

Factors influencing strategic responses of managers in crisis

Ayanda Yvonne Manunga

19341343

A research project submitted to the Gordon Institute of Business Science,
University of Pretoria, in partial fulfilment of the requirements for the degree of
Master of Philosophy (Corporate Strategy).

29 November 2021

ABSTRACT

The COVID-19 crisis has had a far-reaching impact on the aviation industry and it continues to threaten the survival of many organisations in that sector. The level of uncertainty that exists as a result of the crisis has highlighted the need for managers to understand the complex nature of implementing appropriate strategic responses in crisis. Based on such understanding, management then have to make the appropriate strategic decisions and act fast in such turbulent business environment. This multifaceted challenge faced by managers is heightened by the fact that there are still conflicting views and debates regarding the relevant antecedents and processes in managing a crisis of such proportion. This study explored the factors that influenced the strategic responses of managers during the COVID-19 crisis.

This research was conducted using the qualitative research approach. Interviews were conducted with managers involved in the strategic decision-making process during the COVID-19 crisis. The managers were from a broad range of sub sectors within the South African aviation industry.

The research outcome presents in-depth insights on the different strategic responses adopted by the managers in the sub sectors to respond to, monitor and manage the crisis. The findings from the study identified three strategies that were adopted by the managers: retrenchment, persevering and innovation. The study further identified the internal and external factors that served as enablers and disablers to the strategic responses. This research contributes to the literature on strategic management, decision-making and crisis management.

Keywords

Strategic response; strategic decision-making; crisis management

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 Philosophy in Corporate Strategy 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.

Ayanda Yvonne Manunga

Name & Surname

Signature

Table of contents

ABSTRACT	ii
Keywords	ii
Declaration	iii
Table of contents	iv
List of Figures and Tables	viii
ABBREVIATIONS	ix
CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM	1
1.1. Background to the Research Problem	1
1.2. Problem Statement	2
1.3. Research Questions	4
1.4. Research Objective	4
1.5. Contribution of the Study	5
1.6. Roadmap of the Research.....	5
CHAPTER 2: LITERATURE REVIEW	7
2.1. Introduction	7
2.2. Strategy in Business	7
2.3. Strategic Management.....	8
2.3.1. Strategy formulation.....	8
2.3.2. Strategy implementation	8
2.4. Strategy in Crisis.....	9
2.5. Strategic Responses	10
2.5.1. Retrenchment	11
2.5.2. Persevering	11
2.5.3. Innovating	12
2.5.4. Exit.....	13
2.6. Strategic Decision-making.....	14
2.7. Environmental Scanning	16
2.7.1. Assessing	18
2.7.2. Evaluate.....	19
2.8. Enablers and disablers in responding to crisis	21
2.9. Conceptual Framework.....	23
2.10. Conclusion.....	24

CHAPTER 3: RESEARCH QUESTIONS	26
CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN	27
4.1. Introduction	27
4.2. Research Paradigm	27
4.3. Research Methodology	28
4.4. Sampling Approach	28
4.4.1. Population	28
4.4.2. Unit of analysis.....	29
4.4.3. Sampling method	29
4.4.4. Sampling size.....	30
4.4.5. Sample subgroups.....	31
4.4.6. Appropriate and sufficient sample	32
4.4.7. Measurement instrument.....	33
4.4.8. Data collection process.....	33
4.5. Data Analysis.....	34
4.6. Data Quality	35
4.7. Limitation of the Research Design and Methods.....	36
4.8. Conclusion.....	36
5. CHAPTER 5: RESULTS	38
5.1. Introduction	38
5.2. The research context	38
5.2.1. Aviation Training Organisation subsector	38
5.2.2. Private Airline subsector	39
5.2.3. Aircraft Maintenance Organisation subsector.....	39
5.2.4. Cargo and security subsector.....	40
5.2.5. Public entity	40
5.3. Results.....	41
5.3.1. Research Question 1	41
5.3.1.1. Retrenchment strategy	41
5.3.1.2. Persevering strategy	45
5.3.1.3. Innovation strategy	47
5.3.2. Research Question 2	51
5.3.2.1. Environmental scanning.....	51

5.3.2.2.	Assess	54
5.3.2.3.	Evaluation.....	55
5.3.2.4.	Conclusion.....	56
5.4.	Research Question 3	57
5.4.1.	Internal factors.....	57
5.4.2.	External Factors.....	62
5.4.3.	Conclusion.....	65
5.5.	Chapter Conclusion.....	66
CHAPTER 6: DISCUSSION OF RESULTS		69
6.1.	Introduction	69
6.2.	Discussion of Findings for Research Question 1	69
6.2.1.	Retrenchment Strategy.....	70
6.2.2.	Persevering Strategy	72
6.2.3.	Innovation Strategy.....	73
6.3.	Discussion of Findings of Research Question 2.....	74
6.3.1.	Environmental scanning.....	75
6.3.2.	Assessment	77
6.3.3.	Evaluation.....	78
6.4.	Discussion of Findings for Research Question 3	79
6.4.1.	Internal Factors	80
6.4.2.	External Factors.....	82
6.5.	Chapter Conclusion.....	85
6.6.	Conceptual framework	86
CHAPTER 7: CONCLUSION.....		87
7.1.	Introduction	87
7.2.	Principal Theoretical Conclusions	87
7.2.1.	Research Question 1	87
7.2.2.	Research Question 2	88
7.2.3.	Research Question 3	89
7.3.	Research contribution.....	90
7.4.	Recommendation for Management	90
7.5.	Limitations of the study	91
7.6.	Suggestion for Future Studies.....	91

7.6.1.	Strategic responses	91
7.6.2.	Environmental scanning, assessment, and evaluation	92
7.6.3.	Enablers and disablers	92
8.	REFERENCES	93
	APPENDIX ONE: INVITATION EMAIL.....	97
	APPENDIX TWO: INFORMED CONSENT FORM.....	98
	APPENDIX 3: INTERVIEW GUIDE.....	99
	APPENDIX 4: CODE LIST.....	100
	APPENDIX 5: ETHICAL CLEARANCE	105

List of Figures and Tables

Figure 1: Research roadmap	6
Figure 2: A dual process model of environmental scanning (García-Carbonell et al., 2021)	16
Figure 3: The scanning channel used across the organisation (Robinson & Simmons, 2018).....	17
Figure 5: Conceptual framework (Author’s own)	24
Figure 6: Analysis of cumulative and new codes generated per participant.....	33
Figure 7: Phases of Thematic Analysis (Braun & Clarke, 2006).....	35
Figure 8: Strategic responses implemented by managers in the aviation industry	41
Table 1: Different approaches to scanning	18
Table 2: Main strategy evaluation techniques.....	19
Table 3: The interview sample	30
Table 4: The interview sample organisation subgroups	32
Table 5: Strategies implemented by managers	50
Table 6: Environmental scanning by managers	56
Table 7: Internal and external environmental factors	66
Table 8: Summary of key findings	67

ABBREVIATIONS

Abbreviation	Full Description
ATO	Aviation Training Organisation
AMO	Aircraft Maintenance Organisation
CEO	Chief Executive Officer
COO	Chief Operations Officer
COVID-19	Coronavirus disease 2019
ICAO	International Civil Aviation Organization
IATA	International Air Transport Association

CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1. Background to the Research Problem

Organisations have seen a fair share of crises in recent history. These included the 1997 Asian crisis, the dot-com bubble in 2000, the economic crises in 2008 and the Fukushima nuclear meltdown (Wenzel et al., 2020). These crises have had a devastating societal and economic impact on a global scale for individuals, societies and organisations (Wenzel et al., 2020). These crises disrupted the normal course of business in varying degrees. In 2020, the world started experiencing the devastating impact of COVID-19 (Talbot & Ordonez-Ponce, 2020). The scale and magnitude of this pandemic has been unprecedented and remains unpredictable (Do et al., 2021)

The COVID-19 crisis has had a severe impact on and in organisations across the globe. It continues to threaten the survival of many organisations. The impact of this pandemic was not anticipated by the business community and most organisations were not prepared to deal with a crisis of that magnitude (Foss, 2020). This crisis continues to test the organisations' adaptability to new situations, new rules, routines and regulations (Netz et al., 2020). This has led to many organisations experiencing their greatest challenges to date, compelling them to adapt to the change and start preparing for the next crisis (Bailey & Breslin, 2021). Because of its widespread impact, the COVID-19 crisis has also resulted in a decline in business activities and profits, which necessitated a change in strategy (Thompson et al., 2014). Many organisations had to review and dramatically change their strategic direction. The review and change of the strategy required managers to implement the appropriate strategies to respond to the crisis (Wenzel et al., 2020).

The COVID crisis has had a severe impact on the lives of many around the world and has led to many organisations to closing down or reducing their operations (Bapuji et al., 2020). The repercussions of this crisis will be felt for many years to come (Albers & Rundshagen, 2020). Even organisations that were able to successfully manoeuvre and manage this crisis still had to deal with supply chain disruptions, changes in operations and their overall activities of the business.

The COVID-19 pandemic and the aftermath of the lockdown regulations formed the most devastating crisis experienced by the aviation industry; all prior crises experienced seemed inconsequential in comparison. The prior critical events that directly affected the aviation industry included the oil crisis in the 1970s, the Iran-Iraq war in the 1980s, the Gulf and Asian crises in the 1990s, the 9/11 terrorist attack in the US, and SARS and the financial crisis in the 2000s (ICAO,

2021). These crises had a severe, negative impact on the aviation industry, but their impact was still insignificant when compared to the impact of the current COVID-19 pandemic (ICAO, 2021).

In the years 2020 and 2021, the aviation industry's performance plunged to all-time low global figures, with the overall estimated actual levels reflecting a reduction of 50% in seats offered by airlines, a reduction of 2,699 million passengers and a loss of over \$371 billion gross operating revenues for airlines when compared to 2019 (ICAO, 2021). In addition, airports reflect a loss of over 64.4% passenger traffic, the international tourism declined by \$1.3 trillion and the global economy contracted by between 3.3 and 4.3% in the same period (ICAO, 2021). The South African market declined by an estimated \$3 billion in 2020, which was 56% lower than the levels seen in 2019 (IATA, 2021a).

The experts project that it will take up to four years for the aviation industry to recover to pre-COVID-19 levels (Richter, 2021). Such a projection is an optimistic view that factors in the successful vaccine roll-out currently underway in many countries (Pearce, 2021). The prolonged period of a full recovery of the industry has a direct impact on global aviation activities. It further requires that managers in the aviation industry will have to continuously identify and implement strategic responses to adapt to the changing environment. This shift from the planned state of business activities to the crisis state has heightened levels of uncertainty in the industry (ICAO, 2021).

For managers in the aviation industry to be able to respond appropriately to the crisis and ensure that they are prepared for the next potential crisis, it is important to understand the successful strategic responses adopted by managers to respond to the crisis. It is further important to understand what enabled or disabled these managers to act appropriately (Wenzel et al., 2020).

1.2. Problem Statement

This research is centred on the complex nature of formulating and applying the most appropriate strategic responses in a crisis. Managers need to continuously ensure that appropriate strategies are implemented. This raises the question of how managers are able to respond effectively to a crisis (Alvarez et al., 2018), despite the well-established focus on strategy, strategic decision-making and crisis management. Organisations are continuously exposed to crises and periods of uncertainty (Wenzel et al., 2020). The high-velocity business environment requires managers to act fast and to take appropriate strategic decisions in unforeseen, threatening and disruptive circumstances (Netz et al., 2020). However, there is a limited number of studies available on how

managers scan, assess, evaluate, reject or accept the appropriate strategic options (Maitland & Sammartino, 2015).

There is advancement in the literature on crisis management. However, the proposed models still consider a 'one size fits all' approach, which does not take into consideration that the experience and impact of a crisis can vary dramatically, based on the severity of the impact, and the scale and the duration of the crisis (Le & Phi, 2021). Bundy et al. (2017) note that there is minimal intergration in the literature associated with a crisis and crisis management. They argue that there are still conflicting views and debates to understanding the relevant antecedents and processes involved in crisis management. This presents an opportunity for scholars to further advance the literature on crisis management, strategy implementation and strategic decision-making.

The experience of a crisis has become a constant encounter in the business environment. This has heightened the business need to devise effective strategic responses in times of a crisis, and the need for managers to be better prepared to respond appropriately and timeously (Wenzel et al., 2020). Managers are faced with great uncertainty when conducting their day-to-day activities in times of crisis (Alvarez et al., 2018). Therefore, it is crucial for managers to understand the strategy-making process, as it relates to identifying and implementing the appropriate strategic response in times of a crisis. The selection of the most appropriate strategies by managers needs to consider the changing internal and external environment (Wenzel et al., 2020). Thompson et al. (2014) advise organisations to focus on four factors when selecting the appropriate strategy:

- a) The nature and cause of the change in the business environment;
- b) The ability of the organisation to still reach a sizeable market share;
- c) The cost of exiting the business includes that they have to assess the degree of urgency;
- d) Having to assess the competitors' landscape, focusing on opportunities and threats.

Managers who are not equipped to devise timeous and appropriate strategic responses will disadvantage the organisation in its quest to outmanoeuvre any crisis (Netz et al., 2020). The aviation industry has been hard hit by the pandemic, with full recovery projected to occur at best in the next four years (Richter, 2021). This will continue to have a severe impact on the survival of organisations within the aviation industry. Therefore, managers are expected to have the know-how to be able to respond to this crisis and other potential crises in the future in the most effective manner, to support the organisation moving out of this crisis and to make and keep the business

sustainable in the long term. Failure by the managers to devise the most decisive and appropriate responses will be detrimental to the organisation (Wenzel et al., 2020).

This study accepted the view that there are four strategic responses that could be implemented to respond to crises; retrenchment, persevering, innovating and exit strategies (Wenzel et al., 2020). The retrenchment strategy focuses on core financial changes for organisational sustainability; namely: organisational and financial changes, cost reduction, asset reduction and revenue generating strategies (Thompson et al., 2014). The persevering strategy focuses on maintaining the status quo for as long as possible. The innovating strategy is focused on exploiting the opportunities that arise as a result of the crisis, which provides the organisation with an opportunity for strategy renewal (Do et al., 2021). These could also include mergers with similar organisations. The exit strategy is an alternative response to effectively confront the crisis by selling off or closing non-core assets (Elfenbein & Knott, 2015), which could include take-overs. These strategic responses provide managers with some options and direction on how to respond in a crisis (Wenzel et al., 2020).

1.3. Research Questions

Wenzel et al. (2020) acknowledge that managers and employees encounter uncertainty in business on a regular basis. Therefore, more research is required to unpack the skills needed for strategy-making in times of a crisis, as there is a greater need to “examine in greater depth the internal and external enablers (disablers) that lead managers and employees to respond appropriately to the situational circumstances that crises invoke” (Wenzel et al., 2020). Three main research questions were identified for the present study to explore the factors that influence managers’ strategic responses.

- a) Which strategic responses were implemented by managers in the aviation industry in response to the COVID-19 crisis?
- b) How did the managers in the aviation industry scan, assess, and evaluate their strategic responses?
- c) What were the internal and external factors that influenced their strategic responses to the crisis?

1.4. Research Objective

The study sought to explore the factors that influence managers’ ability to respond to crises in a strategy context in the South African aviation industry. This was achieved through identifying the

strategic responses adopted by managers because of the prevalent COVID-19 crisis. The research explored the process that was followed by these managers to scan, assess and evaluate their responses and to identify and understand the factors that influenced the responses.

1.5. Contribution of the Study

The research contributed to the existing literature in strategic management, strategic decision-making, and crisis management. Studying the strategic responses implemented by the managers in the aviation industry during crisis provided crucial lessons in navigating a turbulent business environment. Furthermore, understanding the decision-making process and the factors that contributed to these decisions provided valuable lessons for managers involved in strategy-making and strategy decision-making.

1.6. Roadmap of the Research

The research is segmented into seven chapters as set out in Figure 1.

- Chapter 1 sets the context for the research by outlining the research problem from an academic and business perspective. The chapter further introduces the research question.
- Chapter 2 is the literature review. It commences by providing an overview of the strategy in business concepts, which includes strategic management, and strategy formulation and implementation in a crisis. This is followed by a review of the strategic responses in a crisis and strategic decision-making. Lastly, it considers the enablers and disablers of strategic decision-making and concludes with a conceptual model.
- Chapter 3 provides a summary of the research questions that have been addressed by this study.
- Chapter 4 sets out the research method and design that were suitable for this study. It comprehensively discusses the rationale of the choices in the method and design.
- Chapter 5 details the research findings and sets the stage for the discussion in the next chapter.
- Chapter 6 sets out the discussion of the results. It integrates the discussion of findings and the implications for business.
- Chapter 7 concludes the research by outlining the principal findings of the study and the overall implications for management. It sets the scene for future studies.

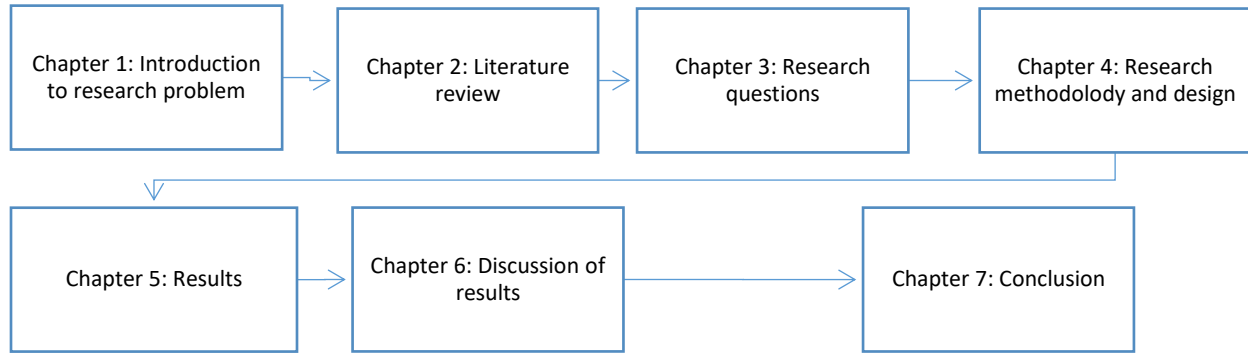


Figure 1: Research roadmap

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

The importance of identifying appropriate strategic responses in crisis was highlighted in Chapter 1 and the limited literature that dealt with unpacking strategy-making during a crisis was also noted. Chapter 2 conducts a literature review on the key constructs of the study, which include strategic responses, strategic decision-making, enablers, and disablers regarding these responses.

First, the role of strategy in business is outlined to provide context of the strategic management process. Thereafter, the section extends to explain the formulation and implementation processes in a normal competitive environment. This build-up is important to differentiate between strategy formulation and implementation in a normal competitive environment and that of a strategy devised during a crisis. Literature suggests that the strategic management process in its entirety may be ineffective during a crisis (Alvarez et al., 2018; Ansell & Boin, 2019). Second, the study provides context of implementing strategy in times of crisis, and it further provides a link to a strategic decision-making process, wherein tasks are identified to assist managers in decision-making during a crisis. This leads to the detailed review of the different tasks of environmental scanning, assessing and evaluating during a crisis. Lastly, the study delves into the factors that will enable or disable managers from making the most appropriate strategic decisions as part of their responses to a crisis.

2.2. Strategy in Business

The word 'strategy' is derived from the Greek word '*strategos*', which means 'general', the original meaning referred to leading the army (Louw & Venter, 2013). Strategy is the means by which an organisation or its management seeks to achieve its strategic objective (Thompson et al., 2014). In essence, strategy refers to the plans that are put in place by an organisation to gain a sustained competitive advantage (Alharthy et al., 2017) and achieve its overall goals.

Louw and Venter (2013) observe that the concept of a strategy has evolved over time through different schools of thought; the concept commenced in the ancient world, moved to the classical planning school, and then on to a competitive advantage, a resource-based view,

system thinkers, a dynamic strategy and currently, to the contemporary view of strategic management. Strategy implementation was considered to be a long-term and methodical process; however, this neat and tidy description or perception of strategy and its implementation is far from the turbulent and ever-changing business environment (Sull, 2007).

2.3. Strategic Management

Strategic management is a process of formulating the organisational objectives and actions, while it ensures that these objectives are implemented within stipulated timelines and monitored on an ongoing basis (Thompson et al., 2014). Strategic management is not only focused on strategy planning, but it also incorporates the implementation and monitoring of the strategy to ensure that the strategies are working in practice (Louw & Venter, 2013).

Louw and Venter (2013) state that strategic management is made up of three pillars: formulation, implementation and control. Thompson et al. (2014) concur with strategic management possessing three pillars, but they define them slightly differently as comprising the pillar of creation, implementation and change. Alharthy et al. (2017) expand these pillars to four by including environmental scanning as a pillar. This study accepted the three pillar concept as proposed by Louw and Venter (2013), which are discussed next.

2.3.1. Strategy formulation

The first pillar, referring to strategy formulation, is about ensuring that suitable strategies are selected based on a thorough external and environmental analysis (Hill et al., 2017). This formulation process extends to the analysis of the strategic direction, external and internal environment and ultimately, selecting the suitable strategy (Louw & Venter, 2013). Thompson et al. (2014) summarise strategy formulation as the “direction from the strategic leader, strategic planning and emergent strategies”. Strategy formulation is a crucial pillar in the success of any organisation. However, it should be noted that it is only the successful implementation of a strategy that creates a competitive advantage for an organisation. “Structured execution is key to maximising a strategy’s full value” (Galpin, 2018).

2.3.2. Strategy implementation

Strategy implementation refers to the processes undertaken by an organisation to deliver on the identified strategy (Thompson et al., 2014). Strategy implementation is about deploying suitable structures and controls put in place to deliver on the chosen strategy (Hill et al., 2017). It is thus the sum of all activities required to implement the strategy (Hourani, 2017). It is about seizing the

opportunities in support of the strategy, while ensuring that all other aspects of the organisation are in line (Sull et al., 2015).

Successful strategic implementation requires a clearly stipulated vision that is supported by the appropriate support systems, control systems and formal structures (Huy, 2011). Strategy implementation also needs to consider structural, emotional and social-cultural elements (Huy, 2011). These elements are crucial in implementing the strategy. Implementing the intended strategy of the organisation into the lived behaviour by the employees is crucial for driving organisation change and strategy implementation (Lynch & Mors, 2019).

There are a number of widely accepted strategic management frameworks such as SWOT analysis, Porter's generic strategies, McKinsey's 7-S, the Six Silent Killers, various portfolio models and strategy implementation models, and so forth (Hourani, 2017). However, these routine strategies and frameworks tend to be ineffective in times of crisis (Ansell & Boin, 2019). The framework function is usually based on the assumption of a normal competitive environment (Pretorius, 2008). Albers and Rundshagen (2020) posit that these traditional methodologies are not sufficient to address an extraordinary crisis such as the COVID-19 pandemic. It is thus clear that strategy in crisis needs to follow a different approach, and one that is suitable to enable leaders and managers to respond appropriately to the crisis at hand.

2.4. Strategy in Crisis

As noted in the previous section, several frameworks and theories are in place to support organisations' intended strategies. However, these frameworks are appropriate and implementable in the 'normal business environment'. These frameworks do not unpack how they can be used during crises, and it thus appears that crises and uncertainty have not been fully considered (Alvarez et al., 2018). The older frameworks did not or do not factor in the strategic implications of disruption, unplanned changes, and crises in industries or the ecosystems (Foss, 2020).

Organisational crisis refers to an event that is noted by managers and stakeholders as being "highly salient, unexpected, and potentially disruptive" (Bundy et al., 2017). Albers and Rundshagen (2020) add that an organisational crisis manifests itself in a barrage of urgent and unexpected events, wherein there is limited opportunity to plan the most appropriate response. Such crisis is publicly known and experienced by key stakeholders, and it creates high levels of uncertainty among the stakeholders as well as among the organisation's leaders, resulting in

major disruption of normal operations (Do et al., 2021). Bundy et al. (2017) further outline the primary key characteristics of the crisis and its repercussions as follows:

- a) It creates uncertainty, disruption and unplanned-for change;
- b) It is threatening for the organisation and most, if not all of its stakeholders;
- c) It is a behavioural phenomenon;
- d) It is considered to be a part of larger processes rather than a discrete event.

The organisations in the context of crisis are forced to become agile, flexible and adaptable to the 'new normal'. They have to review and adjust their processes to improvise their functioning at an organisational level and at an individual level to stay afloat in times of crisis (Bailey & Breslin, 2021). The resilience of organisations during times of crisis is linked to their ability to respond to both external and internal threats (Bailey & Breslin, 2021). Crises may affect the strategic position of an organisation (Netz et al., 2020). Wenzel et al. (2020) add that any change in the strategic positioning of an organisation requires a strategic response to the crisis to enable management to manoeuvre the unexpected and massive disruption.

2.5. Strategic Responses

Managers are expected to co-ordinate timely and effective their strategic response under conditions of high uncertainty (Ansell & Boin, 2019). Strategic response refers to "the set of coordinated communication and actions used to influence evaluators' crisis perceptions" (Raithel & Hock, 2021). These are choices directed at the organisation's activities, which are supported by the available resources to deliver on the organisation's mandate (Mitchell et al., 2011). The choice of such responses provides managers and employees with the key principles on how to respond to unexpected crises (Do et al., 2021).

Through a thorough analysis of the available literature, Wenzel et al. (2020) identify four potential strategic responses that may be used in crisis, namely: Retrenching, persevering, innovating, and exiting. These strategies influence the direction that must be taken by managers. Some of these strategies require prompt action, which limits the time available to deliberate interpretation (Netz et al., 2020). As such, the time horizon to the implementation of these responses needs to be carefully considered. For example, the most suitable or optimal strategies for short to medium-term strategies may include any one of the options, referring to retrenching, persevering, or exiting, while the organisation could consider innovating strategies for the long term (Do et al., 2021). The four strategic responses during times of crisis are discussed in more detail below.

2.5.1. Retrenchment

Retrenchment is a strategic response that is intended to achieve the goal of reducing “costs, assets, product lines and overheads” (Wenzel et al., 2020). Thompson et al. (2014) note that this response focuses on ensuring that the organisation can survive a crisis by becoming more productive and profitable, while delivering a similar or at best, the same product and services. Retrenchment strategies, also known as operating actions, are intended to reduce costs and assets (Santana et al., 2017). This strategy may be considered as the initial response for strategic renewal (Argyres et al., 2019).

The output of this response is aimed at cutting out complexity and improving transparency by improving the organisation’s performance when compared to its competitors (Do et al., 2021). This may include the examination and review of the existing pricing model – by either increasing prices to increase revenue or decrease prices to stimulate demand (Thompson et al., 2014).

There are varying views on the use of this strategy. Santana et al. (2017) note that this response may be detrimental to the organisation if it is not well considered and includes all short and long-term consequences, as this strategy focuses on reducing costs based on forces of competitive advantage for the organisation, such as downsizing of personnel. Argyres et al. (2019) add that this response raises doubts about its effectiveness, stating that it often leads to underperformance when compared to competitors that have not adopted the same response. This view is shared by Wenzel et al. (2020), who point out that adopting this strategy might lead to continual underperformance post the crisis caused by the organisation having become short-staffed or having lost irreplaceable talent.

Wenzel et al. (2020) note that despite the short-comings of this response, it remains widely used during times of crisis. The retrenchment strategy is focused on short-term solutions and is geared to yield immediate results (Thompson et al., 2014). It must only be used in an industry that is still profitable, attractive and viable (Thompson et al., 2014).

2.5.2. Persevering

This strategy focuses on maintaining the status quo within the organisation and aims to see the organisation through the crisis, while it considers making only minimal changes to its existing strategy, structure and assets (Albers & Rundshagen, 2020). All measures are directed at sustaining the organisation’s activities, while trying to mitigate the adverse impact of the crisis (Wenzel et al., 2020).

Some scholars are of the view that this is the best strategy when dealing with sudden changes in uncertain circumstances (Chakrabarti, 2015; Li and Tallman, 2011). Wenzel et al. (2020) agree and add that this strategy may positively contribute to sustaining the organisation in the short term, but warns that this cannot be sustained in the long term, while other authors believe that this strategic response may be the source of a competitive advantage post the crisis (Albers & Rundshagen, 2020)

2.5.3. Innovating

Crises usually have a severe impact on economies and societies, but they may also offer organisations an opportunity to innovate in response to the crisis (Wenzel et al., 2020). This response focuses on the strategic renewal of an organisation. In essence, this strategy is the opposite of the persevering strategy, as it disrupts the status quo by changing the core competencies of the organisation to improve long-term performance (Do et al., 2021). Schmitt et al. (2018) promote this strategy as the only response that can help the organisation adapt to the changing environment by deciding to exploit new and existing competencies and capabilities. This strategy is crucial and unavoidable if the organisation intends to sustain a prolonged competitive advantage in the long run (Wenzel et al., 2020).

With this strategy, the organisations must explore other sources of revenue in response to the crisis, and these may extend to various innovating programmes and collaborations with various other stakeholders (Wenzel et al., 2020). This strategy may be adopted by an organisation that has the commitment to innovate in the medium to long term in terms of its product or market renewal (Do et al., 2021). Thompson et al. (2014) propose the below action in the processes of innovating.

- a) **Refocusing:** Using the opportunity to segment or differentiate the organisation's product or services to gain competitive advantage;
- b) **Rationalising** product development, and the product line, but focusing on advertising or promotions;
- c) **Rejuvenation of the business:** Offering a more creative and innovative approach to the business through galvanisation, simplification, building new competencies and leveraging on newly found competencies and capabilities.

2.5.4. Exit

The exit strategy is the discontinuation of certain or all business activities in response to a crisis (Wenzel et al., 2020). Exiting can take multiple forms across multiple disciplines (Elfenbein & Knott, 2015). It is thus not only focused on shutting down the entire business, but can also consider down-scaling operations or exiting certain markets or industries (Albers & Rundshagen, 2020). This can include rationalising the closure of the business or selling parts of the non-core aspects of the business (Thompson et al., 2014). This response may form part of an evolutionary process aimed at reinventing the organisation through a new product offering or renewing the organisation's core competencies (Do et al., 2021). Exiting should only happen after careful consideration of the organisation's vulnerabilities, its exposure to the crisis (Wenzel et al., 2020) and any long-term aims and objectives have been carefully assessed.

This strategy may be considered by some as the most appropriate decision from the outset of the crisis (Wenzel et al., 2020). Elfenbein and Knott (2015) note that this response may be the most obvious, but at the same time also the most difficult decision that can be taken by management, while the delayed decision may result in the organisation's poor performance being allowed to continue too long and thus depleting the organisation's resources (Elfenbein & Knott, 2015). The exit strategy should be considered if the future revenue of the organisation is expected to be lower than the total operating costs plus the cost of exiting (Elfenbein & Knott, 2015).

It is important to note that the exit strategy does not necessarily only reflect an organisation's business failure or that it is the last response to a crisis, but rather that it is an alternative response to effectively confront the crisis and its repercussions (Elfenbein & Knott, 2015; Dai et al., 2017; Wenzel et al., 2020). Exiting at the right time might also enable the organisation to avail committed resources to boost the attempts of a strategic renewal or leverage on a new opportunity that may exist as a result of the organisation exiting the market (Do et al., 2021).

The four strategies noted above provide management with an insight into the different strategies that can be adopted by managers during times of crisis, and sometimes even when a crisis is anticipated, allowing management more time to investigate each of the options and choose the optimal one. Therefore, this study will seek to identify and understand, which strategy/ies were implemented by managers in the aviation industry and what informed their choice of the strategy adopted.

2.6. Strategic Decision-making

Identifying and implementing the appropriate strategic responses during a crisis is crucial for the success of any organisation (Wenzel et al., 2020). Hence, it is vital to understand the process followed by managers to identify and implement the appropriate responses. The strategic decision-making process is a sequence of events that involves collecting information, and thereafter developing and choosing the most appropriate strategic options (Shepherd & Rudd, 2014). The decision-making process is a cross-function process, which requires significant financial considerations and is often long term in nature (Shepherd & Rudd, 2014). This linear approach refers to strategic responses in a normal competitive environment.

When operating during a crisis, the strategic decision-making process often can be “ill-structured, non-routine, uncertain and pervasive” (Shepherd & Rudd, 2014). Ansell & Boin (2019) argue that management’s insistence on applying a rational process to manage a crisis is at the heart of the arising problem. Netz et al. (2020) add that during crises, fast decisions are often made that are rarely logical or sequential. This dispels the notion from the traditional school of thought that a strategic decision-making process ought to be ‘normative’ or ‘naturalistic’ (Thomas, 2020).

Managers operating in a crisis environment often experience uncertainty when they are required to respond to a changing business environment (Wenzel et al., 2020). Many of these managers find it difficult to make decisions in such highly uncertain business environments; yet, such uncertainty has become a norm when it comes to strategic decisions (Eisenhardt, 1989). Where there is such a high level of uncertainty, a crisis is known to put organisations and managers to the test (Ansell & Boin, 2019). In an attempt to deal with the uncertain environment, managers tend to adopt either the ‘normative’ or the ‘naturalistic’ decision-making process. The normative decision-making process is linear, and follows a process of collating information, assessing, developing and selecting the appropriate responses (Thomas, 2020). Other managers adopt the naturalistic decision-making process, which applies to unexpected events that require quick decisions from managers who use their prior experience of dealing with similar events (Thomas, 2020).

The decision-making process during a crisis necessitates a different process to be followed that requires managers to take fast decisive action. Eisenhardt (1989) connected fast strategic decision-making to a number of factors that have to be in place, namely, availability and use of real-time information, multiple strategic options, counsellors, consensus and decision integration. However, there is no record of a consolidated perspective regarding how this can be achieved.

This is concerning, since appropriate strategic responses are crucial and at the heart of any potential success in manoeuvring the organisation out of the crisis.

To manage the crisis strategically and provide a response to the threat to the organisation, Ansell and Boin (2019) propose that managers follow the process that is outlined below:

- a) *Sense-making*: Gathering, analysing and disseminating information to the relevant stakeholders, while ensuring that all strategic crisis managers have a shared understanding of the impact and the consequences of the crisis (Ansell & Boin, 2019). Sense-making is thus crucial in decision-making during times of crisis or disruption (Foss, 2020). Robinson et al. (2021) add that the optimal environment is crucial in this process.
- b) *Critical decision-making*: This relies on the focus being on identifying and implementing the appropriate strategies to address the crisis in the short and long term (Ansell & Boin, 2019). This includes focusing on the strategic responses and the situational preferences (Foss, 2020).
- c) *Coordinating*: This refers to management implementing the intended strategic actions, while ensuring that stakeholders all work together to deliver on the expected actions (Ansell & Boin, 2019).
- d) *Meaning-making*: This refers to the process of disseminating information to all those involved, to help them understand what is being done to address the crisis and providing a clear picture of what is happening (Ansell & Boin, 2019). It also assists the aim to achieve buy-in from the various stakeholders, if they not only understand the tasks or action they are meant to execute, but also understand the intended outcome and how it affects them.

The organisation's adaptability is tested by unforeseen events that disrupt the normal course of business (Netz et al., 2020). Fast decision-making requires the involvement of the board and the whole management team, since dealing with the group provides various possible options in response to the crisis, and this, in turn, improves the quality of the decision (Netz et al., 2020). It is important to understand what processes the managers follow in reaching their decision of which strategy to follow and implement (Ramírez & Selsky, 2016). Little is understood about how managers scan, assess, and evaluate their strategic options and responses (Maitland & Sammartino, 2015).

2.7. Environmental Scanning

Environmental scanning is a processes that entails different actions used to obtain information and protect the organisation from uncertainty (García-Carbonell et al., 2021). It is about searching, collecting and disseminating information gathered from the external environment and using that information to inform the strategic direction of the organisation (Brown & Kline, 2020). Scanning of the strategic responses helps managers prepare actions in response to the disruption. Managers need to scan the environment to make valid judgements and be able to analyse the status quo of the situation and how 'things' may change (Ramírez & Selsky, 2016), referring to potential changes in functions, the way the organisation operates, what the organisation can offer, and so forth. Environmental scanning is thus crucial in strategy management, as it is a precursor to scenario planning, product innovation and strategic change (Robinson et al., 2021).

During a crisis, the systematic and rigid approach to scanning the environment is not efficient enough. García-Carbonell et al. (2021) propose the use of two types of processes in environmental scanning: the intuitive process and a rational process as indicated in Figure 2.

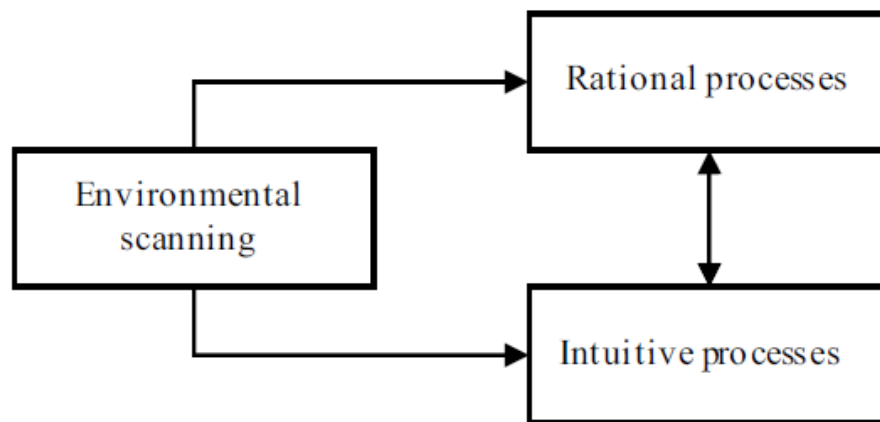


Figure 2: A dual process model of environmental scanning (García-Carbonell et al., 2021)

The rational processes have always been used in environmental scanning. The rational processes are concerned with procedural rationality and comprehensiveness (García-Carbonell et al., 2021). Based on the mental and strategic assumptions, the process is concerned with identifying external stimuli, and then interpreting them with other information to inform the strategic responses (Vecchiato, 2019). The study conducted by Robinson & Simmons (2018) supports the use of the rational processes. It found that decisions are made by using various approaches to

scan the environment, which includes the use of both formal and informal processes as outlined in Figure 3. They further assert that the decision-makers use external impersonal sources (market intelligence reports and news reports) and external and personal sources (industry associations, personal networks and external-facing employees) (Robinson & Simmons, 2018) to lead them to their decisions.

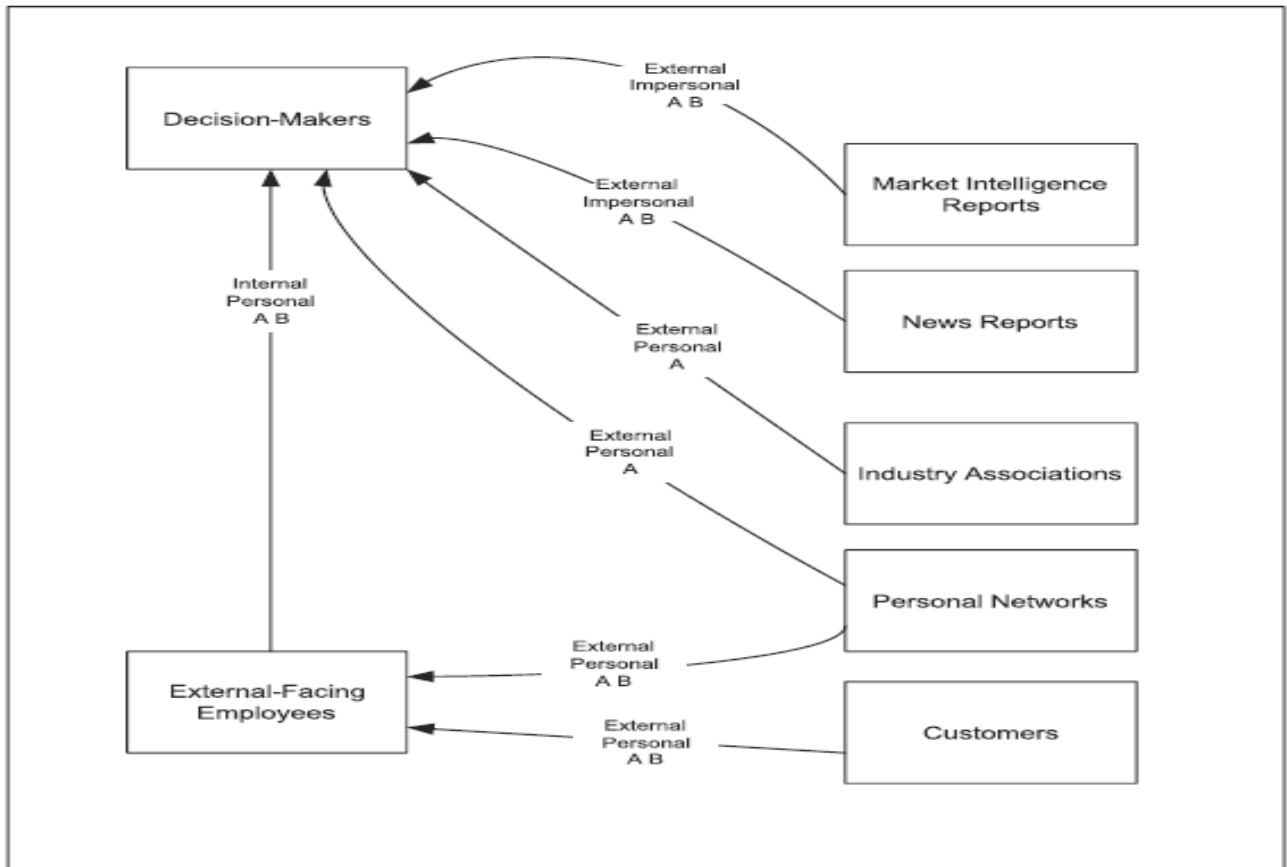


Figure 3: The scanning channel used across the organisation (Robinson & Simmons, 2018)

During a crisis, the rational approach needs to be complemented by an intuitive process, which focuses on problem solving and integration from a less conscious perspective, based on experience and understanding of the environment in which the organisation operates (García-Carbonell et al., 2021). It has further been suggested that where there is uncertainty, there tends to be higher reliance on the human factor for information gathering as opposed to written documentation (Robinson et al., 2021). This is ascribed to the non-availability of hard data relating to the experience of such a crisis. According to Maitland and Sammartino (2015), the application of the intuitive process enhances strategic decision-making in an uncertain context. It must be

noted that the intuitive process has the advantage of being fast; however, it does come with the higher risk of error when compared to the rational approach (Ansell & Boin, 2019).

The frequency and requirements for scanning the environment are based on the organisational contextual environment. Robinson et al. (2021) outline the distinctive approaches based on the context that can be considered by managers as indicated in Table 1.

Table 1: Different approaches to scanning

Irregular scanning	Scanning as a result of a crisis. This type of scanning is conducted on an ad-hoc basis and is often a simplistic analysis.
Periodic scanning	This type of scanning is conducted periodically, based on a forecast. It is thus issue oriented.
Continuous scanning	This type of scanning is opportunity seeking and is thus problem focused. It is conducted formally on an ongoing basis. It is future-oriented.

Source: Robinson et al. (2021)

Strategic planning that is rooted on neoclassical economics borne of the ‘predictable’ uncertainty is not an adequate response in a turbulent environment. It is thus proposed that leaders rather adapt to a socio-ecological view that considers the ‘predictable’ uncertainty in business, as well as environmental jolts and macro-level disruptions (Ramírez & Selsky, 2016). The unpredictable uncertainty shifts the organisation to unprecedented turbulence (Ramírez & Selsky, 2016). Proactive management of uncertainty and their strong understanding of the changes in the external environment can however mitigate this (Linden, 2021). As such, scenario planning as part of the environmental scanning is suggested by scholars to enable managers to have foresight of the possible futures (Ramírez & Selsky, 2016; Robinson et al., 2021; Linden, 2021). Scenario planning significantly reduces the perceptual bias in environmental scanning. It encourages managers to explore strategic responses beyond the scope of their current processes and experiences (Vecchiato, 2019).

2.7.1. Assessing

The assessment of the strategic responses helps managers to better understand the context to identify what is possible and what challenges might derail the strategy (Ramírez & Selsky, 2016).

Sweeny (2008) described the three-stage process of responding to negative events as follows: (a) assessing the severity of the negative event, (b) defining the strategic responses and (c) evaluating the organisation’s response. In assessing the severity of the event, the managers will need to gather information about the possible causes of the event or the contributing factors to better understand the severity and extent of the threat, the comparative information and understanding the full potential consequences of the crisis (Sweeny, 2008). The assessment aligns with information collated in environmental scanning, which provides rich information to better understand the appropriate strategic responses.

2.7.2. Evaluate

It is crucial to evaluate the strategic responses retrospectively as well as on an ongoing basis. Organisations also have to plan both for favourable and unfavourable conditions that can be implemented with urgency when there are changes in the internal and external environment (David, 2013). Evaluating the data collected gives meaning to the strategic responses (García-Carbonell et al., 2021). The process of evaluation is a crucial step and can help inform managers of any potential problems before such challenges become a crisis in themselves (David, 2013).

There are a number of main strategy evaluation techniques that may be used by an organisation to evaluate strategic responses. Some of these techniques are outlined in Table 2. According to Thompson et al. (2014), there is no single tool that can provide a definite answer to all strategic responses, and the choice of the evaluation technique should always address the following:

- a) **Appropriateness** - in the context of the environment and competitive forces;
- b) **Feasibility** – it must be relevant to the organisation’s capabilities, competencies and resources;
- c) **Desirability** – there must be a strategic fit with the existing culture of the organisation as well as with the decision-makers’ preference

Table 2: Main strategy evaluation techniques

Technique	Technique
SWOT analysis	Discounted cash flows
E-V-R congruence	Net present value

Planning gap analysis	Internal rate of return
Porters industry analysis	Payback
Portfolio analysis	Cash flow implications
Scenario modelling	Cost-benefit analysis
Break-even analysis	

Source: (Thompson et al., 2014).

This research aligns well with the E-V-R congruence model for the evaluation of the strategic responses, which is reflected in Figure 4. The E-V-R model provides a straightforward view of how the organisation is attuned to the environment (Thompson et al., 2014). In this model E – represents the environment (opportunities and threats), R – represents the resources (the strengths and weaknesses) and V- represents the values (leadership and culture) (Kew & Stredwick, 2010). This model posits that for an organisation to be congruent, the environment, resources and values need to be mutually reinforced. This model is adaptable in that it can be applied to situations where management have to manage crises and change, unlike the traditional models (Thompson et al., 2014).

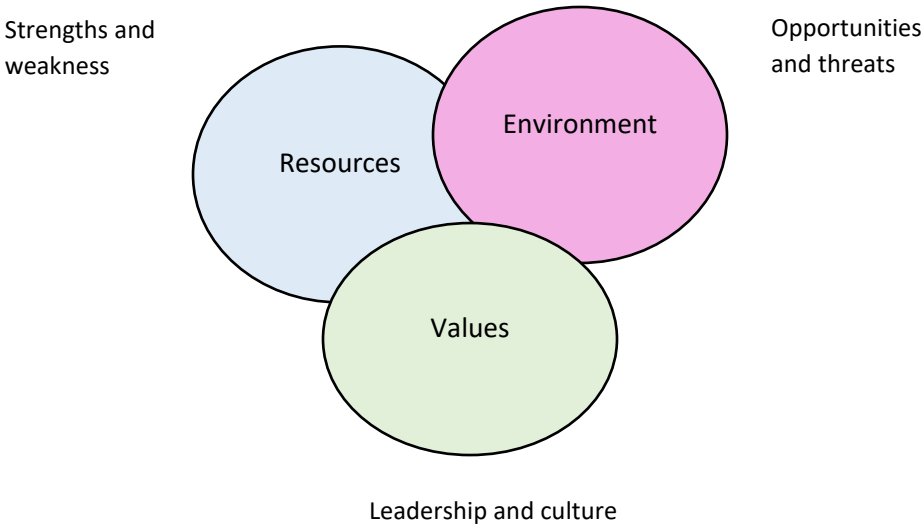


Figure 4 : A congruent organisation (Thompson et al. 2014)

The best strategies often become obsolete as and when there are external shifts and in the external and internal environment. It is therefore important that there is a systematic review, evaluation and control of the execution of the strategic responses (David, 2013). The evaluation during times of crisis ensures that strategic responses are evaluated on an ongoing basis and corrective action can be taken promptly (David, 2013).

In line with this section, the next section will focus on the enablers and disablers in response to a crisis. It elaborates on the enablers and disablers that influence the strategic responses during times of crisis. These factors are noted in the external and internal environment.

2.8. Enablers and disablers in responding to crisis

It is crucial that managers have the ability to make decisions, and that these managers are equipped with sufficient and the appropriate information, as this improves the quality of the decisions (Netz et al., 2020).

Eisenhardt (1989) referenced several factors that influence fast strategic decision-making in high-velocity environments, namely: the availability of real information, multiple alternatives, and counsellors with the relevant qualifications and decision integration. Schmitt et al. (2018) notes that from an external perspective, the political, technological, and competitive environment plays a crucial role in decision-making and that from an internal perspective, the structure and processes are key factors. Albers & Rundshagen (2020) identify various external factors that have an impact on the organisation's ability to make fast strategic decisions. These include (a) the involvement of national governments; (b) reassembling the existing business models towards a common goal, and (c) concreting the industry structure. In a prior study conducted by Shepard and Rudd (2014), they presented a consolidated framework of the factors, which was adopted for this study. According to their study, there are four factors that influence the strategic decision-making process, namely: the top management team, strategic decision specific characteristics, external environment and firm characteristics (Shepherd & Rudd, 2014). These factors are discussed below.

a) Top management team

This team is ultimately responsible for the strategic decisions made within the organisation. These managers' decisions may be influenced by demographics (education, age and diversity), personality, cognitive diversity and other (aggressive philosophy, meta-cognition

and potency polytonicity) (Shepherd & Rudd, 2014). The management team is tasked with being able to respond accordingly during times of crisis. It is the top priority for the management team to be able to scan and understand the environment and to capture opportunities and avoid threats (Brown & Kline, 2020).

b) *Strategic decision-specific characteristics*

The type of decision to be made plays a crucial role in decision-making. Therefore, understanding the specifics is key; the details that ought be considered include: information pertaining to issue, motive, level of uncertainty, time pressure and the importance (Shepherd & Rudd, 2014).

c) *The external environment*

The consideration of the external environment extends to the level of dynamism, velocity, hostility, instability and uncertainty (Shepherd & Rudd, 2014). Scanning and understanding the external environment to make strategic decisions should be management's priority. This includes gathering information on macro-external factors and micro-external factors at an industry level (Brown & Kline, 2020). The macro-external factors include the impact of the local and sometimes international politics, the economy, socio-economic factors, technology, the environment and legal factors (PESTEL) (Louw & Venter, 2013). The micro-external factors include the analysis of the industry's competitors, customers and suppliers (Thompson et al., 2014).

d) *Internal Environment (Firm characteristics)*

The organisation's dynamics play an important role in enabling decision-making. The extent of centralisation, the type of structure, size, performance, controls and formal system planning (Shepherd & Rudd, 2014) of the organisation are all major influencers. The internal factors extend to include leadership, top management characteristics, routines and interactions (Linden, 2021). This extends to distinctive competencies such as the architecture, strategic assets, reputation and the innovative nature of the organisation (Thompson et al., 2014). The organisation's ability to respond fast and efficiently during a crisis is conditional to the decision-maker's ability to understand the environment and what will be involved in the crisis and the decisions to be made. They must be able to be flexible to the appropriate set of issues such

as their speed of response, the timing of their entry and their ability to detect weak signals leading to a crisis (Vecchiato, 2019).

The manager's ability to respond strategically is determined by a number of factors: the top management, the external environment and the internal environment. These factors serve as either enablers or disablers of strategic responses during a crisis.

2.9. Conceptual Framework

The conceptual model reflected in Figure 5 was developed by using the literature that was reviewed in the study. The literature identified four strategic responses that are used by managers in responding to a crisis, namely, retrenchment, persevering, innovating and exit strategies (Wenzel et al., 2020). Literature further identified the need for managers to be able to scan, assess and evaluate these strategic responses (Maitland & Sammartino, 2015). This ought to be conducted on an ongoing basis to enable managers to respond fast and appropriately according to the changing environment during a crisis. The framework indicates the two-way relationship between the strategic responses and the ongoing environmental analysis. The ongoing assessment and evaluation empower the managers to take prompt corrective action where required.

The literature further identifies the external and internal factors that enable or disable the strategic responses to the crisis (Shepherd & Rudd, 2014). These factors influence the strategic responses, as outlined in Figure 4, as there is a two-way relationship between these factors and the environmental analysis, which feeds in directly to the strategic responses that are implemented by the managers.

The conceptual framework outlined below was used to identify the factors that influenced the strategic responses of managers in the aviation sector.

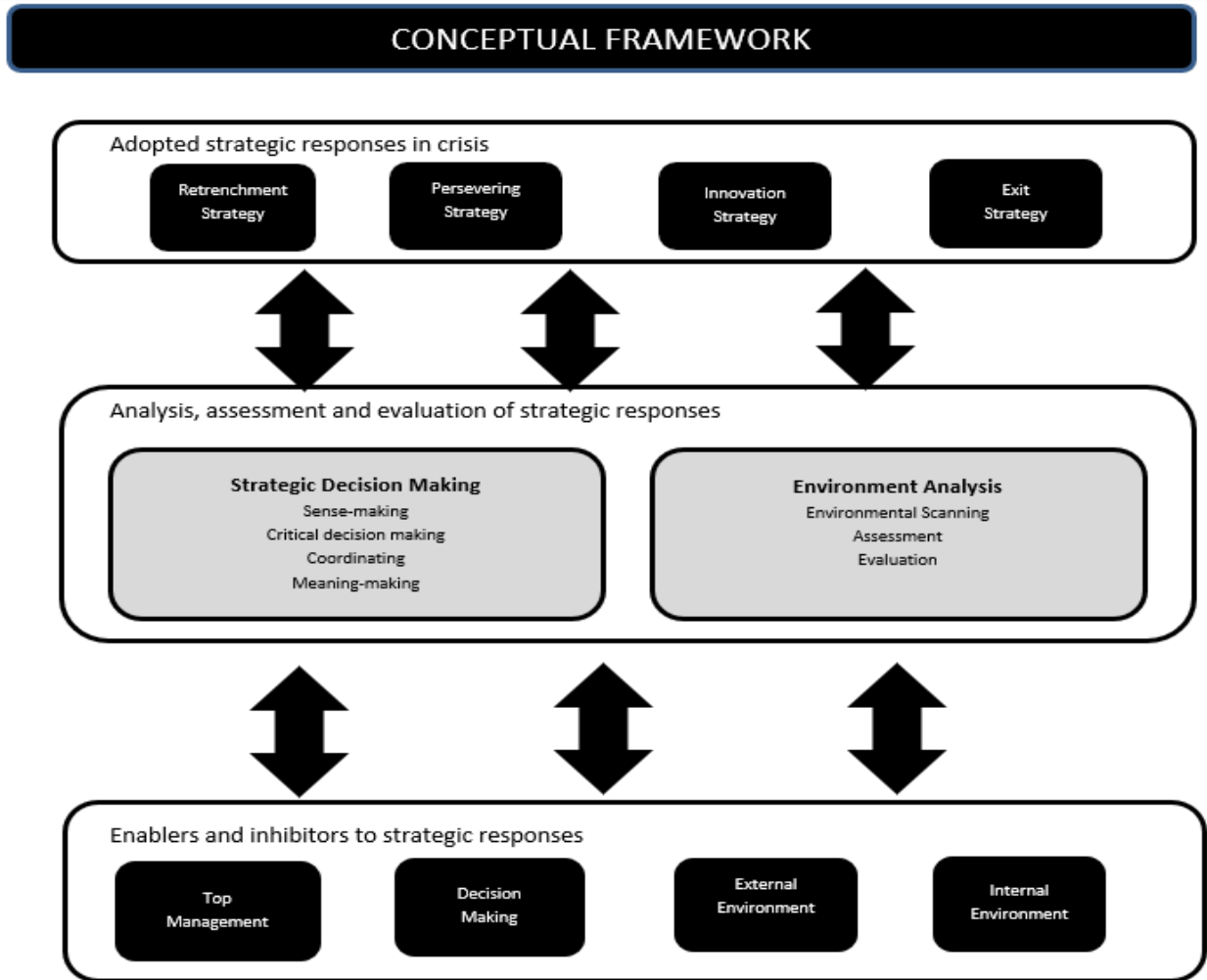


Figure 4: Conceptual framework (Author's own)

2.10. Conclusion

The literature review was conducted to gain an understanding of strategic responses made during a crisis, the analysis and evaluation of strategic responses, and the prevailing enablers and inhibitors to strategic responses. The strategic management literature was outlined, which extended to strategy formulation, implementation, and controls in a normal competitive environment. The difficulty of implementing a strategy during a crisis was outlined, as well as the associated challenges in strategic decision-making. The reviewed literature confirmed that there was a need to add to the literature associated with crisis management, strategy implementation and decision-making during a crisis.

The literature review identified the gaps that aided in the formulation of the research questions for this study, which will help managers in the aviation industry to better understand the factors that

influence strategic responses during a crisis. The key concepts were summarised in the conceptual model to provide insights regarding the formulation of this study's research questions as outlined in the next chapter.

CHAPTER 3: RESEARCH QUESTIONS

The literature was reviewed and presented in Chapter 2, which resulted in the formulation of the research questions. The research was anchored in the opportunity for further research identified by Wenzel et al. (2020), who identified the need to examine the internal and external enablers and disablers that influence managers to respond (in)appropriately to a crisis.

Three main research questions were identified to explore the factors that influenced the strategic responses made by managers.

Research Question 1: Which strategic responses were implemented by managers in the aviation industry in response to the COVID-19 crisis?

This question sought to identify how managers responded to the COVID-19 crisis. This question also sought to gain an insight into the impact of the strategic response on the overall strategy of the organisation.

Research Question 2: How did the managers in the aviation industry scan, assess, and evaluate their strategic responses?

This question sought to understand the processes that were used by the managers to scan the impact of the COVID-19 crisis on their industry and thus on their organisations. In addition, it sought to detail how the managers assessed and evaluated the impact of the implemented strategic responses in the short, medium and the long term. The question also aimed to get the managers to reflect on what could have been done differently to obtain better results with the implemented strategic responses.

Research Question 3: What were the internal and external factors that influenced their strategic responses to the crisis?

The importance of understanding the extent that the internal and external enablers (disablers) influenced the strategic responses was highlighted by Wenzel et al. (2020). This question sought to identify the internal and external environmental factors that influenced the strategic responses implemented by the managers in the aviation industry.

CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN

4.1. Introduction

This chapter focuses on the research methodology used to conduct this research. The literature review was conducted, which concluded with the three proposed research questions for the study based on the literature. These questions provided the foundation for the research methodology for this research. The research methodology provides for a systematic approach to solve research problems and further clarifies what ought to be adapted (Kothari, 2014). This research was conducted using the qualitative and exploratory research approach. The research design, population sampled and the data collection supported the selected research approach.

4.2. Research Paradigm

This research was underpinned by the epistemological consideration, 'interpretivism'. It considered the social construction of ontology, in that it was interested in understanding the human behaviour (Bell, Bryan, and Harley, 2019). As this study dealt with understanding the factors influencing strategic responses during a crisis, interpretivism was most suited for this complex problem. The perspective of this philosophy is to understand the phenomena at an individual level (Creswell, 2014), which provides a deeper understanding of the research context. The study was thus based on aiming for an understanding of the 'real world phenomena' (Scotland, 2012). This philosophy was appropriate as it necessitated the researcher to identify and understand the subjective meaning of social action (Bell et al., 2019), thus addressing the nature of the research questions.

This study used both the deductive and inductive approach. The deductive approach draws conclusions from available information, while the inductive approach uses a logical process to draw conclusions based on observation (Zikmund, Babin, Carr, & Mitch, 2013). In this study, the researcher used the inductive approach to analyse the literature and available data to gain an insight into the factors influencing strategic responses during a crisis. The inductive approach starts with the research question in mind, without the theoretical relations or set constructs (Eisenhardt, Graebner, & Scott, 2016). Thereafter, the deductive approach was used to compare the codes and develop a theoretical understanding of the data.

4.3. Research Methodology

The qualitative research method was used for this study to explore the factors influencing strategic responses to a crisis. Creswell (2014) notes that this method is used for exploring and understanding a context that is attributed to social problems. It focuses on examining and interpreting real life issues. It commonly uses the inductive approach to understand the relationship between theory and research (Bell et al., 2019). Kothari (2014) posits that this method is concerned with understanding the qualitative phenomenon that includes understanding individuals' motives and desire.

4.4. Sampling Approach

4.4.1. Population

The population of a study refers to the universe from which the sample is selected (Bell et al., 2019). In defining the population, the research considered two aspects. First, as it set out to explore the factors that influenced the strategic responses of managers in the aviation industry, the researcher needed to identify managers, who were knowledgeable about strategy-making and decision-making in response to the COVID-19 crisis and who were able to provide insights into the research questions. Second, the research focused on the aviation industry and not necessarily on specific organisations. As such, the researcher included managers in the broader aviation industry, who were knowledgeable and experienced regarding the subject under discussion.

The managers included anyone working in the aviation industry. This included both public and private organisations. According to the Department of Transport (2017), the South African aviation industry is made up of several key stakeholders, which include governance stakeholder, commercial stakeholders, support, and society stakeholders. The commercial stakeholders and governance stakeholders include air carriers, air service licences, the airports, air navigation services, training schools, aircraft maintenance organisations and aircraft manufactures, as well as the Regulator (Department of Transport, 2017).

The managers in the aviation industry were faced with their greatest challenge to date, as the crisis is expected to continue for years before the return to pre-COVID-19 figures (Richter, 2021). These managers were thus expected to respond appropriately to these challenges.

The recovery of this industry is crucial to the South Africa economy. The industry contributed 3.2% to the GDP prior to the COVID-19 crisis and employed over 70 000 people (IATA, 2021b). It is

thus imperative to understand the strategic responses implemented by managers to revive the industry. Hence, collecting data from these managers will have a meaningful contribution in providing an in-depth perspective on the strategic responses to the crisis.

4.4.2. Unit of analysis

The unit of analysis of this study referred to individual managers in the aviation industry, who were involved in strategy-making and strategy decision-making during the COVID-19 crisis. These leaders played a crucial role in coming up with effective strategic responses to the crisis.

4.4.3. Sampling method

Sampling is the subset of the study's population (Creswell, 2014). Kothari (2014) identifies two sampling design methods, which can be classified as either probability sampling or non-probability sampling. Probability sampling is also known as 'random sampling', wherein participants have an equal chance of being selected, while non-probability sampling is purposive sampling (Creswell, 2014).

This study used the purposive sampling method. This sampling method deliberately selects units of the universe that are relevant to the research question. Bell et al. (2019) adds that this sampling approach is adopted to ensure that the unit of analysis selected for the study is equipped to answer the posed research questions. Section 4.4.1 defined the population as knowledgeable and experienced managers in strategy implementation and strategy decision-making in the aviation industry in both private and public entities. The aim was to gain variable insight on the experiences of different managers in different types of organisations within the aviation industry. This approach provided the research with rich data based on the interviews conducted with the different qualifying managers in the different types of organisations who had experienced the different impacts by the COVID-19 crisis.

The research used the below criteria to identify the suitable participants for the study:

- a) They had to be employed in the aviation industry in a private or public entity.
- b) They had to be involved in a strategic decision-making process during the COVID-19 crisis.
- c) They had to be available for the interview during September or October 2021.

4.4.4. Sampling size

The COVID-19 crisis negatively affected the aviation industry, and especially the airline organisations (ICAO, 2021). This resulted in the drastic reduction of the number of operating airlines in South Africa. The researcher had proposed to sample managers in the registered air carriers. However, at the time of this study, only four registered airlines remained that were operating in South Africa as a result of the COVID-19 regulations, with some air carriers being grounded, placed in business rescue or in liquidation (Business Insider, 2021). As a result, it was thus a very small sample of managers from which the researcher could select the study's participants. The final sample achieved included three managers from the four airlines that were still operational. To improve the initial proposed sample, managers from different types of organisations within the aviation industry were included as indicated in Table 4. A total of 14 interviews were completed against the target of 12. These managers were involved in the strategic decision-making process during the COVID-19 crisis. In order to maintain confidentiality, the generic type of organisation and position were used to present an idea of the managers and the sub sectors they worked for.

Table 3: The interview sample

No	Company	Subsector	Position	Years of Experience
Par 1.	Company A	Aviation Training Organisation (ATO)	CEO	> 15 years
Par 2.	Company B	ATO	CEO	> 5 years
Par 3.	Company C	ATO	COO	> 20 years
Par 4.	Company D	Public Entity	Management	> 20 years
Par 5.	Company E	Cargo and Security	CEO	> 20 years
Par 6.	Company F	Cargo and Security	CEO	> 20 years

Par 7.	Company G	Airline – Privately owned	Executive	> 20 years
Par 8.	Company H	Aviation Maintenance Organisation (AMO) and Charter	Director	> 20 years
Par 9.	Company P	Airline – Privately owned	Management	> 20 years
Par 10.	Company J	AMO and Charter	Senior Management	> 20 years
Par 11.	Company N	Public Entity	Executive	> 15 years
Par 12.	Company K	Cargo and Security	CEO	> 15 years
Par 13.	Company L	AMO and Charter	Director	> 5 years
Par 14.	Company M	Airline – Privately owned	Management	> 15 years

Source: Author’s own

4.4.5. Sample subgroups

The final sample was split into five sub sectors to help the structure and segmentation of the data for analysis. These sub sectors provided a classification on the organisations that were sampled. These organisations provided a broad range of the type of organisations within the aviation industry as outlined in Table 5. The managers in the different organisations provided an interesting insight based on their experiences and reflection on the crisis. The broad range of the managers who were sampled is outlined in Table 4.

Table 4: The interview sample organisation subgroups

Subgroup	Type of Organisation	Sub sector - Profile
1	ATO	The organisations provide aviation training in South Africa.
2	Airline - Privately Owned	Privately owned airlines registered in South Africa providing passenger air transport.
3	AMO and Charter	These organisations provide aircraft maintenance services and private charter services.
4	Cargo and Security	These organisations provide air cargo transportation services and aviation security services.
5	Public Entity	The public entities are mandated with the strategic country responsibility of providing safety, security, and infrastructure in the industry.

Source Author's own

4.4.6. Appropriate and sufficient sample

The researcher continued sampling until data saturation was reached. Saturation was reached after the 12th interview, when no further codes were created. Two additional interviews were conducted to confirm that there were no new codes that could be created. Figure 6 below reflects the total accumulated codes and the new codes identified per participant. A total of 123 codes were created.

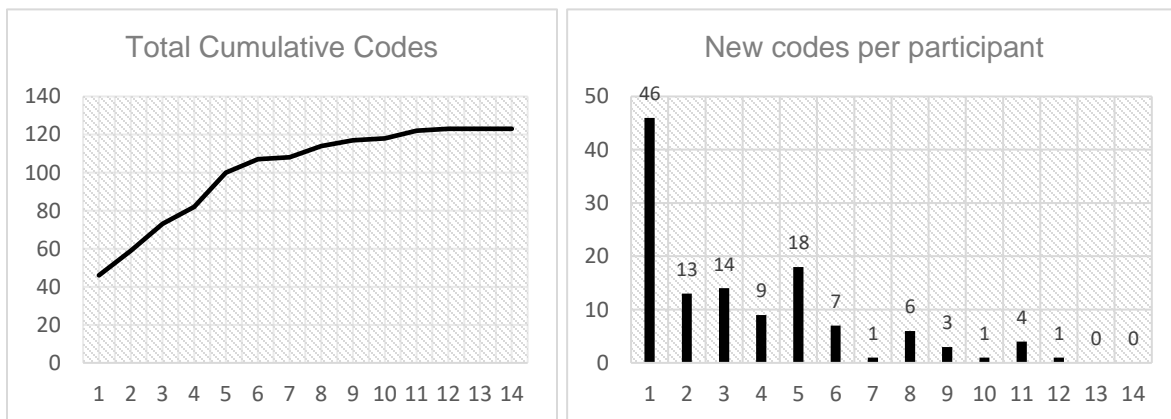


Figure 5: Analysis of cumulative and new codes generated per participant

Source: Author's own

4.4.7. Measurement instrument

This study was conducted using semi-structured interviews with individual managers on a one-on-one basis. This method is ideal to conduct exploratory research in that it helps the researcher gather enormous amounts of information (Welman et al., 2005). These interviews enabled the researcher to collect in-depth first-hand information (Zikmund et al., 2013). The researcher interviewed individual managers, who were involved in strategy-making and strategy decision-making during the COVID-19 crisis.

The research interview guide provided in Appendix 2 was used by the researcher to direct the discussion, in line with the research question outlined in Chapter 3. Given that the questions were semi-structured, the series of questions followed the guide, but the sequence varied with the interviewer having the latitude to ask further questions (Bell et al., 2019). The research questions were open-ended to allow the participants to provide in-depth insights into the factors that influenced the strategic decisions. Appendix 1 reflects the alignment of the literature and the research questions.

The duration of the interviews was on average between 30 to 60 minutes, which allowed for sufficient time for clarity-seeking questions. According to the COVID-19 protocols and regulations, the interviews had to take into consideration the social distancing measures practised by many organisations. Therefore, the interviews had to be conducted by using the Microsoft Teams functionality, which had sound, video and transcription capabilities.

4.4.8. Data collection process

The interviews were conducted using the Microsoft Teams platform. The sound and video recording functionality were used with all interviews. The researcher used two electronic recording devices as back up. The interviews were conducted during the month of October 2021.

The Microsoft Teams transcription function was used to ensure that the interviews were transcribed immediately. After each interview, the researcher downloaded the transcription, and reviewed and edited it for correctness. The researcher anonymised the transcript files prior to loading them into the Atlas.ti qualitative coding software. The recordings and transcript were stored on a private server for the prescribed period (10 years), after which the information will be destroyed.

The participants were assured confidentiality as outlined in Appendix 3: Informed consent for interviews. The researcher took precautionary measures to ensure that the confidentiality of all participants was maintained, as outlined below:

- a) The audio of the interviews was stored, using an anonymised file name, a password and access-controlled server.
- b) The transcripts were also using the similar anonymised name to align with the audio, by using a password protected and access-controlled server.
- c) The researcher anonymised the transcript files and removed all identifiers prior to loading them into the Atlas.ti qualitative coding software.
- d) Verbatim quotations from the interviews were used in the report, without identifiers.

4.5. Data Analysis

The analysis of the data included the data preparation, conducting various analyses as well utilising different methods to extract meaningful data (Creswell, 2014). This study used the thematic analysis. This form of analysis is commonly used for qualitative data, as it extracts data from key themes (Bell et al., 2019). Thematic analysis enables the researcher to organise and describe data in detail by identifying, analysing and reporting on responses (Braun & Clarke, 2006). The study followed the six-stage approach as articulated by Braun & Clarke (2006) in Figure 7.



Figure 6: Phases of Thematic Analysis (Braun & Clarke, 2006)

The researchers used Atlas.ti 9 software for the analysis. The researcher read the transcripts in detail to understand the data. Thereafter, the researcher created the initial codes, then grouped the codes into themes, while reviewing and defining the themes as outlined in the six-stage approach. The final step of the process was when the researcher produced the report on the findings and interpreted the results. The outcome of the analysis was an understanding of the empirical data.

4.6. Data Quality

Data quality is a crucial element of the study. Given that this was a qualitative study, the study had to satisfy the trustworthiness criteria for credibility, dependability, transferability and confirmability (Creswell, 2014). This study satisfied the trustworthiness criterion as detailed below:

- a) Credibility - Ensures that the study is conducted in good practice and that the results reflect the participants' perspective (Bell et al., 2019). The grounding of the study can be strengthened by triangulation of evidence (Eisenhardt, 1989). The credibility of the study was addressed through data triangulation. The data collected for the 14 participants was used by the researcher to triangulate the data.

- b) Transferability - refers to the generalisability of the study (Bell et al., 2019). This is often noted as a limitation for a qualitative study because of the small size of the sample at a theoretical level (Creswell, 2014). The researcher did however use data saturation as outlined in section 4.4.6 and purposive sampling to mitigate this limitation.
- c) Dependability - refers to the reliability of the study, ensuring that all records are kept through all phases of the research process (Bell et al., 2019). The researcher kept all recordings and transcript in a safe place to ensure that there was an audit trail. The recordings and transcripts were stored on a private server and will stay stored there for the prescribed period (10-years), after which time the information will be destroyed.
- d) Confirmability - calls for objectivity in the study, and the research must act in good faith in conducting the study (Bell et al., 2019).

4.7. Limitation of the Research Design and Methods

The limitations of the research design and methods are outlined below:

- a) The study used purposive sampling, and deliberately selected units of the universe that were relevant to the research questions. The participants did not have an equal chance of being selected, as the researcher applied judgement in identifying the sample for the study.
- b) The key limitation of a qualitative study is the lack of generalisability in other settings (Bell et al., 2019). This is often noted due to the small size of the sample at a theoretical level (Creswell, 2014). The research was based on a single setting of managers in the aviation industry. However, this was negated by the fact that this study was interested in understanding the context at a specific time period (Saunders & Lewis, 2018).
- c) The research was industry specific and did not focus on company-specific dynamics, which could be different. However, these industry-based insights were useful contributors towards understanding the factors that influence strategic responses during a crisis.

4.8. Conclusion

This chapter detailed the research methodology that was applied in this study. The study used the interpretivism philosophy and exploratory strategy. The researcher used semi-structured interviews as a measurement instrument. In order to gain meaningful insight, the researcher identify suitable participants for the study using a specified criterion. The final sample was made up of 14 managers, which was deemed sufficient, because saturation was reached.

Furthermore, the study had to take into consideration the current COVID-19 measures implemented by various organisations, and therefore, the interviews had to be conducted virtually. The researcher ensured that the recordings and transcripts of the interviews were stored safely without identifiers in a password and access-controlled server.

The limitations of the study were noted and how they were mitigated. The interviews provided good insights into the strategic responses adopted by the managers working in the aviation industry, the processes they followed were analysed and the researcher evaluated their responses to the COVID-19 crisis, and the factors that influenced their decisions. The findings of the research interviews are discussed in Chapter 5.

5. CHAPTER 5: RESULTS

5.1. Introduction

This chapter presents the findings of the qualitative research that was undertaken among managers working in the aviation industry. This chapter commences with the research context of the participant's setting. Subsequently, this chapter structures the findings in accordance to the research questions to provide an understanding from the analysis of the interviews.

5.2. The research context

The COVID-19 crisis affected organisations in many different ways. The different organisations also responded differently to the crisis, depending on the level of impact it had on their organisation. It was thus important to understand the context in which the strategic responses were implemented. To understand the level of impact, in the five different aviation sub-sectors where data was collected, the managers were asked to describe the impact of the COVID-19 crisis to their organisations. The managers' responses are outlined below, and they provide a contextual understanding for the rest of the chapter.

5.2.1. Aviation Training Organisation subsector

Participants in this group are managers in aviation training organisations (ATOs). They are key role players in the strategy-making and decision-making in response to the COVID-19 crisis. Their responses are based on their professional and leadership experience in the sector.

The COVID-19 crisis had a massive impact on these organisations. The leaders were asked to describe the impact of the crisis on their organisation.

"It was a very big impact. We've downscaled drastically. We've had students leave because of financial difficulties. Parents have lost their jobs." (Par 1)

"So, when COVID hit, we obviously had no students, where students had to stay at home. Parents were afraid; hence, no flying, aircrafts were parked off - when an aircraft is parked off, it actually costs us more money." (Part 2)

"It was a massive impact, but we all had to comply with what the law and the regulations said. So, we shut down the company." (Par 3)

The impact of the crisis was severely felt by managers in these organisations. Their clients are individuals who were subjected to regulations and lockdown restrictions in South Africa and some were affected even on a global basis.

5.2.2. Private Airline subsector

The airlines were among the hardest hit in the industry. The traditional role players largely changed as a result of the crisis and other factors. This led to some of the key role players either being liquidated or going into business rescue. The participants of this study are leaders in the airline organisations that are the key role players in the industry. The participants were asked to provide a reflection of the impact of the crisis in their organisations.

“That impacted the business heavily, but because no operations taking place, the company had offered us either to resign or to accept a pay cut in order to keep your job.” (Par 9)

“Initially, we said we didn't want to panic, because with the uncertainty we needed to see which part of the organisation it is affecting.” (Par 14)

The third participant shared similar experiences with the first two participants and further added that it was difficult to plan as a result of the crisis.

“And now all of a sudden, everything has literally been ... initially in crisis mode, then to a certain form of planning, but in the short term.” (Par 7)

5.2.3. Aircraft Maintenance Organisation subsector

Participants in this group are managers in AMO and charter organisations. These organisations were classified as essential service providers, which enabled the organisations to operate fully during the various lockdown restrictions, resulting in a minimal impact to their operations. In general, they were cushioned by virtue of their type of operations. When asked to reflect on the impact of the crisis on their organisations, the managers shared these sentiments:

“To be very honest with you, we weren't really affected.” (Par 8)

“I think we were lucky... a ... because when COVID-19 hit everyone and the first time we had too many aircrafts or projects that we needed to finish, that would last us the whole year, and everything was lined up and luckily, they were in our facility.” (Par 10)

“We didn't have any impact in terms of business and revenue.” (Par 13)

5.2.4. Cargo and security subsector

Participants in this group are managers in aviation cargo and security organisations. These organisations provided a crucial role during the outbreak of the crisis. They are classified as essential service providers, which then reduced the level of disruption in their organisations. Their clients are typically organisations within the aviation industry and other industries both locally and internationally. These managers were asked to elaborate on the impact of the crisis on their organisations.

“The aviation industry has been decimated by COVID, but that has just been primarily on the passenger side. Cargo has been pandemic agnostic and that’s not quite true, but it has been. Our company has grown enormously.” (Par 6)

This sentiment is shared by other participants within this space.

“In the thick of things with COVID-19, it was great, I don’t want to say great, but for us we didn’t suffer, because we had such a unique and niche service, they had to use us.” (Par 5)

“We were able to maintain momentum throughout that period of COVID-19.” (Par 12)

5.2.5. Public entity

Participants in this group are managers in public entities that are self-funded. These public entities generate their own revenue and as such, they are financially self-reliant. The managers in these organisations were also asked to reflect on the impact of the crisis to their organisations.

“COVID-19 operations were severely affected by ... because there were lesser numbers in all spheres and then it affected us.” (Par 4)

“When COVID-19 hit, it spelled doom for us, because it means from the very first cent that you get, or you don’t get, it would affect your business positively or negatively.” (Par 11)

The differences and similarities of the contextual environment of these groupings as described in this section is included in the discussion of the research findings, where applicable. For consistency in the analysis, the generic group term is used for the remainder of the chapter as well as the participant number.

5.3. Results

The findings are presented in order of the research questions and are further categorised in the identified group codes

5.3.1. Research Question 1

Which strategic responses were implemented by managers in the aviation industry in response to the COVID-19 crisis?

The research findings indicate that three predominant strategic responses were adopted by the managers in response to the crisis, namely, the retrenchment strategy, the persevering strategy, and the innovation strategy as outlined in Figure 8. The retrenchment strategy was the default strategy at the beginning of the crisis, when there was still a lot of uncertainty in the local and international industry. The organisations then either shifted to other strategic responses as more information became available about the crisis. The strategic responses that emerged are outlined below. The exit strategy was identified through literature.

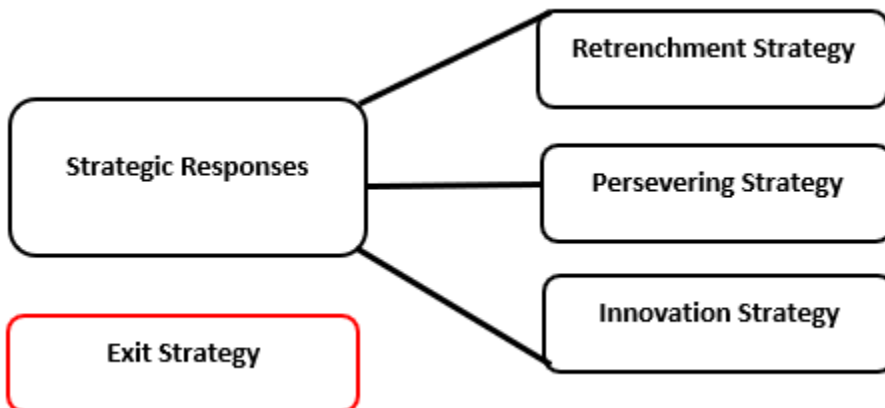


Figure 7: Strategic responses implemented by managers in the aviation industry

Source: Author's own)

5.3.1.1. Retrenchment strategy

The retrenchment strategy was adopted by most organisations. The ATOs, airlines, the cargo and security organisations, and the public entities adopted this response in the short to medium term because of the level of uncertainty that came with the crisis. The leaders initiated various measures as a result of the implemented retrenchment strategy, which included cost cutting, selling of non-core assets, the reduction of business activities and of the staff complement.

Aviation Training Organisation

The ATOs are among the organisations that were hardest hit by the crisis. The participants had to implement drastic measures for the ATOs to stay in business. The initial response of these organisations was to cut costs as much as possible in their operations, as there no income generation for an extended period. While the organisations had valuable assets, they did not have the liquidity required for a period where there was no or only a minimal incoming revenue. Drastic measures had to be undertaken by these leaders.

“Slowly but surely, assets were being sold off to maintain profitability.” (Par 1)

“I sold one or two of my aircrafts to cover expenses.” (Par 2)

“We had a couple of cars, vehicles that we operated in the business. We have cut some of them.” (Par)

There were some red flags that came with selling their assets and some participants realised that there was a need to have a limit or a ceiling on selling off the assets.

“If we sold everything, then there would be nothing to actually left to operate the business with.” (Par 1)

However, the ATOs had to also consider the fact that the business could not continue without the appropriate income stream or finances.

“Everything is about reining in; you know we try to rein in the finances” (Par 1)

In addition, ATOs had to review their staff complement and the organisation’s structure in response to the crisis. They had to reduce the staff complement to reduce salaries and reduce the overall cost.

“You know the biggest thing was cutting of staff.” (Par 1)

“In our organisation, we had what we call a reduction in salary, which was very small in the beginning and so on.” (Par 3)

Private Airlines

The airlines were the organisations in the aviation industry that were the hardest hit by the crisis. Reducing cost for these organisations was crucial, as the organisations' operations had drastically reduced from a full operation down to a standstill within a matter of days. The full-scale travel restrictions that were imposed for months (and eventually nearly two years) crippled the airlines. The organisations ended up with low revenue, if any at all, and consistently high fixed costs. Therefore, there was no option left to them other than to drastically reduce these costs. This was not only important for these organisations if they had any hope to rescue their businesses, but it meant a chance of survival if they had any hope of being able to operate again. The management considered the chances of any recovery of the industry in the foreseeable future. As such, these managers responded with the below measures to reduce staff costs, while ensuring that there was still a sufficiently large staff complement available in case of a sudden opening up of the restrictions.

“You literally had ... initially staff completely ..., except your absolutely necessary staff ... And those that remained behind had to take huge salary cuts and for the foreseeable future you will still have to live with that.” (Par 7)

“We gave up our salaries, we were getting, I think 80% ... and so, there was an option to actually retire, or if everything goes back to normal, we will contract you in.” (Par 14)

“The company had offered us either to resign or to accept a pay cut in order to keep your job.” (Par 9)

In addition, some of the business leaders engaged their suppliers for preferential terms.

“Obviously, we had to be like cut costs at every level.” (Par 14)

“We immediately initiated discussions with the various vendors and suppliers to see what we could do, what we could put on hold, what we couldn't put on hold.” (Par 7)

Aircraft Maintenance Organisation and charter

The AMO and charter sector did not implement any of the retrenchment strategy measures, as their operations were considered to be used for emergency services, and thus, they remained largely unaffected by the crisis.

Cargo and security

The cargo and security managers implemented their retrenchment measures as a precaution based on the high level of uncertainty at the beginning of the crisis. The measures taken were reduction activities to reduce the high cost and free up cash in the short term.

“So, our strategy there was freeing up more cash flow.” (Par 5)

“We looked at freeing up more cash, because as the client came and said we can only pay every 60 days, cargo clients were only paying us in 60 to 90 days.” (Par 6)

In reducing costs, these managers had to engage suppliers for preferential agreements during the crisis to provide them with essential relief as the crisis was unfolding, and their uncertainty grew regarding the future of their sector.

“We went to all of our major suppliers and negotiated deals with them to either give us some form of relief, whether it was just a short-term thing, or whether it was ...” (Par 5)

“The second thing was, he said, let's get the costs right down. So, we went and negotiated the lease agreements on the aircraft that were not flying.” (Par 6)

These organisations did not retrench or lay off employees as a response to the crisis. They looked for alternative ways of reducing their staff costs, which included compulsory leave and no salaries being paid for the top management team.

“So, our group said we will subsidise the people that don't have leave, but of course leave gets exhausted very quickly.” (Par 6)

“We are grateful for that we didn't have to lay off anybody or say to anybody stay home until we call you to come back.” (Par 5)

“Management agreed, the executive agreed, no salaries.” (Par 6)

Public entity

The implemented travel restrictions caused by the COVID-19 pandemic resulted in a dramatically reduced number of travellers, which highly impacted the public entities, since their major source of income had been based on air traveller volumes. These organisations had to cut cost by

postponing or cancelling major capital expenditure projects and implement cost contain measures.

“We had to cut on capital expenditure for big projects that was already approved.” (Par 4)

“We put some cost containment measures in place.” (Par 11)

“All of these things, selling of assets, cutting head count, cutting down, and at the same time go to the bank to borrow money.” (Par 4)

These organisations had reviewed and seriously considered their staff complement and strategy. The managers had to apply measures to reduce the staff cost and the staff count.

“There were positions that were clustered.” (Par 4)

“We put positions on a moratorium to see if we can make do with what we have.” (Par 11)

“Already the organisation has offered a third voluntary severance packages.” (Par 4)

The reduction of the staff complement seemed to be effective at first. However, some serious drawbacks were noted by the managers, indicating that such cut-backs will have a severe impact on the organisation’s ability to function sustainably in the future, and this was flagged by some of the leadership.

“A lot of people are being laid off and it’s people with experience and people that have been there for years.” (Par 4)

5.3.1.2. Persevering strategy

This strategy was adopted the AMO and charter as well as the cargo and security organisations. The nature of their operations was classified as essential services, and as a result, they could operate throughout the various lockdown restrictions that were imposed in the country and globally. This was their competitive advantage, as they were providing niche and essential services.

Private Airlines

While some managers in the industry initially adopted the retrenchment strategy by temporarily reducing the staff complement, taking salary cuts or requesting for preferential terms from vendors

and suppliers. These organisations remained resilient throughout this period, although some airlines had to go into business rescue or be permanently shut down. The more resilient organisations remained geared up and ready to pick up operations as soon as the travel restrictions were relaxed.

“We continued business as normal, we kept everyone”. (Par 14)

“We’ve tried to be always fair to the workforce, and as we say, we didn’t go into the process of retrenchments.” (Par 7)

Aircraft Maintenance Organisation and charter

The managers in these organisations maintained the status quo as their initial response to the crisis. There were minimal disruptions in their operations, as this section of the industry was designated as essential service providers right from the start of the crisis. This meant that their operations remained relatively stable and experiencing only minor disruptions. In addition, they had internationally based clients that were not operating under the same restrictive lockdown environment.

“COVID-19 didn’t really affect us locally, to be honest. A lot of our contracts are out of the country as well, so we continued operations.” (Par 8)

“We had too many aircrafts or projects that we needed to finish, that would last us the whole year.” (Par 10)

They did not have to change their strategy or their operations.

“We were considered essential workers, so we’re able to carry on in terms of strategy.” (Par 13)

“Look, we do a lot of maintenance for third parties, which were air ambulances, cash-in-transit helicopters. The kind of work you were doing ... it was. It was necessary, like we were in essential service to all these people.” (Par 8)

There were no changes to the staff complement in many of these organisations. They had sufficient work and projects to keep their staff occupied. Furthermore, they had sufficient incoming revenue to maintain the salaries.

“Nobody in our company took a salary cut, nobody was retrenched.” (Par 8)

“We still have enough work. We didn't have to retrench people. We are still fine.” (Par 10)

“You know, we were able to keep everybody on the same salary throughout.” (Par 13)

Cargo and security

There were companies in the cargo and security sector that imposed salary reduction for a short period before going back to normal. Their initial response was to apply the retrenchment strategy and then, once the lockdown restrictions eased and they were able to operate again, things stabilised, and they reversed some their responses.

“We realised ... you know that our cost base was still going to be the ... pretty much the same other than maybe direct operating costs of the of the aircraft. Everything else was the same.” (Par 6)

“We weren't dropped, and we are grateful for that. We didn't have to lay off anybody or say to anybody stay home until we call you to come back.” (Par 5)

“Everybody is working and employed, and we have tried to compensate them as best we could for those difficult times.” (Par 6)

5.3.1.3. Innovation strategy

The initial response by all the organisations in this study was to either implement the retrenchment strategy or the persevering strategy. However, they identified opportunities that arose as a result of the crisis. Some of these opportunities were pursued by the organisations during the crisis, while some opportunities were identified as future innovative strategies, and some were missed opportunities.

Aviation Training Organisation

The ATOs identified and implemented some innovative ideas in response to the crisis. These responses are expected to become sustainable in the future and to a large extent even provide a competitive advantages to them. One participant extended their organisation's offering to include charter operations as they already owned the suitable aircrafts.

“That’s when I opened a charter section. That is helping us bring in some money to survive.” (Par 2)

Another participant stated that their organisation repositioned their product offering to offer an exclusive package in the industry. This offering was both innovative and beneficial to the organisation and to the clients.

“In terms of our building package, we’ve offered what we call our building packages for students and getting in more simulators, so that we can do more simulator training, which is a lot cheaper than keeping an aeroplane ... keeping an aircraft in the air. (Par 3)

Aircraft Maintenance Organisation and charter

Some of the AMOs and charter organisations identified an opportunity to extend their offering globally to leverage on the opportunities presented by this crisis.

“We had actually ... saw a market for flying internationally and actually collecting or picking up people, or even if it was dead bodies, whatever it was, we were there doing flights to go and collect people that needed to be rescued or deported or leave the country.” (Par 8)

“That kind of opened our eyes, the possibility of expanding our operational business in terms of our flying is to include cargo operations.” (Par 13)

Cargo and security

These organisations identified and pursued opportunities in refining their operations to seamlessly deliver to their clients.

“And we are busy with engagements with the Regulator now to see how we can collaborate in the cyber security field.” (Par 12)

“We were used to dealing with unexpected situations that arrived very quickly and we knew that the way to be able to survive and thrive in that environment is to have proper processes and procedures that everybody understands.” (Par 12).

“And so now we are trying to brainstorm what role can we play with those people to make this faster, easier, lower cost, etc.” (Par 6)

Missed opportunities

There were however missed opportunities as a result of some of the organisations' inability to respond quickly to change and disruption that faced them during the crisis.

"We should have concentrated more on our systems ... that you could have done things more efficiently and less people on the ground." (Par 1)

"I think we were too slow on the operations side. There was a lot more revenue to be made for operations. I think we underestimated how much the big players couldn't respond. I think if we could do it again, we would just double the flights." (Par 13)

One participant noted that the highly regulated environment made it impractical for them to respond quickly to the opportunities that presented themselves during the crisis.

"We couldn't do the cargo, we tried to do cargo, but in South Africa, so it was difficult because of regulations and the configuration." (Par 14)

All participants were positive about the future of the aviation industry and stated that they are committed to ensuring that the organisations are able to continue into the future.

"I personally believe, and my organisation as a group strongly believes that the markets are going to recover." (Par 3)

5.3.1.4. Exit strategy

None of the participants of this research opted for the exit strategy. They opted for the retrenchment strategy and the persevering strategy as the short to medium-term response, with some organisations advancing to the innovation strategy in response to the crisis and the opportunities they discovered. However, the participants noted the significant changes in the airline sub sector as a result of this crisis and a range of other factors that arose during the course of them addressing the impact of the crisis.

"What I've seen, your playing field in terms of who the traditional role players were and who their role players are currently That whole landscape has changed materially." (Par 7)





















"Are the airlines in South Africa going to make it?" (Par 3)




“Let’s say the closure of the major airlines, we have had ample pilots not returning to their jobs and positions. You had other airlines completely withdraw and then coming back on line and then withdrawing enormous amounts of capacity.” (Par 7)

5.3.1.5. Conclusion

The research findings are summarised in Table 5. They outline the strategic responses implemented by managers in the aviation industry.

Table 5: Strategies implemented by managers

Theoretical Category	Themes	Sub-Sector				
		ATO	Private Airline	AMO & Charter	Cargo & Security	Public Entity
Strategic Responses	Retrenchment strategy					
	Persevering Strategy					
	Innovation Strategy					
	Exit Strategy					

Legend	
	Limited implementation / No mentions
	Moderate implementation / some mentions
	High implementation / many mentions

Source: Author’s own

The managers adopted a number of strategic responses to the crisis. These responses were subject to the subsector’s context during the crisis as outlined in Section 5.3. The managers initially implemented the retrenchment strategy or the persevering strategy in the short-to-medium term. The retrenchment strategy was implemented by all sub-sector groups except for the AMO and Charter sub-sector who implemented the persevering strategy as their initial response. The managers in the ATO and Private Airlines subsequently transitioned to the persevering strategy by keeping certain operational and staff components unchanged. The managers in the AMO and Charter and Cargo and Security sub-sector highly implemented the persevering strategy since

the impact of the crisis was minimal to their operations. There was limited implementation of the persevering strategy by the public sector.

Most managers moved to innovate in response to the crisis. The study reflects moderate implementation by all sub-sector groups except for Cargo and Security who reflect high implementation. None of the participants in this study implemented the exit strategy. There is however an indication that this strategy was adopted by organisation in the Airline operations.

5.3.2. Research Question 2

How did the Managers in the Aviation Industry Scan, Assess, and Evaluate their Strategic Responses?

The managers in the industry followed a similar approach by first scanning, then assessing and evaluating their potential strategic responses. It also emerged that this process was interwoven, sometimes moving back and forth, and needed to be done on an ongoing basis. The cycles were very close to each other in the early days of the COVID-19 crisis, as there was a lot of uncertainty in the industry. The managers understood the need to fundamentally shift their mindset when dealing with such fundamental crisis. It was not business as usual for most of the organisations.

5.3.2.1. Environmental scanning

The business environment had become extremely unpredictable, continuously changing and unstable, surrounded by uncertainty in all industries, including the aviation sector. The leaders had to gather and analyse new information nearly on a daily basis, and then disseminate the information rapidly, but also on an ongoing basis, as it became available. The focus had to be on the changes taking place in South Africa and globally, as the aviation industry is globally interconnected. The leaders had to stay abreast of these changes by continuously scanning the business environment. The environmental scanning considered two approaches, referred to as rational scanning and intuitive scanning.

Rational scanning

The rational scanning process was used by all managers who were interviewed in this research. The premise of the rational scanning was the use of available information to make informed decisions during the times of crisis.

“For the first couple of months, we had daily sessions to discuss how we need to respond to it, what will fit, ... be engaging with our various stakeholders on how we could ring-fence certain issues.” (Par 7)

“We keep a very careful eye on market developments and movements. What flights are coming back, what is the financial status of various organisations, who’s going to be doing what, when are they going to do it?” (Par 12)

“I would actually say CNN, BBC and Sky News became a big source for me to see what was going on.” (Par 5)

The leaders had to identify, plan and implement their most appropriate strategies, which they were only able to do if they had achieved to put in place some benchmarking and forecasting measures so that they could estimate the future state of the industry.

“Forecasting through research and development and looking through things and technology. (Par 4)

“We benchmarked everything against Italy. Remember, Italy was the worst hit at that time.” (Par 5)

The managers in the cargo and security sector, and those in public entities extended the rational scanning process to engage their networks in their efforts to obtain market intelligence.

“I am very much involved in the intelligence, and I do have my circles.” (Par 5)

“Please can you tell us how you see things impacting your business so that we can adopt it into our service level to you. To make sure that what is happening internally in your company and with your clients that we can help with, because we are here to help you solve problems.” (Par 12)

“We had this forums way before COVID happened, but it meant that during this time, those ... these forums, industry forums were meeting more regularly than normal.” (Par 11)

Intuitive scanning

Management’s intuitive process had to be used to supplement the rational scanning process, since information was not always readily available. Not having all necessary information available

and having to rely on their intuition often resulted in high levels of uncertainty. Therefore, management had to scan the environment and their strategies as accurately and consistently as possible. This process was not popular with the managers in the aviation industry, and as a result of the highly regulated industry, most managers rather opted to follow their intuitive scanning of the environment. Some managers in the ATO, airlines, cargo and security sectors were also forced to use intuitive scanning, because there was very little or no information available for their sectors at the time. They had to make judgement calls in many areas of business based on their experience as well as on their estimates and forecast for the future

“Do you put the aircraft in storage, or do you fly it in a limited capacity, because both have cost to it?” (Par 7)

“With common clients and common destinations that we used to service, we had to keep on monitoring any developments with regard to COVID from their side.” (Par 9)

“The short term ... what would happen if Level 5 comes back, would we be able to operate or will this aircraft be profitable in that time?” (Par 1)

“We got to take a longer-term view than ... right now, we believe the business will come back, and so we are going to have to keep investing in certain things. We cannot just shut the business down or just shrink it down to nothing.” (Par 6)

“I think what COVID has done for our industry, it's forced everybody to think differently.” (Par 6)

Some organisations' lack of preparedness, lack of a thorough risk analysis and risk management strategy, plus the managers' inability to implement the intuitive process, or not reacting fast enough to what could have been a solution to some challenges they were faced with, resulted in these managers being too slow to take up opportunities or effectively respond to the changing environment.

“The last thing that would go in your mind is to get hit by a pandemic like this.” (Par 3)

“But this time, we couldn't do it, because a lot of it was a big snowball effect on that.” (Par 8)

Some managers in public entities also showed that they relied on organisation's structures and routine processes, and thus, they had a limited ability to use intuitive scanning because of the prescriptive environment in which they operated. Agility and flexibility were not part of their normal processes, or the anticipation of a worst case scenario. They relied on long-term plans and rules.

"Our strategies are based on a five-year cycle. So, if you start the five years, then the rules are such that you can't change the strategy before the duration of that ... the five years."
(Par 11)

5.3.2.2. Assess

The implemented strategic responses had to be assessed on an ongoing basis for relevance. The managers used the available information from their environmental scans.

"We had to review the corporate strategy, the business strategy and the operational strategy." (Par 4)

"For the first couple of months, we had daily sessions to discuss how we needed to respond to it, what will fit, ... be engaging with our various stakeholders on how we could ring-fence certain issues." (Par 7)

"You need to go and analyse that document and say what restrictions is it. Is it travel to Gauteng, is it business travel only that will be affected?" (Par 7)

The managers in the cargo and security organisations provided great insights into their assessment of their strategic responses.

"The first thing is, we have to understand that we don't know when this is going to return to normal or ... it could be within weeks, it could be months, but either way, when we started to do our financial projections." (Par 6)

"So, that old concept of doing strategy for one year, for three years, for five years, that has been completely knocked out of the park by COVID-19. That whole thing changed almost overnight, and it also established that if you still come across someone who says 'I am working on my five-year strategic plan, he doesn't understand, or she doesn't understand that that is history and is never coming back.'" (Par 12)

5.3.2.3. Evaluation

Evaluating the effectiveness of the implemented strategic responses proved to be difficult for some of the managers, as there was still a lot of uncertainty in the market as well the possible resurgent of the various levels of the crisis and thus, the potential tightening again of the various restrictions. However, the managers did not utilise a systematic approach to evaluating the responses.

“I think it's really difficult to state that you've got a five-year plan at this stage. But once again that whole planning can be totally undone if a fourth wave now rears its head, and government makes the decision that we are locked down.” (Par 7)

“We literally had executive meetings daily, because the situation was fluid.” (Par 7)

“We have a centralised reporting system, where we record everything, and we have our monthly meetings, and we actually speak about this. Like ... what do you think?” (Par 1)

The public entities had to follow the prescribed processes in evaluating their responses.

“The government’s planning, monitoring and evaluation department is quite prescriptive in terms of how we should deliver in terms of our strategy.” (Par 11)

However, in most cases, organisations in the aviation industry still measured the effectiveness of their strategic responses in financial terms, while this did not ensure congruence between the scanned environment, the perceived derived value and the use of their resources.

“I can tell you, financially, we are getting there. We really are progressing. It's slow wins, but it's gradual wins, which is good, because what you don't want is to stand still.” (Par 11)

“So that's why I say all these things are constantly being monitored according to a financial baseline.” (Par 7)

“One of the major things that made us ... to change us to revise our annual performance plan and strategy was the availability of funds in terms of resources, rather ... should let me say financial resources.” (Par 11)

The biggest challenges faced by these managers is still the continuous level of uncertainty in the environment, although many believe that there is hope that the lockdowns will be terminated at one stage in the future. Management in the aviation industry still have many concerns regarding

the level of uncertainty that is having an impact on their industry and the market. When evaluating their results and the actions they had taken, some managers referred to the environmental challenges.

“The first question we get from parents is to say ‘Is there a future for my child if my child qualifies as a pilot or as a flying instructor?’” (Par 3)

“Are the airlines in South Africa going to make it?” (Par 7)

5.3.2.4. Conclusion

The research findings are summarised in Table 6. The table outlines the prominence in the process followed by managers to scan, assess and evaluate their strategic decisions.

Table 6: Environmental scanning by managers

Theoretical Category	Themes	Sub-Sector				
		ATO	Private Airlines	AMO & Charter	Cargo & Security	Public Entity
Environmental Scanning	Rational scanning					
	Intuitive scanning					
	Assessment					
	Evaluation					

Legend	
	Limited prominence / no mentions
	Moderate prominence / some mentions
	High prominence / many mentions

Source: Author’s own

The managers followed a similar approach in scanning, assessing, and evaluating their strategic responses. All managers applied rational scanning by collecting information from various sources before making decisions on the strategic responses. There was moderate prominence of adoption of rational scanning by managers in the ATO, Private Airlines and AMO and Charter sub-sectors. There is however high prominence of adoption of rational scanning by managers in Cargo,

Security and Public entities as they extended their scanning to various public forums to gain market intelligence. In addition, some managers adopted the intuitive scanning as a result of limited information and the need to make fast decisions. There was however moderate adoption of the intuitive scanning by managers in ATO's and Private Airline. There was limited prominence for the AMO, Charter and Public entities, these managers relied on rational scanning. The research shows high prominence for managers in the Cargo and Security sub-sector.

The managers in all subsectors conducted the assessment and evaluation of their strategic responses on an ongoing basis. There was however moderate prominence for the implementation of the assessment and evaluation process as managers did not make use of any defined frameworks to conduct the assessment and analysis. The process was conducted concurrently with the environmental scanning. The research further shows that most managers still use financial measures to evaluate the strategic responses.

5.4. Research Question 3

What were the internal and external factors that influenced their strategic responses to the crisis?

The internal and external environment can either enable or inhibit the organisational strategic responses to the COVID-19 crisis. The decisions taken by these leaders were subject to the environmental factors and influenced by these factors.

5.4.1. Internal factors

The internal factors that influenced the leaders' strategic responses were identified by the participants as follows: Organisational structure, operations, employees, communication, and the financial position.

Organisational agility

Caused by the impact of the COVID-19 crisis, the resulting lockdown levels and the severe regulations and rules that were put in place by government implied that managements were faced with a fast-changing environment that required leaders to make fast-paced decisions. Leaders who were able to make these decisions faster, but still well considered and effective, were able respond to the crisis in a more efficient manner, which enabled them to implement strategic responses.

“You can't say what am I going to do, I am going to call a committee meeting and we will have a board meeting and we will discuss it for three days, by which time you are bankrupt.” (Par 12)

“I didn't have to consult with a 100 or more people, I didn't have to get permission from the guys, because we could sit down as a collective.” (Par 5)

“It was easier for us to change things or manipulate certain procedures to accommodate the pandemic.” (Par 8)

The bureaucratic structures in some organisations were inhibitors, which necessitated the review and changes in such structures.

“Now, when something like COVID-19 happens and you are married to a certain way, we've always done things this way, then you're a little bit lost, because you're not a flexible organisation that's used to reacting quickly to a crisis.” (Par 12)

“I think for me the big issue is make decisions and make them fast. You don't have time to mess around in a crisis and you really need to” (Par 6)

“A lean structure that's going to bring about stability within the organisation.” (Par 4)

Interestingly, most of the leaders were caught up by the crisis being totally unprepared, despite the fact that the crisis had already hit other countries around the globe.

“COVID-19 hit us, it came out of the blue, maybe that was bad of us and maybe we should have been expecting it. We didn't, to be honest with you. We thought it was a Chinese thing. It was kind of like, you know, and there have been previous epidemics in that part of the world.” (Par 6)

“The last thing that would go in your mind is to get hit by a pandemic like this, no one ... we were not prepared, it was something new.” (Par 3)

“We were waiting on feedback or waiting for someone to tell us or the industry or the Regulator to say you need to do this.” (Par 14)

Changes in operations

The organisations had a legal obligation to adhere to the regulations and the imposed health protocols. This necessitated a change in operations that affected the number of people who were allowed to be present in organisations according to the additional safety measures that had to be observed. This presented a challenge for many organisations and only those that were able to adapt could still operate.

“We are working on a skeleton staff. Now a project will take ... usually takes us 10 days, ... takes double the time, because now of COVID.” (Par 10)

“We therefore had to now consider prioritising our projects to see which are the ones that are related to our core business and that we can't compromise on, and those are the ones that we kind of concentrated on quite a lot.” (Par 11)

“We made everybody part of that decision. So, at the end of the day, you have allowed the person to give input and to be part of the decision-making process and they contributed to something.” (Par 5)

The organisations' ability to incorporate technology into their strategic response to the COVID-19 crisis also enabled the organisations to continue operating.

“So, we had very quickly come up with ways of digital service delivery.” (Par 12)

“We've had to rely a lot on technology, which was our saving grace, honestly. Without technology, I can tell you now, it was going to be messy.” (Par 11)

Committed and flexible staff

The leaders attributed the resilience of their organisations to their committed and flexible employees. Most leaders went as far as acknowledging that if the employees had not gone the extra mile for them, their organisations would not have made it through this crisis. The employees were identified as the greatest enablers for most organisations.

“And if you ignore them and you focus on the customer or you focus on the shareholder instead of on your people, you are doomed.” (Par 9)

The employees gave back selflessly to the organisations. Some volunteered to work without pay, some took pay cuts and others worked longer hours, as and when required.

“We said to our staff ‘Look guys, we cannot afford to pay you, but we need to get this thing going for all of our ... all of our futures’ and people volunteered. It was amazing.” (Par 6)

“The crux of it is your human capital. We are blessed with a fantastic team and all I can do is pay respects to each individual and the sacrifices that they've made as individuals to row the boat.” (Par 7)

“You know the support and you can just see our culture, and the people that work for the organisation actually came together.” (Part 14)

The psychological effect of the crisis played a role in all organisations. As employees were not only financially affected, but were also affected by the death of colleagues, family, and friends, the organisations had to factor their emotional loss and trauma into their strategic response to the crisis.

“Make no mistake, the distress as a result of this whole thing, not just in aviation, as we know, has impacted all industries and I don't think we've seen the final whiplash of that as yet.” (Par 7).

“Just at the beginning of the third wave, that's when we started getting our first few cases of deaths.” (Par 11)

“You know, in the beginning, employee morale was so down ... like, oh my word, everybody is just going to leave.” (Par 14)

Improved communication

Effective communication was one of the enablers of the strategic responses. The organisations that were able to respond successfully and timeously to the crisis stated effective, transparent and honest communication as the key contributor to the success.

“We communicated more and that is still and has actually become embedded in the way that we do ... we communicate more now than we ever had done before.” (Par 6)

“We have improved and enhanced communication and meetings and structural meetings.” (Par 12)

Financial position

Having a stable, solid and profitable financial position, with good cash flow, enabled organisations to respond to the crisis in a meaningful manner and to leverage opportunities presented.

“But our saving grace was our financial prudence over the years, because we had enough cash reserves.” (Par 11)

“We had strong cash flow from other businesses that we could then utilise to sort of shore up our compliance operation.” (Par 12)

The inhibitor to any effective response to the COVID-19 pandemic crisis was dwindling financial resources, an insecure cash flow under pressure, and a negative financial position, which necessitated a review of the financial stance of the organisation.

“We went back to basics, back to the budget, back to the cash flow, see where we could cut.” (Par 1)

“You have to be quite flexible in your pricing or be able to adjust your pricing to be able to accommodate these variables as well.” (Par 7)

The cost structure of the organisations also played a significant role during the different lockdown level restrictions when organisations were not allowed to be fully operational.

“You know with aviation, even if the aircraft is flying or the aircraft is on the ground, it's still an expense.” (Par 1)

“We went and negotiated the lease agreements on the aircraft that were not flying.” (Par 6)

“And it's a reality, because the poor airlines also have operational costs, and they need to go on. And how do you plan if you literally get told one minute before midnight?” (Par 7)

The internal factors outlined above cannot be considered in isolation. During the crisis, these organisations' external environment was also continuously changing, and the organisations had to factor that into their strategic responses to the crisis.

5.4.2. External Factors

The external factors that influenced the strategic responses of the leaders were identified as follows: Legal and regulatory environment, economy, clients, and supply chain management.

Legal and regulatory environment

The leaders had to ensure that their organisations complied with the Disaster Management Act, the health regulations and the local as well as global civil aviation regulations. The legal framework and the regulations were instrumental in ensuring that lives were saved during this crisis. The South African Government was lauded by international bodies for the swift response to the crisis. However, this came at an enormous cost to the organisations in the aviation industry and other industries. Such cost included the imposed travel restrictions and the closure of borders.

“In this case, it was negative, because the impact of COVID ... because it's such a global phenomenon or even virus and it meant that borders are closed.” (Par 11)

“I mean, I know all other airports were closed, you couldn't still negotiate to go in, and they just close it, period. We ended up using our own aircraft just to get out of South Africa and to start the rotation process, wait for crew, swap them out.” (Par 8)

“It was proven during COVID that actually international travel contributes a huge chunk of our revenue. Even while the international borders are now opening gradually, we still ... we actually ... we haven't hit the halfway mark as yet.” (Par 11)

Most of the restrictions imposed on the industry resulted in the organisations not being able to respond effectively to the crisis. Some leaders attributed this to the frequency of the changes that were announced, the inconsistencies in the rules being applied, and the different rules applying to the different countries, so that there was no consistency regarding what an organisation could do across the globe.

Regulations and the inflexible Regulator.

“There's been some problems, or we have found some issues with the Regulator versus the Government Gazette, they are not clear enough at times.” (Par 9)

“So, that's been a big driver and obviously from a regulatory perspective, there were a lot of changes that needed to happen in terms of COVID.” (Par 7)

“If you look at the airlines overseas, they were actually flying their cargo in their passenger flights, on the seats and stuff to Africa and they got the approval with ease, and we were like, how is it that the Regulator don't want to give us this?” (Par 14)

Economy

The already subdued South African economy continued being an additional inhibitor in the aviation industry. The leaders noted that this had been a problem even before the crisis, and this problem escalated during the crisis. The rand/dollar fluctuation continued being a problem in the aviation industry which made fuel expensive.

“Fuel ... completely ... because the rand/dollar was just going crazy constantly.” (Par 1)

“The price of gas was roughly R12.50/litre in March last year. We are now at R20/litre, so that has had an absolutely massive impact on us.” (Par 3)

“You currently ... you know, our rand isn't the healthiest currency, and we were sitting at \$84 per barrel and one of your biggest cost drivers is your direct variable cost in terms of fuel.” (Par 7)

Government as a key stakeholder

The leaders identified the lack of collaboration and consultation by the government as a major inhibitor, which resulted in the organisations not being able to respond effectively to the crisis. The lack of consultation created a lot of uncertainty in the industry.

“You can only plan ... limited, because once again, there is no forewarning of this is what we're going to do, so it's not like we're getting information from government.” (Par 7).

“During the lockdown, one week became two, two weeks became four weeks, and then four became six weeks, and then aviation was hit even further.” (Par 3)

Other organisations within the aviation industry took a proactive stance to lobby government and other business platforms to be part of the discussions that were underway in relation to the various lockdown restrictions and as well as the commercial activities that were permitted at each level.

“Our decision was ... we have to change government's mind. So, what we did, myself and one of my colleagues in the executive, we started to lobby government. We started to

participate in work streams. We got ourselves invited all over the place. We were absolute nuisances.” (Par 6)

“I am very much involved in the intelligence, and I do have my circles. I am just lucky to have certain networks.” (Par 5)

No government funding

The South African Government was criticised by the leaders for not funding organisations in the industry during this crisis in the same way that aviation organisations had been supported in other countries. Such funding or financial assistance was needed by these organisations to resuscitate their business activities.

“Especially a young business like ourselves, we have had ... received no funding from the government.” (Par 1)

“I mean, it's not like other countries where you in the private sector also got a big support or a leg up from government to maintain your status as an airline.” (Par 7)

Client base

The client base was largely affected by the various restrictions that were imposed in South Africa and around the globe. This led to a drastic reduction in these organisations' individual client bases such as students, travellers, and passengers. The organisations that were able to operate fully during the various levels of lockdown, still experienced challenges, because their clients (organisations) were often not able to honour their commitments as a result of their businesses struggling.

“So, when COVID hit, we obviously had no students.” (Par 2)

“Clients were telling us that they are not working, and I'm saying, but we had a contract! It was a big issue for us to get the money out of the clients and we have to understand, because we are all in the same boat.” (Par 10)

The organisations that had a strong overseas client base were in a better position to be able to withstand the adverse effects of the Crisis.

“We have a very good contract in the European summer, and where the aircraft basically operates out of Europe.” (Par 9)

“Yes, it was because most of our clients are from other countries and not in ... within South Africa.” (Par 10)

“We have operations outside of the border, we operate in places where nobody actually wants to go to. So, that part of the business was actually the only part that actually sustained us for the time.” (Par 14)

Supply chain disruptions

The supply chain experienced a serious impact across the globe as a result of the COVID-19 crisis. This also affected the organisations that were dependent on international supplies for their operations. This created a backlog regarding the completion of projects in their operations.

“There was an enormous focus on managing that aspect in terms of your whole supply chain and we are still suffering the consequences, because not of what we are doing, but what the international markets have done.” (Par 7)




“Buying a small little part, we could say this part will come in a week’s time, but with COVID, you had something between three weeks up to three months.” (Par 1)

“There were backlogs in courier companies and the vaccine took preference for most shipping agents.” (Par 8)

5.4.3. Conclusion

The research findings are summarised in Table 7. It outlines the internal and external factors that influence strategic responses.

Table 7: Internal and external environmental factors

Theoretical Category	Themes	Enabler	Disabler	Theoretical Category	Themes	Enabler	Disabler
Internal Environment	Organisational Agility	●	●	External Environment	Legal and Regulatory	○	●
	Operations	●	●		Economy	○	●
	Staff	●	○		Government	○	●
	Financial position	●	●		Clients	●	●
	Communication	●	○		Supply Chain Management	○	●
Key: Enablers and Disablers  Disabler  No Data  High prominence / many mentions							

Source: Author's own

The strategic responses were influenced by both internal and external factors. These factors either enabled or disabled the strategic responses. The internal factors that that enabled the manager's strategic responses included the organisational agility, operations, staff, communication, and the financial position. These factors were noted strongly by all participants.

The managers identified the external factors largely as disablers in their strategic responses, these included the legal and regulatory environment, government, clients and suppliers, supply chain management.

5.5. Chapter Conclusion

This chapter provided the research findings of the various themes that were identified in Chapter 2. The study conducted an analysis across the research findings and presented them against the research questions outlined in Chapter 3. The summary of the key findings is outlined in Table 2 below. It is structured in accordance with the research questions. Further discussions aligned to the literature will be presented in Chapter 6.

Table 8: Summary of key findings

Theoretical Category	Themes	Group Type				
		ATO	Airline	AMO & Charter	Cargo & Security	Public Entity
Strategic Responses	Retrenchment strategy	●	●	●	●	●
	Persevering Strategy	◐	◐	●	●	●
	Innovation Strategy	◐	◐	●	●	●
	Exit Strategy	●	●	●	●	●
Environmental Scanning	Rational scanning	●	●	●	●	●
	Intuitive scanning	◐	◐	●	●	●
	Assessment	◐	◐	◐	◐	◐
	Evaluation	◐	◐	◐	◐	◐
Theoretical Category	Themes	Enabler	Disabler			
Internal Environment	Organisational Agility	●	●			
	Operations	●	●			
	Staff	●	○			
	Financial position	●	●			
	Communication	●	○			
External Environment	Legal and Regulatory	○	●			
	Economy	○	●			
	Government	●	●			
	Clients	●	●			
	Supply Chain Management	○	●			

Legend:

- No mentions / Disabler
- No Data
- ◐ Some mentions
- Many mentions

Source: Author's own

The managers in the aviation industry adopted multiple strategic responses to the crisis based on the impact of the crisis on their organisation in the short or medium term. These strategies included retrenchment, preserving and innovation. There was limited implementation of the exit strategy.

The managers scanned, assessed, and evaluated their strategic responses. The managers preferred adopting rational scanning and moderately adopted intuitive scanning. They further scanned and evaluated the strategic responses but there was not framework adopted.

In addition, the study highlights a number of internal and external factors that need to be considered by managers in the aviation industry. These factors influence the strategic decisions of managers.

CHAPTER 6: DISCUSSION OF RESULTS

6.1. Introduction

This chapter discusses the findings presented in Chapter 5, contrasted with the literature analysed in Chapter 2. This process was designed to address the overarching objective of this study, which was to explore the factors that influence managers' ability to respond to a crisis. The findings of the research help decision-makers to understand the different strategic responses adopted by managers in view of the impact of the COVID-19 pandemic, the process followed by the managers to scan, assess, and evaluate their responses, as well as the external and internal factors that influence strategic responses during a crisis.

Chapter 6 adopts the same structure used in Chapter 5, which presented the findings in terms of the research question as outlined in Chapter 3. Furthermore, the summary of themes is discussed under each research question.

6.2. Discussion of Findings for Research Question 1

Which strategic responses were implemented by managers in the aviation industry in response to the COVID-19 crisis?

There were four strategic responses identified through the literature that could be used by managers during a crisis, namely: retrenchment, persevering, innovating, and exit (Wenzel et al., 2020). The managers in the aviation industry adopted three out of the four strategic responses as indicated in Chapter 5; namely: retrenchment, persevering and innovating. None of the managers interviewed implemented the exit strategy, and therefore, only the three implemented strategic responses will be discussed further in this chapter as highlighted in Table 8.

Table 8: Strategic responses discussed

Theoretical Category	Themes	Sub-Sector				
		ATO	Private Airline	AMO & Charter	Cargo & Security	Public Entity
Strategic Responses	Retrenchment strategy					
	Persevering Strategy					
	Innovation Strategy					
	Exit Strategy					

Legend	
	Limited implementation / No mentions
	Moderate implementation / some mentions
	High implementation / many mentions

Source: Author's own

6.2.1. Retrenchment Strategy

The retrenchment strategy was adopted by most organisations as an initial response and aimed at a short-term solution. The managers in the ATOs, airlines and public entities sub-sectors implemented this strategy most often. The managers in other sub sectors were less impacted as a result of being classified as essential services providers. This included the cargo and security as well as the AMO and charter sub-sectors, where retrenchment and a reduction of costs/assets was either partially implemented or not implemented at all. The managers who implemented the retrenchment strategy applied varying measures as part of the implementation of this strategy, for example, cost cutting, selling of assets, and reducing the staff complement to minimise the costs during the crisis. The extent of the implementation varied, based on the impact of the crisis on their specific organisations.

The limitations of this strategic response was noted by a number of scholars (Santana et al., 2017; Argyres et al., 2019; Wenzel et al., 2020). This is consistent with the findings in this research, which reflects that those who implemented this strategy started seeing the serious implications of not having properly balanced the curtailment actions such as selling off too many assets, reducing

highly competent staff members to reduce cost at the expense of efficient operations. This started having a negative impact on the organisation's ability to function suitably now and in the future.

Discussion of key theme finding

The implementation of the retrenchment strategy by managers presents several similarities with the findings depicted in the extant literature. The implementation of this strategy as the initial response to the crisis is consistent with Argyres et al. (2019), who note this strategy as the initial response in strategic renewal. Most managers in this study implemented this strategy partially or fully as the initial response to the crisis. The similarity also extends to the work by Santana et al. (2017) who assert that this strategy must include that management reduces costs and assets to generate better cash flow or free up some reserves. The managers implemented a number of measures, which included cost cutting, selling of assets, and reducing of the staff complement to minimise the costs during the crisis. The managers also had to narrow down the business activities during the severe lockdowns and their strict restrictions, which is consistent with the measures recommended by Wenzel et al. (2020). However, there is only limited information available to address the varying degrees of implementation of the retrenchment strategy across the sub sectors. The research findings suggested that this strategy was applied by organisations that were hardest hit by the crisis: ATO's, private airlines and public entities. As such, the AMO and charter subsector did not apply the strategy as they had been declared to be essential services, while the cargo and security subsectors only partially implemented it.

The managers in this study further acknowledged the possible detrimental impact of this strategy, if not implemented correctly or timeously. This is consistent with the view of several scholars (Santana et al., 2017; Argyres et al., 2019; Wenzel et al., 2020), who note the shortcomings of this strategy as having a negative impact on the organisation's ability to gain a competitive advantage in the long run.

Theme conclusion

The research findings are consistent with the literature; however, there was limited literature that addressed the varying degrees of the implementation of the retrenchment strategy, based on the impact of the crisis on the organisation. The study found that the retrenchment strategy was either partially or fully implemented, but did not always include retrenchment of staff, while it always included cost cutting measures of external costs.

6.2.2. Persevering Strategy

This strategy was adopted by the AMO and charter subsector as well as the cargo and security subsectors, as both these organisations were classified as essential services providers. The organisations were cushioned against the impact caused by the crisis by having been declared essential services providers, and thus, did not experience the severe impact of the crisis. They were proving to be niche services, which could not be provided by other organisations and this gave them the competitive advantage throughout the crisis. The managers in the ATO and private airline sub sectors partially implemented this strategy, once the COVID-19 restrictions were being relaxed during the lower levels of the lockdown.

Discussion of key theme finding

Wenzel et al. (2020) notes that this strategy is viable when there is an availability of internal and external resources. This is in line with the research findings, wherein the subsectors that fully implemented this strategy were the ones that were the least impacted financially by the COVID-19 crisis and its repercussions. The subsectors were the AMO and charter as well as the cargo and security subsectors. The remainder of the sectors could not use the perseverance strategy as an initial response, as their costs or commitments were too high. Hence, they had to first reduce their costs by first applying the retrenchment strategy, and then move to a partial implementation of the innovation strategy.

The perseverance strategy considers minimal changes being made to the corporate strategy, the organisational structure, and the organisation's assets (Albers and Rundshagen, 2020). This was evident in the subsectors that fully implemented this strategy. There was no retrenchment of staff, no salary reduction or change in operations either, but they had to comply with the newly imposed regulations.

A subtle difference to the present findings was found in literature (Li and Tallman, 2011; Chakrabarti, 2015; Wenzel et al., 2020), where authors recommend the persevering strategy as the most effective response to a crisis when faced with uncertainty. However, the research findings indicated that only two subsectors fully adopted this strategy as initial response to the crisis.

Theme conclusion

The research findings are consistent with most of the literature, and the subsectors that implemented this strategy were able to maintain their status quo. However, most subsectors only

partially implemented this strategy in response to the crisis. This difference could be ascribed to previous crises possibly not being as severe and as long as the COVID-19 crisis.

6.2.3. Innovation Strategy

The managers of all subsectors initially implemented either the retrenchment strategy or the persevering strategy. As the level of uncertainty reduced, there were opportunities that resulted from the crisis that necessitated a shift to the innovation strategy. All subsector organisations partially implemented the innovation strategy, with the exception of the cargo and security organisations that fully implemented this strategy. The innovative responses were key in ensuring the sustainability of these organisations in the future, while also providing them with a competitive advantage.

Missed opportunities

The subsectors that only partially or not at all implemented the innovation strategy identified a number of opportunities that were missed by them as a result of being too slow to respond because of their lack of organisational agility in certain instances, as well as the prescriptive regulations that they had to adhere to. These limitations were identified by managers in the ATO and private airline sub sectors.

Discussion of key theme findings

Schmitt et al. (2018) recommend the innovation strategy as the only response that can help the organisation adapt to the changing environment and exploit new and existing capabilities. This is supported by Wenzel et al. (2020), who assert that this strategy is crucial and unavoidable if any of the organisations want to gain a sustainable competitive advantage. The organisation must commit to innovate in the medium to long run for strategy renewal (Do et al., 2021).

The research findings indicate that this strategy was partially implemented by all subsectors, except for the cargo and security subsector, which implemented this strategy in full. The managers in this sector were able to change their strategy to expand their cargo operations to reach for new products and new locations to support the booming e-commerce industry. They fully exploited the opportunities in the market, which resulted in the massive growth of their operations. This subsector ventured into the cyber security space, as they identified the space to innovate. These managers were able to refocus, rationalise and rejuvenate as suggested by Thompson et al. (2014).

The rest of the sub sectors partially implemented the innovation strategy in response to the crisis and the changing environment. This included product innovation, expansion into global reach and digitising their service offering. There were, however, no substantial changes in the overall strategy of the organisations.

Theme conclusion

The research findings are consistent with the literature. There was, however, only a partial implementation of the innovation strategy by most subsectors, and this could be a challenge for these organisations in the long run.

6.3. Discussion of Findings of Research Question 2

How did the managers in the aviation industry scan, assess, and evaluate their strategic responses?

Maitland and Sammartino (2015) identified the need to understand how managers scan, assess, and evaluate the strategic responses. The findings of this study revealed that the managers followed a similar approach in scanning, assessing, and evaluating their strategic responses. All managers fully or partially implemented rational scanning to understand the environment as indicated in Chapter 5. Maitland and Sammartino (2015) recommend the use of the intuitive process, as it enhances strategic decision-making during a crisis. This approach is further recommended by Robinson et al. (2021), who assert that intuitive scanning complements rational scanning in decision-making. In this study, only managers in the cargo and security subsector resorted to using intuitive scanning, while the ATOs and private airlines showed moderate prominence, and the AMOs and charter subsector as well the public entities showed limited prominence. This would have limited the managers' ability to make fast-paced strategic decisions. In addition, the managers showed moderate prominence in the processes followed to assess and evaluate the strategic responses as highlighted in Table 9, as managers did not make use of any defined frameworks to conduct the assessment and analysis.

Table 9: Prominence in environmental scanning process

Theoretical Category	Themes	Sub-Sector				
		ATO	Private Airlines	AMO & Charter	Cargo & Security	Public Entity
Environmental Scanning	Rational scanning					
	Intuitive scanning					
	Assessment					
	Evaluation					

Legend	
	Limited prominence / no mentions
	Moderate prominence / some mentions
	High prominence / many mentions

Source: Author's own

6.3.1. Environmental scanning

The managers in all sub-sectors conducted environmental scanning, mostly using rational scanning, with some using intuitive scanning as the supplementary process. The environmental scanning was done on an ongoing basis by all managers and was done more frequently at the start of the crisis, as there was a lot of uncertainty in the industry.

Rational scanning

The rational scanning process was implemented partially or fully by all managers in the different subsectors. The managers used different platforms to scan their business environment. The managers used the international news platforms such as CNN, the BBC, and Sky News as a regular source of information to gain insights into what was happening globally. They further engaged with multiple stakeholders for the first couple of months to gain insights into the trajectory of the industry. This included the understanding the financial status of these stakeholders. Some of the managers extended their rational scanning to include benchmarking and forecasting to plan for the future of the organisation.

The managers in the cargo and security subsector and those in public entities extended the rational scanning process to engage their personal networks to gather market intelligence. They proactively accessed their various networks, industry associations and other forums to obtain market intelligence information. The organisations were also involved in industry level discussions about the future of the industry, which gave them a competitive advantage.

Intuitive scanning

Intuitive scanning was not popular with the managers interviewed for this research. Managers in the cargo and security subsector were the only managers who used this process to supplement the rational scanning process. These managers understood the need to change their approach and thinking in order to adjust to the changing environment. They also understood the need to make strategic decisions fast by accessing all available information and exercising a level of discretion as managers. This enabled them to seize the opportunities that presented themselves as a consequence of the crisis.

The ATO and private airline managers partially implemented the intuitive scanning approach, as they were required to make judgement calls in many areas of their operations. This included making decisions on when to stop flying at the highest level of the lockdown restrictions, when continued operations could no longer be substantiated.

The managers in the AMO and charter sub-sector as well as the public entities showed limited prominence regarding their intuitive scanning process. The AMO and charter managers had maintained the status quo as far as was possible and opted not to take the proactive intuitive scanning approach. On the other hand, the managers in the public entities also showed no acceptance of the intuitive scanning process as a result of their prescriptive environment that they operated in. These managers still largely adhered to their strategies that were based on a five-year cycle and did not see any opportunity to manoeuvre around the restrictive planning structures.

Discussion of key them finding

The literature suggests two types of processes in environmental scanning: the rational process and the intuitive process (García-Carbonell et al., 2021). The rational approach uses various formal and informal approaches to scan the environment (Robinson and Simmons, 2018). The research findings were consistent with the literature regarding the implementation of the rational processes in response to a crisis. The rational process was implemented partially or fully by managers in the different aviation industry subsectors. The managers used different platforms to

source the information they needed to reach the appropriate decisions by accessing, for example, international news reports, stakeholder platforms, benchmarking their own performance trends during and before the crisis, and forecasting based on what was happening internationally. This was line with the approach highlighted by Robinson and Simmons (2018). The cargo and security subsector and those in public entities further used their networks for market intelligence.

However, there was a subtle difference found in literature as it related to the implementation of the intuitive process. Literature suggests that the rational process needs to be complemented by the intuitive process, which focuses on problem solving and integration based on managers' experience and understanding of the environment (García-Carbonell et al., 2021). The intuitive process enhances strategic decision-making in a crisis (Ansell and Boin, 2019). The research findings reflected that there was a moderate to no prominence in the implementation of the intuitive process by most managers in the different subsectors. The managers in the cargo and security subsector were the only ones who fully implemented this process, which helped them make valid judgments in analysing the changes in their environment. This finding is in line with the recommendation made by Ramírez and Selsky (2016).

Theme conclusion

The research findings are consistent with those findings found in the literature where they related to the implementation of the rational scanning process. There were, however, subtle differences in the implementation of the intuitive process, as there was either some or no mention made of any intuitive scanning and implementation by managers.

6.3.2. Assessment

The research findings revealed moderate prominence regarding how managers assess their strategic responses. While most of the organisations in the aviation industry have been in existence for many years and thus, should have formal assessment structures and systems in place to measure their environment, and most managers assessed the environment on an ongoing basis, such assessments are obviously vital during a time of crisis. Most of the managers used the information obtained from their environmental scans as well as the output of the implemented strategies to assess their strategic responses. The approach was similar by all managers, but it did not follow a structured process, which was probably caused by the different levels of impact the crisis caused in the subsectors or did not cause (where the organisations were regarded as essential services and could operate normally). Being faced by the COVID-19 regulations and restrictions forced the managers in the aviation industry to review their corporate,

business, and operational strategies. This was done frequently and even on a daily basis by managers at the start of the crisis but was later altered to longer periods between the reviews as the level of uncertainty reduced.

6.3.3. Evaluation

The managers interviewed found it difficult to evaluate the effectiveness of their implemented strategic responses, as there was still a high level of uncertainty in the industry and with talks of a possible resurgence of the crisis. The environment was still fluid, and there was a high possibility of the rules and regulations changing at any time in South Africa as well as across the globe, where the pandemic had resurged to new heights, resulting in total lockdowns in those countries. It was evident to the managers that there was no uniform approach to evaluating the responses.

Most managers still measured the effectiveness of their strategies and actions in financial terms, which did not ensure any congruence between the environment, the achieved or retained value, and their resources. There was an overemphasis on the financial baseline and availability of resources, although this was also understandable, as financial security implied that the organisations would be able to survive the crisis.

Discussion of key theme finding

There are a number of evaluation techniques that may be used to evaluate the effectiveness of strategic planning and its management as outlined in Table 2 (Thompson et al., 2014). The E-V-R congruence model was noted as a model that was straightforward and adaptable to allow managers to evaluate strategic responses implemented during a crisis. Applying a systematic review of planned strategic responses, their evaluation and control or monitoring of the implemented changes are all important (David, 2013). Such firm structure was however not evident in the findings.

The managers evaluated their responses to some extent, but there was no systematic approach to the evaluation across the different sub sectors. Most of the managers were still reliant only on the financial measures to evaluate their responses.

Theme conclusion

To a large extent, the research findings are consistent with the literature; however, there was a subtle difference in the findings, regarding the fact that the evaluation of the implemented responses by the managers was not applied in a systematic approach. This could possibly have been caused by either the length/extent of the current COVID-19 crisis, the fluidity of its

emergence and impact, and the different levels of its impact on the various subsectors. Most of these managers did not have to cope with a crisis of this format before and were faced with facts that changed on a daily basis.

6.4. Discussion of Findings for Research Question 3

What were the internal and external factors that influenced their strategic responses to the crisis?

The internal and external factors of an organisation influence the strategic decision-making by its management (Shepherd and Rudd, 2014). The findings of the study identified these factors as either enablers and disablers in their response to the crisis. The internal factors that had to be in place to be functioning as enablers included the organisation's level of agility, conducive operations, committed and flexible staff, a solid and positive financial position and effective communication. The disablers in the internal environment included the organisation's inability to be agile, increased changes in operations and an unstable or even negative financial position with no cash reserves or a poor cash flow. In the current study, all managers believed their staff and their regular, transparent communication in the internal environment served them as enablers, and there was no data suggesting that these aspects in any way inhibited the strategic responses. Table 10 highlights the factors that were not supported by the data, and thus, these factors are not discussed further in this chapter.

The external environmental factors were noted as the key inhibitors by most managers. This included the legal and regulatory aspects that did not favour the aviation industry's business environment, the subdued or even negative and challenging South African economy, government's lack of collaboration and lack of funding or support for the aviation industry during the time of crisis. From an industry perspective, the disruption in supply chain processes was noted as a further disabler to the process. The industry's clients were noted as an enabler in the process. No data supported any of the other external factors as enablers as noted in Table 10, and therefore, the other external factors will not be discussed as enablers in this chapter.

Table 10: Internal and external factors serving as enablers and disablers

Theoretical Category	Themes	Enabler	Disabler	Theoretical Category	Themes	Enabler	Disabler
Internal Environment	Organisational Agility	●	●	External Environment	Legal and Regulatory	○	●
	Operations	●	●		Economy	○	●
	Staff	●	○		Government	○	●
	Financial position	●	●		Clients	●	●
	Communication	●	○		Supply Chain Management	○	●

Key: Enablers and Disablers	
●	Disabler
○	No Data
●	High prominence / many mentions

6.4.1. Internal Factors

The findings identified five internal environmental factors that either enabled or disabled the strategic responses of managers to the crisis. The findings are discussed below.

Organisational agility

The organisations' agility was a key determinant in responding to the crisis. The managers who were able to make fast-paced decisions were also able to respond better to the crisis. The managers in organisations that were agile were able to make decisions on the go; they were empowered to make decisions without having to wait for board approval cycles. They did not have any extensive approval process in place or fixed structures and systems that required permission from multiple signatories. Thus, they were able to make decisions and implement changes speedily. These managers were able to change things or manipulate certain procedures that were necessary in response to the crisis. The leaner the structure of these organisations, the more of an enabler this was to the process.

The organisations that were not agile, especially referring to public entities, still enforced the bureaucratic structures that controlled and restricted the managers' ability to respond to the crisis. These organisations were not flexible and could not make fast-paced strategic decisions. The managers could not be proactive as their internal environment was not conducive for that. Their

reporting structures relied on five-year plans, board approval, government oversight and rules and fixed other reporting structures, which did not inculcate any crisis that would need agility.

Changes in operations

The crisis necessitated that some of the organisations had to adapt their operation in response to the crisis. This fast adaptation necessitated that managers had to incorporate technology speedily, which enabled the organisation to continue with its operations. Digital delivery of services made it possible for these managers to respond positively to the crisis and thereby operations could continue or even expand.

Where the operations structure became a disabler in managers aiming to respond to the crisis, they had to observe and comply with a number of regulations and health protocols. This drastically changed how these organisations' operations were conducted and the number of staff members who were allowed to be physically present at the organisation at a given point. This meant that the projects took longer as there were fewer employees working in operations. Therefore, the organisations had to re-prioritise their projects to ensure that they focused on the core projects.

Committed and flexible staff

The managers acknowledged that their staff were the key contributors to the resilience of their organisations during the crisis. They acknowledged that committed and flexible staff members enabled them in their strategy planning and decision-making. They noted that staff members often went the extra mile, even though they were faced with serious financial and psychological challenges. Staff volunteered to work without pay and some took salary cuts when the organisations could not afford to pay them. The staff members were also key to ensuring that the business continued, despite the high level of uncertainty. There was no data that suggested that staff were ever the disablers to the managers' strategic responses.

Improved communication

The findings identified improved, regular and transparent communication as the key enabler for managers in their strategic responses to the crisis. Some of the managers noted that the crisis drastically improved their communication with their staff and other stakeholders. The managers enhanced the communication with staff by giving feedback more regularly and having regular meetings with the relevant staff members. They also ensured that communication was imbedded in everything that they did.

There was no data that suggested that communication was a disabler regarding the managers' responses.

Financial position

The financial position of the organisations was crucial during the crisis. It hugely influenced the strategic responses of the managers, as it determined what was possible and what was not possible. The organisations that were in a positive and stable financial position were able to be resilient and were also able to leverage on the opportunities that presented themselves as a result of the crisis. The financial prudence of some these organisations is what saved their business during this time. Some managers stated that they were able to sustain their operations as a result of the organisations' positive cash flow.

The findings also indicated that the organisation that did not have a stable or positive financial position at the start of the crisis struggled to stay afloat. The managers had to consider a number of options to keep the businesses in operation, and they had to implement serious cost containment or cost cutting measures to accommodate the growing cost variables. This seriously limited the strategic responses of these managers.

6.4.2. External Factors

The external environmental factors that influenced the strategic responses of managers were identified as follows: Legal and regulatory environment, economy, clients, and supply chain management. Four of the identified factors did not reflect the supporting data identifying them as enablers to managers' strategic responses, thus this section will only focus on the findings where these external factors were believed to be disablers. The only external factor that was identified as an enabler in the external environment at an industry level referred to the clients, which will be discussed later in this section.

Legal and regulatory environment

The managers needed to ensure their organisations' compliance with the Disaster Management Act, the health regulations and the local and international civil aviation regulations. This resulted in a number of restrictions being imposed by the government, which influenced the strategic responses of the managers. The imposition of travel restrictions and closure of borders had a major impact on most of the organisations in the aviation industry. This was felt by organisations

in the industry and across the globe. The initial restrictions resulted in halting operations in the aviation industry, which drastically reduced the revenue of most of these organisations.

The findings indicated that managers were not able to respond effectively to the crisis as a result of these changes. The managers also noted that the regulations were inconsistent and inflexible, and they changed within weeks, sometimes days. This made it extremely difficult for managers to respond appropriately or to re-strategise, as there were a lot of changes required on an ongoing basis.

Economy

The subdued or even negatively performing South African economy continued being an inhibitor in the aviation industry. This was not a new phenomenon, but it was further exacerbated by the crisis. At the same time, global economies were affected by the crisis and the different restrictions, which in turn, had a further impact on the South African operations. The rand/dollar fluctuation was also noted as a challenge by managers, where rising fuel costs were adding to the problem of a loss of passengers or clients. These challenges restricted the managers' ability to forecast effectively and tailor-make their responses.

Government as a key stakeholder

The managers identified the government's lack of consultation and collaboration with the aviation industry as a major disabler while they were trying to strategise their response to the crisis. The lack of consultation meant that most managers had no input or forewarning of the imposition of the impending restrictions at any given time. This created further uncertainty in the industry. The managers also highlighted the lack of funding or financial support by the government to resuscitate business activities as a major issue for the organisations that were hardest hit by the crisis.

Client base

Clients were noted as both enablers and disablers by the managers in this study. The organisations that were offering essential services could still continue and the client base either remained unchanged or increased, based on the opportunities presented. The organisations that had a solid local and global client base were better able to respond to the crisis because of the consistency of these clients and thus their revenue. The balanced portfolio of clients meant that some organisations were still able to operate both locally and globally during the crisis.

However, the imposition of the various local and international restrictions drastically reduced the client base of the organisations in the aviation industry. This reduced the number of students, travellers, and cargo, which brought organisations not offering essential services in the industry to a standstill. The drastic reduction in clients therefore negatively influenced the strategic responses of the managers.

Supply chain disruptions

The managers noted that the global supply chain processes were severely affected by the crisis, which had an impact on the local operations. This was a challenge for managers when trying to respond to the crisis. The shortage of supplies resulted in a backlog in some operations.

Discussion of key theme finding

According to Shepard and Rudd (2014), there are four factors that influence strategic decision-making processes of managers, namely: the top management team, the strategic decision-specific characteristics, the external environment and the firm or organisation's characteristics (Shepherd and Rudd, 2014). The factors are consolidated as internal and external environmental factors (Thompson et al., 2014). Wenzel et al. (2020) further note that these factors are enablers and disablers to the strategic responses of managers and employees.

The research findings and the prevailing literature are similar. The organisations' agility and ability to change their operations came out as both enablers and disablers in the research. Most managers noted that the organisation's ability to be agile during a crisis was the key to their competitive advantage. Accordingly to Shepherd and Rudd (2014), the organisation's dynamic played an important role in enabling their managers' decision-making process. This empowered decision-makers and gave them the ability to make decisions speedily and detect the weak signals leading to the crisis (Vecchiato, 2019).

The subtle difference found between the current findings and those of extant literature was the limited mention of the role that employees play during a crisis. The internal environment was noted as being influential according to the organisation's structure, size, performance, controls and formal system planning (Shepherd and Rudd, 2014). The emphasis was mostly on the role of top management and their ability to make strategic decisions. Yet, the research findings highlighted the important role that was played by the staff members in enabling the organisations' resilience throughout the crisis.

The findings considered both macro-external factors and micro-external factors, which was supported by Louw and Venter (2013), Shepherd and Rudd (2014), and Brown and Kline (2020). The external environmental factors were considered to be disablers. Most managers noted the legal and regulatory factors that had an impact on their decision-making process, as well as government and the disruption in their supply chain management, which had the greatest impact on operations during this crisis.

Theme Conclusion

The findings of the research and the existing literature were consistent, and only presented minor differences regarding the role of various stakeholders or the prominence of certain initiatives.

6.5. Chapter Conclusion

The research findings and the literature identified the four strategic responses to the crisis: retrenchment, persevering, innovation and exit. There were only three responses implemented by managers in this research: namely, retrenchment, persevering and innovation. Most managers opted for the retrenchment strategy as their initial response to the crisis. Thereafter, they moved to persevering and innovation strategies. However, there is limited literature that addressed the varying degrees of implementation regarding the retrenchment strategy, based on the impact of the crisis. The AMO and charter subsector did not apply this strategy and the cargo and security subsector only partially implemented it. The persevering strategy was fully implemented by the organisations that were least affected by the crisis, the AMO and charter as well as the cargo and security subsectors. The remaining subsectors either implemented perseverance partially or not at all. The innovation strategy was partially implemented by most organisations.

The research findings were consistent with the extant literature relating to the implementation of the rational scanning process. There were subtle differences in the implementation of the intuitive process, which were noted in the research, with full implementation only by the cargo and security subsector. The managers assessed and evaluated their strategic responses on an ongoing basis but did not apply any systematic approach, which was probably caused by the fluidity of the crisis, where they did not know how long it would last, what its aftereffects would be, the extent of the detrimental effects, and which other potential repercussions the crisis would have in the medium term and long run.

The enablers and disablers in the internal and external environment were identified in the research and were consistent with the literature. The subtle difference was the minimal mention in literature of the role of staff in crisis.

6.6. Conceptual framework

The conceptual framework presented in Chapter 2 was slightly modified as a result of the discussion and findings noted in Chapter 6. The revised model is presented in Figure 8 below.

The revised framework captures the strategic responses identified in the research. Environment scanning is separated from the assessment and evaluation of the managers' strategic responses. Lastly, the conceptual model consolidates the internal and external factors.

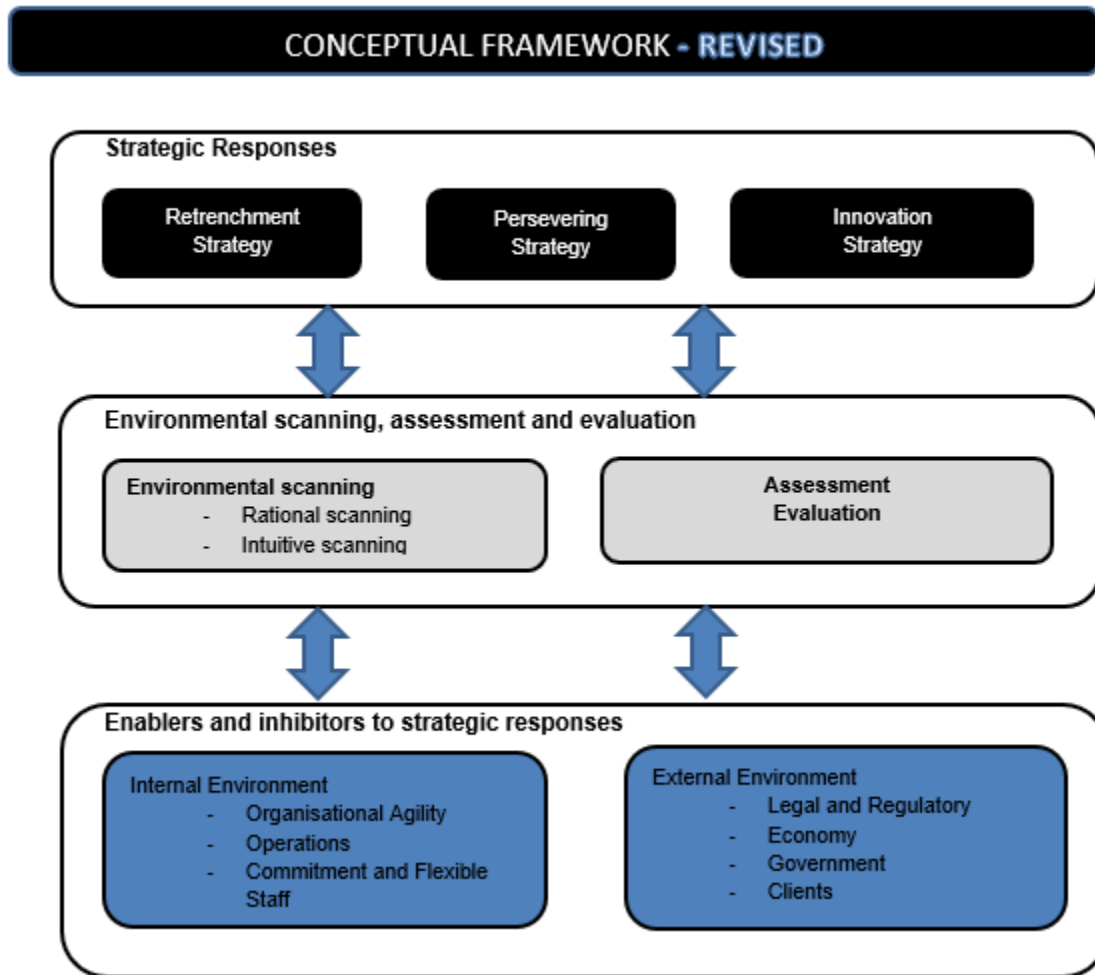


Figure 8: Revised conceptual framework

CHAPTER 7: CONCLUSION

7.1. Introduction

This chapter presents the overall results of the research, based on the findings outlined in Chapter 5 and discussion in Chapter 6. The principal findings are presented in terms of the research questions, for alignment and consistency with the previous chapters and to ensure that the objectives of the study are met. The research contributions of this study are outlined according to improved contextualisation. Due consideration is given when presenting the practical implications for managers responding to a crisis, and in this case, to the current COVID-19 pandemic and its impact on the aviation industry with all of its subsectors. Furthermore, the limitations of this study are outlined for a richer understanding of the findings. The chapter concludes by presenting suggestions for future studies.

7.2. Principal Theoretical Conclusions

The objective of this study was to understand the factors that influence managers' ability to respond to a crisis in the South African aviation industry. This study sought to understand i) to identify the strategic responses adopted by these managers in response to the COVID-19 pandemic crisis, ii) to explore the process followed by managers to scan, assess and evaluate the responses, and iii) to understand the internal as well as the external factors that influenced their responses. The principal findings for the research questions are presented below in line with and answering each research question.

7.2.1. Research Question 1

Which strategic responses were implemented by managers in the aviation industry in response to the COVID-19 crisis?

The research concluded that the managers in the aviation industry adopted three strategic responses in response to the COVID-19 crisis. The three adopted strategic responses were the retrenchment, persevering and innovating strategies. The managers in this study did not implement the exit strategy, which demonstrates resilience of the subsectors, despite the severity and duration of the COVID-19 pandemic and its regulations and restrictions.

Most managers implemented the retrenchment strategy as their initial response to the crisis, in line with what Argyres et al. (2019) wrote. The measures included cost cutting, selling off of assets, and reducing their organisations' staff complement to minimise and control the costs

during the crisis. However, the degree of implementation of the retrenchment strategy varied, with full implementation only occurring by the subsectors that were hardest hit by the crisis (ATOs, private airlines and public entities), while there was only a partial or no implementation by the subsectors that were hardly or not at all hit by the crisis, such as the AMO and charter subsector and the cargo and security subsector. The latter two subgroups opted to fully implement the persevering strategy as their response to the crisis. These subsectors were focused on maintaining their status quo and managed to do so, even under the challenging circumstances of the COVID-19 pandemic and its aftermath, while all other sub sectors either only partially or not at all implemented the preserving strategy as a result of their constrained resources.

The research further concluded that all managers implemented either the retrenchment or persevering strategy as their initial strategic response. Managers in the different subsectors had implement the innovation strategy either partially or fully once the level of uncertainty reduced. The innovation strategy is the only strategic response that is geared to assist the organisations to adapt to the changing environment in an innovative manner and thereby exploit new and existing capabilities (Schmitt et al., 2018).

7.2.2. Research Question 2

How did the managers in the aviation industry scan, assess, and evaluate their strategic responses?

The research found that managers across the various subsectors followed a similar approach in scanning, assessing, and evaluating their strategic responses. The managers in this study mostly used rational scanning to scan their business environment, which extended to using various platforms to gain market intelligence both locally and globally. The information received assisted the managers in benchmarking and forecasting. The rational scanning function is ideally complemented by intuitive scanning, which enhances strategic decision-making in a crisis (Ansell & Boin, 2019). However, the research found that intuitive scanning was only partially adopted or not adopted at all by most managers in the various subsectors in the aviation industry. This could possibly have been caused by their lack of experience regarding such an intense and long-lasting crisis, and therefore, not trusting their intuition that lacked a relevant experience. The managers in the cargo and security subsectors were the only managers who fully adopted intuitive scanning, which empowered these managers to make judgement calls when required, resulting in their fast-paced decision-making and ability to assess further opportunities.

The study found that the managers claimed that they had assessed the strategic responses on an ongoing basis; however, the study also found that there was no structured process followed by the managers in the different subsectors. The managers also did not follow a uniform approach to the task of evaluating the effectiveness of their strategic responses. This led to the managers having difficulties in evaluating their responses. Based on their lack of a ready-made structured evaluation approach or system that they could use to measure and judge their strategic response to the crisis, the managers in this study only used their standard financial measures to evaluate the effectiveness of their responses.

7.2.3. Research Question 3

What were the internal and external factors that influenced their strategic responses to the crisis?

The research concluded that there were a number of internal and external factors that influenced the strategic responses of managers in the aviation industry. These factors were identified as either enablers and/or disablers in the managers' strategic responses. The internal environmental factors that were identified by managers as enablers for their responses were the organisation's agility, conducive operations, committed and flexible staff, a positive and stable financial position and effective, transparent and regular communication. These factors enabled the managers to make the best possible strategic decisions and pursue opportunities that were identified as a result of the crisis. Managers identified the following internal factors as disablers when they had to make strategic decisions: a lack of organisational agility, necessitated increased changes in operations and unstable or negative financial positions.

The external environment factors were also largely identified by managers as disablers in their strategic responses. These included legal and regulatory aspects that did not favour their specific business environment, the subdued or actually negative economy, government's lack of collaboration and a lack of funding or support from government for their business sector. From an industry perspective, the disruption in supply chain processes was also noted as a disabler to the process. The managers could not control these factors and these factors were continuously changing, which made it extremely challenging for the managers to respond in an optimal manner to the crisis and devising the best strategy to see them into the future.

7.3. Research contribution

The research contributes to the existing literature in strategic management, strategic decision-making, and crisis management. Understanding the strategic responses implemented by the managers in the aviation industry during the COVID-19 crisis provides crucial lessons in navigating an insecure, turbulent business environment that changes all the time over an extended period. Furthermore, it provides an understanding of the processes followed to scan, assess and evaluate strategic responses by managers in a crisis.

7.4. Recommendation for Management

The revised conceptual framework was presented in Chapter 6, Figure 9, which provides managers in the aviation industry with an understanding of the factors that influence the strategic responses to a major crisis. The conceptual framework can be used to better understand the context during a crisis, which will enable managers to respond appropriately to a crisis. The framework further outlines the enablers and disablers to strategic responses that ought to be considered by managers in the industry. The managers should also consider the recommendations outlined below.

- a) The managers should not only prioritise cost cutting and asset reduction measures during a crisis, but management must first endeavour to seek opportunities to renew their strategy for the organisation's long-term sustainability. As the impact of implementing the retrenchment strategy as an initial "knee-jerk" response may have a negative impact on the survival of the business once the industry stabilises again, careful consideration should be given to long-term repercussions prior to retrenchment of staff or selling off of assets that will be difficult to acquire again if needed in future.
- b) The managers should seek opportunities to diversify their offerings. The study found that most organisations were singularly focused on their specific subsector's offerings. This limited the managers' strategic responses as restriction posed on one subsector meant the complete shut-down of their operations. The managers must consider diversifying through different service offerings or increasing their geographical reach. The managers should also consider cross-subsector offerings and cross-industry offerings. The impact of a crisis highlights the traditional recommendation or warning: Never have all your eggs in one basket."
- c) The managers should introduce a standard, structured framework that aids them to evaluate and monitor their strategic responses and the effect of their strategies, beyond the measurement of the organisation's financial performance. This will ensure that there is a

consistent matrix used for the formation of strategic goals and targets, as well as for their assessment and evaluation/review and subsequent adaptation, if necessary.

- d) The managers should look for opportunities to collaborate with government to collectively resuscitate the industry. This includes collaborating to develop a framework for government and the industry to manage any crisis in the future. This can be extended to developing a funding framework that can be used by government to fund organisations under distress in the industry during crisis.

7.5. Limitations of the study

The general research limitations are discussed in this section. These limitations must be read in conjunction with the design limitations outlined in Chapter 4. The general limitations are outlined below:

- a) The researcher recognises the limitation that the study only considered managers in the aviation industry to explore factors that influenced the managers' strategic responses in a crisis. The research excluded managers outside the aviation industry, thus limiting the depth and richness of the research findings.
- b) The study was conducted in a single point of time during the COVID-19 pandemic. It does not provide insights into the effectiveness of the strategic responses in the long run and the impact of changes over time.

7.6. Suggestion for Future Studies

The study presents a number of recommendations for future studies. These recommendations are outlined below.

7.6.1. Strategic responses

- a) The aviation industry was largely affected by the COVID-19 pandemic, its restrictions and regulations and rules. It would be interesting to understand the factors that influence the strategic responses of managers in other industries that were similarly impacted by the crisis such as the travel and tourism and maritime industry.
- b) The study confirmed that there were three strategic responses that were implemented by the managers in response to the crisis. However, there were slight differences in the degree of implementation regarding the responses by the different managers in the subsectors. Thus, future research may extend the scope of this study to gain insights on the extent of the variation in implementation.

7.6.2. Environmental scanning, assessment, and evaluation

Further research is required on the systematic approaches required by managers to scan, assess and evaluate strategic responses during a crisis.

7.6.3. Enablers and disablers

Further research is required on the role of employees when strategic responses are planned or implemented in response to a crisis.

8. REFERENCES

- Albers, S., & Rundshagen, V. (2020). European airlines' strategic responses to the COVID-19 pandemic (January-May, 2020). *Journal of Air Transport Management*, 87(June), 101863. <https://doi.org/10.1016/j.jairtraman.2020.101863>
- Alharthy, A. H., Rashid, H., Pagliari, R., & Khan, F. (2017). Identification of Strategy Implementation Influencing Factors and Their Effects on the Performance. *International Journal of Business and Social Science*, 8(1), 34–44.
- Alvarez, S., Afuah, A., & Gibson, C. (2018). Editors' comments: Should management theories take uncertainty seriously? *Academy of Management Review*, 43(2), 169–172. <https://doi.org/10.5465/amr.2018.0050>
- Ansell, C., & Boin, A. (2019). Taming Deep Uncertainty: The Potential of Pragmatist Principles for Understanding and Improving Strategic Crisis Management. *Administration and Society*, 51(7), 1079–1112. <https://doi.org/10.1177/0095399717747655>
- Argyres, N., Mahoney, J. T., & Nickerson, J. (2019). Strategic responses to shocks : Comparative adjustment costs, transaction costs, and opportunity costs. *Strategic Management Journal*, 40, 357–376. <https://doi.org/10.1002/smj.2984>
- Bailey, K., & Breslin, D. (2021). The COVID-19 Pandemic: What can we learn from past research in organizations and management? *International Journal of Management Reviews*, 23(1), 3–6. <https://doi.org/10.1111/ijmr.12237>
- Bapuji, H., Patel, C., Ertug, G., & Allen, D. G. (2020). Corona Crisis and Inequality: Why Management Research Needs a Societal Turn. *Journal of Management*, 46(7), 1205–1222. <https://doi.org/10.1177/0149206320925881>
- Bell, E., Bryan, A., & Bill, H. (2019). *Business research methods* (5th ed.). Oxford University Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brown, R. S., & Kline, W. A. (2020). Exogenous shocks and managerial preparedness: A study of U.S. airlines' environmental scanning before the onset of the COVID-19 pandemic. *Journal of Air Transport Management*, 89(August), 101899. <https://doi.org/10.1016/j.jairtraman.2020.101899>
- Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and Crisis Management: Integration, Interpretation, and Research Development. In *Journal of Management* (Vol. 43, Issue 6). <https://doi.org/10.1177/0149206316680030>
- Business Insider. (2021). *SA airlines clipped by lockdown – here's who's still flying*. <https://www.businessinsider.co.za/airlines-still-flying-in-south-africa-during-lockdown-2021-7>
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed approaches* (4th ed.). Thousand Oaks.
- David, F. (2013). *Strategic Management: Concepts and Cases*. Pearson Education.

- Department of Transport. (2017). *White paper on National Aviation Policy 2017*.
https://www.transport.gov.za/documents/11623/51141/GOVERNMENT_GAZETTE_NCAP_December2017.pdf/b9d35253-8e1d-4784-9669-3ebdd91cbd5b
- Do, B., Nguyen, N., D'Souza, C., Bui, H. D., & Nguyen, T. N. H. (2021). Strategic responses to COVID-19: The case of tour operators in Vietnam. *Tourism and Hospitality Research*, 1–13. <https://doi.org/10.1177/1467358421993902>
- Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32(3), 543–573.
<https://doi.org/10.1017/CBO9780511618925.006>
- Elfenbein, D. W., & Knott, A. M. (2015). Time to exit: Rational behaviour, and organisational delays. *Strategic Management Journal*, 36, 957–975. <https://doi.org/10.1002/smj>
- Foss, N. J. (2020). Behavioral Strategy and the COVID-19 Disruption. *Journal of Management*, 46(8), 1322–1329. <https://doi.org/10.1177/0149206320945015>
- Galpin, T. J. (2018). Realizing your strategy's potential: A seven-step model for its effective execution. *Strategy and Leadership*, 46(6), 35–43. <https://doi.org/10.1108/SL-09-2018-0088>
- García-Carbonell, N., Martín-Alcázar, F., & Sánchez-Gardey, G. (2021). Facing crisis periods: a proposal for an integrative model of environmental scanning and strategic issue diagnosis. *Review of Managerial Science*, 15(8), 2351–2376. <https://doi.org/10.1007/s11846-020-00431-y>
- Hill, C. W. L., Schilling, M. A., & Jones, G. R. (2017). *Strategic Management: Theory - An Intergral Approach* (12th ed.). Cengage Learning Custom Publishing.
- Hourani, M. (2017). Conceptual Frameworks for Strategy Implementation: A Literature Review. *Journal of Management Research*, 9(3), 12. <https://doi.org/10.5296/jmr.v9i3.11222>
- Huy, Q. N. (2011). *How middle managers group-focus emotions and social influence strategy implementation*. 32, 1387–1410. <https://doi.org/10.1002/smj>
- IATA. (2021a). *Airlines*. <https://airlines.iata.org/news/south-african-aviation-needs-financial-relief#:~:text=IATA estimates that revenues generated,%2C 56%25 below 2019 levels.&text=South Africa's economy had already,with unemployment at record levels.>
- IATA. (2021b). *The importance of air transport to South Africa*.
https://www.iata.org/contentassets/a1f674a2687144d9ad5298d2d4e3f7bf/iata_south-africa_report.pdf
- ICAO. (2021). *Economic Impacts of COVID-19 on Civil Aviation*.
<https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx>
- Kew, J., & Stredwick, J. (2010). *Business Environment: Managing in strategic context* (2nd ed.). Charter Institute of Personnel and Development.
- Kothari, C. (2014). *Research Methodology*. New Age Publishers.
- Le, D., & Phi, G. (2021). Strategic responses of the hotel sector to COVID-19: Toward a refined pandemic crisis management framework. *International Journal of Hospitality Management*, 94(November 2020), 102808. <https://doi.org/10.1016/j.ijhm.2020.102808>

- Linden, E. (2021). Pandemics and environmental shocks: What aviation managers should learn from COVID-19 for long-term planning. *Journal of Air Transport Management*, 90, 101944. <https://doi.org/10.1016/j.jairtraman.2020.101944>
- Louw, L., & Venter, P. (2013). *Strategic Management* (3rd ed.). Oxford University Press Southern Africa.
- Lynch, S. E., & Mors, M. L. (2019). Strategy implementation and organizational change: How formal reorganization affects professional networks. *Long Range Planning*, 52(2), 255–270. <https://doi.org/10.1016/j.lrp.2018.02.003>
- Maitland, E., & Sammartino, A. (2015). Decision-making and uncertainty: The role of heuristics and experience in assessing politically hazardous environment. *Strategic Management Journal*, 36, 1154–1578. <https://doi.org/10.1002/smj>
- Mitchell, R. J., Shepherd, D. A., & Sharfman, M. P. (2011). Erratic strategic decisions: When and why managers are inconsistent in strategic decision-making. *Strategic Management Journal*, 32, 683–704. <https://doi.org/10.1002/smj>
- Netz, J., Svensson, M., & Brundin, E. (2020). Business disruptions and affective reactions: A strategy-as-practice perspective on fast strategic decision-making. *Long Range Planning*, 53(5). <https://doi.org/10.1016/j.lrp.2019.101910>
- Pearce, B. (2021). *COVID-19 Airline industry financial outlook update*. <https://www.iata.org/en/iata-repository/publications/economic-reports/airline-industry-economic-performance---april-2021---presentation/>
- Pretorius, M. (2008). When Porter's generic strategies are not enough: Complementary strategies for turnaround situations. *Journal of Business Strategy*, 29(6), 19–28. <https://doi.org/10.1108/02756660810917200>
- Raithel, S., & Hock, S. (2021). The crisis-response match : An empirical investigation. *Strategic Management Journal*, 42(May 2020), 170–184. <https://doi.org/10.1002/smj.3213>
- Ramírez, R., & Selsky, J. W. (2016). Strategic Planning in Turbulent Environments: A Social Ecology Approach to Scenarios. *Long Range Planning*, 49(1), 90–102. <https://doi.org/10.1016/j.lrp.2014.09.002>
- Richter, F. (2021). *Tourism Back to 1990 Levels As Pandemic Halts Travel*. Statista. <https://www.statista.com/chart/21793/international-tourist-arrivals-worldwide/>
- Robinson, C. V., Ahmad, F., & Simmons, J. E. L. (2021). Consolidation and fragmentation in environmental scanning: A review and research agenda. *Long Range Planning*, 54(3). <https://doi.org/10.1016/j.lrp.2020.101997>
- Robinson, C. V., & Simmons, J. E. L. (2018). Organising environmental scanning: Exploring information source, mode and the impact of firm size. *Long Range Planning*, 51(4), 526–539. <https://doi.org/10.1016/j.lrp.2017.10.004>
- Santana, M., Valle, R., & Galan, J. L. (2017). Turnaround strategies for companies in crisis: Watch out the causes of decline before firing people. *BRQ Business Research Quarterly*, 20(3), 206–211. <https://doi.org/10.1016/j.brq.2017.01.003>
- Saunders, M., & Lewis, P. (2018). *Doing research in business and management: An assessment guide to planning your project* (2nd Editio). Harlow: Pearson.

- Scotland, J. (2012). *Exploring the philosophical underpinnings of research : Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms*. 5(9), 9–16. <https://doi.org/10.5539/elt.v5n9p9>
- Shepherd, N. G., & Rudd, J. M. (2014). The influence of context on the strategic decision-making process: A review of the literature. *International Journal of Management Reviews*, 16(3), 340–364. <https://doi.org/10.1111/ijmr.12023>
- Sull, D. (2007). Closing the Gap Between Strategy and Execution. *MIT Sloan Management Review*, June.
- Sull, D., Homkes, R., & Sull, C. (2015). Why Strategy Execution Unravels — and What to Do About It. *Harvard Business Review*, March, 60–66.
- Sweeny, K. (2008). *Crisis Decision Theory : Decisions in the Face of Negative Events*. 134(1), 61–76. <https://doi.org/10.1037/0033-2909.134.1.61>
- Talbot, D., & Ordonez-Ponce, E. (2020). Canadian banks' responses to COVID-19: a strategic positioning analysis. *Journal of Sustainable Finance and Investment*, 1–8. <https://doi.org/10.1080/20430795.2020.1771982>
- Thomas, C. (2020). Decision-making during VUCA crises: Insights from the 2017 Northern California firestorm. *Journal of Business Continuity & Emergency Planning*, 14(1), 82–94.
- Thompson, J., Scott, J., & Martin, F. (2014). *Strategic Mangement: Awareness & Change* (7th ed.). Adrew Ashwin.
- Vecchiato, R. (2019). Scenario planning, cognition, and strategic investment decisions in a turbulent environment. *Long Range Planning*, 52(5), 1–17. <https://doi.org/10.1016/j.lrp.2019.01.002>
- Welman, C., Kruger, F., & Mitchell, B. (2005). *Research methodology* (3rd ed.). Oxford Universty Press.
- Wenzel, M., Stanske, S., & Lieberman, M. B. (2020). Strategic responses to crisis. *Strategic Management Journal*, 41, 7–18. <https://doi.org/10.1002/smj.3161>
- Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2013). *Business research methods*. Cengage Learning.

APPENDIX ONE: INVITATION EMAIL

Dear (Participant name)

I am conducting research as part of the fulfilment of a Masters in Philosophy (Corporate strategy) degree with the Gordon Institute of Business Science (GIBS). You have been identified as a potential research participant based on a referral.

My research topic relates to “*Factors influencing strategic responses of managers in crisis*” in the aviation sector in South Africa. The interview is expected to last between 45 minutes and an hour. Your participation is voluntary, and you can withdraw at any time without penalty.

Due to the prevailing safety concerns relating to the COVID-19 pandemic, the interview will be conducted via virtual platforms such as MS Teams or Zoom.

If you are willing to participate, please will you confirm via return email and indicate your preferred date and time.

Regards

Ayanda Manunga

19341343@mygibs.co.za

APPENDIX TWO: INFORMED CONSENT FORM

26 Melville Road
Illovo
Johannesburg
2196

dd/mm/yyyy
Dear [Interviewee]

Informed consent for interviews

I am conducting research on “*Factors influencing strategic responses of managers in crisis*”. Our interview is expected to last between 45 minutes and an hour. **Your participation is voluntary and you can withdraw at any time without penalty.** By signing this letter, you are indicating that you have given permission for:

- The interview to be recorded;
- The recording to be transcribed by a third-party transcriber, who will be subject to a standard non-disclosure agreement;
- Verbatim quotations from the interview may be used in the report, provided they are not identified with your name or that of your organisation;
- The data to be used as part of a report that will be publicly available once the examination process has been completed; and
- All data to be reported and stored without identifiers.

If you have any concerns, please contact my supervisor or me. Our details are provided below.

	Researcher	Research Supervisor
Name		
Email		
Phone		

Name of participant: _____

Signature of participant: _____

Date: _____

APPENDIX 3: INTERVIEW GUIDE

Preliminary Questions

1. Please indicate your position and brief career history within the aviation industry?
2. Please describe your involvement in the strategic decision-making process in the organisations?
3. Briefly describe the impact of COVID-19 crisis in your organisation?

The above preliminary questions will be used to assess the respondent's overall experience in the aviation industry and in strategic decision-making process. Furthermore, it will be used to understand the impact of the COVID-19 crisis at an organisational level.

Key Questions

- 1. Which strategic responses were implemented by managers in the aviation industry in response to the COVID-19 crisis?**
 - How did you respond as a company to the COVID-19 crisis?
 - What has been the impact of the strategic response on the overall strategy of the organisation?
- 2. How did the managers in the aviation industry scan, assess, and evaluate their strategic responses?**
 - What process did you follow to evaluate the impact of COVID-19 crisis in your organisation?
 - How will you assess and evaluate the impact of the implemented strategic responses in the short, medium and long term?
 - What do you think you could have done differently to obtain improved results with the implemented strategic responses?
- 3. What were the internal and external factors that influenced their strategic responses to the crisis?**
 - What internal environmental factors influenced your strategic responses?
 - What external environmental and industry factors influenced your strategic responses?

APPENDIX 4: CODE LIST

Research Question	Themes	Codes
<p>Research Question 1:</p> <p>Which strategic responses were implemented by managers in the aviation industry in response to the COVID-19 crisis?</p>	<p>Retrenchment Strategy</p>	Variable and fixed expenses accumulating
		More people employed than what was required
		Temporary layoff of staff
		Need to free up more cash
		Negations with suppliers for preferential terms
		Reduce expenditure
		Compulsory leave imposed
		Consolidation of position to reduce staff complement
		Implementation of salary reduction
		Negotiations with creditor preferential terms
		No salaries for Executives
		Selling of assets
		Staff Retrenchments
		Stringent financial control
		Temporary subsidizing employees
	Voluntary Severance Package were offered	
	<p>Persevering Strategy</p>	Staff complement retained
		Business as usual
		No reduction in salary
		Operational costs remained unchanged
	<p>Innovation Strategy</p>	Change of processes to response to the changed environment
		Emphasis should have been on automated processes
		Employment opportunities created as a result of the crisis
		Streamlined processes for improved efficiency

		Ventured into other business within the sector
		Business increased as a result of the crises
		Company agility in response to the crisis
		Experienced enormous growth as a result of the crisis
		Lack of innovation
		Lean organisational structure
		Missed Opportunity
		Need to continuously innovate
		Opportunity as a result of the crisis
		Review service offering
		Innovation - Preparations meets opportunity
		Inability to leverage the available opportunities
		Exit
	<p>Research Question 2: How did the managers in the aviation industry scan, assess, and evaluate their strategic responses?</p>	Scan
Risk Assessment was conducted		
Benchmarking		
Decision Making		
Assessment		Fast paced strategic decision making
		Future strategies
		Limited service offering by the company
		Review of strategy
		Short-term planning
		Situation fluid therefore difficult to plan
		Change of mindset
		Collaboration with various key stakeholders

		Company not suitable insured
		Difficult to assess the impact of the responses
		Forecasting is required
		High level of uncertainty
		Loss of focus due to rapid grow
		Negative impact on operations
		No planning for a crisis of this magnitude
		Reactive in response to the crisis
		Training schools surviving the crisis
		Job losses across industries
		Difficult to plan due to the level of uncertainty
		Impact - Not all sectors of aviation were decimated by COVID
	Evaluation	Failure to take strategic decisions
		Monitoring local and global COVID statistics
		Uncertainty about the future of aviation
		More awareness to monitoring and control
		New monitoring and control measures introduced
		Lack of communication
Research Question 3: What were the internal and external factors that influenced their strategic responses to the crisis	External Environment	Client unable to afford the services
		International and local portfolio of clients
		Aviation training is expensive and not accessible to all
		High reliance on international markets
		Hopes of students shuttered
		Mistrust by the public as a result of changes
		Reduced client base

		Reduction of passengers
		Different COVID protocols in different countries
		External Environment - Closure of South African embassies due different restrictions
		External Environment - Currency fluctuation
		External Environment - Disruption of supply change processes
		Changing COVID Regulations
		No consultation by the government on the possible changes
		No Government Funding
Research Question 3: What were the internal and external factors that influenced their strategic responses to the crisis	External Environment	Restriction on International Travel
		Stringent COVID Regulations impacted the organisation's ability to respond
		Compliance with the Regulations
		High cost of complying with the COVID Regulations
		The extended lockdown had a huge impact in operations
		Change in the industry role players
		Industry is recovering
		Lobby government in different platforms
	External Environment - The aviation sector is interconnected	
	Internal Environment	More assets than cashflow
		High cost of maintaining aircrafts that were not operational
		Use of company resources to continue with operations
		Financial prudence prior to the crisis
		The owner personally absorbed all expenses
		Budget severely impacted
Flexibility in the pricing model		

		<p>High loss of income</p> <p>Poor financial planning</p> <p>Psychological effect on clients and staff</p> <p>Reduction in revenue</p> <p>Review and get the cost structures right</p> <p>Improve the technology infrastructure and usage</p> <p>Committed and flexible staff</p> <p>Increase capacity in operations</p> <p>Involved staff in decision making</p> <p>Lack of crisis management measures</p> <p>investment on clients and staff</p>
<p>Research Question 3: What were the internal and external factors that influenced their strategic responses to the crisis</p>		<p>Regular communication to clients and staff</p> <p>Essential services not affected</p> <p>Down-scaling operations</p> <p>Implementation of flexible working environment</p> <p>Increase capacity in operations</p> <p>Aircrafts parked and not operating</p> <p>Change in business environment to respond to the crisis</p> <p>High loss of income</p> <p>Impact of COVID felt a different level of the organisation</p> <p>Niche service offering</p> <p>Operations operated centrally in response</p> <p>Reduced business activities</p> <p>Review of the financial position</p>

APPENDIX 5: ETHICAL CLEARANCE

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

**Ethical Clearance
Approved**

Dear Ayanda Manunga,

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

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

GIBS ETHICAL CLEARANCE APPLICATION FORM 2021/22

G. APPROVALS FOR/OFF 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: AYANDA MANUNGA

Date: 30 Jul 2021

Supervisor Name in capital letters: GLORIA MBOKOTA

Date: 30 Jul 2021

Co-supervisor Name in capital letters:

Date: 30 Jul 2021

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.

Decision:

Approved

REC comments:

Date: 12 Aug 2021