a view on historical trends and project them forward...but with Covid those historical trends fell off the cliff!” (Resp. 19)

Leaders were not sure whether existing systems and processes were able to execute the unique crisis relief solutions.

12:4 “We didn't know if our **systems** could manage it, we didn't have the **processes** in terms of how we manage this thing on the ground, so all those things had to be developed.” (Resp. 12)

Respondents were not able to determine the amount of financial resources needed to withstand the negative impacts of the crisis.

11:5 “what sort of **resources** we have and how deep can we go into those resources, looking at **liquidity funding, capital and balance sheet strength**.” (Resp. 11)

The responses of external stakeholders such as government and regulators added to the uncertainty in the strategic decision-making process.

10:5 “to what extent will **government** respond in terms of the severity of the lockdown. And again, there was different approaches taken by different countries, we talked about Sweden deciding, no we are just going to leave it to the people to decide.” (Resp. 10)

11:7 "what would the **regulator** [do], because our interests are highly regulated, so what were the regulators come up with and how could we also posture in terms of looking for regulation that we think will help solve for the objectives."
(Resp. 11)

The impact of the crisis on customers was perceived to be severe and there was major uncertainty around customers' ability to spend and to service their debt.

6:2 "**our clients** are unable to trade as per normal therefore the ability to generate revenues comes under strain and therefore,...their ability to service the debt is a concern." (Resp. 6)

10:30 "but now what is **the consumer** going to do, how is the consumer going to react to this? And I think that's the part that's missing." (Resp. 10)

A significant area of uncertainty was the duration of the crisis both from a health and an economic perspective.

16:1 "uncertainties have been the **duration** of inactivity from an economic perspective, no one ever expected to have 178 days of no or minimal economic activity due to lockdown." (Resp. 16)

Leaders were not able to accurately estimate the impact on the economy and the banks' results, as well as the time needed to recover from the crisis.

13:9 "then lockdown happened and it hurt that already **struggling economy** and the question is, will that economy come easily out of this or will it not?"
(Resp. 13)

15:1 "banking mirrors an economy, so the impact of Covid on the economy and the **economic** and social **impact** has very much been mirrored by what you see in the Bank's results and reporting. And so, I suppose that has been significant and probably the negative." (Resp. 15)

The coronavirus pandemic posed a serious threat to personal health and safety, which compounded the uncertainty for leaders.

19:23 "these decisions are not easy to make in a time of uncertainty due to the fact that there is no visibility in uncertain times, you have no idea when the **vaccine** is going to come about." (Resp. 19)

10:6 *"On a personal level, there was the uncertainty of your **own mortality**, your family and your colleagues and your friends so, are you going to get it?"*
(Resp. 10)

The impact of the crisis and level of uncertainty is affected by several environmental or contextual factors. The South African context provides unique challenges that make strategic decision-making more difficult for business leaders as compared to a stable environment.

9:16 *"understand that a lot of the decision-making you do within the South African context is also predicated on the fact that it is a **volatile environment**,"* (Resp. 9)

13:5 *"**Eskom is a big problem** at the moment relative to Covid, so the combination of the two is a really bad one, because you want to go ahead with agile working and then Eskom hurts you."* (Resp. 13)

Uncertainty related to both the short term and the long term, as some impacts of the crisis were temporary, whilst others were more permanent in nature.

9:11 *"it could have turned out to be much worse and we could of all died but then you can't act on that. But we thought that the uncertainty was a lot **more short-term** rather than long-term."* (Resp. 9)

20:3 *"the **ability to forecast in the future** became even more hazy, because of timing around lockdown levels, when will that release, when will the virus start to dissipate...So, the future outlook became a lot blurrier to try and predict."* (Resp. 20)

ii. Types of crisis

The type of crisis affected the level of uncertainty that was created for the strategic decision-making process. Respondents described that the coronavirus pandemic posed a triple threat as a health crisis that caused an economic crisis, and ultimately led to a social crisis.

5:11 *"the **economic fundamentals** of the society has changed dramatically. So, you know on that level you look at the contraction, call it 10% or 15% on*

the year, and inherently in the contraction there's less going around and that's got a lot of strategic consequence." (Resp. 5)

*18:7 "the increasing price sensitivity of customers has just been accelerated because of **unemployment**." (Resp. 18)*

The factors above and below contribute to the unprecedented nature of the coronavirus pandemic, which resulted in heightened levels of uncertainty.

*4:3 "that [the crisis] has caused uncertainty because the **whole value chain of businesses** has been impacted." (Resp. 4)*

*15:15 " the fact that a **health** crisis has turned into an **economic** crisis that's turned into a **social** crisis, has highlighted the major unsustainable issues that the world is facing." (Resp. 15)*

*16:24 "generally crises are something that will happen and it will be a two-day or maximum a week thing. So, you deal with it and you have a little bit of anxiety but you are fit and you get through it, you make decisions on the spot and so on. This was a **long-drawn-out process**." (Resp. 16)*

To make effective decisions, leaders compared the coronavirus pandemic to previous crises, commonalities helped reduce uncertainty, while differences increased uncertainty.

*7:2 "even the 2008 crisis, it was a crisis but it wasn't this magnitude, it didn't **affect every single industry** in every part of the world in every country, whereas that you could have said okay I'm going to streamline my Home Lending." (Resp. 7)*

*12:40 "we've never had a crisis like this but we've had crisis. So, if you call back there's been the **Spanish flu**, the **Global Financial Crisis (GFC)** all those things. So, we've taken bits and **pieces** in terms of **all those crises** that **have set us up now**. We have managed risk better after the GFC, we've managed the contagion effect better after the Spanish flu." (Resp. 12)*

iii. Stages of decision making in crisis

To respond to the multitude of uncertainties created by the crisis, leaders had broken up their decision-making process into stages. In each stage, the focus was placed on a different timeframe, with different types of decisions being made.

In the first month of the crisis, decisions made by leaders were focused on the short term and the objective was to ensure that the business and its people survived the crisis. Decisions therefore were more operational in nature and related to the safety of staff and the immediate needs of customers.

*12:3 "we also had to triage the book properly to understand those that had the most likely chance of **surviving** this thing and then we put money there." (Resp. 12)*

*18:14 "we also had to make sure that we were supporting our clients, so that was kind of the short-term focus, to **survive** to stay in the game." (Resp. 18)*

In the period between one to three months of the crisis, leaders attempted to create stability in their businesses. Decisions were focused on the medium term and the objective was to provide support for customers to withstand the duration of the crisis.

*9:2 "The second thing we said is how do we engender **stability** in the business, so if we've addressed the existential stuff, let's get stable, let's get the guys happy, let's support the frontline and that sort of thing." (Resp. 9)*

*16:21 "the mental driver was, the business must always be on; it must be in a **stable** position and able to service and support customers, that was the objective. All decisions were based on making that objective a reality." (Resp. 16)*

After having stabilised the business, leaders then turned their focus to longer-term sustainability. Decisions became more strategic in nature and the objective was to position the business for long term success, after accounting for the impact of the crisis on the bank's own business model and the business models of customers.

*9:6 "then the third thing is, where did we want to be **in a year's time** or two years' time and what are the **opportunities** that covid-19 gave us?" (Resp. 9)*

15:19 *"and then emerge through this in a more **sustainable** way, and I suppose to me that's looking to **re-imagine** what business might look like in 2021 and beyond."* (Resp. 15)

To ensure efficient reporting of the findings above, some of the relevant data obtained from the interview process has not been presented above; please refer to Appendix Four for other noteworthy quotations.

5.5.2. Research question 2

RQ2: How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?

As a result of the uncertainties created by coronavirus crisis, the strategic priorities of leaders had shifted away from a primarily profit focus and shareholder value, toward the social needs of all stakeholders. The change in priorities impacted the execution of existing strategies and shifted focus to new initiatives as well.

i. Strategic priority shifts

As the entire economy was experiencing the negative impacts of the crisis, the strategy of business shifted from acquiring new customers through increased sales, to retaining existing customers by providing crisis relief solutions.

21:15 *"customer **retention** because you couldn't bank new business, so you must hold on to your current customers."* (Resp. 21)

Leaders were making decisions through a social lens as their concern for people became more explicit and during the crisis, the safety of staff and customers took precedence over making profits.

6:25 *"if you had to choose between doing something and not doing something, it's not just a question of would it make money, will it protect our employees...can people go and meet clients safely? And if they can't, even though you may make money or not make money, you need to **do the right thing for the employees.**"* (Resp. 6)

17:3 *"we are not going to be judged by the profit contribution that the we as a group have made, but actually...of more importance, will be how we **assisted customers and employees** through this difficult time." (Resp. 17)*

Aspirations of profit and balance sheet growth had been shifted to focusing on surviving the economic turbulence caused by the crisis.

3:16 *"example if you were launching a **new business**, then we decided listen that's cool but we are going to **park this strategy** and redeploy all those resources to tackle credit" (Resp. 3)*

12:11 *"It's almost turned in terms of saying, where we were **thriving** now it is **to survive**" (Resp. 12)*

During the crisis, there was a shift away from shareholder primacy to meeting the needs of all stakeholders; the approach to strategy became more inclusive.

15:7 *"that will create a very different way that corporates approach delivering their mandate, not to **shareholders** but **to all their stakeholders**, of which government, society, employees, citizens, and shareholders are all part of an ecosystem." (Resp. 15)*

Customer-centricity became a greater focal point in the minds of leaders as they empathised with their customers' needs during the crisis.

3:36 *"we actually had that opportunity where it was more about looking in the direction and walking a mile **in your client shoes** and then trying to build solutions that makes life easier." (Resp. 3)*

11:22 *"we also put **their priorities** slightly above us and that's going to cost us a couple of hundred million rand but we chose to take the pain." (Resp. 11)*

Leaders believed that helping customers would build the trust needed to maintain long-term relationships.

3:35 *"there was a big focus away **from profitability to assistance**, that's a massive thing for a bank." (Resp. 3)*

19:14 *"we shifted from an acquisition / new business strategy to a retention/ ongoing help or **assistance** strategy, in simple terms." (Resp. 19)*

20:7 *"those were our strategic responses, it was certainly a time for the bank to show its brand, and its commitment to customers. You know, helping our customers through these difficult times, we felt would lift the brand reputation and build more **trust** and loyalty with clients for the long term."* (Resp. 20)

A large portion of time and energy was spent on providing relief to customers from their existing credit obligations, even though that came at a major financial loss for banks.

17:10 *"when the crisis hits now, the focus shifted very differently and we've had to now make sacrifices where we have had to **set aside** things like **fees** which became quite topical in the market and particularly in the banking environment, how do we relax things like that, how do we come up with **relief solutions** for customers."* (Resp. 17)

20:8 *"this **credit relief**, that was quite a massive decision to make, it's certainly outside of business as usual. And that took a lot of time and effort, decisioning, collaboration with various areas."* (Resp. 20)

To make decisions quickly and to respond effectively, a shift was made from the traditional competitiveness between businesses to a higher level of collaboration.

19:25 *"What helped was a lot of **collaboration** within the group; for the first time we saw that these **silo businesses** within the group came together and we had a lot of input from Treasury, from the guys that the Advisory desk, there was a lot of consultation."* (Resp. 19)

Besides the cost benefit of implementing a work-from-home strategy, leaders highlighted other advantages of embracing flexible working arrangements, which includes being more productive and ensuring the safety of staff.

10:18 *"one of the good things that came out of Covid is that everybody suddenly realized how well we can use technology and we can **work from home**."* (Resp. 10)

17:11 *"how do we execute our services and that will come down to enabling **work from home** a lot easier for employees, protecting their interests."*
(Resp. 17)

Attention was also given to the operating model of the business, as in a time of crisis when growth was subdued, leaders sought efficiencies in their business to ensure sustainability.

4:11 *"to save some money, bring in competency that has ability to change processes make things more **efficient**, the less rework, the deployment of more digital type interfaces."* (Resp. 4)

14:7 *"be somewhat aggressive in reducing your physical expensive infrastructure, and replace it with a slicker, **leaner** machine from a growth and managing your income statement perspective."* (Resp. 14)

Resources had to be repurposed to meet the immediate strategic priorities of the bank.

3:7 *"We **converted** drivers to delivery people. You had to take the **skills** that you had and then shape it to meet the crisis head on."* (Resp. 3)

12:13 *"We've also changed tact in terms of our guys on the ground, we've **repurposed** them. So, we've repurposed dealmakers into capital preservation portfolio managers."* (Resp. 12)

Digitisation was highlighted as a key strategy to reduce the cost to serve banking customers.

14:6 *"what it's highlighted, and the rate at which you now going to **aggressively digitize** your sales capabilities, digitize some of your service offerings, has become an imperative that should have happened yesterday."* (Resp. 14)

Lastly, after stability was obtained, leaders gave thought to the long term and how to position their businesses for strategic growth in the new environment that is to emerge in the aftermath of the coronavirus pandemic.

4:5 *"it affects the way and where we **market**, in what **sector** we go for."* (Resp. 4)

6:8 "And so we are having to **strategically consider which clients** are strong through the cycle, which clients may be more affected." (Resp. 6)

ii. Crises creates urgency

The threats posed by the crisis and the need to respond to avoid loss, creates a sense of urgency amongst leaders and their staff. Leaders felt as though there was no choice but to make the decisions needed to respond to the crisis.

10:36 "What Covid has done is, it has **forced** people, even those that are beyond late adopters they were never going to adopt anything, it's forced them to adopt it." (Resp. 10)

20:10 "the Covid period, really **forced** quick decisioning to ensure that we are ready to operate." (Resp. 20)

The crisis introduced extreme time pressure which led to people executing decisions faster than usual. Some respondents were pleased that the pace of strategic implementation had increased.

1:14 "the decision-making process is much **quicker**, which results in more **implementation** of things which is an advantage." (Resp. 1)

18:23 "I think there's an elevated sense of **urgency**, one, so **less procrastinating** and trying to take the bull by the horns." (Resp. 18)

While most leaders warned against reactive decision-making, some respondents admitted that the sense of urgency did lead to decisions being taken in reaction to immediate risks.

9:31 "Then you start acting in very much a **reptilian** fashion, it's **reactive** and one of the things you say is, "I don't want to hurt the reputation of the bank or the business unit," and that becomes the driving thing all the time" (Resp. 9)

10:17 "that's what happened with Covid you were just confronted with stuff and you must **react**." (Resp. 10)

iii. Crisis impacts on strategy

The crisis and the uncertainty it introduced had impacted the method of strategic execution. In most cases, leaders adjusted the pace and timing of implementation, however maintained the consistency of the organisation's purpose.

The economic impacts of the crisis had placed constraints on capital which also led to certain strategies being delayed or disrupted.

3:19 *"our priorities definitely shifted and it's more like pressing **pause** button on some of these things and deliberately saying you're going to come back and fix it, or we'll come back and pick it up."* (Resp. 3)

7:28 *"we actually **shutdown or paused** a number of smaller projects that weren't really strategic in nature."* (Resp. 7)

The most notable impact of the crisis on strategy is the acceleration of existing strategies such as flexible working arrangements and digital transformation.

9:7 *"there were opportunities that were available that we could opportunistically use to **expedite** our strategic vision and strategic direction. You know we wanted to be at 50% work-from-home by the end of the 2021 calendar year, now we going to be there by the end of the 2020 calendar year."* (Resp. 9)

14:1 *"it has almost **accelerated** the need for the rate of digitization. And I think this is relevant not only from a financial services perspective, but I think it's becoming quite relevant across all sectors of the economy."* (Resp. 14)

The purpose was re-affirmed and the overarching strategy of the business was unchanged, as leaders were wary of making discontinuous changes in a volatile and uncertain time.

13:25 *"if you've got a **vision and mission**, you **can't** because of a crisis, **change** your vision and mission."* (Resp. 13)

9:25 *"it wasn't actually changes to the strategy, it was **changes to how we implemented**."* (Resp. 9)

19:13 *"the textbook strategy was still something we could think about but it was around execution or **implementation** that we **had to reinvent** ourselves on." (Resp. 19)*

Most leaders indicated that strategic projects needed to be reprioritised in order to effectively respond to the crisis.

17:16 *"we had to accelerate and drop things. We had to **reprioritize**, where certain things that were in the pipeline, we had to make trade-off calls to figure out, do we cut our losses on things that we have already invested in...and reprioritize that." (Resp. 17)*

To ensure efficient reporting of the findings above, some of the relevant data obtained from the interview process was not presented above; please refer to Appendix Five for other noteworthy quotations.

5.5.3. Research question 3

RQ3: What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?

The urgency created by the crisis led to a faster decision-making process, which increased the risk of error. Leaders therefore mitigated this risk through collective decision-making, collaboration, and consultation.

i. Collective and Collaborative decision making

A collective approach was utilised to increase the level of expertise and diversity of views in the decision-making process. Teamwork enabled leaders to process the large amount of information in a relatively short time frame, as well as avoid individual biases in formulating effective responses.

17:35 *"we as a **collective** or as a forum decide on a way forward and make decisions as opposed to any individual having a particular bias towards anything. You always seek to understand opinions and views, and different options that is available, but then consensus must come down back into the collective." (Resp. 17)*

21:35 "you are **not the only person** making the decision, there are people who can sense check the decision and say ok, are we in agreement or not agreement, so that is the mitigating factor." (Resp. 21)

Internal collaboration improved as teams from different areas of the organisation were united by a common purpose in a time of crisis.

19:37 "If there was one thing, everybody in this bank **came together** to create this, otherwise you would never have those solutions in such a short time." (Resp. 19)

21:21 "The other thing that was required was **collaboration**. Now, no one person has all the answers, nobody knew, one of the things that I also realised was that we were all required to step up." (Resp. 21)

Collaboration also took place with external parties to obtain information from those had experienced the crisis in other countries.

11:34 "We tried to **consult** with...people who were leading, who had more of the crisis earlier, so we looked at banks in the East and how they dealt with certain things." (Resp. 11)

Information sharing was essential to reducing uncertainty across different teams and different levels in the organisation.

9:28 "...it **democratizes that knowledge**; it is very important for me that we push down the knowledge...as far down the value chain as possible." (Resp. 9)

ii. Consultative decision making

The coronavirus crisis posed challenges from a health, economic and social perspective. To ensure a comprehensive analysis in the decision-making process, there was increased consultation of parties internal and external to the business.

Experts need to be consulted in areas where a leader's knowledge was limited, for example in the area of macroeconomics and health related issues.

6:30 "You listen to the **health experts**; you listen to public health." (Resp. 6)

12:26 "I listen to what the **economists** talk about, we have got an economist working for us." (Resp. 12)

17:19 "Look there's always the element of uncertainty, but I guess that's where you rely on **SMEs** (Subject Matter Experts) in their particular field." (Resp. 17)

Through the involvement of the team and staff, leaders ensured that the real issues being experienced on the ground, were being addressed.

12:27 "I take the views of the **guys on the ground** in terms of what's happening." (Resp. 12)

18:26 "there's definitely a lot more **consultation** because there is so much information out there, there is so much happening in short spaces of time, that you don't have the luxury of trying to assimilate that on your own." (Resp. 18)

Senior experienced officials, such as non-executives, provided independent and unbiased strategic input to the decision-making process.

11:36 "we are providing **non-execs** monthly information. Non-execs generally get involved in our business on a quarterly basis, so getting different voices in to challenge some of the decision-making. I think that held us in good stead." (Resp. 11)

Consultation of peers also assisted in identifying gaps in the decision-making process.

19:62 "you also **consulted** a lot, you consulted with people that would give you guidance so that you can move forward because you didn't know whether your decisions were right or wrong." (Resp. 19)

iii. Nature and scope of decisions

Approach to decision-making differed depending on the types of decisions being made, with operational decisions being made faster and more frequently than strategic decisions which required more consideration.

In the early stages of the crisis, the types of decisions made were mainly operational responses to immediate threats posed by the crisis.

3:33 *"you can argue that it's not all strategic, some of it in fairness became **operational** in some instances because you were forced to respond to how the market was every day. Client engagement drove those responses and clients were asking questions." (Resp. 3)*

5:29 *"I think there's some stuff that's in the world of **obvious** and in the world of the obvious I think the speed up is easy." (Resp. 5)*

19:35 *"But the other stuff that's **on the ground**, the running of your business that we did very quickly. So, there is a big distinction." (Resp. 19)*

As time progressed, decisions became more tactical in nature as it required a significant commitment of resources in order to stabilise the business.

21:10 *"Now, getting the entire workforce to work from home was a very **costly** exercise; getting people laptops, 3G's, cell phones, airtime. And there was no time to consider that to say let's stagger the costs, it was something that had to be done immediately, you absorb the cost and you move on." (Resp. 21)*

After stability had been established, neo-strategic and strategic decisions were focused on long term plans for modifications to the markets being targeted.

5:30 *"but there's a lot of stuff that is **not** the world of **obvious**, you know the investments into which markets and what that means, how do you play in your business models that's less obvious." (Resp. 5)*

18:21 *"figure out **which sectors** we wanted to be exposed to and which sectors we did not want to be exposed to. So yes, the hospitality industry will recover in the best-case scenario, but we might not want to be as exposed to it as we were in the past because of the new normal." (Resp. 18)*

Due to the urgency created by the crisis, some decisions were made faster. Leaders indicated that operational decisions, which required no significant commitment of resources, could be made quickly.

17:24 *"It just means that the **pace**, the ability to make decisions must be a lot **faster**, there isn't any time to absorb and overanalyse." (Resp. 17)*

21:53 *"the main difference between making decisions in a Covid environment and normally [is] you don't have the luxury of that time. Which for me is good because it allows for **quick decision-making**. Covid for me it has created a sense of **urgency**." (Resp. 21)*

Conversely, as strategic decisions have significant consequences, these types of decisions were not rushed by leaders, with most admitting that the process could only be finalised in a year or so.

15:21 *"I think the **reimagining** part is probably going to take place in earnest, **in 2021**." (Resp. 15)*

19:31 *"information gathering, consultation and making decisions took a little bit longer, the lesson is **don't rush it**. We didn't rush it;...we tried to make the best possible decisions under the circumstances that we were facing." (Resp. 19)*

Admirably, in a time of financial pressure, some leaders placed priority on ethical decisions which affected customers positively but the business's profits negatively.

11:21 *"we found out that there's...customers of ours that didn't have retrenchment cover in their pre-NCA policies. So, we took a call where **legally** we had **no obligation** to do that, we also said ok let's put all our new customers versus the old customers on the right footing." (Resp. 11)*

Decision-making had to take place more frequently to respond to the volatility and uncertainty created in the environment by the crisis.

3:31 *"we normally run our businesses using concepts like a monthly Exco or a set of ExcOs to run decision making. I ran a **daily** stand-up for the first six weeks of the crisis." (Resp. 3)*

Trade-off decisions had to be made to ensure that the interests of all stakeholders were considered.

10:15 "Because you've got to **protect people**, protect clients, protect society on the one hand **and** on the other hand you still have to be available to **service clients**." (Resp. 10)

17:9 "we had to make **trade-off decisions** here, and trade-off decisions come with relaxing the requirement on the one side being profit generation to upping the social responsibility to the community and the country." (Resp. 17)

To help reduce uncertainty, leaders found guidance in frameworks that aligned with their organisation's values and strategy.

6:36 "the World Health Organization has a guiding set of **protocols and principles** around how you decide to open schools and so that's very transferable to how you decide to open the work place." (Resp. 6)

11:26 "they said, ok I don't know the unknowns but I can define the principles. So, what they came up with is a broad **framework** that has got added to our finance resource management framework, about 7 principles. So, they said that's the framework within which we are going to make decisions." (Resp. 11)

In the early stages of the crisis, decisions were primarily focused on the short-term.

3:11 "when we started our view of long-term was three weeks, so we **planned for three weeks** and then I guess in our own minds we had a backstop of like 3 months." (Resp. 3)

As time progressed and data was gathered on the crisis, the focus shifted to long-term decisions. In some cases, the decisions that were made to respond to short term threats, began the foundation of longer-term strategies.

10:27 "these decisions are going to be longer term; they are **not** going to be **permanent** decisions made now." (Resp. 10)

20:12 "it's more long-term than short-term, because I think a lot of the decisions that we landed on, laid **foundational building blocks** for these things to come together as business as usual." (Resp. 20)

iv. Cognitive processes

The banking industry is naturally inclined to analytical processes applied in driving decisions, however leaders admitted that in a time of uncertainty, intuition had to be applied in order to make the judgement calls needed to respond to the urgency of the crisis.

Analysis of financial data related to the bank and to the customer, remained an essential part of the strategic decision-making process.

*10:22 "it's being responsible in your decision-making process, have you thought it through, have you **considered all the angles** of it, have you looked at the unintended consequences, have you **done what if analysis**." (Resp. 10)*

*17:45 "you can never be sure around your forward-looking projections and so forth. I guess all you can do is, the **more analysis** you do, the more data points you gather, all it does is it gives you a little bit more assurance over what you are seeing." (Resp. 17)*

Due to the deep uncertainty in a crisis scenario, in some cases, automated models for data-driven decisioning were overridden with decisions based on the leader's intuition and expert judgement.

*10:40 "and a lot of it needs to be on **gut**, because sometimes you just need to make, it's a crisis you've got a deadline, you've got to get things out and you need to make a decision." (Resp. 10)*

*21:49 "a lot of things must be referred to **judgement**, I think I mentioned before that there is no scorecard for this environment...you cannot plug in the variables to see what output it gives you..." (Resp. 21)*

While analysis of data gave leaders a solid foundation for strategic decision-making, the process had to be combined with intuition to ensure that decisions were pragmatic.

*5:27 "you're going to have to take **judgmental** calls. I am very **analytical** but at the **same time**, I think that some things are done because of passion and purpose and you've got to back it and go for it." (Resp. 5)*

20:15 *"the process of decision-making requires, whether it is pre or post Covid, it requires some level of guidance driven by **data and** a combination of **experience**." (Resp. 20)*

Strategic decision-making was approached with conservatism, given the potential losses that were being faced during the crisis.

17:49 *"I think we all took a very **conservative** approach in our forward-looking views and I think early indications from the first two and a half months of this financial year playing out, it's certainly telling us that maybe it's not as bad as we initially thought it to be." (Resp. 17)*

19:43 *"I think the process was firstly in depth, secondly it was a very **conservative** lens that we put on because of the uncertainty." (Resp. 19)*

While innovation was not needed for sales and marketing strategies, creativity was needed for crisis relief solutions as normal solutions were not suitable for the context of a crisis.

12:37 *"So, I think it's getting the **innovative juices** going, in terms of saying what do we need to do, where do we need to do it and how do we need to do it. And then what is the future going to look like for this business? Is the future people coming through electronically and wanting straight through processing? Yes. Are we building for that? Yes." (Resp. 12)*

16:10 *"product innovation did slow down quite a bit, it might still take place in the laboratories but the reality is that it did not go to market, so **go to market offerings did slow down**." (Resp. 16)*

19:20 *"in terms of the strategic decisions, those were the decisions we made, we couldn't sit back and say our normal solutions would hold, we had to come up and **create new solutions** that would suffice in time of crisis." (Resp. 19)*

A forward-looking mindset was applied in strategic decision-making, albeit through a conservative lens.

17:20 *"A lot of strategic things that we as an organisation backed and said it is very much a **forward-looking** view to even figure out that maybe the*

recovery might be here for either the short or medium or long-term." (Resp. 17)

Some leaders' perception was that there were fewer options available to choose from and they felt forced to make decisions to respond quickly. Whereas, one respondent's view was that it was essential to try to keep options open.

*5:20 "there's no point in rushing, the best thing to do in my view was to **preserve** your **optionality**." (Resp. 5)*

*7:15 "say, look this is what the facts are we don't have a lot of **choices** this is what we need to move forward." (Resp. 7)*

Effective decisioning meant that leaders had to apply their contextual intelligence as opposed to using generic solutions for the unique problems created by the crisis.

*15:8 "these are not true, we are **not in the same boat**, my experience of lockdown in Covid has been fundamentally different to 55 million other South Africans. And I believe that there is a push to a much more just, equitable, and socially conscious world order. And so, I think that's one of the things that is emerging from this, how that plays out in strategy." (Resp. 15)*

As the decision-making process became more forward-looking and strategic in nature, scenario planning became a key tool for dealing with uncertainty.

*6:20 "the key to making decisions in an uncertain environment, is building multiple **scenarios**, and then saying if things go this way, we will do this, if they go that way, we will do this." (Resp. 6)*

v. Data gathering in crisis

The data gathering process had to be adapted to match the changes in the environment. Data collected included key metrics to measure the severity of the crisis itself, this includes health statistics and data related to government interventions.

*6:26 "before usually our processes our information sources were all internal, we had to **broaden** that a lot more. So, for **example** people now know what "R" means and it's the **infection rate** or the **transmissibility of infections**." (Resp. 6)*

Due to the volatility in the environment during a crisis, data is gathered more frequently to ensure that decisions remain relevant to the context.

11:29 *"some of the **daily KPIs** helped us understand how the market is moving, so now I have a daily dashboard."* (Resp. 11)

The data gathering process is broadened by leaders to account for various types of information relating to the crisis.

6:24 *" the number of **factors that go into a decision is exponentially more than before, way more, and it's actually the type of input it's more social, its medical, is environmental, a lot more input goes into the decision making than before.**"* (Resp. 6)

Banks had a wealth of internal data that was representative of the population and which was extrapolated to get a sense of the direction that the economy is heading in.

17:33 *"a lot of the data that we used was **internal information**, because we understand the customer's credit profile and behaviours and so forth."* (Resp. 17)

External data was collected to assist leaders to develop a wholistic picture for strategic decisions.

17:34 *"But also, **bureau information** because that provides you with the external information that you as an organisation won't be privy to, so if the customer has other products or other needs that is outside of your organisation, you need to understand that holistic situation as well."* (Resp. 17)

The data collected is more granular as the sense of heightened risk results in leaders seeking more details in order to make decisions.

20:19 *"I would say it's more **granular**, to try and nit-pick into ring-fencing those clients that were potentially impacted by Covid and how they are performing. So, it's more a **deeper analysis.**"* (Resp. 20)

Due to the unprecedented nature of the crisis and urgency needed in responding, leaders often had to make decisions with incomplete data.

21:33 *"It's about courage, you must just make the decision and know that you **don't have all the information**, you haven't done all the analysis." (Resp. 21)*

Some historic data that is traditionally used in forecasting, was made irrelevant as the crisis disrupts current trends. Such data may therefore no longer provide an accurate view of reality.

5:4 *"every indicator that you had of probability of default, loss given default, forward-looking risk **measures all don't work**." (Resp. 5)*

9:20 *"given there was not that much data that was valid within a Covid 19 environment, and it wasn't that it was wrong but just **not relevant anymore**." (Resp. 9)*

vi. Flexible leadership

Flexibility was raised as a key attribute needed to respond to the demands placed on leaders by the crisis. Leaders had to remain agile in order to make decisions quickly and with limited information.

Leaders had to make decisions whilst uncertain, as opposed to becoming paralysed from excessive analysis.

5:26 *"you must get yourself reasonably informed not overly informed to a degree and then you know, you have got to back a direction, you have got to **be comfortable in your gut** in a way. You've got to believe in what you doing." (Resp. 5)*

21:30 *"Leadership is about having **courage to make decisions when you are uncertain**." (Resp. 21)*

Accepting uncertainty and being proactive was essential to avoiding losses from delayed decision-making.

6:18 *"what Covid has just refused us, is the notion of predictability. We all had to **learn to live in a time of uncertainty**." (Resp. 6)*

16:16 *"one thing that made it easier was **being decisive**, so coming to terms with the fact that we don't know what we don't know, then being decisive on it and sticking it through until new information came to light." (Resp. 16)*

Many leaders emphasised that they had to continuously learn while acting at the same time.

12:18 *"we were quite nimble in doing some of that stuff but those are the things that we had to **learn on the fly**, we didn't know what was going to happen." (Resp. 12)*

One respondent pointed out that pre-conceived strategy had to be suspended and instead leaders had to allow strategy to emerge from the people closest to the crisis.

9:24 *"one of the things that we've got now is that a lot of **strategic action as driven by the frontline** and is supported by the head office, rather than driven by the head office and executed by the frontline." (Resp. 9)*

Experimentation was needed to address uncertainty and discover new information needed to advance the decision-making process.

3:37 *"what you doing is you kind of build-test-implement, **build-test-implement** and we ended up with **cycles** where you recognise that your pace was going to lead to more things not being perfect." (Resp. 3)*

During the crisis, most leaders advised that a willingness to be wrong enabled them to decide on a course of action in an uncertain environment.

21:32 *"you must **be comfortable to be wrong** later. You must be comfortable to know that I am making this decision based on the information that I have today." (Resp. 21)*

Leaders had to be agile in correcting their actions when decisions turned out to be wrong in order to avoid irreparable damage.

18:25 *"Being evidence-led as much as possible and being **willing to course-correct** and change, based on what evidence is saying." (Resp. 18)*

21:26 *"it will become clearer as you move and you must be **comfortable to change that decision** tomorrow to say, "oh yes this is what we said*

yesterday but today based on the new information, this is what is happening.” (Resp. 21)

Many respondents explained that it was best to avoid aiming for perfection in decision making in order to respond immediately to the urgent needs of clients and others.

*3:38 "the help motive overtook what you would do in the normal course, because when we land tech elements, we seek perfection, zero-defect, zero downtime etc. When you building solution to help someone in need...you were **happy to get it 80% right on day one.**" (Resp. 3)*

*21:43 "I think the thought process was let's make decisions that are good enough, based on the available information. Let's **make decisions that are good enough** because if you are looking for perfect information or perfect decisions you are never going to get there." (Resp. 21)*

In order to mobilise their teams quickly, leaders preferred to provide direction over accuracy.

*9:15 "Sometimes it's not about deciding precisely, it's making decisions on the **direction** rather than on the actual figures." (Resp. 9)*

*21:39 "It was mainly about flexibility, you had to be **firm and clear on the output but flexible on the how.** And that flexibility to say we are rolling out a product, we have never rolled out this product, there is no time to test it and do sampling and stuff like that, let's just roll it out, because people are looking for assistance." (Resp. 21)*

According to respondents, decisions were made incrementally as opposed to committing large amount of resources in an uncertain time.

*5:15 "banks are going to be accelerated **incrementally, rather than** sort of **discontinuous change.**" (Resp. 5)*

*19:59 "what happened was, we had to **take it step by step, one day at a time.**" (Resp. 19)*

vii. Crisis leadership

Given the risk of staff becoming paralysed with fear, strong crisis leadership skills were needed to mobilise staff to make decisions.

21:24 *"it is about **imperfect action**," it's taking action imperfectly, you can't be paralysed, you must just move." (Resp. 21)*

Many respondents described their role as a leader as helping the team understand the crisis and providing direction to staff to aid in responding to the crisis.

12:31 *"because **staff are looking for direction**...they are looking to us to give them the process...the Exco is looking for me to give some sort of direction... I think that is the biggest thing, is that you need direction, whether the direction is right or wrong you need direction, because you need everybody rowing in the same direction." (Resp. 12)*

Leaders explained that experience was useful to an extent.

10:46 *"where you harness your **experience** is in keeping a cool **calm head** for your team, for your people and making sure there's no anxiety or emotion or too much of it to cloud effective decision making." (Resp. 10)*

18:28 *"My past **experience** has been **helpful**, but I've also been very **cautious in over-relying on it**. I have never quite faced anything like this, but it has been helpful in that some of the **key tenets** from the **previous crisis** that I faced are **still relevant** now." (Resp. 18)*

All leaders pointed out the danger of making reactive decisions and emphasised that effective decision making in crisis requires the leader to be calm.

5:14 *"any **knee-jerk** sudden shift for which you are not geared to make them, will inevitably lead to a disaster." (Resp. 5)*

13:26 *"we had to provide interim help, but it's **not** like we **knee-jerked** and suddenly changed the direction of the business." (Resp. 13)*

To ensure efficient reporting of the findings above, some of the relevant data obtained from the interview process was not presented above; please refer to Appendix Six for other noteworthy quotations.

5.6 Conclusion

The table below summarises the key findings relation to each of the research questions of the study, which will be discussed further in the next chapter with reference to relevant literature.

Table 2: Summary of findings

Research Questions	Summary Response
RQ1: During a crisis, how do business leaders in the banking sector perceive the level of uncertainty in their environment of business?	Leaders perceived an increased level of uncertainty across the value chain of the business. The type of crisis presented by the coronavirus was unprecedented, which led to heightened uncertainty. Decision-making was split into stages with different objectives and approaches.
RQ2: How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?	There were shifts in strategic priorities which impacted on strategies of the bank. The crisis created a sense of urgency which drove faster decision-making. Strategic implementation methods were adapted but the overall purpose was kept consistent.
RQ3: What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?	Decision-making became more collective, collaborative, and consultative to mitigate risk of erratic decisions. The nature of decisions moved from operational and tactical to strategic as the crisis unfolded. Leaders applied both intuitive and analytical types of cognitive processes depending on the challenges being faced. There were changes to data gathering processes which became both broader and deeper. Also, data was gathered more frequently to support more frequent decision-making in crisis. A flexible mindset and crisis leadership approach were essential to the decision-making process.

(Source: Author's own creation)

6. CHAPTER 6: DISCUSSION OF RESULTS

6.1. Introduction

The purpose of this chapter is to discuss in detail the findings presented in Chapter Five, with reference to the relevant literature as reviewed in Chapter Two. The overarching objective of this study was to explore the impact of crisis and uncertainty on the strategic decision-making process. From the interviews conducted with leaders in the banking sector, the study found that the crisis led to an increase in the level of uncertainty, which consequently led to shifts in strategy that impacted on the strategic decision-making process.

The discussion in this chapter will be structured in terms of the research questions listed in Chapter Three, which were used to guide data collection. Thereafter, using a combination of data from the three research questions, a summary of the key themes will be presented. Themes identified included that crisis and uncertainty create opposing forces on the strategic decision-making process, that decision-making in crisis and uncertainty is conducted in three stages and uses a combination of cognitive approaches, and lastly, that a pragmatic philosophy was encouraged by leaders in crisis.

6.2. Research Question 1: Uncertainty created by crisis

RQ1: During a crisis, how do business leaders in the banking sector perceive the level of uncertainty in their environment of business?

The purpose of the first research question was to understand what uncertainties the coronavirus crisis had created and to assess whether leaders felt that the extent of uncertainty had changed due to the crisis. The findings revealed that the level of uncertainty did increase and due to the type of crisis being experienced, the entire value chain of business was impacted, as discussed below.

6.2.1. Crises create uncertainty

*"these decisions are not easy to make in a time of **uncertainty** due to the fact that there is no visibility in uncertain times, you have no idea when the vaccine is going to come about."* [Respondent (Resp.) 19]

From the various responses received this study confirmed with leaders in banking that the coronavirus crisis had created a significant increase in uncertainty in the business environment. This is consistent with literature on crisis leadership and crisis decision-making which describes that a crisis creates or is characterised by deep uncertainty (Ansell & Boin, 2019; Nunamaker et al., 1989; Osiyevskyy & Dewald, 2018). Literature describes that uncertainty exists when neither the outcomes nor the probabilities of their occurrence are known (Alvarez et al., 2018; Nash, 2003; Teece & Leih, 2016); this was corroborated by leaders in banking who were neither able to predict possible economic outcomes nor calculate the probability of default for their customers, as the coronavirus represented an unexpected event that had affected all sectors of the global economy.

*"that [the crisis] has caused uncertainty because the **whole value chain of businesses has been impacted.**" (Resp. 4)*

One of the aims of RQ1 was to identify which areas of business were impacted by crisis-induced uncertainty. Leaders raised multiple areas of uncertainty created by the crisis, as the impact was felt across the value chain from their suppliers to the internal components of the business and to the end customer. Given that respondents were uncertain about when an event could occur, what its impact could be and who could be affected, the coronavirus crisis falls into the realm of the "unknown unknowns" (Ansell & Boin, 2019; Snowden & Boone, 2007; Teece & Leih, 2016).

Uncertainties were reported by some respondents over the potential disruption of services from suppliers, doubt was created over the ability of the government to provide support for businesses, and concerns were raised as to the response from regulators. Hannah et al. (2009) described factors that either attenuate or intensify the level of extremity in the environment, similarly respondents indicated that decisions taken by these external parties could have either decreased or increased the level of uncertainty in the environment. A common example that was provided was the uncertainty over the duration of the national lockdown imposed by government which was affecting the ability of businesses to trade freely and would ultimately have serious economic consequences.

When assessing the internal components of the business, leaders expressed uncertainty as to whether staff were equipped to deal with the crisis both physically

and mentally. As explained by Silviera-dos-Santos et al. (2016), the duration of a crisis depends on the type of crisis but the critical period of a crisis is usually brief, occurring over a few days or hours. Contrary to this last statement, respondents confirmed that the novel coronavirus pandemic created a prolonged disruption. Therefore, leaders were uncertain about the financial resources of the bank, in terms of capital and liquidity, that were needed to withstand the entire period of the crisis.

Respondents indicated that, without a clear forecast, the business was unable to apply the traditional product set to cater for the unique requirements of clients during the crisis. Some respondents emphasised the need for creativity and adaptability to respond to the context of the crisis (Osborn et al., 2002; Silviera-dos-Santos et al., 2016). There was uncertainty as to whether the current processes would be able to handle a crisis scenario, for example legal processes were still paper-based which made it difficult for clients and business leaders to authorise credit relief agreements, given the social distancing restrictions of the lockdown. Systems were also not able to deal with non-routine transactions that needed to be processed during the crisis. Thus, the internal products, processes and systems of the bank, as well as the restrictions of the national lockdown, all represented conditional factors that affected leaders' ability to respond to the crisis (Bundy et al., 2017; Shepherd & Rudd, 2014).

As described in literature, crisis and uncertainty are characterised by a lack of information or incomplete knowledge (Ansell & Boin, 2019; Nash, 2003; Teece & Leih, 2016). In line with this, respondents complained that there was "no visibility" and perhaps the most significant area of uncertainty for leaders was the impact of the crisis on their customers. This study found that leaders were not sure whether customers would survive the crisis from a financial perspective, as they explained that the lockdown had hampered the ability of certain businesses to trade. Therefore, these businesses were not generating an income and would be unable to service their loans owed to the bank, which would ultimately lead to bad debt write-offs for the bank. The inability to continue business for customers, led to significant doubt over the income generating ability of the bank in the future.

Further, respondents observed that customer needs changed as demand shifted from loan products to insurance, which are not as profitable as loans; this created uncertainty over the future profitability of the bank. Lastly, leaders were uncertain as to consumer behaviour and how people would embrace the world after the crisis. A

common example provided by two respondents with differing views, was whether consumers would increase or decrease their needs for residential property and the corresponding impact that would have on mortgage lending for the bank.

Given the exploratory nature of this qualitative study, other insights were uncovered and this included that uncertainty was created at a macroeconomic level and at an industry level. Many respondents explained that as each sector had been impacted differently, some positively but most negatively; this made it difficult to predict what the overall impact of the virus would be on the broader economy. A few leaders also admitted to being distracted by personal uncertainty around their own health and safety. Besides health risks, the poor state of the economy led to personal uncertainty around job security and personal finances, which increased anxiety around making incorrect decisions.

Collectively, these findings suggest that the crisis had caused a significant increase in the level of uncertainty perceived by business leaders in banking. Due to the widespread impact of these uncertainties across the entire value chain of the bank, the ability to formulate strategic decisions to respond to the crisis would be severely constrained. The next section relates the typical aspects of the novel coronavirus pandemic to the level of uncertainty created.

6.2.2. Types of crisis and the impact on the level of uncertainty created

*"the fact that a **health** crisis has turned into an **economic** crisis that's turned into a **social** crisis, has highlighted the major unsustainable issues that the world is facing." (Resp. 15)*

Respondents reported that due to the coronavirus attacking humanity on multiple fronts, health, economic and social, it created more uncertainty than previous crises that were isolated events. These findings corroborate with literature which explains that the type of crisis affects a leader's ability to respond and is one of the factors that need to be address in crisis management (Bundy et al., 2017; Silveira-dos-Santos et al., 2016). Respondents gave an example of the global financial crisis which was an economic crisis and was limited to the housing and mortgage sector, whereas the coronavirus pandemic had a broader social and economic impact through the restrictions placed on the movement of people and trading for businesses. Some respondents noted that balancing the health, social and

economic costs of the coronavirus crisis, affected strategy and required trade-off decisions to be made.

Given the unprecedented nature of the coronavirus crisis, there was uncertainty as to how to formulate a plan of response, as leaders had no prior experience, or as expressed by respondents, no “blueprint”, “textbook” or “formula” to rely upon (*refer to Appendix Four for full quotes*). As posited by Osborn et al. (2002), leaders use their experience to formulate scenarios to deal with unexpected events quickly. However, this study found that for the novel coronavirus, respondents had to allow for strategy to emerge from the needs of various stakeholders and to be formulated from the “frontline” (ground) up. These findings mirror the sentiments of Mintzberg, (1987a), who explained that in an emergent strategy a perception of the world leads to a certain pattern of behaviour which later becomes formalised into a plan. In line with this, some respondents explained that the operational decisions taken to respond to short-term threats would form the foundation of long-term planning and strategic decision-making.

Throughout the interview process, respondents raised various environmental or contextual factors that affected their strategic decision-making process. This is in line with scholars who purport that conditional factors change the level of extremity in the context and affect the ability to lead effectively during a crisis (Bundy et al., 2017; Hannah et al., 2009; Shepherd & Rudd, 2014). For many respondents the extent of uncertainty was exacerbated by the surrounding context, a common example raised was the lack of a reliable electrical power supply in SA which created further uncertainty as to how people could work remotely under the planned response to the pandemic.

As the interview process was semi-structured, the use of open-ended questions allowed for leaders to provide other valuable insights such as the impact of the recovery process on strategic decision-making. Bundy et al. (2017) characterise crisis as a process rather than an event, respondents agreed that the coronavirus pandemic was not a once off event with a recovery phase following swiftly, instead most leaders had to estimate whether the recovery process would be immediate or pro-longed, a factor which would impact on strategic decision-making.

In summary, these findings suggest that the coronavirus pandemic presented different types of uncertainties as compared to previous crises in the banking sector.

What made this crisis novel was the multiple threats posed from a health, economic and social perspective, its global and multi-sector impact, and the unusually prolonged period of the crisis. These characteristics of the coronavirus crisis exacerbated the level of uncertainty perceived by business leaders in banking and therefore required a different approach to strategic decision-making, this is discussed further in the sections below.

6.2.3. The stages of decision-making in crisis and uncertainty

*"so that was kind of the short-term focus, to **survive** to stay in the game," (Resp. 18); "The second thing we said is how do we engender **stability** in the business," (Resp. 9); "and then emerge through this in a more **sustainable** way, and I suppose to me that's looking to **re-imagine** what business might look like in 2021 and beyond." (Resp. 15).*

When facing a major challenge, literature suggests taking an incremental approach by splitting the problem into smaller more manageable decisions (Ansell & Boin, 2019; Weick, 1984). Congruent with this approach, this study found that in response to the high level of uncertainty, leaders split their decision-making process into three stages, with each stage having a different objective and decision-making method. Some scholars have previously analysed the different phases before, during and after a crisis and the changes in leadership activities through each phase (Nunamaker et al., 1989; Silviera-dos-Santos et al., 2016). While similar in structure, this study differed in that it identified and interpreted the stages of decision-making during a single phase of the crisis, which was the critical or response period. The data showed that the types of decisions made in each phase ranged from operational decisions made to ensure the survival of the business and its people, to tactical decisions needed to stabilise operations and then neo-strategic and strategic decisions for long-term sustainability. Various examples of such decisions were evident throughout the interview process and the data from all three research questions will be discussed in the section below.

In the first stage, the objective of decision-making in business was to survive the crisis. In the first few weeks of the coronavirus crisis, decisions were operational and leaders responded quickly to immediate risks and uncertainties created by the crisis. This is consistent with Nunamaker et al. (1989) who suggested that due to a

constraint placed on information-processing during a crisis, focus shifts toward operational and tactical decision-making. Respondents explained that focus was placed on protecting staff from immediate threats, equipping staff to deal with the extreme conditions and providing critical support to customers. For example, personal protective equipment had to be procured to provide a safe working environment for staff. Respondents felt that these decisions would enable the business to survive the crisis in the short term by avoiding significant losses. This is contrary to the critical decision-making referred to by Ansell & Boin (2019) which suggests that decision-making in crisis should focus more on strategic decisions; however a few respondents reported that these decisions would eventually facilitate longer-term strategic decisions.

The second stage of leaders' decision-making sought to stabilise the business and create some certainty for staff, customers, and other key stakeholders. This is in line with Kahn et al.(2013), who asserted that successful crisis management is demonstrated by stabilising operations and minimising losses to stakeholders. Respondents reflected that this stage occurred one to three months into the national lockdown, and decisions were fast and tactical where leaders deployed resources to stabilise the service levels in the medium term to help customers survive the crisis. For example, computer equipment had to be procured to enable staff to work remotely and provide uninterrupted banking services to customers. Some respondents pointed out that these initiatives required a significant cost to implement and would further negatively impact profitability, which made these decisions tough but essential to longer-term success.

The objective of stage three was to sustain solutions put in place to deal with the crisis and reposition the business for the long-term success. Respondents observed that after three months of the pandemic, decisions became neo-strategic and strategic in nature, as leaders re-imagined their business models and the markets that they targeted in the long term. This phase therefore was in line with the critical decision-making referred to by Ansell & Boin (2019). Neo-strategic decisions involved analysis of risks and opportunities, and areas of the economy that should be avoided and areas that should be invested in. For example, the travel and tourism sectors were more negatively impacted than the retail sector, which led to leaders in banking aiming to reduce their exposure to hotel groups but increase investment in supermarket chains. More strategic decisions were being made to embed

efficiencies created during the crisis, for example, the ability to work remotely led leaders to re-assess their commercial property requirements which could lead to significant cost savings in the long term. However, most respondents advised that this strategic decision-making process cannot be rushed and will take careful consideration, thus the decisioning process may take more than a year to complete.

In conclusion, these findings suggest that in order to cope with immense pressures placed by the crisis and the significant increase in uncertainty experienced, leaders used an incremental approach by splitting their decisions into three stages with the objectives of survival, stability and sustainability respectively. The types of decisions made in each stage varied in line with the different objectives. The above uncertainties and the staged approach to decision-making in turn led to shifts in strategic priorities, which will be elaborated upon in the section below.

6.3. Research Question 2: The impact of crisis and uncertainty on strategy

RQ2: How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?

The purpose of the second research question was to identify shifts in priorities for business leaders in banking during the crisis and the strategic decisions needed to respond to crisis-induced uncertainty. Responses revealed various shifts in priorities and changes to strategic execution.

6.3.1. Shifts in strategic priorities

*"there was a big focus away **from profitability to assistance**, that's a massive thing for a bank," (Resp. 3); "we shifted from an **acquisition/ new business strategy to a retention/ ongoing help or assistance strategy...**" (Resp. 19).*

According to (Osborn et al., 2002) a change in context, requires a change in leadership, and the results of this study corroborate that the coronavirus crisis resulted in a shift of strategic priorities for leaders. Respondents highlighted several shifts including, shifts from sales to retention, from profit to people and from growth to survival. As advocated by various scholars, strategic-decision making by leaders

ensures the survival of an organisation (Eisenhardt & Zbaracki, 1992; Nunamaker et al., 1989). Due to the financial pressure exerted by the crisis and the broad uncertainty over the sustainability of customers, the environment was not conducive to generating new sales or acquiring new business, instead leaders turned their attention to assisting existing customers to retain their business. As banks are linked to the performance of the economy and the coronavirus had led to an overall contraction, it was not possible for business leaders in banking to target growth, instead the primary objective was to survive the crisis and respondents sought to maintain profitability by reducing costs through increased efficiency.

As advocated by Kahn et al. (2013), during a crisis, the needs of all stakeholders must be seen equally, this study showed a shift of the primary focus from shareholders, toward that of meeting all stakeholder needs. Respondents emphasised that they were not willing to pursue profitable business opportunities if there was uncertainty around the health risks involved, thus placing the safety of their people over the opportunity to generate profit. A priority for leaders was to ensure the safety of staff through the provision of protective personal equipment and by enabling remote working ability, irrespective of the cost involved. It was also reported by respondents that significant efforts went into deciding appropriate ways to provide credit relief for customers such as payment holidays on loans and the reduction of banking fees.

Other noteworthy insights raised by respondents included that there were increased efforts placed into customer centric solutions and building trust with stakeholders through making decisions that were morally correct and that placed being helpful above being profitable, which they felt was not usual for a bank. Also, in trying to balance the needs of various stakeholders during the crisis, leaders were faced with trade off decisions. Leaders in banking had to balance their fiduciary duty to maximise financial returns to shareholders, with their social responsibilities to provide support to customers and staff.

It is important to highlight that the above findings represent a shift in focus of existing priorities, rather than new strategic goals. Some respondents argued that there was always latent concern for the safety of people, however without immediate threats, it was not an area of significant focus. For many years, banks have been practising the principles of good corporate governance, which requires that the need of all

stakeholders be considered; however, the crisis caused a rebalancing of priorities between those stakeholders. Therefore, the decisions made by leaders related to changes in strategic execution rather than changes in strategic goals.

To summarise, the changes in the business environment caused by the coronavirus crisis had led to shifts in strategic priorities. Leaders shifted from the traditional profit-making motive to being concerned over the safety of people. Focus also shifted away from acquiring new clients to protecting and supporting existing clients. These new perspectives then led to changes in strategic decision-making, which is discussed further below.

6.3.2. Crises create urgency

*"the Covid period, really **forced** quick decisioning..." (Resp. 20), "I think there's an elevated sense of **urgency**..." (Resp. 18).*

The consensus amongst respondents was that the coronavirus pandemic and national lockdown had created a sense of urgency across the organisation. This supports the views of various scholars who assert that a crisis represents an urgent, unexpected and unpleasant event that leaves little time for response, thus placing pressure on leaders to respond (Osborn et al., 2002; Osiyevskyy & Dewald, 2018; Silveira-dos-Santos et al., 2016). Hannah et al. (2009) list time pressure as an intensifier of the level of extremity of an event, thus leading to a change in leadership style. Many respondents explained that the need to respond swiftly led to faster decision-making and faster implementation of strategic initiatives.

6.3.3. Adjustments to strategic decision-making

*"our priorities definitely shifted and it's more like pressing **pause** button..." (Resp. 3). "the textbook strategy was still something we could think about but it was around execution or **implementation** that we **had to reinvent** ourselves on." (Resp. 19)*

In the face of crisis, leaders were not comfortable to make major changes to strategy, as most respondents warned that it was too risky to completely change or pivot the business. A trend across respondents was that businesses were being forced to change; however, leaders were wary of making reactive or "knee-jerk" decisions that would result in discontinuous change. This approach was consistent with the

strategy of small wins and other scholars who propose an incremental approach (Ansell & Boin, 2019; Mintzberg, 1987b; Weick, 1984).

Most respondents re-affirmed the purpose of their businesses and advised that the goals of the strategy remained clear; but raised uncertainty over existing tactical plans that were made inapplicable by the crisis. Given that poor strategic implementation could lead to overall failure to achieve strategic goals, these types of operational and tactical decisions were inextricably linked to the accomplishment of the organisation's strategic intent. Therefore, respondents confirmed that the long-term strategy of the bank was sound, but there were adjustments to pace and timing of execution. Pace was adjusted as there was an acceleration of certain elements of strategy, and for other projects the deadlines were elongated to allow for time to focus on more urgent issues, for example implementing flexible work arrangements to allow for business continuity during the lockdown.

It was highlighted by most respondents that the coronavirus pandemic had acted as a catalyst for staff projects related to flexible working arrangements, which were already a part of a larger cost reduction strategy for banks. Respondents described previously progress on this initiative was slow, but the coronavirus crisis forced people to accept the change of working methods and embrace technology faster. This move to remote working arrangements also presented an opportunity for leadership to gain efficiencies in the long term by reducing property costs.

The need for digitalisation and efficiency were already current topics in the banking industry, but the crisis increased the urgency and importance behind these initiatives. Many respondents noticed an acceleration of the digital platform strategy which received higher than usual priority due to the impacts of the crisis. There was also an intensified need for efficiency as banks sought to reduce their cost to serve customers in a time of increasing price sensitivity due to higher unemployment caused by the crisis.

Some respondents who were involved in digital products and services, indicated that there was increased use of digital channels by customers who could no longer obtain goods and services physically due to the lockdown rules that enforced social distancing measures to minimise the infection rate of the coronavirus. One respondent also emphasised the long-term impacts of the crisis by explaining that even though the lockdown rules were gradually relaxed, the increase in digital

volumes persisted as people recognised the value and convenience of utilising these virtual channels.

To conclude, these findings suggest that a crisis creates a sense of urgency which leads to quicker decision-making and faster implementation of strategies. Leaders were comfortable to accelerate strategies that would counteract the negative impacts of the crisis and did not hesitate to delay other strategies that were important but not urgent. From RQ1 an increase in uncertainty was noted which made the strategic decision-making process more difficult, whereas from RQ2 the urgency created by the crisis led to faster strategic decision-making. These opposing forces of crisis and uncertainty are further discussed in section 6.5 below.

6.4. Research Question 3: Strategic decision-making processes in crisis and uncertainty

RQ3: What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?

The purpose of the third research question was to understand the cognitive processes and underlying philosophies used to strategically respond to crisis and uncertainty. Respondents described the nuances in their experience of the strategic decision-making process during the coronavirus crisis, which are discussed below.

6.4.1. Collective, collaborative and consultative decision-making in crisis

*"there's definitely a lot more **consultation** because there is so much information out there, there is so much happening in short spaces of time, that you don't have the luxury of trying to assimilate that on your own." (Resp. 18)*

The unanimous view provided by respondents was that there was more collaboration, consultation and collective decision-making during the crisis. These findings corroborate scholars who advocate for collaboration and coordination to increase the effectiveness of strategic decision-making in threatening situations (Ansell & Boin, 2019; Nunamaker et al., 1989). Many leaders admitted that their businesses were competitive before the crisis, with businesses within the same group operating in siloes. However, the crisis had forced decision makers in various businesses to collaborate in order to develop solutions faster. This pulling together

of networks is in alignment with Ansell & Boin (2019) who advocate that coordination, as opposed to a command and control approach, is more effective crisis leadership.

A few respondents explained that there was too much information to be processed in a short space of time, thus to gain an understanding quickly, consultation had to take place with the team, with peers, with senior officials and with experts. As explained by Mintzberg (1987b), strategy enables the coordination of activities of different individuals in the organisation and focuses their efforts. In line with this, many respondents advised that committees were set up to facilitate a collective and coordinated decision-making process. One respondent elaborated that making decisions collectively served as a mitigating control due to the speed with which decisions had to be made. Another respondent explained that the committees were comprised of experienced members of management and leadership and these forums allowed for more debate than usual, thus testing the veracity of decision being made. One respondent suggested that a benefit of collective decision-making was that it provided a diverse set of views which compensated for areas of uncertainty that an individual leader may have had.

One of the differences from the normal decision-making process was that subject matter experts (SMEs) were relied upon more for input into decision-making during the crisis. Sweeny (2008) suggests that consulting experts can help decision-makers to cope better with crisis. For example, economists were consulted for the forward-looking views on the macroeconomic factors which informed the long-term strategy for business. Also, the scope of expertise was expanded, for example, epidemiologists were consulted for advice relating to the pandemic. One respondent advised that non-executive directors were consulted on a monthly basis as opposed to on a quarterly basis as is usually done in business. Some respondents highlighted that their business's executive committee was expanded to include specialists, other experienced staff, project staff and frontline staff. This was done to ensure that the right parties were involved in the decision-making process.

In summary, these findings reflect that collective efforts in decision-making helped to process large amounts of dynamic information to enable faster, yet robust decision-making. The common purpose of protecting the business and its people, led to more collaboration across teams. Lastly, due to the large amounts of specialised knowledge needed to respond effectively, leaders consulted experts and senior

executives for guidance. Besides group decision-making, there were changes to the nature and scope decisions made at by the individual leader as well.

6.4.2. Nature and scope of decisions

Respondents highlighted a clear distinction between the nature and scope of decisions needed to survive the immediate crisis and the decisions required for long term sustainability, with the former being operational and the latter being strategic.

*"I think there's some stuff that's in the world of **obvious** and in the world of the obvious I think the speed up is easy." (Resp. 5). "But the other stuff that's **on the ground**, the running of your business that we did very quickly. So, there is a big distinction." (Resp. 19).*

One leader distinguished between the obvious and the unknown when making decisions under crisis and uncertainty. This approach aligned to the Cynefin framework for decision-making that is separated into simple, complicated, complex and chaotic contexts (Snowden & Boone, 2007). Other respondents agreed with this and elaborated that "obvious" decisions related to the handling of day-to-day issues and ensuring compliance with laws or regulations. It was explained that leaders were comfortable to make the obvious decisions and therefore acted quickly, following their intuition.

Respondents indicated that in the first few weeks of the crisis the frequency of management meetings was changed from monthly to daily in order to facilitate faster decision-making for operational issues. It was noted by some respondents that these meetings were less formal and that decision-making was more intuitive as there was not enough time for excessive analysis. This rapid decision-making style aligns to the naturalistic approach proposed by Klein (2008) and Mishra et al. (2015) who advocate that an analytical approach to decision-making would not be able to accommodate the fact that decisions need to be made frequently and constantly.

*"there's a lot of stuff that is **not** the world of **obvious**, you know the investments into which markets and what that means," (Resp. 5), "information gathering, consultation and making decisions took a little bit longer, the lesson is **don't rush it**...we tried to make the best possible decisions under the circumstances that we were facing." (Resp. 19)*

Respondents clarified that the “unknown” related to longer term strategic issues such as reconfiguring business models and selecting target markets to minimise risks and maximise returns. It was emphasised that when approaching these more challenging decisions, leaders did not rush the process, and were driven by analysis of data and consultation of experts. The difference in speed of decision-making was distinct and is consistent with literature on cognitive processes used for fast and slow decision-making (Doherty & Kurz, 1996; Kahneman, 2011).

All respondents agreed that strategic decisions require analysis and should not be rushed. Some respondents advised that leaders are not making permanent decisions during the crisis, and warned that the strategic decision-making is a longer-term process of change. Due to the significant commitment of resources required when it comes to strategic decisions (Shivakumar, 2014), these decisions take longer to finalise. An example provided by one respondent was the efficiencies in property costs could not be realised “overnight” but involved the cancelling of long-term leases and the selling of large properties which is a more drawn-out process.

Together, these findings indicate that in a crisis, operational decisions were made more frequently and quickly using intuitive processes in order to minimise exposure to external threats. Conversely, strategic decisions which involve a significant commitment of resources and have a major impact on the direction of the business, require a slow, deliberate and analytical approach. These cognitive processes are further explored in the sections below.

6.4.3. Cognitive processes and data gathering in crisis and uncertainty

i. Generally, combined cognition works best

*“the process of decision-making requires, whether it is pre or post Covid, it requires some level of guidance driven by **data and** a combination of **experience.**” (Resp. 20)*

As respondents commented on the decision process in general, some explained that the banking industry is naturally data-driven but that there is always a need for judgement. This combined approach is reflective of the cognitive continuum proposed by Hammond (1996). Respondents referred to terms like “educated haircuts” which implied a combination of analytical and intuitive cognitive processes.

Similarly, Nash (2003) explained that gathering data is important for decision makers to better understand how to increase the accuracy of practical judgements.

ii. In crisis, intuition is relied upon more

*"and a lot of it needs to be on **gut**, because sometimes you just need to make, it's a crisis you've got a deadline, you've got to get things out and you need to make a decision." (Resp. 10)*

The differences in crisis decision-making were clearly outlined as having less time which meant that leaders had to work with incomplete and imperfect information (Ansell & Boin, 2019; Nash, 2003). One respondent clarified that the output from data models were not simply accepted as correct, instead leaders applied their intuition as to which direction and approximately how much they expected the outcomes to move.

Klein's (2008) naturalistic approach to decision-making implies that decision-makers use their experience to recognise patterns in a crisis situation and respond quickly. However, most respondents advised that a novel crisis like the coronavirus made it difficult to rely fully on past experience, which aligns more closely with literature that warns against using old solutions to address new problems (Shivakumar, 2014; Snowden & Boone, 2007).

Despite the above, experience was still useful as many respondents advised that the combined experiences of different people did help to respond to elements of the crisis, which is consistent with Hannah et al.(2009) who proposed that experience is used to formulate responses to crisis. Respondents compared the coronavirus pandemic with previous crises to identify commonalities and differences so that aspects of prior responses could be applied, leaders also compared the situation in SA to the crisis being experienced by partners in Asia and Europe. Therefore, this approach to decision-making indicated an attempt to match patterns in order to form a response which is more reflective of naturalistic decision making theories (Klein, 2008). It can be concluded that while past solutions are not applied directly to new problems, past experiences of the collective are nevertheless useful in formulating responses to novel situations.

Various respondents admitted that the short-term focus shifted to operational decisions which were driven more by judgement than analysis in order to respond

quickly. This is consistent with the suggestion made by some scholars that decision making is more intuitive when responding to a crisis in practice (Klein, 2008; Mishra et al., 2015). As mentioned above, some respondents proposed that the decisions being made to respond to short term risks, would also set the direction for longer term strategic decision-making. An example provided by respondents was to decide how to embed the efficiencies that arose during the crisis; however, these longer-term decisions were faced with deep uncertainty.

iii. For uncertainty, more analysis is needed

*"you can never be sure around your forward-looking projections and so forth. I guess all you can do is, the **more analysis** you do, the more data points you gather, all it does is it gives you a little bit more assurance over what you are seeing." (Resp. 17)*

From the findings of the study it was evident that in some cases leaders sought to reduce uncertainty through data gathering and analysis; whereas in other instances an intuitive approach was used which accepted uncertainty. This is consistent with Kvalnes (2016) who clarified that there are some types of uncertainty that should be reduced and some types of uncertainty that should be embraced. This study found that when making operational decisions where the stakes were low, leaders accepted uncertainty in order to respond urgently to immediate threats; however, when approaching strategic decisions that required a significant commitment of resources, leaders tried to reduce uncertainty to a manageable level through data analysis.

While incomplete information was used for short-term decisions, which is typical in a crisis situation (Nash, 2003; Teece & Leih, 2016); the converse applied when dealing with the uncertainty in the long term. Strategic-decisions for all respondents were predicated on data gathering and in-depth analysis, this is consistent with Nunamaker et al. (1989) who highlighted the need to acquire and use information to make intelligent decisions to respond to a crisis.

Various respondents observed that data collection in a crisis was done a deeper level than usual, leaders gathered both high-level data, that gave a sense of direction, and granular-level data to determine accuracy. Stanovich et al. (2011, p.105) explained that when given task that involves estimation, decision-makers must "retrieve the relevant facts" to help calculate an estimate, and that intuitive processes are used to

determine the “right ballpark” but analytical processes are used for fine-tuning.

iv. Increased data gathering for analytical decision-making

*“the number of **factors that go into a decision is exponentially more than before, way more, and it's actually the type of input it's more social, its medical, is environmental, a lot more input goes into the decision making than before.**”*
(Resp. 6)

Most respondents indicated that the data gathering process was broadened to collect a wider than usual scope of information around the crisis, the environment, the business, staff, and customers. This agrees with Nunamaker et al. (1989), who warned that limitation of information search due to the urgency imposed by a crisis, could lead to further disaster and instead the search for information should become more divergent to allow for more and better solutions. Leaders in banking partnered with other organisations externally to gather data on sectors, the economy and health information. These findings corroborate with Osborn et al. (2002) who highlighted the need to develop interpersonal networks to gather strategic information needed to make contextually intelligent leadership decisions. Many respondents advised that data was gathered quickly by leveraging their professional networks and by interfacing with people on the ground. When data was not yet available locally, leaders consulted external partners and industry peers in other countries that had an earlier time frame in experiencing the pandemic and who were dealing with similar challenges to reduce uncertainty in certain areas of strategic decision-making.

The frequency of data gathering was also increased, as data was collected daily to constantly assess the severity of the crisis, to re-assess the appropriateness of decisions that were recently made and to identify new trends in behaviour caused by the crisis. To mitigate against risk, leaders continuously checked the correctness of previous intuitive decisions against data as it became available during the crisis, which then guided future decision-making (Harrison, 1996; Mishra et al., 2015). There was ongoing experimentation and frequent adjustments were made as new information was discovered. This approach is in line with scholars whose research suggests that decision-makers in a chaotic environment need to first act to create stability and then make sense of the situation (Mishra et al., 2015; Snowden & Boone, 2007). Respondents re-iterated the need to think in a non-linear pattern as problems were made complex by constantly changing information in a crisis context.

v. Analytical decision-making tools

*"it's being responsible in your decision-making process, have you thought it through, have you **considered all the angles** of it, have you looked at the unintended consequences, have you **done what if analysis.**" (Resp. 10)*

Respondents indicated that scenario planning was used to assess response options for different levels of severity of the crisis. This is in line with literature which proposes that in responding to crisis, options need to be determined and assessed (Sweeny, 2008). Leaders also applied a forward-looking view for the different economic recovery scenarios, which impacted long-term strategic decision-making. Conversely, for decisions needed to respond to the immediate crisis, some respondents emphasised that the time pressure of crisis did not allow for the full analysis of all the options and leaders felt forced to make decisions to respond to operational risks. This is consistent with Nunamaker et al. (1989) who highlighted that the pressure imposed by a crisis constricts the ability to assess options and forces people to make tactical rather than strategic decisions. It is important to therefore distinguish between operational and tactical decisions, that need to be made quickly in the early stages of a crisis, and strategic decisions, that require more time for a scenario analysis.

Respondents' description of the scenario planning process showed that scenarios were constructed using existing information and using expert judgement. Uitdewilligen & Waller (2018) describe that information sharing during a crisis occurs with objective facts, subjective interpretations and views on the projected future. This literature was exemplified in the findings of this study as respondents indicated that the scenarios were based on information that is certain, for example the current number of staff, and uncertain information, for example the future prime interest rate; in cases of uncertainty the judgement of experts such as economists and epidemiologists were relied upon. As events unfolded in the crisis, the updated data was fed into the decision-making models to update the relevant scenarios and to select the corresponding pre-determined response. This process of anticipating possible outcomes enables faster decision-making when faced with uncertainty.

This exploratory study provided some other notable insights which included that leaders prepared a framework of principles to give others some sense of certainty and direction. As proposed by Staw et al. (1981), in dealing with highly stressful

situations, people may resist change and by implication avoid innovation or creative thinking. Instead, this study found that there was a shift of creative thinking from sales initiatives to crisis relief solutions and retention strategies. Also, it was evident from the interviews that uncertainty had made people more conservative in their approach to strategic decision-making.

In summary, these findings show that generally leaders utilise a combined cognition to make strategic decisions. However, when faced with the urgent threats of a crisis, leaders rely more on their intuition to make decisions quickly. Once stabilised, focus turns to the increased levels of uncertainty over the long-term, which requires more analysis as leaders prefer not to rush the strategic decision-making process.

6.4.4. Crisis leadership and decision-making

*"Leadership is about having **courage to make decisions when you are uncertain**,"... "it is about **imperfect action**" (Resp. 21)*

With an increase in uncertainty in the environment, a key function of a leader during a crisis is sensemaking (Ansell & Boin, 2019; Weick, 1988). Respondents agreed that leaders were responsible for giving staff a sense of direction during the crisis to avoid panic and reactive decision-making. As advocated by Mintzberg (1987b), one of the functions of strategy is to offer the direction needed to navigate through turbulent situations; many respondents agreed with this sentiment and emphasised that giving direction to staff was more important than providing accuracy. Some respondents explained that due to higher levels of collaboration, information sharing took place more easily and helped give staff a sense of certainty. This is consistent with literature that advocates that during a crisis sharing of facts, interpretations and projections facilitates sensemaking, meaning-making and effective decision-making in crisis management teams (Uitdewilligen & Waller, 2018; Weick et al., 2005).

*"It was mainly about flexibility, you had to be **firm and clear on the output but flexible on the how**. (Resp. 21)*

The consensus amongst respondents was that an agile or flexible mindset be maintained and leaders need to be willing to adapt as the situation changes, which is in alignment with the philosophy of pragmatism in the principles of crisis leadership proposed by Ansell & Boin, (2019). A few respondents clarified that a leader needed to be firm on the end goal but flexible on the strategies to achieve those goals. One

respondent highlighted the need to suspend pre-conceived strategy and allow strategy to emerge as the crisis unfolded (Mintzberg, 1987a; Snowden & Boone, 2007). Flexibility was needed to accept that the normal rules of governance that applied to decision-making may not be practical given the time constraints, instead the approach had to be more informal. Some earlier theories proposed that people avoid change during a crisis and revert to known solutions (Staw et al., 1981). The findings from this study contradicted this view, where at a leadership level, people were comfortable with change.

It was suggested by some respondents that it was necessary to accept the uncertainty in the environment and have the courage to make decisions with imperfect information. Accepting uncertainty as a method of decision-making that is in line with a pragmatic philosophy (Ansell & Boin, 2019; Kvalnes, 2016; Nash, 2003) and contrary to approaches that try to reduce uncertainty (Kramer, 1999). In the early stages of the crisis, emphasis was placed on the need to be decisive, rather than wasting time and taking the risk of incurring significant losses.

Several respondents advocated that a leader needs to avoid perfection and be comfortable to make wrong decisions which reduces the pressure when committing to a course of action. One respondent explained that in crisis, leaders were forced to make decisions with imperfect information or incomplete data, which is in line with the pragmatic philosophy advocated by Ansell & Boin (2019). Further, respondents explained that a willingness to be wrong helped avoid paralysis through excessive analysis when urgent responses were needed in a time of crisis. Many respondents explained that being wrong was acceptable if the decision-maker was willing to constantly re-assess their decision and take corrective actions as necessary (Harrison, 1996; Mishra et al., 2015).

One respondent had decided to repurpose staff to match the shift in strategic focus. Sales staff were repurposed into capital preservation staff and executive members had to increase their workloads by taking on dual portfolios. In applying the principle of dynamic capabilities (Teece & Leih, 2016) staff were cross skilled to provide flexibility in capacity to deal with fluctuating demands during the crisis and to ensure that when the economy recovers, the business will be able to scale up using existing staff, thereby protecting jobs and saving costs in the long term.

To conclude, these findings suggest that a key role of leaders in crisis was to make

sense of the environment and provide direction for the decision-making process. A pragmatic philosophy was applied by accepting uncertainty and avoiding perfection; leaders were therefore able to make decisions without hesitation. The section below analyses the themes underlying the findings discussed above.

6.5. Identification and discussion of themes

Theme 1: Paradoxical effects of crisis and uncertainty

From RQ1 and RQ2 the first theme identified was that the crisis and uncertainty created opposing forces for business leaders, which then impacted the strategic decision-making process. As described above, the sense of urgency created by the crisis forced leaders to make operational decisions quickly during a crisis in order to minimise disruption in the short term. The decision-making process was in line with NDM theories, as decisions were made in a rapid manner (Klein, 2008).

Conversely, when respondents were faced with uncertainty over strategic decisions for the longer term, the decision-making process was delayed as more information was sought out. This decision-making process showed similarities with approaches that seek to reduce uncertainty (Kramer, 1999). Similarly, Mitchell et al. (2011) found opposing interactions of hostile (threatening) and dynamic (uncertain) environments on strategic decision-making and Kvalnes (2016) described the “tension” between experience (intuition) and thought (analysis). Therefore, as depicted in **Figure 4** below, crisis and uncertainty presents a paradox to leaders when making decisions; where crisis requires rapid pragmatic responses and intuitive thought processes (Ansell & Boin, 2019; Klein, 2008) and uncertainty drives logical thought processes which includes the analysis of options and scenarios (Kramer, 1999; Sweeny, 2008).

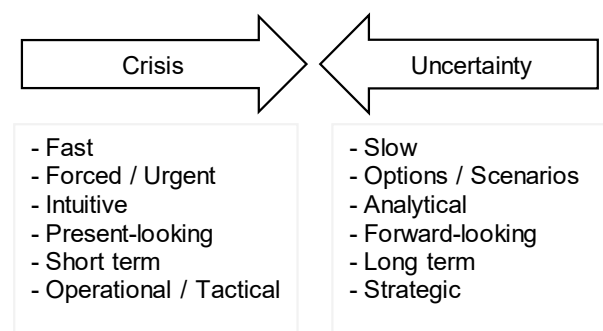


Figure 4: Paradoxical effects of crisis and uncertainty
(Source: Author’s own creation)

These opposing forces led to shifts in strategic priorities for business, as discussed under RQ2 above. Leaders shifted their focus away from strategic growth and toward protecting people in the short-term; while simultaneously re-configuring the business model for long-term efficiencies.

Theme 2: The stages of decision-making in crisis and uncertainty

From the various responses under all the research questions above, it appeared that there were three stages of decision-making during the crisis. The sense of urgency and uncertainty caused by the crisis had led to shifts in strategic priorities. At the beginning of the crisis, the objective of the decision-making process was to ensure that the business could survive the pandemic and lockdown in the short term and continue to operate. Leaders thereafter sought to stabilise the business by changing their tact in the medium term, in order to minimise the negative impacts of the crisis and provide consistent support to staff and customers. After stability was obtained, leaders began to think more strategically about long-term sustainability and how to capitalise on opportunities arising from the crisis.

The cognitive processes were initially more intuitive and focused on present events at the onset of a crisis; and then became more analytical and forward-looking as stability was gained. As explained by various leaders, some decisions were easier to make and there was no time wasted in responding to the crisis, however other decisions were more complex and leaders were wary of rushing the process. Therefore, in the early stages of the crisis, leaders were forced to make operational decisions quickly, whereas the process for strategic decisions in the long term was slower. This three-phased approach to making decisions forms the baseline premise for the integrated framework presented in section 6.6 below.

Theme 3: Crisis leadership and a pragmatic philosophy for decision-making

A key theme that was raised by respondents was the need for strong leadership during the crisis to ensure that the decision-making process was effective. While leaders were trained for disaster recovery, this could not have prepared leaders for an unprecedented and extended crisis such as the coronavirus pandemic. As traditional processes could not be relied upon, leaders adopted a “flexible” or pragmatic philosophy of decision-making.

Being flexible and accepting uncertainty was important for leaders to avoid becoming

paralysed. This study found that for operational decisions, leaders accepted uncertainty and dealt with the immediate pressures of the crisis using a pragmatic philosophy; whereas for strategic decisions relating to the long-term, leaders tried to reduce uncertainty through a rationalistic approach.

6.6. Integration of findings and implications for business

The findings above have practical implications for the strategic decision-making process used during crisis and uncertainty. As discussed in Chapter One, errors in strategic decision-making during a time of crisis could result in further disaster for a business. The framework below provides a useful structure for decision-making that can help leaders to deal with the pressures of a crisis and the burden of uncertainty.

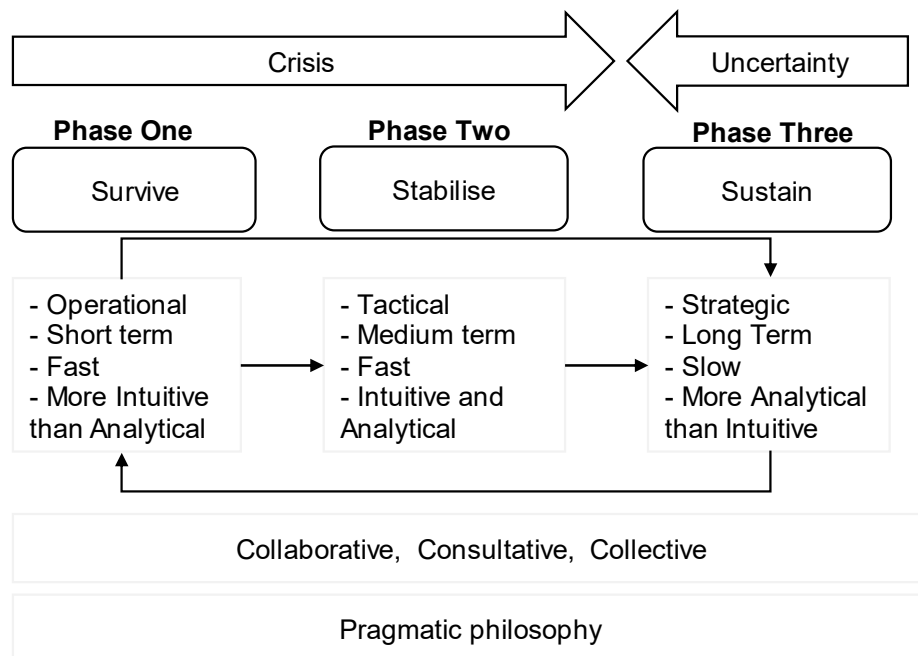


Figure 5: A proposed structure for strategic decision-making under crisis and uncertainty

(Source: Author's own creation)

The framework depicted in Figure 5 above divides the decision-making process into the three stages labelled with the three S's of Survival, Stability and Sustainability. The three C's of Collective, Collaborative and Consultative decision-making provide an underlying foundation for increasing the robustness of the decision-making process. Lastly, the entire process is underpinned by a pragmatic philosophy that helps leaders avoid paralysis when facing a crisis and provides the courage to take imperfect action.

The value of the above approach is that it prioritises decision-making in a crisis and combines different types of cognition to be applied at the most appropriate time. The major benefit is for leaders to avoid using a single approach for dealing with both crisis and uncertainty, which would only be partially effective. As noted by Dhimi & Thomson (2012), it is highly important to recognise the ability to integrate analysis and intuition into one framework. This model shows that both intuition and analysis can be used to varying degrees in a phased-approach to decision-making.

In their proposal for intelligent decision-making during crisis, Nunamaker et al. (1989) show that the negative effects of crisis, such as constriction in information-processing, rigidity in response and lack of decision readiness, can be ameliorated through training for crisis management and “learning to learn.” The findings of this study may contribute toward such management training initiatives. Following the structured or staged approach above could enhance the strategic decision-making process, through better prioritisation and deep focus. This should assist in avoiding reactive decision-making which may lead to further disaster and improve overall effectiveness of their responses for the relevant context.

Mishra et al. (2015) emphasise that effectiveness of decision-making during emergencies depends on situational awareness, information provision and most importantly an understanding of the decision-making process. This study sought to explore and describe the strategic decision-making process in practice; the framework proposed above creates a foundation for future research which could lead to the development prescriptive models for the strategic decision-making process in crisis and uncertainty.

6.7. Conclusion

The findings from the study help answer the research questions set out in Chapter Three, therefore the research objectives in Chapter One have been met. Practical insights and empirical evidence have been provided which hopefully can contribute to extant literature on strategic decision-making in crisis and uncertainty.

The findings for RQ1 showed that the coronavirus crisis caused a significant increase in uncertainty for business leaders in banking. Due to the unprecedented nature and global impact of the pandemic, uncertainties were created across the banks’ value chain. Under RQ2 it was observed that the increased uncertainty led to shifts in

strategic priorities which ultimately impacted the strategic decision-making process. A notable and unexpected finding in this study was a shift away from driving profitability and towards helping people. Lastly, the findings reported under RQ3 provided insight into the decision-making processes used to respond to the crisis in the short-term and the increased uncertainty in the long-term. Leaders used a combination of intuitive and analytical cognitive processes and applied a pragmatic philosophy to ensure that decisions could be made quickly but still be robust.

Key themes included the paradoxical forces of crisis, which requires fast intuitive decision-making, and uncertainty, which requires a slower analytical approach. To manage the enormous challenge of making decisions in a turbulent environment, leaders divided the strategic decision-making process into three stages to ensure survival, stability and sustainability of their businesses. Lastly, this approach is founded on a pragmatic philosophy which allowed leaders to embrace uncertainty and make the decisions needed to respond to the crisis with goal of aiming for progress, not perfection.

The implications of these findings were outlined and a structured approach to decision-making was proposed to help leaders when coping with a crisis and when addressing deep uncertainty. The approach requires leaders to split up their decision-making into stages and focus on the priorities of each stage by using the relevant mix of analytical and intuitive processes to allow for quick but robust decisions to be made. This is underpinned by an increase in collective, collaborative, and consultative processes; and the application of a pragmatic philosophy to allow for effective strategic decision-making in crisis and uncertainty.

7. CHAPTER 7: CONCLUSION

7.1. Introduction

The purpose of this chapter is to draw conclusions on the findings listed in Chapter Five and the interpretation discussed in Chapter Six. The principal findings will be summarised in relation to the research questions, to demonstrate that the research objectives of this study have been achieved. Consideration will be given to the practical implications for management's strategic decision-making process in crisis and uncertainty. The limitations of the study will be highlighted to further contextualise the findings. Lastly, given the importance of effective strategic decision-making in business, suggestions for future studies will be made.

7.2. Principal findings

The objectives of this study were i) to understand the impact of the coronavirus crisis on the perceived level of uncertainty in the banking industry, ii) to explore how that crisis-induced uncertainty in turn affected strategy and iii) to describe the strategic decision-making processes used by business leaders to respond to crisis and uncertainty. The principal findings for the research questions relating to these objectives are presented below.

7.2.1. Research Question 1: Uncertainty created by crisis

RQ1: During a crisis, how do business leaders in the banking sector perceive the level of uncertainty in their environment of business?

This study found that leaders perceived an increased level of uncertainty in the business environment. The coronavirus crisis had created uncertainties across the value chain of business as the pandemic had affected multiple sectors of the economy. Health, economic and social concerns were raised both for the short-term and long-term horizons. Key areas of uncertainty included the impact of the crisis on the wellbeing of staff, the effect of the national lockdown on the income-generation ability and sustainability of customers and the ability of the organisation's resources to outlast the duration of the crisis, which itself was unknown. These concerns played a major role in the shift in strategic focus of business leaders in banking.

7.2.2. Research Question 2: The impact of crisis and uncertainty on strategy

RQ2: How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?

While leaders remained confident that the overall purpose, mission, and vision of business was still sound, it was highlighted that the manner of strategic execution had changed. The pace of strategy was affected by the crisis, with an acceleration in initiatives that promoted digitalisation, including technology needed to facilitate flexible work arrangements. The sense of urgency created by the crisis led to faster implementation of such initiatives. Conversely acquisition and growth strategies needed to be delayed as these were no longer appropriate in a depressed economic environment. There was also a shift in priorities for leaders as more focus was given to social needs and the needs of multiple stakeholders, in contrast to being primarily profit-driven and shareholder-focused. These shifts led to faster decision-making and decisions being taken to help people in a time of need as opposed to profit maximisation.

7.2.3. Research Question 3: Strategic decision-making processes in crisis and uncertainty

RQ3: What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?

Decisions were taken over three stages, ranging from operational, to tactical, to neo-strategic and strategic as the crisis unfolded. In arriving at decisions, leaders applied both analytical and intuitive processes. For operational decisions the process was more intuitive than analytical, as while data was being collected, decisions had to be made quickly using judgement. The process for strategic decisions was more analytical than intuitive, to allow for a deeper consideration of the data and to avoid reactive decision-making. The method of decision-making had become more collective, collaborative, and consultative during the crisis as leaders required a diverse range of expertise to deal with the uncertainties being faced. Tools such as scenario-planning proved to be useful in dealing with uncertainty, the effectiveness of this however was questionable given that data trends had been disrupted by the crisis, thus reducing a leader's ability to predict outcomes reliably. Leaders therefore emphasised the need to apply a pragmatic philosophy when making decisions, which

includes accepting uncertainty and aiming for progress rather than perfection.

In summary, **Figure 6** below illustrates the combined findings from each of the Research Questions above. The objective of this study was to use the opportunity presented by the coronavirus crisis to respond to the need for research on decision-making under uncertainty (Alvarez et al., 2018; Teece & Leih, 2016). This study contributes an in-depth understanding of how business leaders in banking approached the strategic decision-making process when faced with the coronavirus crisis and the resultant uncertainties it created. The roles of intuition and analysis cognitive processes were also studied and empirical evidence was also contributed in response to the call from scholars in this area of research (Mishra et al., 2015). Lastly, the framework provided in **Figure 6** below makes a practical contribution to strategic decision-makers in business and provides an understanding of the required staged approach toward decision-making in crisis, the thought processes that need to be amplified and combined, as well as the underlying philosophy needed to address uncertainty in turbulent environments.

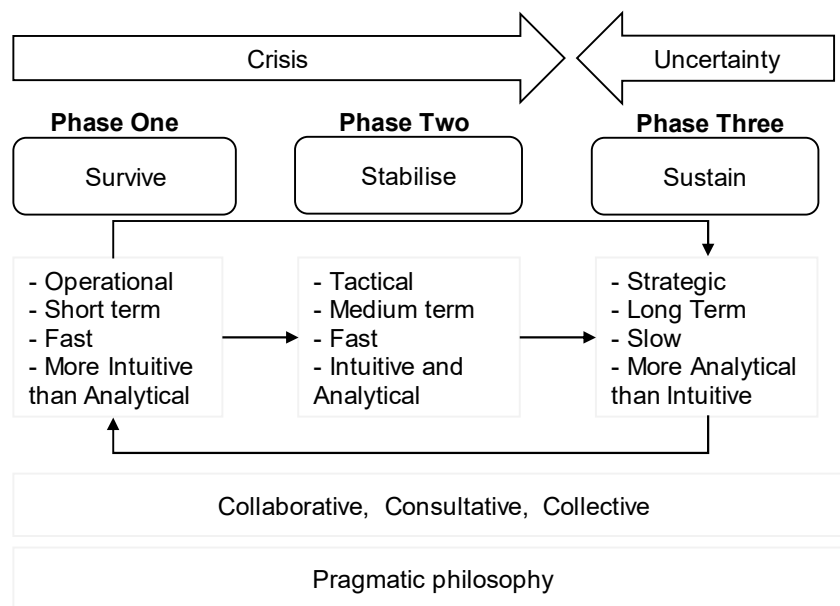


Figure 6: A proposed structure for strategic decision-making under crisis and uncertainty

(Source: Author's own creation)

7.3. Implications for management

To elaborate on the discussion in Chapter Six, the implications and practical applications of this study are described in this section. Against the backdrop of climate change, Mazutis & Eckardt (2017) advanced a list of mitigating strategies to increase the sustainability of strategic decision-making, including the use of training simulation exercises, establishing stretch targets and the application of scenario planning. Similarly, the findings of this study can be used to develop mitigating strategies to increase the effectiveness of strategic decision-making in crisis and uncertainty.

7.3.1. Leadership training and development

The key findings summarised in **Figure 6** above could be used to develop training interventions for new managers and leaders, small business owners and multidisciplinary crisis management response teams in a corporate setting. The training objectives should be to create an awareness of the different types of managements decisions ranging from strategic to operational, to outline the strategy of small wins and the staged approach to decision-making and to understand the strengths and weaknesses of applying the different types of cognition (intuitive vs analytical), approaches (collective decision-making) and philosophies (pragmatism) in decision-making. Nunamaker et al. (1989) highlight the importance of being able to control the strategic decision-making process and assert that leaders who learn how to learn, become experts in gathering information even in novel and unexpected situations.

These learnings can then be tested on a routine basis in crisis simulation exercises, as is done for natural disasters such as fires. Mazutis & Eckardt (2017) explain that short simulations can have a long-term impact on decision-making behaviour. This level of training could help leaders feel more prepared for 'wicked crises' such as the coronavirus pandemic and business can become more alert to other existential threats such as climate change and nuclear war. Maitland & Sammartino (2015) posit that through repetition, decision-makers develop their ability to apply heuristics in specific situations. Through experience, leaders could build the tacit knowledge needed for intuitive decision-making and pragmatic leadership.

7.3.2. A dynamic crisis scorecard

During the interview process, respondents indicated that data was collected frequently and that new KPIs had to be created to monitor the severity of the crisis. One possible application of these findings is to establish a dynamic scorecard that introduces crisis management KPIs in line with the strategic shifts that occur in the critical period. For example, in stage one, the scorecard should decrease profit-related targets and increase people-related measures (including staff and customers) to drive the objective of “survival”, in stage two the scorecard should increase system and process KPIs to establish “stability” in the organisation, and in stage three long-term efficiency and growth targets should be introduced to achieve “sustainability”. This operationalises the decision-making approach in **Figure 6** above and allows for it to be implemented at all levels of the organisation, not just leadership. These shifts in KPI’s should filter throughout the organisation to provide direction, facilitate sensemaking and create alignment that guides decision-making from the ground up.

7.3.3. Extreme scenario planning

Many respondents emphasised that the coronavirus pandemic was unexpected. Traditional scenario planning focuses on adjusting key known variables by a few percentage points and focuses on a financial response. Leaders should update scenario planning models to consider more extreme events and should ensure that the interconnectedness to other industries and countries is considered by involving a broad range of experts up front. Planned responses should not just look at financial impacts but be pragmatic in envisaging the physical responses needed and considering the impact on various stakeholders. This will enable faster decision-making when a crisis does occur.

7.3.4. Build flexibility into systems and processes

In addition to the above, the findings of this study showed that leaders realised that systems and processes were not flexible enough to respond to the unique requirements that arose during the crisis. The insights gained from scenario planning and the crisis related KPI setting, should be transferred into systems and processes by developing the ability to execute the transactions needed to implement the strategic decisions taken to respond to crises. It is common in stable situations that

much of human, technological and financial resources are dedicated to testing new initiatives for profit growth, but some capacity should be dedicated to developing flexibility into current systems and processes to enable faster responses during a crisis.

In summary, the practical benefits of the findings of this study could lead to better strategic decision-making and most importantly, the survival of businesses which contributes both economic and social value.

7.4. Limitations of the study

Interview bias was introduced as the researcher has had previous working relationships with some of the interviewees from the banking industry. However, this was mitigated by following the interview guide set out in Appendix Two and the researcher did not offer subjective input into interview discussions. A benefit of the researcher being familiar with leadership issues in the banking industry is that the interview process could follow a more conversational tone and knowledge could therefore be created at a deeper level when engaging with the interviewees.

The scope of the study attempted to explore strategic decisions which are generally treated as confidential issues thus some respondents were not willing to do into detail for their responses. Further no information could be shared around the amount of resources being committed to decisions, thus making it difficult to differentiate between neo-strategic and strategic decisions. Nevertheless, the insights gained from the study could prove to be useful for all types of decision-making in a management context.

This study took place during the coronavirus crisis, as such there were still restrictions on movement in place. To respect the requirements of social distancing, the interviews took place virtually using conferencing software. This prevented the researcher from observing the interviewees conduct in their natural office environment. However, due to the advances in video conferencing, the researcher was able to see the reactions of interviewees, thus observation was not completely impossible.

The purposive sample needed to be adjusted as the interview process unfolded as access to some leaders in banking was not possible due to commitments arising from the crisis. In anticipation of this complexity, the researcher contacted a broader

sample and the overall response rate was sufficient to reach a sample size that provided saturation.

7.5. Suggestions for future studies

This qualitative study was designed to explore the strategic decision-making process in crisis and uncertainty. The findings provide a useful foundation to further investigate the strategic decision-making processes of business leaders. As highlighted in Chapter One, there is need to better understand this topic and assist leaders in business with strategic decision-making both in crisis and uncertainty.

As discussed above, the context of the study matters, and the banking industry was well positioned to deal with unexpected shocks to the economy. Many respondents suggested that the study be conducted on other industries which have experienced the crisis as more severe, for example, the Travel and Tourism industry where the broader macroeconomic impacts of the crisis affected the long-term demand for their products and services. It was also highlighted during interviews that the South African economy had been struggling for a long time preceding the crisis. Therefore, there was pressure being applied to the strategic decision-making process in business. It would be interesting to perform this study in a developed country, where the economy was growing before the crisis, as the change in economic direction may then force a different approach to strategic decision-making. This could help make the findings in this study more transferrable between industries and geographical locations.

Even if reperformed in the current context, different sizes of businesses should be studied. Respondents commented that large organisations, such as banks, have well-founded strategic plans, are well diversified and have access to more capital which gives leaders more options when responding to crisis. Conversely, smaller businesses with fewer product lines and customers, and less capital, face greater uncertainty and may be forced to approach strategic decision-making differently during a crisis. This could assist in adapting the structure suggested in this study for the context of small business.

Many respondents indicated that to deal with the crisis, intuition had to be used in making decisions. Heuristics are rules of thumb used to respond with faster decision-making under conditions of uncertainty (Mousavi & Gigerenzer, 2017). Accordingly,

a study should be done to understand the specific types of heuristics used by strategic decision makers during crisis-induced uncertainty. This could provide useful supplemental insights to the approach suggested in this study.

The collective decision-making process used to respond to crisis may introduce the risk of groupthink and therefore sub-optimal decision-making. Groupthink is the phenomenon whereby sub-optimal decisions by people who seek to agree with or conform to the thought processes of their team (Janis, 1971). A study should be performed to identify whether groupthink occurs or not. This will serve notice to management teams when approaching decision-making in crisis and preventative or mitigating measures can be taken.

A final recommendation for future studies is to formulate hypotheses contextual factors that amplify or mitigate the impact of crisis on decision making as identified in literature (Hannah et al., 2009). A mixed methods study could be performed to explore qualitatively what factors affect strategic decision-making in crisis, which can then be tested quantitatively. The benefit to business would be that these external factors could be more frequently monitored and better managed in partnership with other key stakeholders such as government and society at large.

7.6. Conclusion

In summary, this study sought to provide an in-depth understanding of the strategic decision-making process under the context of crisis and uncertainty. The findings suggest that the coronavirus crisis had created both a sense of urgency and deep uncertainty for business leaders in the banking sector, which led to shifts in strategic focus. Strategic decision-making was approached in a phased approach to ensure the survival, stability, and sustainability of business. The roles of intuitive and analytical cognitive processes were revisited in the strategic decision-making process. The study provided empirical evidence to add to extant literature and proposed a three-stage model for decision-making in crisis and uncertainty that may have useful practical implications. The limitations of this study were acknowledged and mitigated where possible. Suggestions for future studies were provided to gain deeper insights into the strategic decision-making process in crisis and uncertainty. A better understanding of this topic could lead to more effective decisions being taken by leaders to ensure the long-term sustainability of their businesses, which contributes both to the health of the economy as well as the wellbeing of society.

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APPENDIX ONE: CONSISTENCY MATRIX

Table 3: Consistency Matrix

	Research Questions	Literature Review	Data Collection	Analysis
1	During a crisis, how do business leaders in the banking sector perceive the level of uncertainty in their environment of business?	Nunamaker et al. (1989); Osiyevskyy & Dewald (2018); Alvarez et al. (2018); Teece & Leih (2016); Ansell & Boin (2019); Snowden & Boone (2007)	Interview questions (Q1)	Content Analysis (coding and themes)
2	How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?	Eisenhardt & Zbaracki (1992); Haider & Mariotti (2016); Ansell & Boin (2019); Bundy et al. (2017); Mintzberg (1987b); Shivakumar (2014)	Interview questions (Q2, Q3, Q4)	Content Analysis (coding and themes)
3	What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?	Nunamaker et al. (1989); Sweeny (2008); Klein (2008); Klein et al. (2001); Mishra et al. (2015); Stanovich et al. (2011); Hammond (1996); Dhami & Thomson (2012)	Interview questions (Q5, Q6)	Content Analysis (coding and themes)

(Source: Author's own creation)

APPENDIX TWO: INTERVIEW GUIDE

26 Melville Road
Illovo
Johannesburg
2196

dd/mm/2020

Dear [Interviewee]

Interview Consent Form

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA. The research is entitled "Strategic decision-making in the context of crisis and uncertainty." The purpose of this study is to explore how business leaders in the banking sector respond to uncertainty and crisis in their organisational strategic decision-making process. To gather data for this project, I would truly appreciate the opportunity to interview you.

Our interview will take between 45 minutes and an hour. Your input will help to provide insight into the lived experience of business leaders during the Covid-19 pandemic. Your participation is voluntary, and you can withdraw at any time without penalty. Confidentiality will be maintained and all data will be reported without identifiers. If you have any concerns, please contact my supervisor or me, using the details provided below.

	Researcher	Research Supervisor
Name	Vishad Ramnund	Dr Charlene Lew
Email	19384620@mygibs.co.za	lewc@gibs.co.za
Phone		

	Researcher	Participant
Name	Vishad Ramnund	
Date	dd/mm/2020	dd/mm/2020
Signature		

Preliminary Interview Questions

1. Please can you state your position and brief career history within the banking industry?
2. Has your business been impacted by the COVID-19 coronavirus crisis either directly or indirectly?
3. Are you involved in the strategic decision-making process for the business?

The above questions would only be used if this information could not be sourced via email or through a pre-existing professional relationship with the respondent. If the leader had sufficient experience, had been impacted by the crisis and was in a strategic decision-making position, then the interview would proceed as indicated below.

Key Interview Questions

RQ1: What uncertainties have the coronavirus crisis created for the bank?

RQ2: How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?

2	How has the crisis affected your top strategic concerns?
3	What strategic decisions were required to respond to increased uncertainty?
4	How comfortable are you to make strategic decisions in this time?

RQ3: What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?

5	What was your thought process for deciding on these strategic changes?
6	In what way would this decision-making process differ from those used in the normal course of business?

APPENDIX THREE: CODE LIST AND THEMATIC MAPPING

Table 4: Code list and mapping of themes

Research Questions	Themes	Code Groups	Codes
RQ1: During a crisis, how do business leaders in the banking sector perceive the level of uncertainty in their environment of business?	Theme 1: Paradoxical effects of crisis and uncertainty	Areas of uncertainty: Value Chain	Uncertainty_Suppliers
			Uncertainty_Staff
			Uncertainty_Customers
			Uncertainty_Products
			Uncertainty_Processes
			Uncertainty_Financial
			Uncertainty_Government
			Uncertainty_Regulator
			Uncertainty_Shareholders
			Uncertainty_Personal
		Areas of uncertainty: Time Horizon	Uncertainty_Duration_of_crisis
			Uncertainty_Short_Term
			Uncertainty_Long_Term
		Areas of uncertainty: Environmental	Uncertainty_Risks
			Uncertainty_Environmental_Factors
		Crisis: Type	Crisis_Health
			Crisis_Economic
			Crisis_Social
		Crisis: Scope	Crisis_Global
			Crisis_Multiple_sectors
Crisis: Unknown	Crisis_Unexpected		

Research Questions	Themes	Code Groups	Codes		
			Crisis_Unprecedented		
			Crisis_Commonalities_and_differences		
			Theme 2: Stages of decision-making in crisis and uncertainty	Stages of decision making in crisis	Stage_Survival
					Stage_Stabilise
					Stage_Sustain
RQ2: How does crisis-induced uncertainty impact the strategic decision-making process in the banking sector?	Theme 2: Stages of decision-making in crisis and uncertainty	Strategic priority shifts: Profit and Growth	Strategic_Shift_Sales_to_retention		
			Strategic_Shift_Profit_to_people		
			Strategic_Shift_Growth_to_survival		
			Strategic_Shift_Shareholder_to_stakeholders		
			Strategic_Shift_Social_development		
		Strategic priority shifts: Long term growth	Strategic_Shift_Repurposing		
			Strategic_Shift_Digital		
			Strategic_Shift_Target_markets		
		Strategic priority shifts: Operating Model	Strategic_Shift_Competition_to_Collaboration		
			Strategic_Shift_Flexible_Work_Arrangements		
			Strategic_Shift_Efficiency		
		Strategic priority shifts: Customer focus	Strategic_Shift_Customer_Centric		
			Strategic_Shift_Helpfulness		
			Strategic_Shift_Trust_building		
			Strategic_Shift_Credit_relief		
			Urgency_forced_decisions		

Research Questions	Themes	Code Groups	Codes	
	Theme 1: Paradoxical effects of crisis and uncertainty	Crisis creates urgency	Urgency_informal_processes	
			Urgency_fast_implementation	
			Urgency_staff_productivity	
			Urgency_reactive_decisions	
	Theme 1: Paradoxical effects of crisis and uncertainty	Crisis impacts on strategy: Pace	Strategy_disrupted	
			Strategy_accelerated	
		Crisis impacts on strategy: Timing	Strategy_delayed	
			Strategy_reprioritisation	
		Crisis impacts on strategy: Purpose	Strategy_reaffirmation_of_purpose	
			Strategy_same_strategy_different_execution	
RQ3: What type of processes are used by business leaders in the banking sector to make strategic decisions under a context of crisis-induced uncertainty?	Theme 3: Pragmatic philosophy of leadership and decision-making in crisis and uncertainty	Collective and Collaborative decision making	Collective_decision_making	
			Collaboration_internal	
			Collaboration_external	
			Collaboration_information_sharing	
	Theme 3: Pragmatic philosophy of leadership and decision-making in crisis and uncertainty	Consultative decision making	Consultation_experts	
			Consultation_team_and_staff	
			Consultation_non_executives	
			Consultation_peers	

Research Questions	Themes	Code Groups	Codes
	Theme 2: Stages of decision-making in crisis and uncertainty	Decision making: Type	Decision_Type_operational
			Decision_Type_tactical
			Decision_Type_strategic_and_neo-strategic
		Decision making: Speed	Decision_fast
			Decision_slow
		Decision making: in Crisis	Decision_ethical
			Decision_more_frequently
			Decision_balancing_trade_offs
		Decision making: Time horizon	Decision_principles_framework
			Decision_short_term
		Cognitive processes: Approach	Decision_long_term
			Cognitive_Process_analytical
			Cognitive_Process_intuitive
		Cognitive processes: Perspective	Cognitive_Process_combined
			Cognitive_Conservative
			Cognitive_Creativity
			Cognitive_Forward_looking
		Cognitive processes: Tools	Cognitive_Options
			Cognitive_Process_contextual_intelligence
		Data gathering: Types	Cognitive_Scenario_planning
			Data_Type_customer
Data_Type_staff			
	Data_Type_crisis		

Research Questions	Themes	Code Groups	Codes
			Data_Type_KPIs
		Data gathering: Processes	Data_Gathering_frequency
			Data_Gathering_broader
			Data_Gathering_internal
			Data_Gathering_external
		Data gathering: in Crisis	Data_Granularity
			Data_Incomplete
			Data_Inaccurate_or_irrelevant
	Theme 3: Pragmatic philosophy of leadership and decision-making in crisis and uncertainty	Flexible leadership: Managing Uncertainty	Flexibility_Taking_action_whilest_uncertain
			Flexibility_Accepting_uncertainty
		Flexible leadership: Learning Ability	Flexibility_Learning_on_the_fly
			Flexibility_Strategy_emerges
			Flexibility_Experimentation
			Flexibility_Willingness_to_be_wrong
		Flexible leadership: Pragmatism	Flexibility_Correcting_decisions
			Flexibility_Avoiding_perfection
			Flexibility_Direction_over_accuracy
		Flexible leadership: Multitasking	Flexibility_Incremental_small_wins
			Flexibility_Shifting_resources
			Flexibility_Taking_multiple_decisions
		Flexibility_Agile_change	

Research Questions	Themes	Code Groups	Codes
		Crisis leadership: Staff Direction	Crisis_leadership_staff_engagement
			Crisis_leadership_staff_burnout
			Crisis_leadership_frequent_communication
			Crisis_leadership_paralysed_to_mobilised
			Crisis_leadership_sensemaking
		Crisis leadership: Self Direction	Crisis_leadership_experience
			Crisis_leadership_avoiding_knee_jerk_decisions
			Crisis_leadership_vulnerability

(Source: Author's own creation)

APPENDIX FOUR: ADDITIONAL QUOTATIONS FROM INTERVIEWS (RQ1)

Table 5: RQ1 Additional data

Codes	Ref	Quotation
Areas of uncertainty: Value Chain		
Uncertainty_Suppliers		
	11:1	On one end its supply chain, continuity, and disruption of supply chain.
Uncertainty_Staff		
	3:1	it was a lot of uncertainty surrounding people, where do you work, what do you do, how do you activate people in these circumstances.
	17:6	your own employees going through a pandemic like this there is uncertainty and fear, concerns of a job security, you need to respond to them and figure out a solution
	21:2	after we got everybody out of the office to their homes, how do we measure productivity?
Uncertainty_Customers		
	1:1	the customer demand for products like literally changed overnight
	3:2	how you engage with clients and what needs to change and how do you make sure that your engagement is welcoming as opposed to frightening people
	8:1	uncertainty from our side is obviously the lending, concerned in terms of our target market is the SME space. So, the ability of these organizations to continue into the future, given the lockdowns
	10:3	Because businesses can't survive indefinitely, especially the smaller businesses with less reserves and capacity. So that was the first unknown
	13:7	a lot of people are losing a portion of their revenue or their salary income. In an environment like that you would obviously tighten your credit risk
	16:20	So, does that mean there will be an increase in turnover taking place, or an increase in demand from customers, do we need to prepare for things, how will customers be feeling, will they be

Codes	Ref	Quotation
		comfortable enough to go out branches, do we need to enhance our digital offerings so that they don't need to?
	17:17	we are going to see customers going through a difficult phase for the next couple of years, where they are going to have uncertainty around their income.
Uncertainty_Products		
	19:7	So, we started to develop new solutions that would cater for customer needs in an uncertain time
	21:38	you have never sold the product, maybe some of it is includes giving payment holidays, you have never done that so you don't really know
Uncertainty_Processes		
	2:3	there was no formula, there was no experience to say we went through this five years ago, this is the plan
	10:12	dealing with stuff we didn't deal with before, what do we do, how do we respond, what's the approach we take; not all companies and all institutions took the same approach.
	10:13	not everybody had a blueprint that was given to say, this is the rules and this is how you implement it. So, one of the very important things during this crisis was how do you interpret the criteria set by government in there 500 billion support package and how do you respond to that.
	12:42	there's no textbook that says this is what you must do in this crisis
	18:10	How do we also ensure that our systems and our processes are responsive to the uncertainty that is out there, either in terms of policy changes around leave, to working from home, to policy changes on credit and so forth
Uncertainty_Financial		
	5:2	it has got a big impact on your financial position, whatever your collectability

Codes	Ref	Quotation
	14:4	it's impacting on their income statement and balance sheets around bad debts, impairments, risks etc. So, it's almost requiring a rebase of the new norm in terms of run rate, CAGR growth etc
Uncertainty_Government		
	3:34	the government hadn't answered questions for them, so we were getting questions about government support
	10:4	there was the government and then there was Panda, the institute of doctors and specialists that had a very different opinion around lockdown and the severity of the disease. So, it just compounded the uncertainty
Uncertainty_Regulator		
	5:8	when you have a catastrophic event like this you've got lots of unknowns in every facet and laws and all sorts of stuff that can trip you up and have devastating consequences
Uncertainty_Shareholders		
	17:4	shareholders and they have a particular interest in making sure that their investment is protected
Areas of uncertainty: Crisis related		
Uncertainty_Duration_of_crisis		
	21:5	nobody knows how long we are going to be in this environment, so that also creates a lot of uncertainty
	21:56	one of the things that is difficult is, how long is this decision valid for? How long is it valid for when you are making a decision, because we don't know when we are going to normal again?
Uncertainty_Economic		

Codes	Ref	Quotation
	1:11	now the environment has totally shifted altogether, and again there are doubts around are we going to be able to achieve if it is adjusted targets because the world or the environment is so uncertain at the moment
	10:32	And is this thing going to revert because remember our economy is not strong, as much as people want stuff there is an economic reality of what you can afford. So, is this sustainable?
	12:33	I don't know, nobody knows the answers. You know the guys were talking about V-shaped and W-shaped and L-shaped recoveries, what do those things mean for us?
	20:5	spend levels as we have seen dropped to record low levels given that the ability to spend was curtailed, with shops being closed
Uncertainty_Health		
	10:7	There was uncertainty about how you going to react, because everybody reacts differently. Some people are asymptomatic, some people go to intensive care and need oxygen
	18:3	A vaccine might come, it might be effective, it might not be, people might get vaccinated, some might choose not to.
Uncertainty_Personal		
	14:17	from a personal perspective it's about financial stability and your own pocket etc. right that's the individual view
Areas of uncertainty: Time Horizon		
Uncertainty_Short_Term		
	16:15	uncomfortable in the context of, we couldn't see further than the fog in front of us. So, all we could see was our hands
Uncertainty_Long_Term		

Codes	Ref	Quotation
	17:37	once the pandemic hit, we were then all forced to re-evaluate and figure out, what is the impact we are going to see coming into the future. We do it on a three-year horizon, what's the impact we are going to see on that three-year period and then how do we then change target setting accordingly with that.
	19:64	with the next couple of months, we are trying to establish a trend but it's difficult, because the trend moves, every time you think you've got it, it moves. So, I think we are just taking it step by step and hopefully by December we will have better insight into what the future holds
Areas of uncertainty: Environmental		
Uncertainty_Risks		
	9:10	that to me just became a much more volatile risk environment, the risks were bigger and they were more urgent.
	21:11	it also touched on the risk as well, you know, during the crisis, the fraudsters are not looking at the stats, they are not sleeping and counting how many cases of coronavirus have been reported, they up their game as well. So, we have seen a lot of fraud risk, exposure to fraud, IT risks, legal risks
Uncertainty_Environmental_Factors		
	10:21	in this world of technology and the fourth Industrial Revolution, there is disruption happening all the time
	13:23	when Moody's changed their credit rating, we went into junk status and most of their models say you can't invest in shares in a junk economy and then you get that withdrawal of funding.
	15:11	Inequality builds distrust in a society, and so if you look at a much more homogeneous and equal society, like the Scandinavian countries, handled Covid, there is a much better level of trust in their society and their government. Because of that they have been able to handle Covid without a lot of the volatility we have seen in other parts of the world

Codes	Ref	Quotation
	15:14	How do we break the economic ownership patterns of the past that was premised on a legacy of legalized prejudice and racism? So, it wasn't structural or systemic racism and prejudice as you've had in the US, it was legalized up until 1994. And so, those economic structures have not been changed dramatically in the past 25 years.
	15:16	Whereas, a lot of the South African banks have targeted the cost of equity plus 5 or cost of equity plus 7, and I don't know if that's appropriate, given the change in the regulatory landscape and our level of financial exclusion.
	16:27	we never thought about having the entire workforce off-site, and all of them plugging into the system remotely, that is a massive bandwidth constraint which was never planned for before
Crisis: Type		
Crisis_Health		
	3:24	The recognition that when you're handling disease as opposed to let's say something as broad as pivoting your business or whatever, the one thing you could take a lot of time, this was like immediate
Crisis_Economic		
	6:1	the first crisis creation was liquidity for ourselves and for our clients. So, when you shut down the economy it means our clients are unable to trade
Crisis_Social		
	13:6	so if your economy is taking strain, at the moment a lot of people are losing their jobs

Codes	Ref	Quotation
Crisis: Scope		
Crisis_Global		
	17:43	So, we had to look at a bit of global trends, how the pandemic was playing out globally, what impact they would have based on that. And even the central bank rates that we were seeing in South Africa, and the revision of that, a lot of that was as a response to how global rates were moved by other central Banks.
Crisis_Multiple_sectors		
	4:2	so all businesses are shut, it's not just business A that's close because of a poor marketing attack on a market or acquisition, all businesses, their value chain has been impacted
	6:7	So, it had a big impact in terms of the segments and the sectors that we support just because it touched everything.
Crisis: Unknown		
Crisis_Unexpected		
	1:9	So, when doing the budgets no one thought of, there is a Covid-19, and we knew there was Covid-19 but it was like away from us, it was happening in China, it was happening in Europe, up until it comes and hits us.
Crisis_Unprecedented		
	7:26	this crisis was so unlike any other crisis that we had ever had or seen before, that it was very difficult to navigate, it all came down to strategic thinking
	10:1	when there was a lockdown and it was unprecedented; we said a 1 in 100-year event
	13:22	But all those instances that I am talking to now, the problem was sort of a year-and-a-half to two years and gone. Now if you look at Covid, it destroyed nearly 10 years worth of GDP, so it will take a long time for us to climb out of this.

Codes	Ref	Quotation
Crisis_Commonalities_and_differences		
	13:20	we have had a couple of shocks in the past, the difference between this shock and other shocks has to do with the fact that other shocks were short-lived. So, if you think of the internet bubble
Stages of decision making in crisis		
Stage_Survival		
	9:1	the risks we were focusing on in the short-term was existential, so very much survival orientated, it was reputational, which was also operational in the sense that we had to look out for the lives of our people and the existence of our clients
	10:10	So a lot of our focus was just taken up by the priorities of the day, and the priorities of the day was to be there for clients to support them with their normal banking
Stage_Stabilise		
	7:6	from an operational and delivery of service perspective, you think how are we going to continue to engage with your customers
	18:13	our focus was on capital, adequate liquidity both local and foreign, as well as making sure that we were alive to the imperative around a stronger credit risk management process
Stage_Sustain		
	6:16	going forward we are re-evaluating our assumptions around running the bank sustainably. So, we thought a lot about sustainable ways of working, sustainable finance for clients

(Source: Author's own creation)

APPENDIX FIVE: ADDITIONAL QUOTATIONS FROM INTERVIEWS (RQ2)

Table 6: RQ2 Additional data

Codes	Ref	Quotation
Strategic priority shifts: Profit and Growth		
Strategic Shift Sales to retention		
	3:17	we asked key sales resources to pivot to apply their minds to credit
	21:13	you may not be winning in terms of the external environment but you just need to run faster than the next person. So, you are not the biggest loser.
Strategic Shift Profit to people		
	18:30	don't forget that it's your people that are your biggest asset, so you have to take care of first things first, your priorities have to be clear.
Strategic Shift Growth to survival		
	5:22	we battened down the hatches for two or three months, we barely did any new lending, we obviously consolidated what was left out and if the deals that were necessary to make sure we don't lose a lot of money
Strategic Shift Shareholder to stakeholders		
	3:25	the principles that we run the bank on pre-Covid and in the crisis are different. So, in the normal course of business you would be satisfying shareholder needs and goals as your primary objective.
	15:3	a move away from shareholder primacy or shareholder supremacy, to stakeholder outcomes. I feel that there's an opportunity and a need for a major acceleration of that shift
Strategic Shift Social development		
	6:17	there's been a greater shift into considering the footprint and the impact we have on society
	15:9	we are going to have to look at how South Africa can create a more equal and inclusive society. And to do that, we will therefore be creating better levels of economic resilience in our society, reduced volatility, and greater sustainability.

Codes	Ref	Quotation
Strategic priority shifts: Customer focus		
Strategic Shift Customer Centric		
	7:10	putting the client first our mind and in terms of that it was to make sure that we communicate very clear so as we are shifting our ways of working
	11:10	look at the customers that have been good to our organization, that have been diligent in terms of how they conducted their affairs and then let's work at protecting them and providing relief to them.
Strategic Shift Helpfulness		
	10:29	My priority right now is to get my bankers in front of the clients and have a nice good strategic conversation, fully understand it see where they are going and establish how I can help them and then implement that
Strategic Shift Trust building		
	11:20	the end messaging was that we wanted to be remembered for doing the right thing.
	19:15	Because in a time of crisis your customer base always remembers how you reacted or how you responded to requests; and the one thing that we want to be known for post-Covid is the bank that stood by its customers and provided the necessary assistance during a time of crisis.
Strategic Shift Credit relief		
	19:44	payment holiday, so we gave from three months up to six months moratorium where clients didn't have to service their debt and on top of that we also gave them temporary facilities to cover their operating expenses

Codes	Ref	Quotation
Strategic priority shifts: Operating Model		
Strategic Shift Competition to Collaboration		
	17:36	the one thing that it's certainly forced is for us to pull together. So, in the past, you know the bank structure, it is very product-house driven and decisions will primarily sit at each of the underlying product level or business units. But what this has forced, and again just emphasising the customer solution, it had to force the bringing together of all these various parties and figuring out then how we solve it collectively.
Strategic Shift Flexible Work Arrangements		
	9:4	strategically we want to work from home, the way we set up our IT is to make our people more productive
	14:2	the whole Covid response by organizations has almost proven that the ability to work remotely is now in place and you can be as effective working remotely as well as working in the office.
Strategic Shift Efficiency		
	6:9	all the banks are very concerned about protecting the capital so you are very selective in terms of where you are deploying your own limited capital
	7:8	And it's our number one biggest project, we are hoping to save tens of millions with defining the future of work
	18:8	And so, the need to find ways to lower your cost to serve whilst also responding to the digital trend that has been accelerated
	21:7	to work off-site over two weeks; which has also allowed us to streamline the leases and the buildings, which will have a positive impact. Now we realise that we don't need as many buildings as we had
Strategic priority shifts: Long term growth		
Strategic Shift Repurposing		
	12:16	we repurposed exco members, we have also let a few of them go, so as Exco we have all doubled up, we all hold dual portfolios

Codes	Ref	Quotation
Strategic Shift Digital		
	5:9	suddenly everybody spent a lot of time in digital media and our bank approach was very digitally focused and everything was geared towards digitization
	9:5	longer-term strategic elements around that, in October we will be visible digitally you will be able to see your policy with us on our bank app and that kind of thing
	12:24	So, there are lots of digitization projects that we started about two years ago that is now getting better impetus. In terms of saying it now becomes priority, we are focusing time and energy on getting those things right.
Strategic Shift Target markets		
	15:13	banks are very important because banks are placed in a crucial role in society where the decisions banks make define what society looks like 5 and 10 years from now? So, if we are making decisions on renewable energies, on greenhouse gas emission, that plays out of the next 15 and 20 years.
Crisis creates urgency		
Urgency forced decisions		
	2:11	You have no choice you either dive into this and swim with it or you will be left behind, you have no option.
	7:4	there was actually quite a lot of resistance to that thinking in the past. And so all of a sudden you had a lot of leaders around the table that everyone had to make it happen and it was no longer a discussion point
	12:19	I think Covid has just accelerated that race and it forced us to get the technology where we didn't have the technology, it forced us to do certain things
	14:11	it's not a case of how comfortable you are, I think you have to. It's less of a nice to have
Urgency informal processes		
	1:16	you can make multiple decisions without necessarily waiting for that formal structure which is like an Exco meeting

Codes	Ref	Quotation
	21:17	it was more informal. Now this is a bank, a bank is a highly regulated environment. But because you need to make a lot of decisions faster, there is no time to talk about the process and go and draft a process flow
Urgency_fast_implementation		
	14:21	in terms of delivery pace, there is an imperative to get things going a lot faster, mostly because of the need.
	21:6	The bank has been on this project for over two years, where they wanted us to work from anywhere, and we could not get this project off the ground, it went for two years. And with the crisis we were able to implement a lot of things over two weeks
Urgency_staff_productivity		
	3:10	the productivity stats and all the work effort stats in the month of April it went the other way so, our clients weren't necessarily there at their businesses but our staff were working feverishly in ours
	13:17	What we have found is that productivity has shot up after lockdown, the amount of emails, the number of meetings, the number of things being implemented, the productivity levels have just shot up
Urgency_reactive_decisions		
	10:17	that's what happened with Covid you were just confronted with stuff and you must react
Crisis impacts on strategy: Pace		
Strategy_disrupted		
	21:3	around customer acquisition and growing the customer base. We didn't even know how to deal with that, in fact we stopped new business at the beginning of the crisis
Strategy_accelerated		
	3:30	in order to capitalise change in the normal course, in order to persuade people to work from home, it would have taken years and what happened was you had this sharp corner which went from having resistance about, " I feel I've got to be at work," to no one being at work

Codes	Ref	Quotation
	13:3	where you would have had slow take up of virtual channels, people have suddenly realised that they have to go to virtual channels to avoid the risk and the displeasure of standing in a queue.
	20:6	There were some silver linings that positively catapulted some of our strategic outcomes, which is good to see. You know, like people trying out more digital options, less use of cash etc., those things were quite positive, online spend was another highlight and a strategic output for us
	20:25	for me what really stood out is, and I suppose the lightbulb moment is, some of the silver linings is that, we have been battling for years to crack and how quickly a crisis like this can catapult, some of these strategic behaviours that one can try as much as they want but a crisis like this can really fast track it.
Crisis impacts on strategy: Timing		
Strategy_delayed		
	7:29	And we actually elongated the initiatives, instead of saying they're going to be delivered on X date, we did the resource planning and elongated it out.
Strategy_reprioritisation		
	9:26	for us it was more re-prioritisation than de-prioritisation or taking this off and putting that on, it was just shifting the series a little bit more.
	10:9	We needed to reprioritize because being in the financial sector we were looked upon to disperse a lot of the financial support that government and a lot of the financial donors were giving
Crisis impacts on strategy: Purpose		
Strategy_reaffirmation_of_purpose		
	18:11	we need to be a business that is here for the long term. That means that we must be a business that is rooted in purpose
Strategy_same_strategy_different_execution		
	18:16	the reaffirmation of our strategic choices, was a decision that we had made in our land. Our choices are actually ok, they just need to be accelerated in certain aspects

APPENDIX SIX: ADDITIONAL QUOTATIONS FROM INTERVIEWS (RQ3)

Table 7: RQ3 Additional data

Codes	Ref	Quotation
Collective and Collaborative decision making		
Collective_decision_making		
	11:45	we are not going to fly solo, let's challenge each other a little bit and let's understand the collective as well.
	19:29	Most of the decisions we took through an Exco, we had presentations that we took through an Exco and that's how we came up with a solution to go back to market or our customer base.
Collaboration_internal		
	11:46	So, a lot more collaborative in terms of understanding how does your part affect the whole group and I think that part was a lot more collective in the grand scheme of things.
	14:24	for me it's that openness and collaboration, and getting input from multiple sources that will ultimately define the solution, as well as keeping each other honest to make sure nothing gets dropped in between. And I think that, for me, is a big difference in success versus failure
Collaboration_external		
	17:42	So, that's where we had to get a couple of our key partners like VISA, where we process all our card transactions through, and tell us, in certain developed countries, what are the behaviours they are seeing
Collaboration_information_sharing		
	21:54	Information sharing has also been a great source to gather information, to say ok this was discussed at the different forums, let's put this information together, it's about taking all those pieces and joining the dots

Codes	Ref	Quotation
Consultative decision making		
Consultation_experts		
	4:21	I use foreign exchange experts and I use material, there's enough material online
	9:27	it was very much they were the data lies we go and talk to them; we would go to the specialist that were available to us in the environment
Consultation_team_and_staff		
	6:31	you listen to your own people and then you try and make the most balanced decision
Consultation_peers		
	7:25	it was leveraging off individual networks of ex-colleagues etc, that have now subsequently moved, for example of got an ex-colleague that works for UBS in London
Decision making: Type		
Decision_Type_operational		
	9:14	the more worrying things in the short term were actually operational decisions, do you send everybody home, what do you do with laptops, what do you do with desktops, you know 320 people go from a 90% office-based business to within two weeks to fully decentralized business, what's going to work, what's going to happen to our clients and so on
	10:14	Some of the more operational questions was, what do we give to our people to support them. There are numerous decisions that you have to make, making life easier for people to work from home, enabling them with Wi-Fi, what do you give them, how do you support them, what value do you ascertain to data
Decision_Type_tactical		
	8:5	I wouldn't say it's a strategic change, I think it's more optimal balance sheet management
	17:12	cost that we as an organisation incur, now certainly you deploying work-from-home principles to employees into their various locations in order to enable them, by enabling them you know it's things like data and office equipment

Codes	Ref	Quotation
Decision_Type_strategic and neo-strategic		
	3:29	strategically we've had a look at our property solutions as a bank
	4:4	it's strategically changed the way our business deals with distribution physically and digitally
	12:14	We've changed our tact in terms of where we are attacking, which part of the market, we are very retail / industrial focused, but our sweet spot retailers below 10 000
	16:12	the actual plastics for the cards were coming from China, which we couldn't get as we now had no access to even logistics between countries, it came to a halt, resulting in us making a decision to extend the duration of the existing cards in market for a period of time so those could still work
	16:14	a move in production. So, what we saw we had a problem with was globally getting plastics as well, so what we do is we get the raw material from China then we produce it, we have vendors locally that produce it in South Africa. What we had to do then was rely on a vendor in Kenya
Decision making: Speed		
Decision_fast		
	1:13	it is more learning to make these decisions on the fly or let me say quick decisioning.
	11:32	It's the time and uncertainty, like in certain cases you had to make a call within the day or so, generally we are not that rushed
	12:30	what we want to do is make sure that we get to the problem a lot quicker, if we leave it to fester, it creates a whole lot of problems
	19:32	the people, the operational stuff, tools of trade, that we had to do very quickly
Decision_slow		
	5:16	I think for most people the best thing you do is you actually slowdown
	10:26	nobody is really made permanent decisions yet and remember even with us, if I wanted to reduce my floor space it's not going to happen overnight. You know we are committed into leases and we own buildings
	18:15	some decisions have not been made, it is more about still going through the thought process and the decisioning process.

Codes	Ref	Quotation
Decision making: in Crisis		
Decision_ethical		
	11:37	then also we thought within the context of a pandemic, that would morally not sit well with anybody as well, because you don't want to be seen to take somebody's house away in a pandemic.
Decision_more_frequently		
	12:6	they fed back, so we met daily, we were solving crises on a daily basis
	17:47	it's shortened that analysis period, that you can't do this once off you have do it constantly
Decision_balancing_trade_offs		
	6:10	but at the same time, you have the responsibility to support the economic activity that is taking place. So, we had to balance that support role as well as our own capital issues.
	7:11	that's really been a balancing act in terms of that alignment around both from a sales perspective as well as from a risk leadership perspective
	14:13	how do you balance putting the customer first, which is what you quite aggressively punting, as well as keeping your shareholders happy?"
	21:14	as you are retaining your customers, you are also taking into account that your customers are struggling and vulnerable. It's also a balancing act because you can't be assisting all of them
Decision_principles_framework		
	16:29	we ended up deciding is that the principles that apply to business continuity in those crisis modes need to still be in place no matter how long the duration of the pandemic is
	17:32	this is where various frameworks that you have within an organisation serves its weight. We can't make any decisions that is not in accordance with our governing frameworks

Codes	Ref	Quotation
Decision making: Time horizon		
Decision_short_term		
	15:22	2020 is more survival and showing resilience through the crisis
Decision_long_term		
	15:12	To sustainably create a world where shareholders can get returns, and by sustainably, I mean beyond the current 1, 3- and 5-year planning Cycles, I mean 10 or 20 years from now, we're going to have to make major structural changes
	17:22	It's really around forward-looking views and sustainable strategies as opposed to short-term strategies.
Cognitive processes: Approach		
Cognitive_Process_analytical		
	1:18	trying to use data as the key to a decision-making process
	2:9	What I usually do is, I like to make decisions based on detailed facts, so with my team I will research all applicable areas upfront and with all the changes happening around us, because we had so many frequent meetings you have to make decisions based on facts, so you have to keep updated around all different areas and when you have got the detail you can make risk-based decisions based on facts.
	10:35	so we leverage the data that we have based on what we see on behavior both in terms of transactional and in terms of engaging with the bank but we also get information from clients
	15:23	my natural inclination is to collect data, analyse data and then use data to make interpretations or predictions
	20:20	Very much a data-driven and analytical approach, so the forecast modelling is driven by existing data that we have seen
Cognitive_Process_intuitive		
	7:19	but there's not a lot of facts to go by, so there's a lot of intuition decision making

Codes	Ref	Quotation
	11:38	so the credit guys took a stab, and then the CFO and myself said, ok but this doesn't make sense, I don't get it, this intuitively doesn't make sense.
	12:23	two years before Covid, you know we introduced automated scoring, we are one of the first banks to introduce property scoring, and we were tweaking and playing around and trying to see if the dials were right and when Covid hit we switched it off because we wanted more judgmental
	14:15	And then you apply some form of, I'm going to use the word educated or calculated, haircuts on those numbers, albeit sometimes it's a thumb suck, but ultimately you apply some form of a haircut to apply a relative sense of reality.
	19:46	The out of model adjustments were more where we know, we've got these 10 clients, this is what the LGD is, this is what the possible loss could be, this is the provision created by FLI and IFRS9, do I have to add or don't have to add. We went through name by name, in order to create the out of model adjustment.
	20:22	At that point it required a lot of judgement and a lot of the experience component starts to come through
	21:52	it was very judgemental, more than data, remember there is no time to think through, there is no time to analyse data
Cognitive Process dual		
	9:18	we were more analytical but there was a big element of intuitiveness in there as well, but I think they were not complimentary
	9:19	so our analysis told us what the market will do, our intuition said to us what our brokers would do about that market, you know because that's a very human side of things
Cognitive processes: Perspective		
Cognitive Conservative		
	2:8	people are conservative in their thinking, they don't want to act, they see the risk but they still cling to what is known and the fear of change basically supersedes the ability to see what's coming
	7:12	generally the perception is I'm going to put my head down and lay low until I'm asked questions

Codes	Ref	Quotation
	8:3	we are not going to force things in terms of riskier lending, we are still going to stay within our bands
	12:20	So I am conservative by nature, I want to make sure that in a crisis like this if I'm going to have a bad year then I'm going to have a terribly bad year; because there's no use in me taking some provisions now and then some next year and some next year and have three bad years.
Cognitive_Creativity		
	3:50	it forces innovation in the leadership styles as well, because you are forced to do things differently
	16:10	product innovation did slow down quite a bit, it might still take place in the laboratories but the reality is that it did not go to market, so go to market offerings did slow down.
Cognitive_Forward_looking		
	13:12	they have changed the forward-looking indicators and the types of things that they would have increased is job losses, growth in disposable income and all of those would have effectively than increased your PD (probability of default) in your models...
Cognitive_Options		
	6:22	the breadth of options, so in a pre-Covid world you had options A, B and maybe C. In a Post-Covid world your options are limited because there are so many factors that overlay
	19:19	we had two options, the one option was an on-balance sheet where we would find the solutions, the second option was going through the government scheme
Cognitive processes: Tools		
Cognitive_Process_contextual_intelligence		
	7:5	you have to think about people in a South African context, you have to think like does everyone actually have a desk and chair, do they have a space at home to sit
	15:25	we are absolutely all in the same storm, in the same ocean, in the same weather but we have just got very different boats, and rigidity of boats to survive the storm.

Codes	Ref	Quotation
Cognitive_Scenario_planning		
	11:24	we played with a couple of scenarios. So, looking at the economic scenarios that says does the economy bounce back as a V, is it a U, is it a L (shape) and we consulted with the lot of economists
	14:16	And then what we did was we built three scenarios, we build a bull scenario, base scenario, and a bear scenario. Thereby giving the approvers a sense of an aggressive, a middle-of-the-road, and a conservative, and what impact does that have
Data gathering: Types		
Data_Type_staff		
	3:43	we are blessed with solid systems and solid metrics, so for example we can monitor all the engagements on the front lines, using something like Microsoft Dynamics
	21:23	we had to have more focus on measurements, like I touched on productivity earlier to say, how do you measure people's productivity
Data_Type_crisis		
	3:44	we had good metrics therefore we could move fast and when we build new things, we also had digital crumbs that allowed us to see where processes broke.
	16:32	the actual data coming through from the actual level 5 data, actual level 4 data, actual level 3 data based on those actuals we can now assume that this is what level 2 and level 1 looks like. So, the relevance of our data became key
Data_Type_KPIs		
	17:39	over that six-week period we had to figure out what are the key metrics impacted by this, what are we seeing from adoption of early behaviours
Data gathering: Processes		
Data_Gathering_frequency		
	16:31	the reality is we were getting data as it came in, and that data from where people are swiping, how much are they swiping, what time; the impact of curfews

Codes	Ref	Quotation
	19:3	3 to 4 times a week, where they would engage with their people to find out how people are doing, the safety
Data_Gathering_broader		
	4:17	my scanning was much wider than normal. I cannot do my traditional scan
Data_Gathering_internal		
	19:52	the methodology around gathering, it was interfacing with people, we interfaced a lot. We stopped external, we internalized and we said what do you think around coming to work, if you are not coming to work how are we going to still operate, how will we service our clients?
Data_Gathering_external		
	10:34	strategic discussions with my clients that's going to be a key important source of information for me.
	11:41	we brought in other people to look abroad at what's happening, again it's a more relative basis because credit worthiness in the European market versus credit worthiness in the South African Market is two different things, and appetite for risk and reward is two different things as well. So just to look at relative customer behaviour and those kinds of things, what was happening and playing out in those markets as well.
Data gathering: in Crisis		
Data_Granularity		
	11:44	by drilling into some of the crisis analytics we learnt a lot more about our business in the grand scheme of things
Data_Incomplete		
	1:20	not all the data is available on the fly
	10:41	And you're not going to have all the information that you need to make a decision
Data_Inaccurate_or_irrelevant		

Codes	Ref	Quotation
	16:30	so there's actual data from the previous years to pick up some seasonality, that's thrown into the model and that's also a good baseline. Unfortunately, that baseline was totally irrelevant now
Flexible leadership: Managing Uncertainty		
Flexibility Taking action whilst uncertain		
	1:10	the impact of that has been now you have to readjust the budgets on the fly
	3:13	So, we didn't go and say "oh let's wait", we went, "let's get on with it" and I think that really helped our cause
	16:18	amongst fellow executives as peers, as information was coming in, we were making calls and trying to decide
Flexible leadership: Learning Ability		
Flexibility Learning on the fly		
	15:28	I think finding our feet and exploring and innovating and trial and error
	19:60	and we had to learn as we went along. What it did do for us, if you ask me what the learnings was, it's that you had to keep an open mind
	21:27	You learn on the fly; you build the car while it's moving
Flexibility Willingness to be wrong		
	3:39	I think we failed fast, we also acknowledge that if they got it wrong we fixed it fast
Flexibility Correcting decisions		
	4:14	sufficient evidence to say that "this thing is not working", you must have the guts and the leadership strength to say I'm stopping it
Flexible leadership: Pragmatism		
Flexibility Avoiding perfection		
	10:39	in a crisis you need to work with imperfect information

Codes	Ref	Quotation
Flexible leadership: Multitasking		
Flexibility_Shifting_resources		
	12:17	we have crossed skilled the people where they knew that they did one thing for 20 years, now they are learning the whole spectrum across a piece so we can chop and change people when we have capacity
Flexibility_Taking_multiple_decisions		
	2:5	you had to design and execute simultaneously
	5:6	you know you are juggling as a result of this, a thousand balls, and it's a bad position to be in
Flexibility_Agile_change		
	6:21	So, we've had to become far more nimble and flexible in our approach and deciding at a moment's notice to change based on our predetermined drivers.
	15:29	the whole agility mindset way of thinking, is going to become increasingly more relevant if people look at responding to this in a systemic, strategic long-term way
Crisis leadership: Staff Direction		
Crisis_leadership_staff_engagement		
	5:32	Levels of participation are worse, ability of people to read each other is worse, the lack of everybody building on each other is worse, so I think it does lend itself to a particular transactional nature of decisioning
	13:10	Then the other thing when you work away from the office, the engagement of your staff wanes over a period.
	21:28	Our people are more engaged, as leadership we are more engaged, because now we talk more frequently, we send out newsletters, we have webinars on well-being and stuff like that.
Crisis_leadership_staff_burnout		

Codes	Ref	Quotation
	13:18	The only problem with all of that is staff burnout, I do believe that the people that have always worked in the offices and went on leave, have not found a way to split this work, because it's work from home, when is it home time and when is it work time?
	14:3	there's a higher chance of burnout, where people are constantly now on the pulse, you now having to be more focused, having to be available at 7:00 in the night, you now start work at 7:00 in the morning
Crisis_leadership_frequent_communication		
	12:29	Prior to this we met monthly, we had a weekly sales meeting, I don't think we were close. When this crisis hit, we were meeting on weekends and any part of the day
	21:29	now we have to communicate more, take people on the journey, over-communicate actually because there are always questions that are being asked
Crisis_leadership_paralysed_to_mobilised		
	7:16	this is what we need to move forward and to encourage the others to make decisions
Crisis_leadership_sensemaking		
	10:48	Make sense of the chaos
	12:8	we tried to keep it as standardized as possible because, just the complexity when you're dealing with back-office people, that's a recipe for disaster. So, we tried to manage complex vs non-complex structures as well.
	16:17	to the more junior staff members we were consistent and we were very clear in our direction
	21:20	you had to take people on a journey to say this is where we are, this is why we making a decision, let's take the next step and tomorrow when we get more information will make more decisions
Crisis_leadership_experience		
	5:25	just because something was successful before does not make it successful now. But you know they are experiences that you have that will be relevant.

Codes	Ref	Quotation
	15:26	past experience is relevant to the extent that strategically, you are looking to responding to this pandemic in an operational, maintain the status quo way. I think past experience is increasingly less relevant if we are looking at a strategic response that says we need to create a more sustainable, just, equitable, and inclusive world
Crisis_leadership_avoiding_knee_jerk_decisions		
	10:24	But if you make knee-jerk reactions and make decisions like that, then you are going to have a problem.
Crisis_leadership_vulnerability		
	15:27	part of that leadership, courage, humility, is a vulnerability that should emerge saying that I don't have the answers in terms of how we create and respond to this
	16:6	As soon as we had acknowledged that we did not have the answers and there would not be an answer coming anytime soon, it changed our whole view on how to solve it.
	19:26	In a time where there is crisis the leader does not have to put on a brave front because he also doesn't know, you are vulnerable, so you have got to make sure that you are consultative and you check stuff properly

(Source: Author's own creation)

APPENDIX SEVEN: ETHICAL CLEARANCE

**Gordon Institute
of Business Science**
University of Pretoria

**Ethical Clearance
Approved**

Dear Vishad Ramnund,

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

[Ethical Clearance Form](#)

Kind Regards

GIBS ETHICAL CLEARANCE APPLICATION FORM 2020

G. APPROVALS FOR/OF THIS APPLICATION

When the applicant is a student of GIBS, the applicant must please ensure that the supervisor and co-supervisor (where relevant) has signed the form before submission

STUDENT RESEARCHER/APPLICANT:

29. I affirm that all relevant information has been provided in this form and its attachments and that all statements made are correct.

Student Researcher's Name in capital letters: VISHAD RAMNUND

Date: 07 Aug 2020

Supervisor Name in capital letters: CHARLENE LEW

Date: 07 Aug 2020

Co-supervisor Name in capital letters:

Date: 07 Aug 2020

Note: GIBS shall do everything in its power to protect the personal information supplied herein, in accordance to its company privacy policies as well the Protection of Personal Information Act, 2013. Access to all of the above provided personal information is restricted, only employees who need the information to perform a specific job are granted access to this information.

FOR DOCTORAL AND FACULTY/RESEARCH ASSOCIATE/STAFF MEMBER RESEARCH ONLY

Approved

REC comments:

Date: 29 Aug 2020