Developing a talent-risk management framework for selected aviation enterprises

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DECLARATION

I, Jessica Haripersad, student number, hereby declare that this study entitled: *“Developing a talent risk management framework for selected aviation enterprises”* is my own unaided work apart from where sources are acknowledged, and this work has not been submitted by me or anyone else for any academic examination towards any qualification.

J. HARIPERSAD

ABSTRACT

The COVID-19 pandemic has had a huge influence on the aviation industry. Traffic restrictions, lockdown measures and decreased passenger demand have all contributed to a significant drop in air traffic. Airlines have encountered financial difficulties, with several suffering huge losses and others going bankrupt. Flight frequencies, route cancellations and grounded aircraft have all increased in the industry. Talent risk management in the aviation industry was severely impacted during the COVID-19 pandemic. A literature review highlighted that there was no formal talent risk management framework in place for the aviation industry. As a result, aviation managers lack the skills and specialist expertise required to manage talent during the pandemic. Employees may seek work elsewhere as a result, resulting in a talent drain in the industry. The goal of this research is to develop a talent-risk management framework for the selected aviation enterprises that will better enable aviation managers to deal with crisis while managing crucial resources and human capital.

This study was conducted with participants from two airlines; namely, South African Airways in South Africa and a middle eastern airline, Qatar Airways. While Qatar Airways continued to fly throughout the pandemic, South African Airways was already identified to undergo business rescue and organisational restructuring prior to the pandemic. So, the emergence of the pandemic only added to the difficulties that this airline was already facing.

A total of 12 (six from each airline) human resource managers voluntarily participated in the study. The study adopted a qualitative research approach, using semi-structured interviews conducted via Microsoft Teams. This method sought a more subjective review of the experience from the participants. Data were analysed manually using a wall of code and code matrices to show frequency of code words. The themes were generated from the code words. The themes were aligned with the four objectives of this study, which are; to determine the critical factors involved in the development of a talent-risk management framework for the aviation industry; to determine what talent-risk management processes are in place and where the gaps exist in the aviation industry; to explore the perceived competencies managers need in the aviation industry (skill sets, bias) to deal with talent-risk management and to explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 pandemic.

The findings of this study revealed that there is no formal talent-risk management framework for the selected aviation enterprises. The findings from the data collected were used in combination with the literature and the theoretical foundations that underpin this study to develop a talent-risk management framework for the selected aviation enterprises as the main contribution to the body of knowledge. Multiple managerial recommendations were posed to ensure the management of the talent-risk factors that frame the outcome of the study.

KEYWORDS: aviation leadership; change leadership; COVID-19; talent management; talent-risk management.

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DEDICATION

This study is dedicated to my mum and dad, who lived their dreams through their children. I finally did it! Wish you were here to share in this.

It is also dedicated to my children, here is to wish that this inspires you all to do your very best. Mummy loves you all too much.

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TABLE OF CONTENTS

DECLARATION ii
ABSTRACT iii
ACKNOWLEDGEMENTS v
DEDICATION vi
TABLE OF FIGURES xiv
LIST OF TABLES xv
CHAPTER 1 1
INTRODUCTION AND BACKGROUND 1
1.1 INTRODUCTION 1
1.2 PROBLEM STATEMENT 4
1.3 RATIONALE AND SIGNIFICANCE OF THE STUDY 5
1.4 OBJECTIVES 6
1.4.1 MAIN OBJECTIVE 6
1.5 RESEARCH QUESTIONS 6
1.5.1 MAIN RESEARCH QUESTION 7
1.5.2 Sub-questions 7
1.6 LITERATURE REVIEW OUTLINE SUPPORTING THE PROBLEM STATEMENT 7
1.6.2 TALENT-RISK MANAGEMENT 8
1.6.3 COVID-19 8
1.6.4 LEADERSHIP IN THE AVIATION INDUSTRY 9
1.6.5 TALENT AND TALENT MANAGEMENT 9
1.6.6 CONCEPTUAL AND THEORETICAL FRAMEWORK 10
1.7. DEFINITION OF KEY CONCEPTS 11
1.7.1 Talent-risk management 11
1.7.2 Talent management 11
1.7.3 LEADERSHIP 12
1.7.4 LEADING CHANGE 12
1.7.5 GLOBAL PANDEMIC 12
1.7.6 COVID-19 12
1.8. DEMARCATION/DELIMITATION OF THE STUDY 12
1.9 OUTLINE ON RESEARCH PARADIGM, PHILOSOPHY AND METHODOLOGY 16
1.9.1 RESEARCH PARADIGM 16
1.9.2 RESEARCH METHODOLOGY AND DESIGN 17
1.9.2.1 Population 17
1.9.2.2 Sample method/technique and sample size 17
1.9.2.2.1 Non-probability Sampling 18
1.9.3 Data collection and instrument 19
1.9.4 The use of Interviews 19

1.9.5 Data collection/fieldwork 20
1.9.6 Data coding and analysis 20
1.10 ETHICAL CONSIDERATIONS 21
A. Informed consent 21
B. No harm to participants 22
C. Confidentiality and Anonymity 22
D. Seeking Permission 22
1.11 OUTLINE OF THE CHAPTERS 22
1.12 SUMMARY 23
CHAPTER 2 25
LITERATURE REVIEW 25
2.1 INTRODUCTION 25
2.2 TALENT-RISK MANAGEMENT FRAMEWORK 26
2.2.1 CONSTRUCTS OF TALENT-RISK MANAGEMENT 27
2.2.2 TALENT-RISK MANAGEMENT PROCESS 29
2.2.2.1 Recruitment and selection procedures 29
2.2.2.2 Training and development programs 30
2.2.2.3 Succession planning 30
2.2.2.4 Performance management systems 31
2.2.2.5 Employee engagement initiatives 32
2.2.2.6 Talent retention strategies 32
2.2.3.1 Health and safety concerns 33
2.2.3.2 Managing uncertainty 33
2.2.3.3 Work force reductions 34
2.2.3.4 Skills gap 34
2.2.3.5 Training and development 35
2.2.3.6 Retention and Engagement 35
2.2.3.7 Virtual management 36
2.2.4 LEADERSHIP COMPETENCIES NEEDED TO MANAGE TALENT RISKS 36
2.2.4.1 Adaptability 36
2.2.4.2 Communication 37
2.2.4.3 Resilience 37
2.2.4.4 Empathy 38
2.2.4.5 Strategic thinking 38
2.2.4.6 Collaboration 39
2.2.4.7 Innovation 39
2.2.5 The focus of the framework 39
2.2.5.1 Critical roles 40
2.2.5.2 Succession planning 40

2.2.5.3 Talent pools and pipelines 41
2.2.5.4 Competition 41
2.2.5.5 Benefits and rewards 41
2.2.5.6 Competency framework 42
2.2.5.7 Talent risks 42
2.2.5.8 Talent attraction 43
2.2.5.9 Talent retention 44
2.2.5.10 Talent management and development 45
2.3 THEORETICAL FRAMEWORK 47
2.3.1 Introduction 47
2.3.2 The contingency theory of leadership 49
2.3.3 Maslow's hierarchy of needs 50
2.3.3.1 Physiological needs 51
2.3.3.2 Safety needs 52
2.3.3.3 Love and belonging 52
2.3.3.4 Esteem 52
2.3.3.5 Individualisation 52
2.3.5 Constructs of the human capital theory 55
2.3.6 Enterprise risk management theory 55
2.3.6.1 Types of enterprise risk: 56
2.3.6.2 Elements of an enterprise risk management framework strategy and objective setting 56
2.3.6.2.1 Risk identification 57
2.3.6.2.2 Risk assessment 57
2.3.6.2.3 Risk response 57
2.3.6.3 Communication and monitoring 58
2.7 SUMMARY OF CHAPTER 59
CHAPTER 3 61
RESEARCH METHODOLOGY 61
3.1 INTRODUCTION 61
3.2 RESEARCH PHILOSOPHY 61
3.2.1 EPISTEMOLOGY 62
3.2.1.2 Choice in this study 63
3.2.2 Ontology 63
3.2.2.1 Choice in this study 64
3.2.3 Axiology 64
3.2.3.1 Choice in this study 65
3.3 RESEARCH PARADIGMS 66
3.3.1 Interpretivism 66
3.3.2 Positivism 67

3.3.3 Pragmatism 68
3.3.4 Choice for this study 68
3.4 THE LOGIC OF INQUIRIES 69
3.4.1 The deductive inquiry 69
3.4.2 The inductive inquiry 70
3.4.3 The abductive inquiry 70
3.4.4 Choice for this study 71
3.5 RESEARCH METHODS 71
3.5.1 Quantitative research method 73
3.5.2 Qualitative research method 73
3.5.3 The method adopted by this study 74
3.6 THE PURPOSE OF THE INQUIRY 75
3.6.1 Explorative design 76
3.6.2 Descriptive design 77
3.6.3 Explanatory design 77
3.6.4 The evaluative design 78
3.6.5 The combined research design 78
3.6.6 The choice of research design in this study 79
3.7 RESEARCH STRATEGIES 79
3.7.1 Phenomenology 80
3.7.2 Grounded theory 81
3.7.3 Case studies 81
3.7.4 Ethnography 82
3.7.5 The research strategy adopted by this study 83
3.8 RESEARCH PROCESS 83
3.8.1 Unit of Analysis 83
3.8.2 Target population 83
3.8.3 Sampling method 84
3.8.3.1 Non-Probability Sampling 85
3.8.3.2 Sampling size 86
3.8.3.3 Participants of the study 87
3.8.4 Data collection methods and instruments used 87
3.8.4.1 The choice in this study 88
3.8.4.2 Data collection procedure 88
3.8.5 Data Analysis 90
3.8.5.1 Familiarisation of the data 90
3.8.5.2 Data coding 91
3.8.5.3 Theme generation and review 92
3.8.5.4 Theme definition and naming 93

3.8.6 Writing up the data 93
3.9 PRINCIPLES OF TRUSTWORTHINESS 94
3.10 ETHICAL CONSIDERATIONS 95
3.10.1 Informed consent 95
3.10.2 Ensuring no risk or harm comes to participants 95
3.10.3 Ensuring confidentiality and anonymity 96
3.10.4 The attaining of permission 96
3.11 ELIMINATION OF BIAS 96
3.12 CHAPTER SUMMARY 97
CHAPTER 4 98
DATA ANALYSIS AND PRESENTATION OF FINDINGS 98
4.1 INTRODUCTION 98
4.2 RESEARCH QUESTIONS 98
4.2.1 Main Research Question 98
4.2.1.1 Sub questions 98
4.3 THEORIES USED AS ANALYTICAL LENSES 99
4.4 PRESENTATION AND DISCUSSION OF FINDINGS 99
4.4.1 Demographics of The Participants 99
4.4.3 Theme 1: Talent risk management framework 104
4.4.3.1 Availability of A Framework 105
4.4.3.2 Framework development 106
4.4.3.3 The focus of the framework 108
4.4.3.4 Summary of theme 1 110
4.4.4 Theme 2: Talent risk management processes 111
4.4.4.1 Talent recruitment 112
4.4.4.1.1 Talent pools 112
4.4.4.1.2 Talent attraction and sourcing 113
4.4.4.1.3 Benefits and rewards 114
4.4.4.2 Talent development 116
4.4.4.2.1 Assessing and identifying gaps 116
4.4.4.2.2 Succession planning 117
4.4.4.2.3 Competency framework and job profiling 118
4.4.4.3 Talent retention 119
4.4.4.3.1 Retention toolkit 120
4.4.4.3.2 Exit interviews 121
4.4.4.3.3 Employee wellbeing and a healthy work life balance 121
4.4.4.4 Measures in aligning leadership to TRM 122
4.4.4.4.1 Open communication 123
4.4.4.4.2 Leadership development and engagement 124

4.4.4.5 Assessing talent risks 125
4.4.4.5.1 Data from various sources 125
4.4.4.6 Preventative actions to manage TRM 126
4.4.4.6.1 Employee feedback 127
4.4.4.6.2 Succession planning 128
4.4.4.6.3 Mental health and well being 129
4.4.4.6.4 Remuneration and benefits 130
4.4.4.5 Summary of theme 2 131
4.4.5 Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management 131
4.4.5.1 Skillsets 132
4.4.5.1.1 Flexibility 133
4.4.5.1.2 Empathy and emotional intelligence 133
4.4.5.1.3 Digital acumen 135
4.4.5.1.4 Change leadership 136
4.4.5.2 Awareness 137
4.4.5.2.1 Awareness of factors 137
4.4.5.3 Summary of Theme 3 139
4.4.6 Theme 4: The competency of HR managers in the aviation industry during crisis. 139
4.4.6.1 Changes brought on by COVID-19 140
4.4.6.1.1 Remote working 141
4.4.6.1.2 Adaptability and flexibility 142
4.4.6.1.3 Talent management 143
4.4.6.2 Challenges experienced during COVID-19 144
4.4.6.2.1 Communication during times of uncertainty 144
4.4.6.2.2 Virtual management 146
4.4.6.3 Summary of Theme 4 147
4.4.7 Summary of findings 147
CHAPTER 5 149
INTERPRETATION OF FINDINGS AND DEVELOPMENT OF THE FRAMEWORK 149
5.1 INTRODUCTION 149
5.2 OBJECTIVES OF THE STUDY 149
5.3 INTERPRETATION OF FINDINGS 150
5.3.1 Sub-Objective 1: to determine the critical factors involved and the constructs to be included in the development of a talent-risk management framework. (Synonymous to theme 1: talent risk management framework) 150
5.3.2 Objective 2: To determine what talent-risk management processes are currently in place and where the gaps exist in the aviation industry. These findings can be used to plan mitigation for the gaps identified. (Synonymous to Theme 2: Talent-risk management process in Aviation Industry) 151

5.3.3 Objective 3: To explore the perceived competencies managers need in the aviation industry (skillsets, bias) to deal with talent-risk management. (Synonymous to Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management) 154

5.3.4 Objective 4: To explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 term. (Synonymous to Theme 4: The competency of HR managers in the aviation industry during crisis) 155

5.4 THE TALENT RISK MANAGEMENT FRAMEWORK 156

5.4.5 APPLYING THE THEORETICAL FRAMEWORK 159

5.5 SUMMARY OF THE CHAPTER 162

CHAPTER 6 163

CONTRIBUTIONS, RECOMMENDATIONS AND CONCLUSION 163

6.1 INTRODUCTION 163

6.2 RESPONDING TO THE RESEARCH PROBLEM 163

6.2.1 The Main Objective 163

6.2.2 The Main Research Question 164

6.2.3 Study sub-objectives 164

6.3 LIMITATIONS 165

6.4 MANAGERIAL RECOMMENDATIONS 166

6.4.1 Recommendations for the Selected Aviation Enterprises 166

6.4.2 General Recommendations 166

6.5 THESIS CONTRIBUTIONS 167

6.6 CONCLUSION 167

APPENDIX 1: PARTICIPANT INFORMATION AND CONSENT 194

APPENDIX 2: ORGANISATIONAL CONSENT – QATAR AIRWAYS 197

APPENDIX 3: ORGANISATIONAL CONSENT – SOUTH AFRICAN AIRWAYS 198

APPENDIX 4: ETHICS APPROVAL LETTER 199

APPENDIX 5: INTERVIEW SCHEDULE 201

APPENDIX 6: TURNITIN SUMMARY 203

APPENDIX 7: LANGUAGE AND TECHNICAL EDITING CERTIFICATE 204

TABLE OF FIGURES

Figure 1: Map Of Qatar 13
Figure 2: Map of Qatar Airways Routes 134
Figure 3: Map of South Africa.. 145
Figure 4: Map of South African Airways Routes 156
Figure 5: Talent management framework Source: Van Vulpen (2023)..................... 47
Figure 6: Fiedler's contingency model. Source: Sharan (2022)............................... 50
Figure 7: Maslow's hierarchy of needs. Source: McLeod (2023)............................. 51
Figure 8: Human capital model. Source: Nasib (2017).. 544
Figure 9: ERM framework. Source: Andrieive (2022)... 59
Figure 10: Target population versus sample 84
Figure 11: Screenshot example of the interview responses…………………………102
Figure 12: Talent risk management framework for the selected aviation enterprises
.... 157
Figure 13: A graphical presentation of the theoretical framework…………………..160

LIST OF TABLES

Table 3.1: Source: adapted from (Winit-Watjana, 2016) 62
Table 3.2: Ontology approaches 63
Table 3.3: Axiology illustration 64
Table 3.4: The different research paradigms 66
Table 3.5: The logic of inquiries 69
Table 3.6: The different types of research methods 72
Table 3.7 The comparisons between the different research methods 73
Table 3.8:The different research designs 76
Table 3.9: Research strategies 80
Table 4.1: Participant demographics 100
Table 4.2 Schedule of interviews 101
Table 4.3: Data coding into themes per participantSource: author's own………… 102
Table 4.4: Summary of Theme 1: Talent risk management framework 104
Table 4.5: Summary of theme 2: Talent risk management process 111
Table 4.6: Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management 132
Table 4.7 Summary of Theme 4: The competency of HR managers in the aviation industry during crisis 140

CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

Talent-risk management amalgamates two essential aspects of human resource management, including talent management and risk management. According to Trautman (2017), talent management is a purposeful strategic direction taken by managers to attract, train and retain people who have the skills, capabilities and attitudes congruent with the organisation's goals and will drive future operational excellence. Barkhuizen *et al.* (2014) asserts that talent management seeks to secure the right skills at the right time to have positive outcomes for the organization, whereas talent refers to an employee's skills and capabilities that bring value to the organisation in the present and the future (Trautman, 2017). Talent-Risk Management (TRM) is the process of assessing current technical and professional capacity, aligning the organisation around which risks are a priority and then taking mitigating action to level workloads or transfer knowledge and skills to reduce the highest risk. Talent refers to an employee's skills and capabilities that bring value to the organisation in the present and the future (Trautman, 2017).

It uses detailed, targeted data to monitor talent risk profiles and enhance the makeup and readiness of a team. It means the monetary impact of the risk at any time is known and having justifiable confidence that one can have enough of the right people with the right skill sets in the right place at the right time to stay productive, innovative and competitive (Gurria, 2020). Managers need to assess the risk of retaining or losing their most valuable talent. Thus, talented employees have the advantage of deciding which organisation to work for. Attracting talent, retaining it and getting the most productivity from it creates the challenge in managing talent risk. Hatem and Preve (2015) agree that the ability of a business to attract, develop and retain talent is highlighted by talent risk management in a competitive market. The global competition for resources has resulted in the “war of talents” (Sparrow, 2019).

Since early 2020, the Global Corona Virus Pandemic (hereinafter referred to as COVID-19) has negatively impacted the aviation industry as many airlines were forced to be grounded (ACI, 2020). This has meant that the aviation industry's employees could not continue to work during the COVID-19 restrictions. This study relates to the management of talent risk in the aviation industry. It seeks to develop a talent-risk management framework for the industry to support both currently and in the future when faced with similar pandemics or other crises.

As a response to the outbreak of COVID-19, many businesses incorporated measures to counter the outbreak's impact and its related reactions from economic actors (individuals, authorities and other businesses) on their business operations. However, no empirical studies were conducted to investigate the effectiveness of those measures (Anakpo & Mishi, 2021). According to Murithi (2020), the pandemic led to a negative growth of -5.1% by 2020 in Africa, making this the continent's worst recession in 25 years. Bano *et al.* (2021) highlighted the need for emergency succession planning during the COVID-19 pandemic to ensure business continuity, emphasizing that organisations cannot ignore employees as they are the most valuable asset. According to Baharin and Hanafi (2018), employees are the epicentre of an organisation and emphasize the importance of employee retention in keeping organisations on the right track. It is in line with this assertion that Ako-Nai (2020) states that strong and innovative leadership matters in an organisation's success or failure, especially post COVID-19.

Talent managers are compelled to change the nature of talent management due to changing environmental conditions (d'Armagnac, Ariss & N'Cho, 2021). In aviation, vital human resources are referred to as their talent when a narrow perspective of the definition of talent is observed (Aguinis & Burgi-Tian, 2021). Regardless of a company's location or size, attracting and retaining top talent ranks as the number one internal stressor for CEOs and other C-suite executives globally. This gap in attracting and retaining talent with scarce skills was already an issue across several industries before the COVID-19 crisis (Gamage, 2020). When the world was experiencing economic improvement, aviation growth continued to rise in the pre-COVID-19 era. The number of skilled and qualified graduates from traditional suppliers declined due to competition from other industries.

A study conducted by Wensveen, Professor of Air Transportation at Purdue University in 2017 revealed that there was already a significant gap in aviation talent with the following estimations: “according to the Boeing Long-Term Market Forecast (2016-2035), the global aviation industry will need to hire more than 2 million aviation personnel. It is estimated that 617,000 commercial pilots, 679,000 maintenance technicians and 814,000 cabin crew will be required”. The pandemic has resulted in a change in the need for aviation talent risk management. Due to the volatility of the aviation industry and many airlines grounded during the COVID-19 pandemic, the focus was on cost containment resulting in top talent seeking more reliable opportunities. Based on this argument above, it can be deduced that there is an imbalance in aviation talent supply, which Gamage (2020) supports.

Risk is about uncertainty, events that can happen in the future and outcomes different from original expectations. Organisational leaders tend to have a negative attitude towards risk, considering it as something dangerous that might negatively affect them. Managing talent risk is crucial for the firm, but in the reality of emerging economies, it also becomes a matter of national policy, allowing countries to affect their competitiveness dramatically. In some emerging economies, it is difficult to attract talent as the talent pool shrinks. When crises flare-up, a typical issue in some developing countries, skilled professionals seek job opportunities abroad. In such a context, talent risk management strategies become critical (Gurria, 2020).

Management within the aviation industry faced radical change and pivoted from their usual way of managing talent to managing the industry and its employees through a crisis. In the past, during the Gulf war, the 9/11 disaster and the global economic crisis that began in 2008, the aviation industry responded to these crises by restructuring the costs, rethinking the lease or ownership of the aircraft and removing routes and destinations not frequently traveled (Silling, 2019). There has been a limited focus of literature in this aviation sector and talent-risk management (Sikander, 2019). A study conducted on talent management in turbulent times concluded that talent management is not well documented in academic literature (d'Armagnac, Ariss, & N’Cho, 2021). Sikandar (2019) further attests that there is an academic knowledge gap within the aviation industry. Gurria (2020) concurs that the COVID-19 pandemic has added a burden to talent management practices. This study was able to find literature around talent management, talent risk management; the aviation industry; and the COVID-19 pandemic. However, not much literature was available on Talent risk management in the aviation industry during the COVID-19 pandemic.

This study bridges that gap about talent risk management, the principles known about talent risk and what is unknown about the management of talent and its risks. The COVID-19 pandemic certainly presented a talent management crisis in the global aviation industry (Gurria, 2020). The establishment of a talent-risk management framework can assist managers in the aviation industry in managing talent during periods of radical change. The leadership skills required to manage people during the global pandemic and the uncertainty associated with the outcomes of such a new phenomenon are most important as employees will require much more support and reassurance that they will not lose their jobs (Najm & Manasrah, 2017). The future of the aviation industry remains uncertain, creating anxiety among employees and managers (Cretu & Lova, 2015). The anxiety and stress experienced by aviation industry employees put the management of all its talented employees at risk as staff starts to explore career options outside the industry. Should the exodus of airline employees start, then the management of employees is placed at risk (Gamage, 2020).

1.2 PROBLEM STATEMENT

The premise of this study is set in the nature of the COVID-19 pandemic, which has had a severe negative impact on air travel being brought to a complete halt. During the COVID-19 pandemic, in April of 2020, 66% of the passenger flights were grounded, with more than a million jobs in the airline industry lost (Netnews, 2020). One of the key risks identified is the management of its specialist and highly skilled pilots, engineers, technical teams and specialist back-office administrative employees (Dungarwalla, 2021). This risk relates to talent risk management as a discipline within the broader human capital framework (d'Armagnac, Ariss & N'Cho, 2021). The concept of human factors in the aviation industry deals with understanding employees' capabilities and limitations and putting measures in place, like policies and procedures to improve performance (Bhugalia, 2020). It would be safe to assume that the aviation industry would manage talent during this crisis (COVID-19, Global Pandemic) as they have many tools to manage risk in place. However, many of the engineering and technical aviation tools do not relate to human capital management. The general problem is that many managers experienced challenges in talent-risk management in the aviation industry (Barkhuizen *et al*., 2014), and this was intensified during the COVID-19 lockdown term, which commenced in 2019.

The problem this study investigates is the lack of a talent-risk management framework suitable for the aviation industry to ensure they do not have a talent crisis in times of risk situations, such as was experienced during the global COVID-19 pandemic (d'Armagnac, Ariss & N'Cho, 2021). In the absence of a talent-risk management plan aviation managers do not have the guidelines to equip them with the skills and specialist knowledge to manage talent during a pandemic (Bhugalia, 2020). This lack of talent-risk management could lead to aviation employees looking for employment elsewhere, causing a talent drain in the aviation industry. The main aim of this study is to develop a talent-risk management framework that will better equip aviation managers to optimally manage their critical human resources to deliver their goals.

1.3 RATIONALE AND SIGNIFICANCE OF THE STUDY

According to Trautman (2017), managers find it challenging to manage talent risk mainly because they do not understand their capabilities, limitations or the value that they bring to the organisation. Managers in the aviation business must understand what management practices and leadership styles can be employed to supplement talent management in order for these practices to result in increased employee retention and performance. (Hancock & Schaninger, 2020). Managers need to prioritise talent risk management to mitigate their human capital risks (Trautman, 2017).

Likewise, all managers may experience similar challenges, be it during a pandemic or another severe crisis hence they need to acquire the appropriate knowledge and skills to mitigate such risks. These skills can be utilised to improve employee productivity in the organisation (Hancock & Schaninger, 2020). Acquiring knowledge and abilities in talent-risk management can help high-potential individuals grow and keep their skills for future responsibilities and promotions within their particular firms. The contribution emanating from the study is alternative talent-risk management strategies and practices as alluded by the Covid-19 pandemic within the aviation industry both locally and globally to leverage and optimise employee performance. Lastly, this study contributes to the body of knowledge in talent management and should serve as secondary data in academia for future academics and students researching a related topic.

1.4 OBJECTIVES

The objectives stated for this study are linked to solving the research problem stated.

1.4.1 MAIN OBJECTIVE

The main objective of this study is to develop a talent-risk management framework for the selected aviation enterprises.

1.4.2 SUB-OBJECTIVES

To fulfil the main objectives and significance of the study, the research is guided by the following sub-objectives:

- To determine the critical factors involved in the development of a talent-risk management framework for the aviation industry as indicated in the literature.
- To determine what talent-risk management processes are in place and where the gaps exist in the aviation industry.
- To explore the perceived competencies managers' need in the aviation industry (skill sets, bias) to deal with talent-risk management.
- To explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 pandemic.

1.5 RESEARCH QUESTIONS

The following research questions are aligned with the study objectives above and states the specific questions to be answered in solving the problem stated.

1.5.1 MAIN RESEARCH QUESTION

What constructs are to be included in a talent-risk management framework that will assist managers in the aviation industry in dealing with talent crises based on their experiences from the COVID-19 pandemic?

1.5.2 Sub-questions

The sub-questions below are supporting the answer to the main question.

- What are the critical factors involved in the development of a talent-risk management framework for the aviation industry as indicated by the literature?
- What talent-risk management processes are in place to meet the needs of talent in the aviation industry?
- What do managers in the aviation industry (skill sets, bias) perceive as their needed competencies to deal with talent-risk management as exposed during the COVID-19 pandemic?
- What talent-risk management challenges are experienced by managers in the aviation industry during the COVID-19 pandemic?

1.6 LITERATURE REVIEW OUTLINE SUPPORTING THE PROBLEM STATEMENT

This section highlights the core of the literature on talent-risk management and how it may or may not impact the aviation industry during a global pandemic. A deep dive into the literature to examine the impact of the risk to talent that the pandemic created as well as the lack of talent as a risk. Literature is abundantly available on change leadership, talent management, risk management, leadership in the aviation industry and talent management in the aviation industry (Hassan, 2020). In conducting the literature review from 2019-2023, it was found inadequate to support the aviation talent-risk management during a crisis or a global pandemic. This study addresses this gap in the literature on what is known about talent-risk management and what is unknown about this human capital discipline in the aviation industry.

1.6.2 TALENT-RISK MANAGEMENT

Talent-risk management amalgamates two fundamental aspects of human resource management – talent management and risk management. Talent-risk Management (TRM) is the process of assessing your current technical/professional capacity compared to the demand, aligning your organisation around which risks are a priority, and then taking mitigating action to level workloads or transfer knowledge and skills to reduce the highest risk (Trautman, 2017). This study examines the risks as a result of the crisis impacting on the talent that needs to be managed and the risk posed as a result of a lack of talent management during crisis and thus crisis risks are not managed, impacting talent.

According to Trautman (2017), there are three stages to talent-risk management:

1. *Assessing the risks to talent*: this is done by measuring the data to assess the talent-risk accurately.
2. *Aligning on the Talent-risk Priorities*: manager's use the data collected to collate the talent-risk to the talent pool to discern the talent they have versus the needed talent. The focus points are risk and priority.
3. *Mitigating the Talent Risk*: mitigating the key talent risks identified from the above step. This is done by using teachable moments or learning on the job by structured knowledge transfer (Trautman, 2017).

1.6.3 COVID-19

The Coronavirus (COVID-19) caused by SARS-CoV-2 is an infectious disease spread by droplet transmission, causing respiratory infections and a host of other multi-organ illnesses since its emergence in December 2019. It has caused millions of deaths worldwide and has left survivors with lasting health issues (Sohrabi, 2020) as it is a pandemic that requires global collaboration in order to be eradicated due to the mode of transmission (WHO, 2020).

1.6.4 LEADERSHIP IN THE AVIATION INDUSTRY

Leadership is about being able to inspire and motivate your subordinates in a way that brings out the best in them. Leaders create safe learning and work environments that enable employees to develop and share innovative ideas (Sisman, 2016). A case study of the Hawker Sidley Nimrod XV230 accident on September 2, 2006, near Kandahar in Afghanistan revealed that leadership is a critical aspect of aviation safety as they are responsible for enforcing the organization's vision, strategic objective setting and monitoring the achievement of those objectives. “It was concluded that operational airworthiness is directly dependent on the leadership ability to provide direction, workplace culture, continued learning and establish risk management systems for safe and airworthy operations” (Ayiei *et al.,* 2020).

1.6.5 TALENT AND TALENT MANAGEMENT

Trautman (2017) refers to talent as an employee's skills and capabilities that bring value to the organisation in the present and the future. Barkhuizen *et al*., (2014) state that an employee as talent must align their values and vision with that of the organisation, which works towards a mutual strategic goal.Talent management is a purposeful strategic direction taken by managers to attract, train and retain people who have the skills, capabilities and attitudes that are congruent with the goals of the organisation that will drive future operational excellence. Talent management looks to secure the right skills at the right time to have positive outcomes for the organisation (Barkhuizen *et al*., 2014). Talent management has always been one of the most challenging aspects of human resource management and the uncertainty of the global pandemic makes talent retention difficult (Aligarh & Haque, 2017). Therefore, managers should respond to risks that can influence talent management by making the best use of the talent at hand by developing talent according to the strategic goals of the organisation to retain in the long term.

1.6.6 CONCEPTUAL AND THEORETICAL FRAMEWORK

The theories that support this study are - The Maslow's Motivation Theory of Needs; Contingency Theory of Leadership; Human capital theory and Enterprise risk management theory are used as basis for this study. These theories are discussed in detail in Chapter 2.

THEORY	DEFINITION AND RATIONALE
Maslow's Motivation Theory of Needs	Abraham Maslow proposed Maslow's hierarchy of needs as a psychological theory. It implies that human wants can be classified in a hierarchical manner, with basic physiological demands at the bottom and higher-level needs at the top (Matthew, 2019). During the COVID-19 pandemic, these needs were threatened with more than one million job losses in the airline industry (Netnews, 2020). Employees feel safe in a job or in an organisation that considers their well-being and professional development needs. The researcher believes that this theory brings out the element of attraction in an organisation. Employees can be retained for a more extended period when there is scope for professional development.
Contingency Theory of Leadership	Contingency leadership theories focus on the situation that brings about specific leadership traits and qualities (Fiedler, 1978). Leadership styles may differ between individuals but the consensus is that the leaders in the aviation industry are dynamic and quick to respond (Ayiei et al. 2020) which is why this theory was used in this study.
Human capital theory	This theory considers the skills, abilities and knowledge of the employee. The human factor (talent) as organizational resource is seen as the most valuable assets of an organisation (Muriithi & Makau, 2018). If the organisation invests in this talent and provides development, the long-term benefit would be retaining staff and reducing the risk of losing valuable and scarce talent. When employees feel supported, they are motivated to perform. Employees' higher productivity leads to better organisational performance and a culture of job satisfaction and well-being (Savarimuthu & Jothi, 2020). This theory relates to the talent management aspect of the study.

Enterprise risk management theory	Enterprise risk management is a management strategy that understands, identifies and prepares for the unexpected: dangers and hazards that are not part of the standard operating policies and procedures (Peterson, 2019). This theory would address the risk aspect of talent-risk management for ease of use during a crisis. It can be applied to dynamic situations, like the changes that the COVID-19 pandemic has brought about (Florio, 2017).

1.7. DEFINITION OF KEY CONCEPTS

1.7.1 Talent-risk management

Talent-Risk Management (TRM) is the process of assessing current technical and professional capacity compared to the expected long term employee demand, aligning your organisation around which risks are a priority and then taking mitigating action to level workloads or transfer knowledge and skills to mitigate the substantial risk (Gurria, 2020).

1.7.2 Talent management

Talent management is the acquisition, retention and development of employees in an organisation that drives success through strategic performance (Aligarh & Haque 2017). Al-Dalahmeh *et al.* (2020) defines talent management as selecting the right people for the right positions. On the other hand, Latif *et al.* (2020) defines TM as "the implementation of integrated strategies or systems designed to increase workplace productivity by developing improved processes for attracting, developing, retaining and utilising people with the required skills and aptitude to meet current and future business needs". The researcher concurs with Aligarh and Haque (2017) that talent management entails acquiring, developing and retaining talent to optimise performance.

1.7.3 LEADERSHIP

Leadership is the process of defining the appropriate authority that is responsible for driving success in an organisation. Effective leaders empower employees to succeed and remain engaged throughout their employment in the organisation (Cretu & Lova, 2015).

1.7.4 LEADING CHANGE

Leaders are equipped with tools and strategies to initiate and sustain change initiatives. Change has a better chance of being sustained if the leadership is vested in the change and can drive the initiative successfully while supporting subordinates (Sisman, 2016).

1.7.5 GLOBAL PANDEMIC

A pandemic that requires collaboration on a global scale to be eradicated. The mode of transmission is such that it requires the world to halt and note that no one is safe until everyone is safe (WHO, 2020).

1.7.6 COVID-19

The Coronavirus (COVID-19) caused by SARS-CoV-2 is an infectious disease spread by droplet transmission, causing respiratory infections and a host of other multi-organ illnesses since its emergence in December 2019. It has caused millions of deaths worldwide and has left survivors with lasting health issues (Sohrabi, 2020).

1.8. DEMARCATION/DELIMITATION OF THE STUDY

This study is undertaken in the public domain. This study examined two different airlines: one that flew throughout the pandemic and another that was grounded and undergoing business rescue and organisational restructuring. The researcher wanted to investigate the differences and similarities in the challenges with regards to talent risk management between these two airlines that were affected so differently during the pandemic. The two airlines used are South African Airways (SAA) in South Africa (Figure 3 and 4) and Qatar Airways based in Qatar (Figure 1 and 2). Permission was granted by both airlines to conduct the study.

Figure 1: Map of Qatar

Source: World Atlas (2021)

Figure 2: Map of Qatar Airways Routes

Source: travels.kilroy.net

Figure 3: Map of South Africa

Source: World Atlas (2021)

Figure 4: Map of South African Airways Routes

Source: Airline.routemaps.com

1.9 OUTLINE ON RESEARCH PARADIGM, PHILOSOPHY AND METHODOLOGY

A brief overview is provided in this section, with an in-depth discussion on research methodology in Chapter 3.

1.9.1 RESEARCH PARADIGM

A research paradigm can be defined as how the researcher sees the world. These are made up of beliefs and principles (Davies & Fisher, 2018). An Interpretivist approach, also known as the phenomenological research paradigm will be applied in this study, (Tracy, 2020) because of the subjective characteristics of the study and how this is then interpreted.

1.9.2 RESEARCH METHODOLOGY AND DESIGN

This study utilised a qualitative research strategy based on a phenomenological research paradigm (Tracy, 2020).

The research design, according to Saunders *et al.* (2016) is the entire plan or strategy that a researcher makes to address their research question or examine a specific issue. It describes the procedures, methods and strategies that were utilised to gather and analyse data in order to generate accurate and trustworthy results. As a qualitative study, the design was exploratory in nature seeking answers to the research questions from the participants involved in the real world of the study context of aviation and talent management. The study participants were human resource managers in the aviation industry, who are highly knowledgeable about the industry and are considered subject matter specialists hence their understanding of talent risk management was pivotal to gain a deeper understanding of the research challenges.

1.9.2.1 Population

This study included human resource managers in the two airlines, SAA and Qatar Airways. This will be further discussed in detail in Chapter 3.

1.9.2.2 Sample method/technique and sample size

In a research project, the sampling method/technique and sample size are determined by a variety of factors, including the research objectives, population size, available resources and the desired level of precision. Choosing the right sample size is critical for ensuring the reliability and generalizability of study findings (Sekaran & Bougie, 2016). The sample size should be high enough to offer enough data providing trustworthy findings without becoming impractical or resource intensive. A sampling strategy is made up of three steps: choosing a sampling framework, choosing a sampling technique and choosing a sample size (Pham, 2017). The target population is represented by the sample framework from which participants were chosen in this study. Non-probability sampling was used for this study and the sample strategy was to pick individuals on purpose utilising judgmental sampling. There are two types of sampling techniques: probability or random sampling and non-probability sampling. The participants were purposively selected, using a non-probability sampling technique, based on inclusion and exclusion criteria.

1.9.2.2.1 Non-probability Sampling

Non-probability sampling is a study sampling technique in which participants are not chosen at random. The researcher does not know the likelihood of selecting any single individual from the population while using non-probability sampling. According to Taherdoost (2016), non-probability sampling techniques include the following:

- *Convenience sampling*: involves selecting participants based on their availability and accessibility. This strategy is convenient, but it may add bias because it relies on conveniently accessible individuals.
- *Purposive sampling*: participants are chosen for specific features or criteria that are relevant to the study subject. This strategy enables researchers to target specific individuals with the desired characteristics or experiences.
- *Snowball sampling*: participants are originally chosen based on particular criteria and then they suggest other potential participants who meet the criteria to the original group. This strategy is excellent for researching difficult-to-reach communities.
- *Quota sampling*: participants are chosen to correspond to specific traits or proportions of the population. Quotas are assigned based on characteristics such as age, gender or occupation.

Non-probability sampling methods are frequently employed in qualitative research or when obtaining a representative sample from the community of interest is problematic. Non-probability sampling, on the other hand, may add biases and limit the generalizability of the findings to a larger population (Saunders *et al*., 2016). The non-probability, purposive sampling technique was employed for this study and participants were chosen on purpose using judgmental sampling. According to Etikan (2016), the participants were carefully chosen for this study, they were human resource managers from each airline. Six human resource managers were chosen from SAA and six from Qatar Airways. Therefore, the chosen sample size was 12 participants, six from each airline to have a balance. This was just a guide as data were collected until saturation sets in and no new data came to the fore.

1.9.3 Data collection and instrument

Data collecting instruments are used by researchers to define the procedures and measures utilised in data collection (Sekaran & Bougie, 2016). The research instrument used is determined by its compatibility to the type of research to be done (Terrell, 2016). Text-based methods such as interview schedules or guides, as well as direct or participant observation are used in qualitative studies (Tracy, 2020). The researcher used an interview guide with semi-structured interviews in this study to gain a thorough understanding of the research topic. There was no direct participant observation.

1.9.4 The use of Interviews

Interviews are frequently utilised in research across many areas where discourse is necessary as a form of data collection (Saunders *et al*., 2016). They enable more depth and comprehension of the qualitative research context. Individual or group interviews can be organised, semi-structured or unstructured in qualitative research interviews (Sekaran & Bougie, 2016). The three forms of interview schedules are structured (a pre-determined set of questions is used and repeated in the same sequence), semi-structured (questions are flexible) and unstructured (questions are flexible). There are also unstructured interviews with no set questions and the researcher has flexibility in asking various types of probing questions (Tracy, 2020). Additional questions may be asked by the researcher to gain more information or for clarification. This study used semi-structured questions in the interview process as it allowed further questions for clarity and attaining the desired quantum of answers.

1.9.5 Data collection/fieldwork

The process of interviews collected data via Microsoft Teams. All respondents received emails in advance to inform them of the study, request permission to conduct the study via Microsoft Teams and request permission to record the session for analysis. They were asked to provide convenient times and dates for the interview. The researcher then sent out invites for these sessions and requested a response. The data is protected by storing the name and identifiers of the participants separately from the information extracted from the interview and the interview itself on an external hard drive. Although an interview schedule was in place to ensure that the same questions were posed to all respondents, interviews were semi-structured to allow for flexibility. Probing was done and data were recorded electronically via Microsoft Teams. Consent for recording was attained before the interview.

1.9.6 Data coding and analysis

To make sense of the data acquired, an in-depth evaluation of information is conducted and thorough methodologies are developed to assess, summarise and interpret the relevant theory and literature (Leavy, 2017). Data familiarisation, categorization and initial code development are all steps of data analysis. The data analysis technique employed is determined by the sort of research being undertaken, either quantitative or qualitative. Quantitative research uses statistical analysis, while qualitative research makes use of thematic analysis (Saunders *et al*., 2016). Interview notes, voice recorded transcriptions and video records are all examples of qualitative data (Sekaran & Bougie, 2016).

Thematic analysis was used to identify common themes and patterns in the data material for the qualitative study conducted utilising the interpretivism strategy. Saunders *et al.* (2016) define thematic analysis as a methodical and approachable procedure that searches for common themes or patterns in large and small qualitative data sets. Coding is used to group data that has similar meanings and each unit of data inside a data item is assigned a code that summarises what the extract signifies (Linneberg & Korsgaard, 2019).

The emphasis in qualitative methodology is on trustworthiness. Trustworthiness is concerned with the research project's legitimacy and accuracy, as well as the veracity of its assertions and findings (Leavy, 2017). It is made up of various components, including credibility, transferability, reliability and confirmability. There is also reflexivity and authenticity (Patton, 2015). According to Terrell (2016), credibility relates to whether the study's conclusions are credible or dependable from the perspective of a participant. The ability to transfer research findings from one setting to another is defined as transferability (Leavy, 2017). Dependability is concerned with consistency and the ability to duplicate test results. Confirmability refers to the researcher's neutrality and ability to portray all perspectives fairly in the research by linking assertions, findings and interpretations (Patton, 2015).

1.10 ETHICAL CONSIDERATIONS

According to Saunders *et al.* (2019), the rules and guidelines that researchers must follow to ensure that their studies are ethical and responsible are referred to as ethical concerns in research. These issues include safeguarding the rights, welfare and dignity of participants in the study process. Following these ethical concerns helps to guarantee that research is conducted ethically, that participants' rights are respected and that knowledge is advanced responsibly. The ethical standards that were applied in the study are listed below. The principles are informed consent, no harm, confidentiality and anonymity and permission.

A. Informed consent

Assuring that participants' have provided informed consent. Consent is defined as orally or in writing accepting to engage in the research (Resnik, 2015). It is an inherent research requirement that informed consent is obtained. The researcher ensures that the participants received clear communication about the research's purpose and scope. All participants were given all relevant information about the study, outlining the researcher's expectations and informed consent was obtained.

B. No harm to participants

Making certain that the participants are not harmed in any way. It is the researcher's responsibility to ensure that the participants are not harmed during the research (Creswell & Creswell, 2018). Precautions were taken to avoid asking potentially intrusive questions that may cause emotional or psychological harm.

C. Confidentiality and Anonymity

The researcher is responsible for maintaining confidentiality, which is normally accomplished by remaining anonymous. Creswell and Creswell (2018) defined anonymity as hiding the participant's identification in a non-derogatory way. Furthermore, assurances were given to participants that their responses will not be made available to the leadership of their respective companies. As a result, individuals seeing the findings will be unable to determine which participant stated which viewpoint. Anonymity was maintained in this study by intentionally blanking out the participants' names, identity numbers or staff names. All participants have the option of withdrawing from the study at any time without any implications.

D. Seeking Permission

Making certain that approval is acquired, the researcher sought authorization from the airline companies' management to perform the study. The authorization letter is included in the study. The researcher also obtained ethical clearance from the North-West University.

1.11 OUTLINE OF THE CHAPTERS

The six chapters of this study are:

Chapter 1: Introduction and Background

The purpose of the research is explained in the introduction and an overview of the subsequent chapters is offered. The background to the problem, the aim of the study, research objectives and questions, the research problem and the significance of the study, a preliminary literature review, definition of key concepts, the research paradigm, methods and methodologies, ethical considerations, an outline of the thesis, limitations of the research and a summary are among the topics are covered.

Chapter 2: Literature Review

The literature review provides an in-depth and critical examination of existing research relevant to the study. The scholastic literature relates to TRM within the aviation industry during global pandemics.

Chapter 3: Research Methodology

The emphasis of this chapter is on selecting the best study design and methodology. The research paradigm, research approach, research technique, data collection instrument selection and data analysis will all be discussed.

Chapter 4: Data Analysis and Presentation of Findings

The chapter presents the results and an in-depth interpretation of the findings. A critical review of the literature review will also be presented to show correlation between the findings and the available literature.

Chapter 5: Interpretation of Findings and Development of the Framework

This chapter entails details of the framework that was developed because of this study.

Chapter Six: Contributions, Recommendations and Conclusions

Based on the investigation and study, conclusions are reached in this chapter. The study's contributions are highlighted and recommendations are made.

1.12 SUMMARY

This chapter introduces the study and provides the context to why the study is relevant. The problem statement is outlined, the aims and objectives are listed and subsequently the research questions are formulated. Preliminary literature is briefly discussed under talent management, TRM, leadership, and the COVID-19 pandemic effects on these. The theoretical foundations that underpin this study are discussed: human capital theory, Maslow’s theory of motivation, contingency theory and enterprise risk management theory. The chapter also briefly discussed the research methods, data collection and analysis. The next chapter will discuss the literature review and the theoretical framework that underpins the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will critically review and appraise the literature from 2019-2023 available on talent-risk management, talent-risk management in the aviation industry and talent-risk management during global crises. This chapter validates the research topic's argument and reinforces the study's research questions and objectives. It also examines what is known and what is unknown around the topic and identified gaps in the available literature. The scholastic literature relates to the risks as a result of the crisis impacting on the talent that needs to be managed and the risk posed as a result of a lack of talent management during crisis and thus crisis risks are not managed, impacting talent.

The purpose of the literature review in this study is to:

- Determine what talent-risk management processes are currently in place and where the gaps exist in the aviation industry.
- Determine the critical factors involved in the development of a talent-risk management framework for the aviation industry.
- Explore the perceived competencies managers need in the aviation industry (skill sets, bias) to deal with talent-risk management.
- Explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 pandemic.

The key words used to generate searches for the literature review were "talent risk management", "leadership challenges", "talent management", "aviation leadership", and "COVID-19". The search was further expanded using key words from the research questions and objectives. Academic literature was sourced from various search engines, including Google Scholar, NWU library and peer reviewed articles from academic journals.

The literature review will be presented in the following framework:

- Talent-risk management framework;
- Talent-risk management process;
- The awareness, perceptions and understanding of factors affecting talent-risk management;
- The competency of HR managers in the aviation industry during crisis; and
- Conceptual and theoretical framework.

2.2 TALENT-RISK MANAGEMENT FRAMEWORK

Trautman (2022) asserts that frameworks for talent-risk management are essential for structuring an organization's plan and for enhancing operational effectiveness. Talent management risks are decreased and results are improved when strong frameworks are in place. According to Jantjies (2022), a talent-risk management framework's goal is to draw in, nurture and hold onto talent, particularly those who have been identified to fill critical positions that could open up due to retirement or the voluntary or involuntary termination of the present incumbent. By describing the risks and the steps to take to reduce them, a proper talent risk management framework created specifically for the aviation industry will improve efficiency in the organization's present talent pool (Gurusinghe, Arachchige & Dayarathna, 2021).

According to Kaliannan *et al.* (2023), the development of a talent-risk management framework would largely contribute to successful outcomes. A talent-risk management framework specifically for the aviation industry could not be found using various search engines. A review of the documentation at selected aviation enterprises revealed that a talent risk management framework was not being used. Managers did not prioritize the use of talent risk management frameworks during the COVID-19 pandemic as the business landscape was so dynamic at the time (d'Armagnac, Al Ariss & N'Cho, 2022).

According to a study conducted by McKinsey in 2015, companies have acknowledged a possible deficiency of proficient risk-management experts due to the rising intricacy of regulations and business operations. To mitigate this gap in skills, companies can implement specific tactics that enhance their collective and individual talent management abilities. As an initial step, companies can take a proactive approach by assessing their present risk talent management situation and compare it with industry benchmarks and desired talent management standards. Long-term plans have been recognized as effective ways to elevate talent management capabilities, which ensure that organisations have a competent and well-qualified workforce to navigate present and future business landscapes.

The McKinsey's talent risk management framework consists of the following initiatives:

- Attract and recruit talented employees with compelling stories for working in risk management.
- Train and develop employees by institutionalizing holistic learning and cross-company trainings.
- Groom employees into well-rounded leaders by offering clearly defined career paths.
- Reward employees effectively based on risk-specific and diverse performance measurements and incentive systems.
- Foster connectivity across the entire company with dedicated cross-functional initiatives.

Businesses have the opportunity to integrate technology into their talent risk management frameworks to equip line managers with resources and strategies for effectively assessing and mitigating workforce risks. For instance, in the case of Genpact, the utilization of the Amber AI tool can alert managers to potential employee turnover, prompting the implementation of specific measures to address underlying causes of dissatisfaction and enhance retention efforts. These measures may involve enrolling employees in internal learning programs to foster their growth and recommending potential role transitions based on an analysis of performance trends, tenure in current positions, and levels of engagement (Fuller, 2023).

2.2.1 CONSTRUCTS OF TALENT-RISK MANAGEMENT

According to Trautman (2022), there are three constructs of a TRM framework: Assess the talent-risk, align the talent-risk priorities, and mitigate the talent risks. However, the findings of this study have established four constructs of a talent risk that includes measuring and monitoring as the fourth construct.

Literature reviewed from 2019-2023 showed the following constructs applicable to TRM as indicated in the following frame:.

Constructs of talent-risk management	
Assess the talent-risk	It is important that senior management are aware of what their critical roles are in an organization. According to Trautman (2022), senior executives have “technical fog” which alludes to them not being aware of what their top talents’ skills are. Lin and Wang (2022) states that organisations are unable to assess the talent risks because they are unaware of why people leave the organisation. A starting point would be to conduct exit interviews to understand why it is that people are leaving. This data may be used to assess talent risks. It must be readily available and reliable and be inclusive of information related to critical skills at all levels required by the organization. Leaders need to be aware of their critical roles and be able to identify top talent that may be developed for these roles to adequate manage talent risks.
Align the talent-risk priorities	The leadership in any organisation needs to be aligned to the talent risk priorities. Data from the assessment phase were presented to the leadership by the managers and feedback is provided and received timely. These risks are then discussed on a regular basis so that the leadership is aware of the talent risks at any given time. The focus of these meetings is to discuss which risks should be prioritized (Trautman, 2022). King and Vaiman (2019) agree that leadership buy-in is critical to ensure that adequate mitigation plans are put in place to reduce the risk of mismatched skills to roles of employees.
Mitigate the talent risks	A survey conducted by McKinsey in 2013 highlighted that people and performance management are perceived to play a pivotal role in the risk management function. Employees need not only have technical skills, but innovation, creativity, flexibility and being adaptive to changing situations are critical elements to consider when managing talent risks. Trautman (2022) asserts that the most

	effective way to mitigate talent risks is by using a structured knowledge transfer approach. The priority risks as discussed in leadership meetings will be identified and the process of structured knowledge transfer between the talent currently in the role and the top talent identified to succeed in this role will take place.

2.2.2 TALENT-RISK MANAGEMENT PROCESS

TRM is the strategic process of assessing and evaluating an organisation's talent risks at any given point for a three to six-month period and comparing the talent available as compared to the needed talent to achieve the business objectives (Trautman, 2022). Hatem and Preve (2015) adds that TRM features the organisation's ability to attract, develop and retain talent. Managers need to assess the risk of losing their most valuable talent and ensure that measures are put in place to mitigate these risks. In the aviation industry, TRM processes typically include a range of strategies and practices aimed at identifying, attracting, developing and retaining talented individuals. According to Adams (2021), the disruption brought about by the global pandemic highlighted that a lot of organisations were not risk averse and therefore could not manage talent risk during this volatile period.

2.2.2.1 Recruitment and selection procedures

According to Ihsan, Rahman and Saeed (2021), it is crucial that the correct candidate with the correct skills set, attitude and qualifications are hired for the position. This process is therefore initiated with the job analysis from which the job description can be extracted. The job can then be posted internally, externally or both. Several sourcing methods can be used to recruit the largest and most specific pool of talent for the specific position. Al-Alawi and Al-Hadad (2021) asserts that the applications are screened to ensure that only applicants with the minimum requirements are filtered through to the next round of selection. Shortlisted candidates are invited for an interview, if applicable, further cognitive tests are administered before a decision is made and an offer is put on the table (Shanker, 2020). Every effort is made to ensure that the right candidate gets the right job.

2.2.2.2 Training and development programs

Barkhuizen and Gumede (2019) advocate that to improve their employees' skills and expertise, aviation businesses frequently invest in extensive training and development projects. Technical skills, safety regulations, customer service, leadership and other important topics may be included in these programmes. Aviation professionals must follow the laws and standards established by aviation authorities (Rudi, Kiefer & Raubal, 2020). Training programmes guarantee that personnel are aware of these requirements and can carry out their responsibilities in accordance with them (Septiani & Cahyono, 2019). Safety measures, emergency response and aviation-specific technical abilities are all part of this. New technologies, regulations and operating practices are continually emerging in the aviation industry. Fussell and Truong (2020) adds that employees can stay ahead of industry changes and accept new challenges thanks to training and development programmes that build a culture of constant learning and flexibility.

Leadership and management abilities are also emphasized in training and development activities for the airline workforce. This includes programmes that help talent improve their communication, decision-making and problem-solving skills. Developing strong leaders in the industry aids in the efficiency of operations and the successful management of talent (Meyers, van Woerkom, Paauwe & Dries, 2020). Mutungi, Oduor and Oduol (2023) advocate opportunities for career progression and succession planning are frequently included in airline talent management training and development programmes. Organisations may develop future leaders and guarantee a smooth flow of talent in the industry by identifying high-potential employees and providing them with tailored training.

2.2.2.3 Succession planning

Succession planning has already been discussed as a construct of the TRM framework. As a risk management technique, succession planning assists organisations in mitigating the risks associated with leadership changes, talent shortages, knowledge gaps and organisational instability (Jackson & Dunn-Jensen, 2021). Organisations may ensure continuity, retain vital talents and maintain a strong people pipeline by proactively identifying and nurturing possible successors.

Okwakpam (2019) asserts that succession planning ensures smooth succession of leadership as talent exits the organisation, either planned or unplanned ensuring continuity of business operations, while harnessing the critical skills through structured transfer of knowledge. This adds to the overall stability of the organisation and provides assurance to stakeholders. Succession planning facilitates the growth and development of the employee showing them that they are valued (LeCounte, 2022).

2.2.2.4 Performance management systems

Feng, Wu and Zhu (2022) states that regular performance evaluations and feedback methods aid in the identification of areas for improvement and the development of talent. Goal setting, performance appraisals and career development conversations are examples of these systems. Performance management begins with the setting of goals. These should be specific, measurable, achievable, reliable and time sensitive (SMART) (Dou, 2020). Goals should be assigned in collaboration with the employee and should be aimed at meeting the organisational objectives as well. This sets the tone of what can be expected of the employee. Plans must be put in place to support the success of these goals.

Managers must continuously monitor performance and provide timely feedback to ensure that opportunities for improvement have been identified and development plans are put in place to meet these needs (Paraschi, Georgopoulos & Kaldis, 2019). Performance appraisals are also done as per organisational policy and is a formal measure of performance highlighting strengths and areas for improvement and mitigating plans to support the success of the goals. This appraisal will highlight top talent that would benefit from additional development and preparation for succession planning.

Haj (2023) agrees that improved employee engagement, increased productivity, improved communication between managers and employees, better alignment of individual and organisational goals and the identification of high-potential employees for future leadership roles are all advantages of effective performance management systems. Organisations must create and implement performance management systems that are fair, transparent and consistent with their overall business strategy (Feng, *et al.,* 2022). These systems must be evaluated and refined on a regular basis to ensure that they remain effective and relevant in promoting employee growth and organisational success.

2.2.2.5 Employee engagement initiatives

Aviation firms frequently focus on building a healthy work environment and encouraging employee engagement in order to attract and retain top personnel (Mehta & Sharma, 2020). Recognition programmes, staff wellness initiatives and possibilities for professional advancement are examples of such initiatives. Transparent, two-way communication is essential for engagement and these may include regular meetings, quick huddles, formal forums and townhalls. According to Chaudhary and Sisodia (2022), employee involvement in decision making that require their direct performance improves workplace joy and engagement.

Recognizing and rewarding good performance is a great positive reinforcer and strategy for continued engagement (Nguyen, 2020). A simple thank you or a public announcement is a great gesture of appreciation. Recognizing that employees would benefit from specific development opportunities that also aligns with the organisations objectives is an excellent way to keep employees engaged, motivated and valued. Organisations have a responsibility to ensure employee wellness and this may be achieved by supporting employee wellness programs, employee assistance programs, team building activities and promoting a healthy work life balance. Employees are choosing to live and work differently during and post the COVID-19 pandemic (Paramita & Sudhartio, 2022). Offering hybrid positions or compressed work weeks with some flexibility in how work is performed affects employee engagement.

2.2.2.6 Talent retention strategies

Talent retention strategies have already been discussed under the TRM framework section numbered 2.2.1.10. However, to reiterate, aviation firms may use tactics such as competitive wage packages (Kamel, 2019), employee perks, work-life balance programmes and possibilities for growth to reduce the risk of losing valued personnel (Wolor, 2020).

2.2.3 TALENT RISK MANAGEMENT CHALLENGES

During the COVID-19 pandemic, managers experienced various challenges that they were not ready or equipped for. The landscape of the workplace was dynamic and agile which required high levels of emotional intelligence and change leadership.

2.2.3.1 Health and safety concerns

Strict protocols had to be established during the COVID-19 pandemic. These included mandatory mask wearing, hand and environmental sanitization and reduced movement leading to complete lockdowns. Managers implemented screening protocols that included temperature checks, questionnaires and COVID-19 testing to prevent the spread of COVID-19 (Serrano & Kazda, 2020). Staff were required to wear appropriate personal protective equipment and these were not always readily available. Managers had to ensure that staff had adequate training required to ensure the health and safety of passengers and other staff in a quest to prevent the spread of the COVID-19 virus (Dube, Nhamo & Chikodzi, 2021).

The channels of communication needed to be established to ensure that managers could effectively communicate with all staff in real time as the situation was so uncertain that protocols and guidelines were changing as required and staff needed to ensure compliance as passengers tended to be wary of airport hygiene during the COVID-19 pandemic (Lamb, Ruskin, Rice, Khorassani, Winter & Truong, 2021).

2.2.3.2 Managing uncertainty

Uncertainty was managed during the COVID-19 period by adhering to policy (Rutter, Wolpert & Greenhalgh, 2020). When queries were coming in from employees, managers tended not to deviate from policy. Guidelines were reviewed on an ongoing basis and the same was communicated to all staff. Data were analyzed collectively and decisions were made collaboratively by all relevant stakeholders. Linden (2021) asserts that strategic decisions needed to be made especially with the allocation of scarce resources to mitigate talent risks. Communication from leadership about the way forward must be very clear. There must be transparency even if there is uncertainty as this fosters trust among employees (Hong, Savoie, Joiner & Kincaid, 2022). This study noted that employees were reassured with the continuous communication and transparency from leadership. Employee wellness strategies were put in place to support their mental health and wellbeing as part of managing the uncertainty.

2.2.3.3 Work force reductions

Organisations were forced to reduce staff during the COVID-19 pandemic to reduce financial losses (Sobieralski, 2020) as human capital is by far the largest expense of an organisation. This led to an increased supply of aviation talent in the market (Deveci, Çiftçi, Akyurt & Gonzalez, 2022). Critical skills were still sought after and talent were looking for stable and new opportunities available to them. Due to the changing circumstances of the COVID-19 era, the usual process of reducing the work force could not be followed (Rutter, *et al.,* 2020). Many organisations opted to reduce the number of hours per work week in an effort to reduce costs. Clear and timely communication was used at all times to ensure that the employees were always kept up to date.

Complete lockdown impacted customers facing employees in that work from home was not an option and lay-offs could not be avoided. Managers had to arrange video calls to facilitate these difficult conversations. High levels of empathy and emotional intelligence were required. Employee assistance programs were used to support the employees (Sobieralski & Hubbard, 2023). Those employees still in employment had to absorb the remainder of the work load which led to the merging of roles. Managers had to ensure that employees taking on the role of redundant employees had the skills and training required to do the job (Sa'aid & Noh, 2023). Gaps identified needed to be timely mitigated.

2.2.3.4 Skills gap

Keeping up with the rapid speed of technological progress during the COVID-19 era was challenging for all organisations (Sun, Wandelt & Zhang, 2021). In the shifting period of innovation, especially during the COVID-19 pandemic, it was more important to reskill and upskill and learning soft skills was critical for success in the digital world (Sun *et al.,* 2021). Soft skills including cooperation, communication skills, problem-solving and critical thinking are in high demand, especially during the epidemic when working remotely. Upskilling guarantees that employees' skill sets do not become obsolete. When you reskill your staff, you build a more well-rounded, cross-trained workforce and boost the effectiveness of your team. With the merging of roles, it became apparent that there was a significant skills gap (Serrano & Kazda, 2020). Managers had to implement strategies to support staff until they gained competency to perform the tasks. Training programs were developed to bridge this gap and employees were upskilled to ensure business continuity.

2.2.3.5 Training and development

Gaps in skills were identified but due to the COVID-19 restrictions, training sessions could not be held in person. Therefore, training was conducted online and these were ridden with challenges as well. Employees were asked to complete surveys to evaluate these training sessions and these were being improved on as feedback was being received. According to Byrnes, Rhoades, Williams, Arnaud and Schneider (2022), flight training is considered high risk due to the safety aspect involved with flying an aircraft and adhering to safety policies and protocols. A culture of safety needs to be created and embedded. This type of training necessitates face to face delivery of the content. Ng (2022) cites that the COVID-19 pandemic has caused a worldwide disruption in education and training. Face to face pilot training was not possible and for the first time, virtual training with simulations were conducted in China and Hong Kong. This training was well received and it changed the future of training and development. As the travel restrictions eased, pilots were brought back into the airspace. A risk analysis conducted by Olaganathan and Amihan (2021) indicates that there was a 1000% increase in the incident reports filed by pilots regarding proficiency-related to COVID-19 issues.

2.2.3.6 Retention and Engagement

Both retention and engagement have been discussed before, however, these were also among the challenges faced by managers during the COVID-19 pandemic. Both the retention and engagement of employees during uncertain times were a challenge. Mehta and Sharma (2020) maintain that keeping the workforce engaged and productive despite the uncertainty of the pandemic were strategies used to improve retention. Some of the strategies such as remote work arrangements, flexible schedules and providing support for employee well-being were used to facilitate this (Maurya *et al.,* 2019).

2.2.3.7 Virtual management

Before the pandemic, remote work and virtual management was already in place in certain sectors, but employees would still spend a considerable amount of time at the traditional office. However, during the pandemic, employees were mandated to work from home with no clear direction of how to do this (Hancock & Schaninger, 2020). Some of the jobs were not suited to be done remotely. Effective virtual management depends heavily on open and timely communication. Various digital platforms were used to ensure that managers could reach employees either individually or as a team (Tomcikova, Svetozarovova & Coculova, 2021). Tasks could be discussed virtually and a collaborative input could be provided. Timely evaluation and feedback ensured that employees were engaged. Team building activities were planned in a remote setting and employees were challenged to be innovative with their ideas (Vecchi, Della Piana, Feola & Crudele, 2021).

2.2.4 LEADERSHIP COMPETENCIES NEEDED TO MANAGE TALENT RISKS

The following leadership competencies were identified:

2.2.4.1 Adaptability

Adaptability is a crucial leadership skill and this was highlighted during the COVID-19 pandemic. Leaders had to be adaptable to the changing situations and the changing leadership styles that came with it. Certain decisions needed to be made immediately using critical thinking and reliable decision-making skills (Byrnes *et al.,* 2022). Being adaptive as a leader is being open to new ideas, approaches and ways of functioning. It entails accepting change, being adaptable and responding rapidly to changing circumstances (Tisdall & Zhang, 2020). During the COVID-19 peaks, leaders had to deal with lockdown and remote working and how this affected business operations. Leaders were able to effectively navigate through the COVID-19 pandemic by being adaptive to their strategies and identifying challenges and proactively addressing them to ensure successful outcomes (Ou & Wong, 2021).

2.2.4.2 Communication

Effective leadership communication fosters a sense of trust among employees and stakeholders during times of uncertainty (van Stralen, McKay & Mercer, 2020). Leaders must be transparent and share important information with their employees and encourage them to voice their concerns. Active listening skills are also an important aspect of communication (Tisdall & Zhang, 2020). In times of crisis, employees may just be looking for an avenue to voice their concerns. These concerns must be addressed with empathy and discretion. This will encourage future communication of concerns from the employees (Watkins & Clevenger, 2021). Formal communication channels like emails, memorandums, forums and townhalls that provide regular updates may also be used to keep staff updated (Tisdall & Zhang, 2020). Leaders must ensure that information shared is accurate and aligned with the policies and guidelines. Open communication should be encouraged as this foster’s engagement and involvement during challenging times (Charoensukmongkol & Suthatorn, 2022).

2.2.4.3 Resilience

Resilience is the ability to bounce back from a setback and still persevere in the face of adversity (Brammer & Clark, 2020). Leaders had to demonstrate resilience which is characterised by having a strong mindset, keeping positive, excellent decision-making skills and are adaptable to changing circumstances. Being able to encourage and lead employees even if the situation seems hopeless. Resilient individuals are usually of a strong mindset, optimistic and display an overall sense of wellbeing. Resilient leaders have the ability to anticipate challenges and work on solving these before they snowball into catastrophes (Linden, 2021). Leaders may create and embed resilience in employees by encouraging self-care, providing effective feedback and identifying areas of improvement and implementing strategies to overcome these. They may also provide learning and development opportunities and have robust crisis management plans in place to ensure that employees are supported through policy during times of uncertainty (Watkins & Clevenger, 2021).

2.2.4.4 Empathy

Riess (2017) defines empathy as the ability of the leader to understand the perspectives, needs and acknowledge the feelings of the team, while also being able to identify their own perspectives. This encourages a positive work environment and builds trust among the team. Hofmeyer and Taylor (2021) states that leaders may display empathy by using active listening skills, acknowledging the concerns of the employees and providing reassurance even if it is not possible for them to solve any of these issues. A study conducted by Hajek and König (2022), highlighted that although empathy is an important leadership quality, it is often overlooked because a leader can be competent and have successful outcomes without having the need to be empathetic. According to Cain, Campbell and Coleman (2023), practicing empathy during the COVID-19 pandemic improved teamwork, enhanced overall morale and engagement and created a sense of wellbeing among staff as they felt supported and this ultimately improved performance.

2.2.4.5 Strategic thinking

Strategic thinking is the use of critical thinking skills to solve complex problems. It also involves the review of all relevant data to make informed decisions and identify any risks that may prevent the success of the initiative (Gökhan & AKÇAKAYA, 2023). These must be clearly communicated to staff so they are aware of the goals, mission and vision of the strategy. A study conducted by Salamzadeh, Rahim and Salamzadeh (2022) asserts that applying strategic thinking has resulted in improved performance and positive outcomes during the COVID-19 period. Fenitra, Abbas, Ekowati and Suhairidi (2022) agree that strategic thinking is an inherent requirement during the dynamic circumstances of COVID-19. Change leadership coupled with strategic thinking were used to increase organisational efficiency.

2.2.4.6 Collaboration

Collaboration among staff and leadership was extremely important as everybody grappled to adjust to the change brought on by the COVID-19 pandemic. Various online tools were used to facilitate collaboration among teams (Waizenegger, McKenna, Cai & Bendz, 2020). Teams were able to work on projects simultaneously and managers were able to provide timely feedback. Newman and Ford (2021) asserts that leaders had to ensure active engagement of all members during online meetings and strategies had to be implemented to extract participation from introverted employees, while also understanding that the work environment was new and employees were still adjusting. According to Elbaz, Richards and Savard (2022), a supportive, flexible online environment is needed to ensure a healthy work life balance that ultimately contributes to the success of the team and the organisation as a whole during the COVID-19 pandemic.

2.2.4.7 Innovation

Amankwah-Amoah (2021) defines innovation as the ability to come up with new perspectives, pushing boundaries and being creative that add value to the organisational strategy. This keeps the organisation competitive in the global markets. Linden (2021) adds that leaders can promote innovation by encouraging staff to collaborate openly, in a non-judgmental environment about any ideas that they may have. Teams across the organisations can share knowledge that may lead to innovative ideas. Innovation can be encouraged by rewarding and recognizing new ideas, embracing change and trying new ways of doing things. Leaders are instrumental in driving innovation in the organisation by providing support and nurturing creativity (Dobre, 2021). This allows the team to think creatively and ultimately promotes growth.

2.2.5 The focus of the framework

The following aspects were identified as the focus of the framework. The available literature was used as a reference to extract these aspects. These aspects were also evident from the data collected during the interviews.

2.2.5.1 Critical roles

Whysall, Owtram and Brittain (2019) describe critical roles as those positions which have high impact on the business objectives, success and competition. Mehta and Sharma (2020) add that these roles are difficult to fill as they require talent with critical skills which are scarce. Succession planning for critical roles ensure continuity of business objectives and competitiveness in the market (Al Suwaidi, Jabeen, Stachowicz-Stanusch & Webb, 2020). So, when a top talent leaves the organization, there is already someone in the organisation that has been developed and mentored to take on this position. This prevents disruption in business and also ensures stakeholder confidence in the organization. Succession planning models provides structure to the plan and the below model was developed from Groves (2005) who proposed a succession planning model for critical roles in leadership.

2.2.5.2 Succession planning

Jackson and Dunn-Jensen (2021) describes succession planning as a mitigation measure that organizations need to have in place as the retention of top talent is difficult as people are looking for new opportunities all the time, especially if they have critical skills. Ali, Mahmood and Mehreen (2019) add that succession planning is the identification of top talent in the organisation, developing and mentoring it to ensure a pipeline for roles that are at risk. "At risk" roles can be identified as leadership positions and key technically skilled workers as these skills are not transferred to other talent and often overlooked and undervalued. It is imperative that key knowledge has been transferred to avoid disruption in business operations (Okwakpam, 2019).

Succession planning and developing talent in an organization not only ensures that the organisation has a plan in place for critical roles, but according to LeCounte (2022) it also improves talent engagement and fosters a positive organisational culture. This grows the organisation as well as its people. It also provides a structured plan going forward and sets the expectation for the talent in the organisation. Without a clear plan, conflicts may arise from power struggles between employees vying for these critical roles (Whysall *et al.,* 2019).

2.2.5.3 Talent pools and pipelines

According to De Smet, Dowling, Hancock and Schaninger (2022), a talent pool consists of those employees that have expressed interest in working for the organisation in the past. They may have applied for a role previously but were for whatever reason unsuccessful in securing that particular position that they applied for and were therefore put in a “talent pool” and provided with updates on available posts in the organisation (De La Calle-Duran, de la Luz Fernandez-Alles & Valle-Cabrera, 2021). Haak-Saheem (2020) states that a talent pool is a wider reach of talent in the organisation’s hiring platform. Whysall, Owtram and Brittain (2019) define talent pipeline as a proactive strategy to source candidates that are already qualified for the position and will be put in a “pipeline” until the position becomes vacant. This is an excellent strategy for high turnover roles as these can be filled from the pipeline fairly quickly (Jooss, Lenz & Burbach, 2023).

2.2.5.4 Competition

The COVID-19 pandemic has heightened the war of talent for critical skills. Business leaders and policy makers are using the competitive advantage of remote working as a talent attraction strategy (Haak-Saheem, 2020). According to Choy (2020), the high unemployment rate does not indicate that talent will be there when you need it. Talent with critical or scarce skills is sought after and offered attractive remuneration and benefits that may not be matched by other organisations. Organisations need to be aware of the competition’s talent attraction and retention strategies to be competitive in the global talent market. Data from various sources are to be reviewed to ensure that the selected aviation enterprises are competitive. Geographical locations also impact the competition for talent as talent may not be easily available when required (Haak-Saheem, 2020) and the recruitment process is a lengthy one.

2.2.5.5 Benefits and rewards

Kamel (2019) states that benefits and rewards are important in talent management because they recruit, motivate and retain top people in an organisation. Competitive benefit and reward packages can be an effective technique for attracting high-quality candidates. When considering potential employers, job searchers frequently analyse the whole compensation package, which includes salary, health benefits, retirement plans and other bonuses. Employees can be motivated to perform at their best and remain engaged in their work by well-designed incentives and rewards programmes. According to Barkhuizen and Gumede (2021), recognition programmes, performance-based bonuses and incentives can help to reinforce desired behaviours, increase morale and foster a healthy work environment. Wolor (2020) further adds that offering appealing bonuses and awards can increase employee loyalty and decrease turnover. Kamel (2019) agrees that employees are more inclined to stay with an organisation if they feel valued and compensated for their contributions.

2.2.5.6 Competency framework

Ruben (2019) asserts that a competency framework is important in talent management because it provides an organised way to identifying, assessing and developing the skills, knowledge and behaviours necessary for success in certain roles in an organisation. A competency framework aids in the identification of the unique competencies and proficiency levels required for each job role. Heinen, van Oostveen, Peters, Vermeulen and Huis (2019) adds that it defines the information, skills, talents and behaviours that persons should have in order to effectively perform their roles. Ruben (2019) states that organisations can match their recruiting and selection procedures with the needed competencies by utilising a competence framework. This allows them to find and attract individuals who have the necessary abilities and behaviours, resulting in a better fit between the individual and the post.

2.2.5.7 Talent risks

According to King and Vaiman (2019), the possible obstacles and uncertainties that organisations may encounter in attracting, developing and retaining qualified individuals are referred to as talent risks in talent management. These dangers can jeopardise an organization's capacity to fulfil strategic goals and sustain a competitive advantage. Organisations should implement strategies such as proactive workforce planning, talent development programmes, competitive compensation and benefits, employee engagement initiatives, diversity and inclusion efforts and effective talent acquisition and retention practices to effectively manage these talent risks (Whysall, Owtram & Brittain, 2019). Regular monitoring and analysis of talent metrics can also assist in identifying and mitigating possible talent risks before they become major concerns.

2.2.5.8 Talent attraction

According to Kamel (2019), talent attraction is a crucial aspect of talent management that focuses on attracting and acquiring top talent to meet organizational needs and goals. Pandita (2019) adds that by implementing talent attraction strategies, organizations can enhance their talent attraction efforts and attract the best candidates who align with their values, contribute to their success and drive organizational growth. According to Tanwar and Kumar (2019), developing a strong employer brand that showcases the organization's values, culture and opportunities is an important element of talent attraction. This highlights the unique selling points that attracts talented individuals who align with the organization's mission and vision. Ruben (2019) adds that regularly monitoring and evaluating the organization's employer brand perception and leveraging feedback from current and former employees, candidates and industry professionals' aids in identifying areas for improvement and therefore necessary adjustments to attract top talent may be made.

According to King and Vaiman (2019), identifying the specific skills and competencies required for different roles and designing targeted recruitment strategies to attract candidates with those qualifications are critical recruitment strategies. Albert (2019) adds that various channels such as job boards, social media, professional networks and industry events are utilised to reach potential candidates. It is imperative to craft clear and compelling job descriptions that accurately reflect the responsibilities, requirements and growth opportunities associated with the position, using language that resonates with the desired talent pool and emphasizes the organization's commitment to employee development (Qin, Zhu, Xu, Zhu, Ma, Chen, & Xiong, 2020).

According to Pandita (2019), building and nurturing talent networks by engaging with industry professionals, attending relevant events and leveraging employee referrals is beneficial to the talent attraction experience. Current employees are to be encouraged to refer qualified candidates as they can often attract individuals who are a good fit for the organization's culture (Black, Hasan & Koning, 2020). Albert (2019) cites that a positive candidate's experience needs to be ensured throughout the recruitment process. Application procedures must be streamlined to provide timely feedback and offer a transparent and inclusive selection process. This helps create a favourable impression of the organization and enhances the likelihood of attracting top talent. Jonsen, Point, Kelan and Grieble (2021) agree that diversity and inclusion in talent attraction efforts need to be emphasized. Talent attraction efforts need to promote a diverse and inclusive workplace culture that values different perspectives and backgrounds. This can help attract a wider pool of talent and foster innovation in the organization.

2.2.5.9 Talent retention

According to Trautman (2022), retaining talent is a crucial aspect of managing talent risks in the aviation industry, especially in times of crisis such as the COVID-19 pandemic. To effectively address talent retention, managers can consider talent retention strategies. These include, but are not limited to:

Competitive compensation and benefits: offer attractive salary packages and benefits to attract and retain top-notch talent (Kamel, 2019). Regularly review and compare compensation to ensure it remains competitive in the industry.

Career development opportunities: provide clear paths for career growth and advancement in the organization. Offer training programs, mentoring and coaching to help employees enhance their skills and reach their full potential (Barkhuizen & Gumede, 2019).

Employee engagement and recognition: cultivate a positive work environment that values and acknowledges employee contributions. Implement initiatives to engage employees such as regular feedback sessions, team-building activities and programs to recognize outstanding performance, boosting morale and job satisfaction (Wolor, 2020).

Work-life balance: promote a healthy work-life balance by offering flexible work arrangements like remote work options or flexible schedules. Encourage employees to take time off and prioritize their well-being to prevent burnout and enhance retention (Maurya, Agarwal & Srivastava, 2020).

Transparent communication: maintain open and transparent channels of communication to keep employees informed about organizational changes, challenges and opportunities. Regularly share updates, address concerns and provide platforms for employees to voice their opinions and ideas (Sumelius, Smale & Yamao, 2020).

Employee support programs: implement programs to support employees such as wellness initiatives, counseling services and assistance programs for work-life balance (Berry, Mirabito & Baun, 2020). These resources and support can help alleviate stress and improve employee retention, particularly during challenging times.

Recognition and rewards: recognize and reward high-performing employees for their accomplishments and contributions. This can be done through performance-based bonuses, promotions or other forms of recognition that align with the organization's values and culture (Wolor, 2020).

According to Black, Hasan and Koning (2020) by implementing these talent retention strategies, aviation industry managers can enhance employee satisfaction, loyalty and commitment thereby reducing turnover and mitigating talent crises during challenging times like the COVID-19 pandemic.

2.2.5.10 Talent management and development

Talent management encompasses the strategic approach of acquiring, nurturing and retaining adept individuals in an organization. This entails implementing diverse practices and initiatives to identify employees with great potential, fostering their talents and abilities and aligning them with the goals of the organization (Rahman & Nur, 2023). The ultimate objective of talent management is to ensure that suitable individuals occupy appropriate positions, armed with the essential skills and assistance to propel the organization towards success (Al Hashmi, Azam & Khatibi, 2020).

Hu, Sun and Cheng (2023) state that talent development encompasses the process of nurturing and enriching the abilities, potential and skills of individuals in order to accomplish their personal and professional aspirations. This entails offering favourable circumstances, resources and assistance to aid individuals in their growth and to excel in their chosen fields. The objective of talent development is to identify and harness the distinctive strengths and talents of individuals, enabling them to reach their maximum potential. It involves various activities such as training, mentoring, coaching and continuous learning which empower individuals to acquire new knowledge, develop essential competencies and enhance their performance (Al Hashmi, Azam & Khatibi, 2020).

Talent development is essential for organizations and industries as it allows them to cultivate a highly skilled and capable workforce. Sánchez-Bayón and Aznar (2020) agree that by investing in the growth of their employees, organizations can enhance employee engagement, job satisfaction and ultimately, productivity. Talent development can take on different forms, including formal training programs, on-the-job learning opportunities, workshops, conferences and self-directed learning (Dalal & Akdere, 2023). It is a dynamic and ongoing process that adapts to the evolving needs and demands of individuals and the organization.

According to Kaliannan *et al.* 2023, the key benefits of talent development include the following:

Enhanced skills and competencies: talent development programs enable individuals to acquire new skills, knowledge and competencies, equipping them to perform their roles more effectively.

Increased job satisfaction and engagement: when individuals feel supported in their development and perceive growth opportunities, they are more likely to be engaged and satisfied in their positions.

Improved retention and loyalty: organizations that invest in talent development demonstrate their dedication to the growth and development of their employees, fostering loyalty and decreasing turnover.

Enhanced organizational performance: a competent and capable workforce contributes to improved organizational performance, innovation and a competitive advantage.

In conclusion, talent development plays a vital role in unlocking the potential of individuals and organizations. By providing the necessary resources and support, talent development enables individuals to flourish and make significant contributions using their full capabilities (Al Hashmi *et al.,* 2020).

Figure 5: Talent management framework

Source: Van Vulpen (2023)

Figure 5 above represents a talent management framework, which is one of many available in the literature reviewed between 2019-2023. The study by Van Vuuren (2023) has produced a Talent Risk Management (TRM) framework intended for all staff levels in the aviation sector, in contrast to management-specific approaches. Regrettably, though, this framework would not suffice for crisis management purposes within the industry. Notably, the focus of this framework is primarily on leadership development, as opposed to talent risk management.

2.3 THEORETICAL FRAMEWORK

2.3.1 Introduction

A theoretical framework in a thesis serves as a conceptual foundation for understanding and analysing the research problem or question under consideration. It serves as the study's foundation by guiding the selection and organisation of relevant ideas, concepts and models to be used to interpret and analyse the data. It serves as a lens through which the researcher is able to examine the research problem (Varpio *et al.,* 2020). It helps to define the key variables, relationships and concepts that are relevant to the study and provides a framework for organising and interpreting the findings. The contingency theory of leadership, human capital theory and enterprise risk management theory will be used for this study. Maslow’s hierarchy of needs and the human capital theory were used to address talent management.

This study employed a comprehensive approach owing to the unprecedented nature of the pandemic and the requisite competencies and qualities necessary to lead and manage talent.

Enterprise risk management theory offers a systematic framework for identifying and handling risks within an organization, especially during the uncertain times of a global pandemic. Nonetheless, it may not fully address the specific issues associated with managing talent and ensuring motivation. Hence, the study adopted Maslow's theory of motivation which prioritizes satisfying basic human needs to drive motivation. This theory could prove pivotal in understanding and resolving the emotional and psychological needs of employees in times of crisis, creating an enabling work environment that supports motivation and engagement.

Human capital theory upholds the significance of investing in employees' skills, knowledge, and abilities to enhance organisational success. Firms that prioritize the development of human capital during the pandemic are better positioned to adapt to unforeseen circumstances and retain top talent. However, it is essential to appraise human capital theory in the context of talent risk management amid the pandemic. One limitation is its focus on individual competencies, which fails to account for systemic challenges that might affect talent management and employee well-being during a crisis like the pandemic. Factors such as job insecurity, remote work difficulties, and mental health concerns can significantly impact employee performance, regardless of their individual human capital.

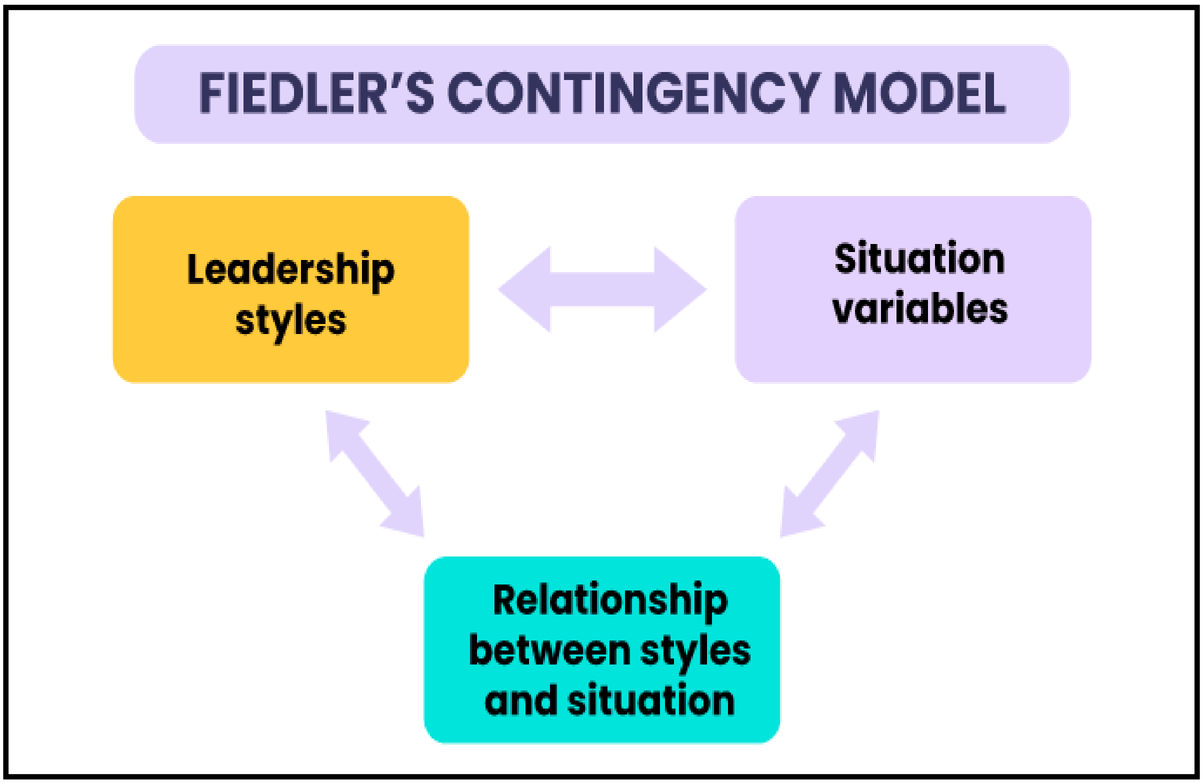
In this regard, the need for effective change leadership and incorporation of the Contingency theory of leadership in this study became apparent. The Contingency theory of leadership posits that effective leadership styles vary according to the circumstances. Leaders who can adapt their approaches to the pandemic's particular challenges, such as remote work and uncertainty, are more likely to manage talent risks successfully.

2.3.2 The contingency theory of leadership

There are four contingency theories of leadership: Fiedler's contingency theory; path-goal theory; situational leadership theory and decision-making theory. This study refers to Fiedler's contingency theory - Figure 7 below, which recognizes that no one style of leadership suits all situations. Leaders must adapt their leadership styles to the situation (Fiedler, 1978). In the 1960s, business and operation psychologist Fred Fiedler developed a proposition of situational leadership that argued that businesses should pair leaders with duties that suit their natural style of leadership. Decades later, the Fiedler contingency proposition of leadership is still being used in work surroundings throughout the business community (Reams, 2023).

Alajmi (2022) agrees that effective leadership, according to this view, is dependent on the interaction of the leader's style and the situational conditions. Fiedler identified two types of leaders: task-oriented leaders and relationship-oriented leaders. According to the thesis, a leader's performance is determined by the match between their leadership style and the favourableness of the situation. Omazić, Labaš and Uroić (2023) asserts that a favourable circumstance is one in which the leader has a positive relationship with their team, the task is well-structured and the leader has power. The leader's style may be less effective in an unfavourable situation. Fiedler's contingency theory emphasises the significance of assessing a situation and modifying one's leadership style as needed.

Figure 6: Fiedler's contingency model

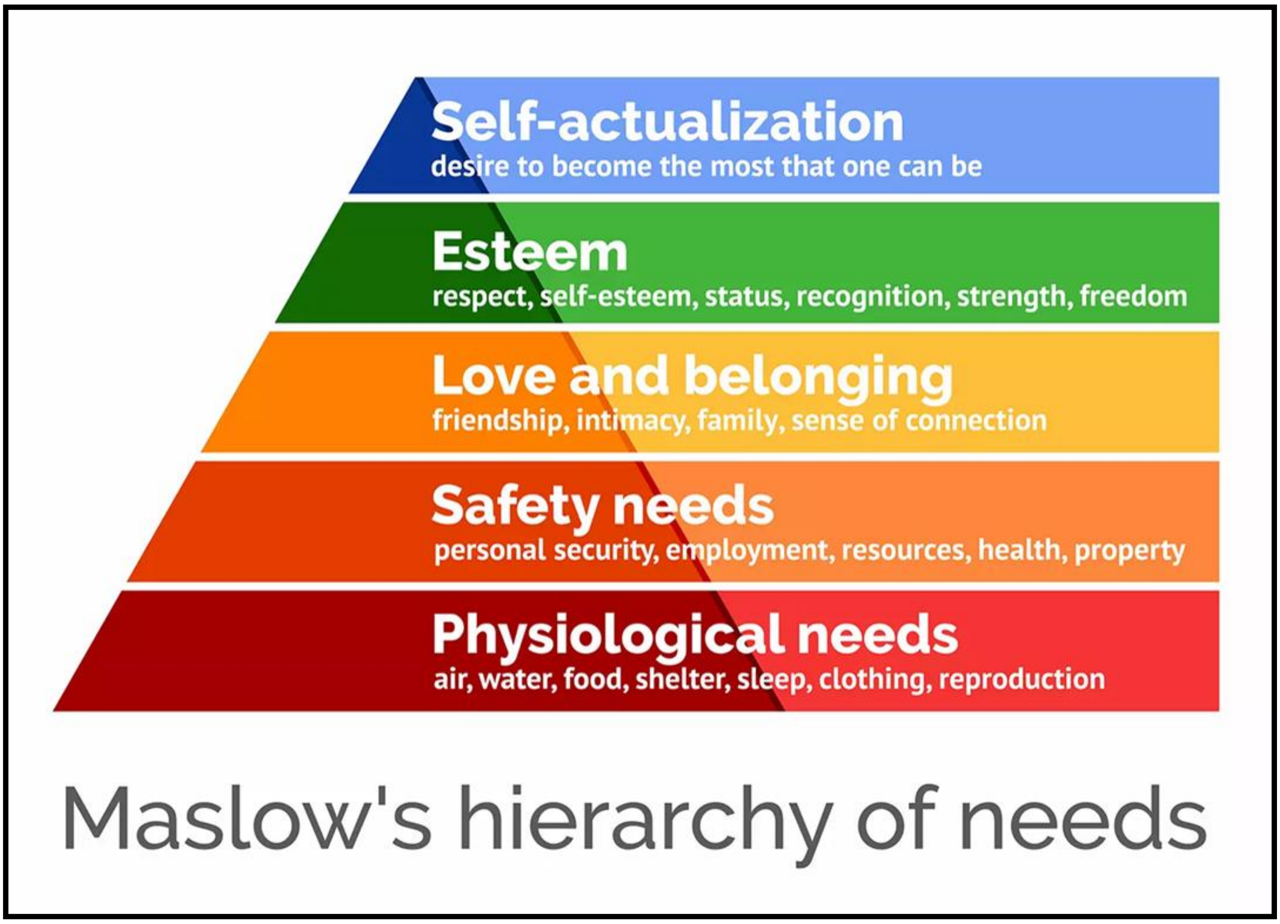


Source: Sharan (2022)

2.3.3 Maslow's hierarchy of needs

Sever (2023) defines Maslow's hierarchy of needs, indicated in Figure 8 below as a psychological motivational theory that consists of a five-tier model of human wants, which is commonly shown as hierarchical tiers within a pyramid. The most fundamental requirements are at the bottom of the pyramid of needs, while the most complicated demands are at the top. People can go to the next level of needs after their lower-level demands have been addressed. As people go up the pyramid, their requirements become more psychological and social.

Figure 7: Maslow's hierarchy of needs



Source: McLeod (2023)

The needs include physiological (food and clothing), safety (work security), love and belonging (friendship), esteem and self-actualization, in that order.

2.3.3.1 Physiological needs

Air, food, drink, shelter, clothes, warmth, sex and sleep are biological necessities for human survival. Our most basic need is for bodily survival and it is this that will drive our behaviour. When that level is met, the next level above motivates us and so on. The human body cannot function optimally unless these demands are met. Maslow believed physiological requirements to be the most important since unless these needs are addressed, all other needs become secondary. Bozyiğit (2021) agrees that when these basic needs are not met, tension arises within the individual. When an individual's physiological demands are met, the yearning for security and safety emerges.

2.3.3.2 Safety needs

People like order, predictability and control in their life. Shi and Lin (2021) add that the family and society can meet the need for safety.

2.3.3.3 Love and belonging

Navy (2020) describes love and belonging as a human emotional need for interpersonal interactions, affiliating, togetherness and being a member of a group. Bozyiğit (2021) concurs that friendship, closeness, trust, acceptance, receiving and giving affection and love are examples of belongingness needs. This urge is especially strong in childhood and it can trump the need for protection as evidenced by children who cling to violent parents.

2.3.3.4 Esteem

This includes self-worth, accomplishment and respect. Maslow separated esteem needs into two categories; namely, regard for oneself (dignity, achievement, mastery and independence) and esteem for others (e.g., position, prestige). The human need to be liked and respected by others is represented by esteem. People frequently choose a profession or a pastime in order to obtain notoriety. Hiltunen (2023) adds that these activities provide the individual with a sense of contribution or value.

2.3.3.5 Individualisation

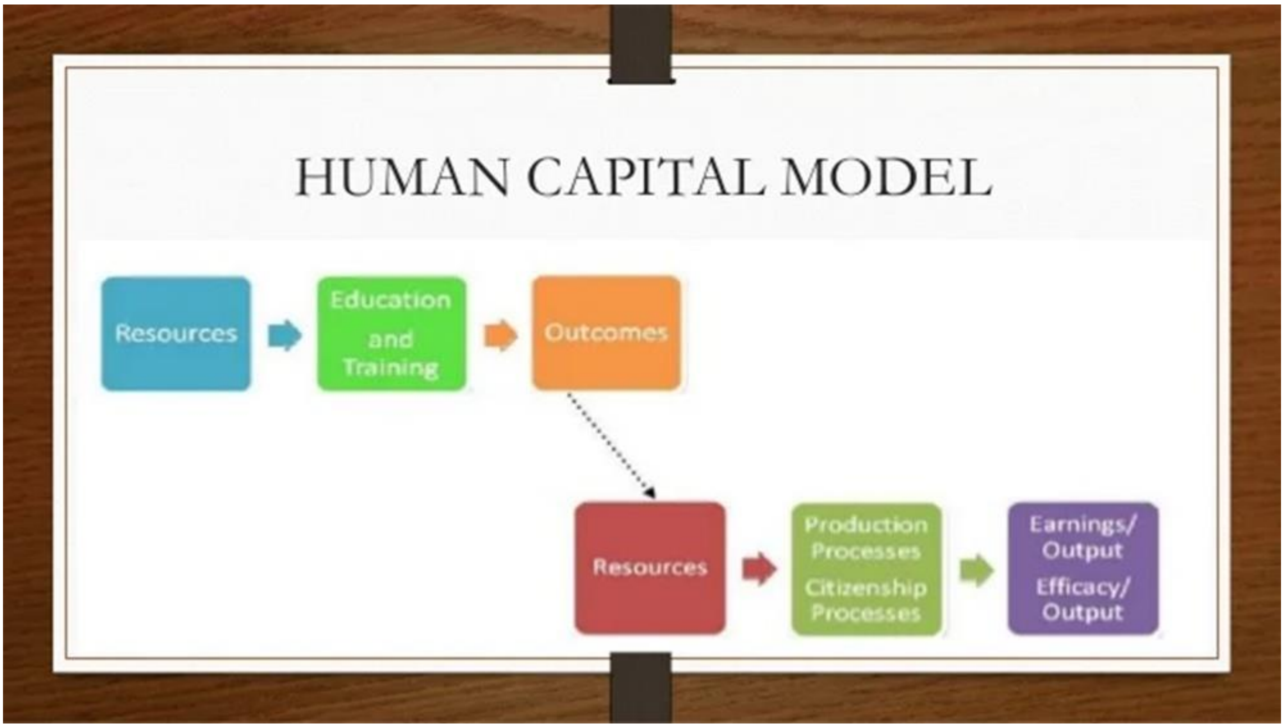
The highest level in Maslow's hierarchy is needs, which correspond to a person's potential, self-fulfillment, personal progress and peak experiences. This level of need is concerned with a person's full potential and its realisation. This level is defined by Maslow (1943, 1987) as the drive to accomplish all possible and "to become everything one is capable of becoming". Individuals may sense or focus on this urge with great intensity. Although Maslow did not feel that many of us could reach full self-actualization, he did believe that we all have transient moments of self-actualization (known as 'peak experiences'). Such moments, which are associated with personally meaningful events such as childbirth, sporting accomplishment and academic success) are difficult to attain and maintain regularly (Hiltunen, 2023).

2.3.4 Human capital theory

Gary Becker, an economist, established the human capital theory. Becker, an economics Nobel Prize winner, popularised the concept of human capital in the 1960s and built on it in his 1964 book "Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education". Becker's work transformed economics by emphasising the significance of human capital investments in explaining individual and societal economic results. His contributions to human capital theory have influenced how we think about education, training and labour market dynamics. Kuzminov, Sorokin and Froumin (2019) agree that this theory is still being used as a foundation for policy development.

Human capital theory, indicated in Figure 9 below, is an economic theory that considers people to be investments in their own education, training and skills development (Deming, 2022). It implies that individuals gain knowledge, skills and abilities (known collectively as human capital) through education and experience, which boosts their productivity and earning potential in the labour market. Individuals, according to this idea, make judgements about investing in human capital based on the expected rewards, such as higher earnings or better work possibilities. Submitter, Somrit and Romprasert (2022) agree that human capital drives business.

Figure 8: Human capital model



Source: Nasib (2017)

It is also known as "The Theory of Investment in Man". The argument can be traced back to Schultz (1960), who claimed that education should be considered as a constructive investment rather than a form of consumption. Schulz claimed that education not only improves men's individual choices, but also offers the type of labour force required for industrial progress and economic success. According to Choudhury (2022), two conditions must be met for economic growth and development to occur:

- Technology's advancement and increased efficiency. This is because improved technology leads to increased output.
- The use of human resources in the application of technology.

According to Deming (2022), formal schooling imparts the skills and incentives for productive behaviour. As a result, investing in education is an investment in the population's productivity.

2.3.5 Constructs of the human capital theory

Individual and government decisions to spend on education or additional education are investment decisions that includes renouncing present consumption in exchange for predicted future monetary and non-monetary rewards:

- The gained skills and knowledge are a sort of capital contained in man.
- Education directly produces capital (human capital).
- The capital generates returns in the same way that other types of capital do.
- The results are favourable, quantitatively significant and statistically significant.

From the foregoing, it is obvious that the Human Capital Theory is primarily concerned with the computation and comparison of costs and benefits connected with educational investment. This notion is further supported by Munawar, Yousaf, Ahmed and Rehman (2022) who asserts that the theory contributes to innovation and improved productivity outweighing the costs involved.

2.3.6 Enterprise risk management theory

Enterprise Risk Management (ERM) is a strategic method used by organisations to identify, analyse and manage risks that may have an influence on their goals as described by Jankensgård (2019). It entails a comprehensive and integrated framework for risk management at all levels of an organisation as indicated in Figure 10 below. ERM is to provide a structured and methodical procedure for detecting potential risks, assessing their potential impact and applying risk-mitigation methods (Naseem, Shahzad, Asim, Rehman & Nawaz, 2020). Pecina, Sprčić and Lacković (2022) define enterprise risk management (ERM) as a critical component of a well-functioning and comprehensive corporate governance framework. Zhu, Li and Mishra (2023) further adds that the success of the theory lies in the set of activities designed to reduce the negative effects of risk exposures on the company's value and long-term business sustainability.

2.3.6.1 Types of enterprise risk:

Handoko, Riantono and Gani (2020) describe *compliance risk* as a sanction that a corporation faces as a result of a violation of an external law or obligation. A company's inability to prepare timely financial statements in conformity with existing accounting regulations such as Generally Accepted Accounting Principles (GAAP) is an example of compliance risk.

Legal risk exists when a company faces a lawsuit or a penalty as a result of a contractual, legal or regulatory issue. More than 25% of Small and Medium Enterprises (SMEs) in the Visegrad Group perceive frequent changes of the legal regulation as a legal risk (Virglerova, Dvorský, Kozubikova & Cepel, 2020). It is a challenge to adapt the organisation and its strategy to the dynamic business climate, therefore *strategic risk* management is defined by Andersen and Sax (2019) as the identification and mitigation of these risks that jeopardises a company's long-term strategy.

The day-to-day operations of the company are jeopardised by *operational risk.* Dirgantara and Heatubun (2022) attests to this as they conducted a risk analysis at AIJ, a manufacture company engaged in the manufacture of adhesives or glues where they identified and analyzed operational risks, the impacts caused by these risks and the actions to be carried out as a measure to anticipate or prevent losses from operational risks.

Assibi (2023) describes *security risk as* inadequate controls on sensitive client information held on network servers. This impacts several organisations as all sectors are being digitized. Ittner and Oyon (2020) describe *financial risk* in organisations with more complex ERM practises and risk-owning. Chief Financial Officers (CFOs) contributes to the identification, monitoring and management of a larger variety of financial, operational and market risks. Tan and Lee (2022) adds that firms with more sophisticated ERM report being better prepared and having stronger competitive positions when faced with major risk events.

2.3.6.2 Elements of an enterprise risk management framework strategy and objective setting

Perbankan (2021) states that a detailed understanding of the internal and external elements that impact the organisation, such as market trends, competition, customer wants and internal strengths and weaknesses is required for effective strategy and goal setting. Lee (2021) agrees that regular monitoring and evaluation of progress towards targets is also required in order to make the necessary adjustments and guarantee that the organisation remains on track to meet its strategic goals.

2.3.6.2.1 Risk identification

The practise of carefully identifying and documenting potential hazards that may harm a project, organisation or other endeavour is known as risk identification. It entails recognising events, circumstances or conditions that could have a negative impact or impede the achievement of goals as described by Tan and Lee (2022). Jonek-Kowalska (2022) further adds that the purpose of risk identification is to proactively identify and analyse potential hazards in order to create and implement appropriate risk management solutions.

2.3.6.2.2 Risk assessment

In ERM, risk assessment is the systematic process of discovering, analysing and evaluating the hazards that an organisation may face. ERM seeks to proactively manage risks and make educated decisions in order to achieve strategic goals while minimising potential negative consequences.

2.3.6.2.3 Risk response

The activities made by individuals or organisations to address or mitigate potential hazards are referred to as risk response. It is an important part of risk management, which according to Pecina *et al.* (2022) is detecting, assessing and responding to hazards in order to reduce their influence on objectives.

Tangprasert (2020) cites the following risk response tactics that are commonly used:

- *Avoidance:* this method entails removing or avoiding the risk entirely by altering plans, processes or actions to prevent possible harm.

- *Mitigation*: the goal of mitigation is to lessen the likelihood or impact of a risk. It entails putting in place measures or controls to reduce the likelihood of the risk occurring or to mitigate its possible repercussions.
- *Risk transfer*: entails delegating responsibility for risk management to another party, generally through insurance, contracts or other means.
- *Acceptance:* accepting certain risks may be permissible if their possible impact is regarded as acceptable or if the cost of resolving them outweighs the advantages. Acceptance, on the other hand should be a deliberate decision made after thorough consideration.

Perbankan (2021) states that the precise risk response approach chosen is determined by the nature of the risk, its potential impact, available resources and the individual or organization's risk tolerance. Lee (2022) concurs that the goal of effective risk management is to create a balance between minimising risks and increasing opportunities for success.

2.3.6.3 Communication and monitoring

Pagach and Wieczorek-Kosmala (2020) agree that communication and monitoring are critical components of ERM in assuring the efficacy of the risk management process. According to dan Perbankan (2021) in ERM, communication entails the sharing of information and ideas about risks and risk management among diverse stakeholders in an organisation. Pamungkas (2019) further adds that this includes exchanging risk assessments, risk mitigation methods and risk-related activity updates. Effective communication promotes knowledge, comprehension and alignment about risks and their potential consequences in the organisation. It allows stakeholders to make educated decisions and implement appropriate risk-management steps.

Monitoring in ERM involves the ongoing assessment and tracking of risks and risk management activities. It involves the systematic collection and analysis of data to evaluate the effectiveness of risk controls, identify emerging risks and measure the overall performance of the risk management process (Wangyanwen, Senathirajah & Haque, 2023). Monitoring helps to ensure that risk management strategies are implemented as intended and that any deviations or gaps are identified and addressed in a timely manner. Both communication and monitoring in ERM are essential for promoting transparency, accountability and continuous improvement in managing risks across the organization (Pagach and Wieczorek-Kosmala, 2020). They facilitate the identification of emerging risks, enable timely decision-making and support the overall risk governance framework.

Figure 9: ERM framework

Source: Andrieive (2022)

2.4 SUMMARY OF CHAPTER

This chapter discussed the literature guiding the various objectives as identified in Chapter 1. The focus of a talent risk management framework was discussed. This included succession planning, talent pools and pipelines, benefits and rewards, talent development and management, competition, talent attraction, talent retention and competency frameworks. The talent risk management process was discussed under recruitment process, talent development and training, succession planning, performance management systems, employee engagement initiatives and talent retention strategies. The challenges that managers faced were discussed and these included workforce reduction, health and safety concerns, virtual management, managing uncertainty, skills gaps, training and development, retention and engagement. Leadership competencies were discussed: adaptability, resilience, communication, empathy, strategic thinking, collaboration and innovation. The contingency theory of leadership, human capital theory and enterprise risk management theory were used for this study. Maslow's hierarchy of needs and the Human capital theory were used to address talent management. The next chapter discusses the research methodology used in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the research methodologies chosen for this study. In essence, the methodology used in this study includes case studies and interviews. The chapter describes the approach used, discusses data collection and explains how data were generated from both primary and secondary sources. The case study technique includes discussions of case selection, data collection and units of analysis. The construction of the interview schedule and data collection procedure, as well as the sample strategy were described for the interview methodology. The limitations of the study methodologies are discussed, followed by an examination of the ethical issues used.

Finally, the chapter concludes by a discussion of ethical issues and research methodology limitations associated with the study. The chapter in essence deals with four key problems: what questions to study; what data were relevant; what data were to be collected and how to analyse the results (Vaezi, Moonaghi & Golbaf, 2019). In general, this chapter discusses the study's procedures, data collection, and how primary and secondary data were gathered. The approach employed for the cultivation of early contacts, the implementation of pilot studies and the design of interview questions used by the researcher to obtain primary data are all covered in this chapter.

3.2 RESEARCH PHILOSOPHY

Research philosophy is defined as a set of beliefs and assumptions regarding the development of knowledge and information (Saunders *et al*., 2019). This is also known as *‘the school of thought that underpins the development of knowledge and the nature of that knowledge concerning research’* (Sekaran & Bougie, 2016). Research philosophy is concerned with the nature of the knowledge (Ade Bilau *et al*., 2018). In social sciences, research philosophy is concerned with the development of knowledge that contains the researcher's perspective (Bahari, 2010). Research philosophy incorporates both deductive and inductive reasoning. Research philosophy is concerned with the nature, origin and evolution of knowledge (Leavy, 2017). It contains critical assumptions regarding the researcher's perspectives on the social world (Leavy, 2017:50). It is also critical for researchers to consider philosophical difficulties in their research because it influences the quality of the study.

3.2.1 EPISTEMOLOGY

3.2.1.1 Epistemological approaches

According to Saunders *et al.* (2019), the researcher creates several types of assumptions at each stage of the research process. The first assumption is the epistemological assumptions which refers to the researchers' values and the axiological assumptions refers to the impact of the researchers' values on the research process itself.

Table 3.1: Epistemological approaches

Epistemology	Is concerned with justified beliefs and knowledge of reality (Winit-Watjana, 2016:429). How do we get the knowledge? How do we discover new thing? What relationship does the researcher have with the research?
Objective	Subjective
• knowledge is discovered through objective measures • The researcher stays far away from the research	• knowledge is discovered through subjective measures • Researcher forms part of the research as they believe that interaction is necessary • The research believes that interaction is necessary
This Study	Subjective epistemology

Source: adapted from (Winit-Watjana, 2016)

According to Moyo (2017), epistemology is a philosophy of knowledge concerned with what is debated in a certain profession. The study of knowledge tends to raise questions about what is understood and who should know it (Converse, 2012). Epistemology is concerned with the conditions for approaching research in order to develop genuine and acceptable knowledge. Table 3.1 indicates the objective and subjective epistemological approaches. According to objective epistemology, knowledge is obtained by objective measures in which the researcher is removed from the investigation. Subjective epistemology, as is the case in this study, argues that the researcher participates in the research due to the belief that engagement is required for the research to be successful (Ade Bilau *et al*., 2018).

3.2.1.2 Choice in this study

This study used subjective epistemology as its epistemological framework. The researcher felt that subjective assessments will be beneficial to the study. The researcher believes that engagement with aviation industry participants was critical to the study.

3.2.2 Ontology

In Table 3.2 the realism and relativism ontology are described.

Table 3.2: Ontology approaches

Ontology	It can be defined as a system of beliefs and assumptions about knowledge development (Saunders ***et al.***, 2016:124). It can also be described as the study of "what is"(Ade Bilau ***et al.***, 2018:600)
Realism	Relativism
• The researcher accepts reality is objective • only one truth exists • One true reality that is recognizable, apprehendable and measurable • Reality is predetermined by nature and is independent of consciousness and human cognition • Associated with quantitative research	• Researcher is subjective to reality • Accept the notion of multiple realities • This view is normally held by the interpretivists • Reality influenced by the situation's context such as individual's perceptions and experiences • There is interaction between the researcher and participants • Associated with qualitative research
This Study	Relativism

Source: (Ade Bilau *et al.*, 2018).

Ontology as indicated in Table 3.2, relates to the nature of reality, or existence or being (Moyo, 2017. Different ontologies make distinct assumptions about the nature of the phenomenon under investigation (Moyo, 2017). Ontology establishes assumptions, specifically realism and relativism, which are linked to concerns such as "whether social entities need to be perceived as objective or subjective", "how things are", and "how things work" (Bilau *et al.,* 2018). A subjective-objective dimension can be used to characterise these ontological assumptions regarding the nature of reality (Bahari, 2010). The researcher is subjective to numerous realities in qualitative research (Bahari, 2010).

3.2.2.1 Choice in this study

The ontological choice in this study was relativism due to the fact that the researcher accepted that multiple realities exist based on different situational contexts. The researcher believed that engaging with the participants will attain greater knowledge of the phenomenon.

3.2.3 Axiology

In Table 3.3, value-laden and value-neutral axiology is explained.

Table 3.3: Axiology illustration

Axiology	Focuses on personal values such as aesthetics and ethics ,and how they associate with knowledge. It concerns researchers' foundation for value judgment
Value-neutral	Value-laden
• Relate to positivism • Values have no place in the research process • Researcher should remain emotionally disconnected from the inquiry • Advocate for systematic and standardized investigative methods • In order to control or eliminate any influence the researcher might have on the research process or on participants	• Relate to interpretivism • There is no way of divorcing the researcher's values and lived experiences from the research process • Researcher should not eliminate his or her values • He or she should acknowledge, pronounce and “bracket” them
This Study	Value-laden

Source: adapted from (Saunders *et al.*, 2019)

Axiology as tabulated in Table 3.3, examines judgments and values. It ponders issues such as what is deemed valued, what moral and ethical standards are, and how people choose what is good or evil. The two primary sub-fields of axiology are aesthetics and ethics. Ethics is the study of moral principles and values, including justice, fairness, and the difference between right and wrong behaviour. On the other hand, aesthetics is concerned with the study of art, beauty and the enjoyment of sensory experiences (Winit-Watjana, 2016). Researchers may communicate their values, experiences and opinions in various studies and this may position them to be unbiased about the value notion (Saunders *et al.,* 2019). There are two axiological positions: one related to positivism, referred to as value-neutral, and the other interpretivism, that is value-laden. Pragmatism is associated with research employing positivism as well as interpretivism (Ade Bilau *et al*., 2018).

Positivism is a philosophical approach that stresses the analysis of values and conclusions using empirical data and scientific techniques. Positivists hold that rather than being founded on subjective views or personal convictions, information regarding ethics and values should be derived from observable facts and objective analysis. (Ponterotto, 2005). Values and ethics, according positivists, are intrinsically subjective and cannot be reduced to strictly objective assessments. They argue that empirical approaches by themselves are insufficient to properly convey the diversity and complexity of human values. They also emphasize the significance of contextual, historical and cultural elements in forming values - aspects that a positivist approach might not fully capture (Saunders *et al.,* 2019). Positivist researchers may strive to be unbiased during the research process, their values are still reflected in their choice of research topic (Moyo, 2017). On the other hand, interpretivists assert that researchers are unable to separate their research and their value systems and they must therefore accept this and admit to it (Ponterotto, 2005). Snyder (2019) agrees by adding that this is manifested through their experiences.

3.2.3.1 Choice in this study

The value-laden axiological perspective used for this investigation was interpretivism. The researcher believes that her values are an intrinsic element of the study and hence they cannot be entirely separated. The study dealt with theoretical conceptualisation; the researcher is required to perform a thorough investigation to obtain a thorough grasp of the phenomenon. As a result, it was determined that a close interdependent contact between the researcher and the participants was required.

3.3 RESEARCH PARADIGMS

Table 3.4 describes the various research paradigms that can be used in research.

Table 3.4: The different research paradigms

Research paradigm	Set of beliefs or philosophical frameworks that guide action on research (Winit-Watjana, 2016:429). Allows various ways of looking at the world and form a foundation for undertaking research (Davies & Fisher, 2018:21).		
Positivism	**Interpretivism**	**Pragmatism**	**Postpositivsm**
• Premise on the physiological perspective that says reality exists in the outside world • Employ deductive reasoning • Employ experimental methodology, tests prearranged theories or hypotheses • Uses quantitative research methods • Larger sample sizes	• Physiological view - researcher's experiences and background influences the research objects • Aim to have an in-depth understanding of the context of the events occurring naturally • Employ inductive reasoning • Uses qualitative research methods • Smaller sample sizes	• Avoids any philosophical arguments that cause tension between the positivists and interpretivists • Do not see the world as an absolute unity • Believe that research happens in a variable context • Aim to solve "real world" problems • Prefers mixed methods research in a methodology	• Premised on critical realist ontology -there is a single reality that we cannot certainly know about it • Based on a modified objectivist epistemology • Focuses on clarifying what we experience and understand • Prefers triangulation of approaches to research
This Study	Interpretivism		

Source: adapted from (Davies & Fisher, 2018)

The general framework or viewpoint that directs the planning, execution and interpretation of research projects is referred to as a research paradigm. It includes the presumptions, convictions and theoretical perspective of the researcher, all of which influence the course of the investigation. According to Davies and Fisher (2018), numerous research paradigms and techniques exist, such as interpretivism, positivism and critical theory. Assumptions regarding the nature of reality, the researcher's position, data collection and analysis techniques and research objectives are specific to each paradigm (Davies & Fisher, 2018). Often connected to the natural sciences, positivism places a strong emphasis on objectivity, quantifiable evidence and the pursuit of generalizations or universal rules. It uses statistical analysis and meticulous experimental designs to try and determine causal correlations.

3.3.1 Interpretivism

According to Davies and Fisher (2018), interpretivist research differs from positivist research in that it subscribes to an ontological assumption that different realities exist, as well as an epistemological belief that the researcher must utilise subjective measures. The goal of interpretivist research is to investigate, characterise and comprehend the context of naturally occurring phenomena. In inductive reasoning, hypotheses are created from specific observations rather than examined in interpretivist research. It typically employs qualitative research methodologies with lower sample sizes to acquire detailed, rich and diverse data regarding participants' life experiences, exposure and skill sets (Qutoshi, 2018). Furthermore, discoveries are produced by close collaboration between the researcher and the participants or subjects (Davies & Fisher, 2018).

3.3.2 Positivism

The philosophical and scientific approach known as positivism places a strong emphasis on using objective observation and empirical data to interpret and make sense of the world. It was first developed in the 19th century and became well-known in the social sciences. According to positivism, knowledge should not be derived from subjective interpretations or philosophical conjecture, but rather from observable facts and verifiable data. It promotes the use of the scientific process, which entails developing hypotheses, carrying out investigations or observations and coming to conclusions supported by actual data (Ade Bilau *et al.,* 2018).

The objective of scientific research, according to positivism, is to find patterns and regularities in the social and natural worlds in order to create general theories and laws. It aims to determine causal links and forecast future occurrences based on observed patterns (Davies & Fisher, 2018). Numerous academic fields, including sociology, psychology, economics and political science have been greatly impacted by positivism. It has influenced how research is carried out by placing a strong emphasis on objectivity, quantification and the application of statistical analysis (Ade Bilau *et al*., 2018).

Positive theories have their detractors who claim that they oversimplify complex social phenomena, ignore subjective experiences and interpretations and ignore how values and social context shape knowledge. They support different strategies that consider various viewpoints and recognize the impact of individual, historical and cultural factors (Davies & Fisher, 2018). To summarize, positivism is a scientific and philosophical perspective that stresses the application of objective observation and empirical data to comprehend and explain the world, with an emphasis on identifying general laws and patterns.

3.3.3 Pragmatism

The pragmatic school of philosophy places a strong emphasis on the applicability of ideas and convictions as well as their practical implications. It was first developed in the late 1800s and has had a big impact on a lot of different areas, like politics, social sciences, education and philosophy. The idea of unchanging truth or unchanging principles is rejected by pragmatism, which instead emphasizes the value and efficacy of ideas, theories and actions. It highlights how crucial experience, observation and experimentation are in establishing the worth and viability of concepts. Pragmatists hold that a concept or belief's veracity is assessed by its applicability, problem-solving capabilities and capacity to produce the desired results (Ade Bilau *et al.,* 2018).

Pragmatism holds that knowledge and comprehension are dynamic concepts that change over time as a result of experience and interaction with the world. In addition, pragmatists emphasize the value of tolerance and pluralism, acknowledging that various viewpoints and methods can be useful in various situations. It promotes adaptability, open-mindedness and a readiness to change opinions and theories in light of fresh information and experiences (Davies & Fisher, 2018). In conclusion, pragmatism is a philosophical school of thought that places an emphasis on ideas' applicability and their practical implications. In order to assess the worth and viability of ideas and theories, it places a strong emphasis on experimentation, experience and observation. It also encourages pluralism, flexibility and adaptability in problem-solving and understanding.

3.3.4 Choice for this study

As it dealt with theoretical conceptualisation and building, the research paradigm for this study was interpretivism. To comprehend the context, the researcher needed to interact with the individuals. Furthermore, the researcher held the ontological belief that several realities exist, each of which is affected by context.

3.4 THE LOGIC OF INQUIRIES

Table 3.5 describes the deductive, inductive and abductive logic of enquiries

Table 3.5: The logic of inquiries

Logic of inquiry	connection between theory and research (Awuzie & McDermott, 2017:356)	
Deductive (theory → data)	Inductive (data → theory)	Abductive (data ↔ theory)
• Associated with quantitative research, inclined towards a positivist paradigm • (1) Researcher tests or verifies an existing theory, (2) From the theory, the researcher tests the hypothesis, (3) The researcher describes and put into operation the variables extracted from the theory, (4) An instrument is used to measure the variables in order to obtain a score	• Associated with qualitative research, inclined towards an interpretivist • (1) The researcher gathers information from participants, (2) Through asking open-ended questions and recording field notes, (3) information is analysed to form categories or themes, (4) Themes are then advanced into theories, broad patterns or generalizations, and (5) The information is compared with existing relevant literature or personal experiences	• (1) Observation of the surprising fact, (2) Guessing a preposition that if correct, would explain this fact as a natural, (3) Conditional recognition of the preposition as true, (4) Resulting on the propulsion regarded as grounds for the consequent deduction which will further be observed through induction. • The surprises from induction can trigger new abductive conclusion and so forth
This Study	Inductive approach	

Source: adapted from (Awuzie & McDermott, 2017).

Academic researchers must choose a framework to develop a relationship between the theory and the study (Awuzie & McDermott, 2017). Academics believe that deductive logic is utilised in 'quantitative' research and inductive logic is utilised in 'qualitative' research. Most qualitative researchers still struggle to establish a clear relationship between theory and study. Theory is used in research, which may have been conceptualised in the research design phase (Saunders *et al*., 2019). This theory is critical because it serves as the framework for a social investigation and provides a theoretical concept for the research. It provides a framework for researching and interpreting social phenomena (Awuzie & McDermott, 2017). As a result, researchers must know their theoretical framework that will form the basis of the study and guide them in terms of design. Theory development can be divided into three approaches: deductive, inductive and abductive.

3.4.1 The deductive inquiry

This approach is typically associated with quantitative research (Sekaran & Bougie, 2016) and utilises a positivist paradigm (Bilau *et al.,* 2018), a theory and hypothesis are then developed, and a research strategy is conceptualised that tests the hypothesis. The deductive approach is defined by Bahari (2010) as an investigation into the relationship between research and theory. The hypothesis and ideas developed as a result of the theory are then used to guide the research (Snyder, 2019). In this approach, the researcher's starting point would be to present the theory which would form the framework for the rest of the research. The deductive approach requires the researcher to present a theory at the start of the study and use it deductively (Terrell, 2015).

3.4.2 The inductive inquiry

The inductive approach is utilised in qualitative research. The empirical data obtained is closely observed and the theory is then formed (Bahari, 2010). In contrast to a deductive technique in which data follows theory, this means that theory follows data (Saunders *et al*., 2016). An inductive method, beginning with the conceptual framework, is more oriented towards interpretivism, according to Bilau *et al.* (2018). The objective of the inductive approach is to comprehend a relevant occurrence within its social context. Scientific research frequently employs deductive inquiry, especially in disciplines like formal logic, mathematics and physics. It enables the testing and improvement of theories, the formulation of predictions and the identification of causal links between variables (Terrell, 2015). It is crucial to remember that deductive reasoning has its limitations. It mainly depends on the original theory or premises and conclusions drawn from it could be wrong if those are faulty or lacking. Furthermore, deductive reasoning can only support or refute pre-existing theories; it cannot produce new ones.

3.4.3 The abductive inquiry

Creating logical explanations or hypotheses to explain observed phenomena or evidence is known as abductive inquiry, sometimes referred to as abduction or inference to the best explanation. It is a kind of inductive reasoning that transcends both deductive and inductive reasoning (Bahari, 2010). Even if an explanation is not definite or proven, the aim of abductive inquiry is to offer the most likely or best explanation for a given set of observations or data. It entails forming informed assumptions or hypotheses in light of the information at hand and past knowledge.

After more research and testing, these theories are assessed and improved. In problem-solving, detective work and scientific research, abductive reasoning is frequently employed. It enables investigators and researchers to produce hypotheses that can direct additional study or experimentation. It is especially helpful in situations that are unclear or complex and have several possible explanations (Vaezi *et al.,* 2019).

It is crucial to remember that abductive reasoning cannot offer absolute certainty or proof. Rather, it provides the most logical explanation given the information at hand. Iterative abductive inquiry involves revising and refining hypotheses in response to new information. All things considered, abductive inquiry is a useful technique for formulating theories and investigating potential explanations in a variety of research domains, advancing knowledge and comprehension (Baker, 2019).

3.4.4 Choice for this study

The choice of inquiry for this study was inductive and qualitative deductive. The study’s key aim was to conceptualise and develop a theory from the analysis of data. The study's main objective was to develop a talent management risk framework for the aviation industry. To further determine what talent-risk management processes were in place and where the gaps existed in the aviation industry. To finally determine the critical factors which may be used in the development of a theoretical framework.

3.5 RESEARCH METHODS

Table 3.6 explains quantitative, qualitative and mixed research methods.

Table 3.6: The different types of research methods

Research method	Systematic plan for conducting research. The researcher's choice of method is dictated by the principle of the research question or that of context (Szyjka, 2012:111).	
Quantitative	Qualitative	Mixed
• Data collection is standardized • Researcher is independent of the research • Research questions are expressed clearly • Uses probability sampling techniques • Use of numerical data • May use of a single data collection techniques or multiple data collection techniques	• Data collection is non-standardized • Research process is interactive and naturalistic • Uses non-probability sampling techniques • Non-numerical data • May use a single data collection techniques or multiple data collection techniques	• Qualitative and quantitative techniques are combined • Various research designs are used: Concurrent mixed method research, Sequential mixed method research, Sequential exploratory method research, Sequential explanatory method research and Sequential multi-phase method research
This Study	Qualitative	

Source: adapted from (Szyjka, 212:111).

Research methods can be defined as a strategy for achieving research objectives and answering research questions (Sekaran & Bougie, 2016). As described in the research philosophy, several research methods, such as qualitative, quantitative and mixed methodologies, as indicated in Table 3.6 above can be employed to address the research objectives (Saunders et al., 2016). The three primary research approaches are qualitative, quantitative and a combination of the two (McNabb, 2020). The Table 3.7 below summarises the comparisons between the different approaches.

Table 3.7 The comparisons between the different research methods

Approaches	Qualitative Methods	Quantitative Methods	Mixed Methods
Philosophies	Interpretivism	Positivism	Pragmatism
Research Enquiries	Inductive, focuses on developing knowledge	Deductive, focuses on testing existing theory	Inductive, deductive, or abductive approach to theory development
Key differentiating Characteristics	Data gathering is non-standardised, the research process is participatory and lifelike, non-probability sampling techniques are used, and a single or several data collection procedures may be used.	Data collecting is standardised, the researcher is independent of the research, research questions are clearly specified, probability sampling techniques are used, and a single or several data collection procedures may be used.	Diverse research strategies, including concurrent mixed method research (separate use of qualitative and quantitative methodologies, sequential exploratory method research), are used.

Source: adapted from (Saunders *et al.*, 2016).

3.5.1 Quantitative research method

A methodical approach to collecting and analyzing numerical data in order to find answers to research questions or validate hypotheses is known as quantitative research. It entails the systematic and standardized collection of data, frequently with the use of surveys, experiments or pre-existing datasets (Szyjka, 2012). The goal of quantitative research is to gather information that can be measured and statistically examined. Most of the time, this data is numerical in nature and includes things like survey replies, measurements and counts.

3.5.2 Qualitative research method

Exploring and comprehending the subjective experiences, viewpoints and meanings of individuals or groups is the main goal of qualitative research. It seeks to obtain profound understandings of the subtleties and complexity of social interactions, beliefs, attitudes and behaviour in humans (Szyjka, 2012). Gathering and evaluating non-numerical data from sources like focus groups, observations, interviews and written or visual materials is a key component of qualitative research (Szyjka, 2012). It places a strong emphasis on open-ended questions and avail the participants with the freedom to describe their experiences and ideas in their own words. In order to examine the data and find patterns, themes and meanings, researchers frequently employ methods like grounded theory, content analysis and thematic analysis (Saunders *et al.,* 2016).

Haven and Van Grootel (2019) add that capturing rich, detailed information that may be difficult to quantify is one of the main advantages of qualitative research. It offers a more profound comprehension of the social dynamics, context and individualized explanations of phenomena. In the social sciences, psychology, anthropology, education and other domains where investigating human experiences and social processes is crucial, qualitative research is frequently employed. It is crucial to remember that qualitative research frequently uses smaller sample sizes and may not be transferable to more extensive populations. Because the researcher's interpretations and analysis may have an impact on the results, it is also necessary to carefully evaluate the subjectivity and potential biases of the researcher (Szyjka, 2012).

3.5.3 The method adopted by this study

The qualitative research method was used in this study. This is due to the researcher's desire to get a comprehensive understanding of the phenomenon of talent management in the aviation industry. Furthermore, the researcher believes that she must be intimately involved in the research process in order to comprehend the phenomena of aviation and how this business attracts and retains its personnel during the COVID-19 pandemic, as well as under other circumstances. Qualitative research is a methodological approach that aims to explore and understand complex phenomena in-depth, often focusing on the subjective experiences, perspectives, and meanings attributed by individuals or groups. It involves gathering rich and detailed descriptions to provide a comprehensive understanding of the research topic.

Qualitative research seeks to understand the research topic within its specific context. The researcher immersed herself in the virtual setting and interacted with participants to gain a holistic understanding of the phenomenon being studied. The researcher used open-ended data collection methods including interviews, and document analysis. These methods allowed the participants to express their thoughts, feelings, and experiences in their own words, providing rich and nuanced data.

The researcher used in-depth interviews to gather detailed information from participants. These interviews were semi-structured, allowing for flexibility and exploration of the themes. The researcher delved into the participants' experiences, beliefs, and perspectives, encouraging them to elaborate and provide rich descriptions. The recorded responses were then listened to and transcribed, further engaging the researcher with the data. The researcher aimed to provide rich and detailed descriptions of the research topic, using thick descriptions to capture the complexity and nuances of participants' experiences, often incorporating direct quotes and vivid narratives to illustrate her findings.

The researcher analysed the data thematically, identifying patterns, themes, and categories that emerged from the data, organizing and interpreting them to gain insights into the research topic. This analysis also involved coding, categorizing, and interpreting the data to identify commonalities and differences. The researcher acknowledged her own biases, assumptions, and subjectivity throughout the research process. She reflected on her own role and influence on the data collection and analysis, ensuring transparency and rigor in her interpretations. Overall, qualitative research offers a deep exploration of the research topic, providing a comprehensive understanding of the subjective experiences, meanings, and social dynamics associated with the phenomenon under investigation. It allows researchers to capture the richness and complexity of human experiences, providing valuable insights for theory development, policy-making, and practical applications.

3.6 THE PURPOSE OF THE INQUIRY

As a starting point before any design is contemplated, the purpose or purposes of the study should be articulated. The research design, as indicated in Table 3.8 below, should represent the objective of the inquiry, which is divided as follows: explorative, descriptive, explanatory and evaluative as explained more below: Strydom (2013).

Table 3.8:The different research designs

Purpose of the inquiry	Articulate the purpose(s) of the research study (Strydom, 2013:149)		
Explorative	**Descriptive**	**Explanatory**	**Evaluative**
• Aim to discover what is happening and gain insights about a particular phenomenon of interest • Ask open-ended questions -“How’ or ‘What” • Conducted through in-depth interviews, literature search, focus group • Flexible, follows un-structured research process	• Concerns about gaining an in-depth profile of persons, events or situations • aim to gain a more compact description of the phenomenon and their deeper meaning by describing the setting • ‘What’, Who’, When’, ‘Where’ or “how’ • rigid, follows a structured research process	• Aim to explain why the phenomenon occurs • predict future similar events or behaviour • To build theory • establishes relationships between variables • ‘How’, ‘What' or ‘Why’	• Concerns about finding out how well something works • Incorporates the components of descriptive, exploratory and explanatory purposes • ‘What’ or ‘How’
This Study	Explorative		

Source: adapted from (Strydom, 2013:149)

3.6.1 Explorative design

By asking open-ended questions, exploratory research tries to understand what is happening and obtain insights into a specific phenomenon (Saunders *et al.,* 2016). It is related to research designs that are designed to gather ideas and impressions regarding research problems and factors related to such difficulties. Exploratory research aids the researcher in identifying and comprehending variables and their relationships. It is frequently used as a "pilot" study in larger investigations, but it can also be important research in its own right (Biereenu-Nnabugwu, 2018).

A research method that seeks to delve further into a specific topic or issue is known as exploratory design (Taherdoost, 2018). It is frequently applied at the beginning phases of a project or research when there is little prior knowledge or comprehension of the topic. The primary objective of explorative design is to produce ideas, insights and hypotheses that can direct more research or development. Vaezi *et al.,* (2019) adds that open-ended techniques like surveys, observations and interviews are frequently used by researchers or designers in exploratory design to acquire qualitative data. After that, the qualitative data is examined for trends, themes or new ideas. The results of exploratory design can assist researchers or designers in developing hypotheses, improving their research questions or influencing the plan of follow-up studies or interventions.

3.6.2 Descriptive design

The goal of descriptive design is to precisely characterize and record the traits, actions or events of a certain group or circumstance. It does not try to determine causes or make forecasts; instead, it concentrates on giving a thorough and impartial explanation of what is observed or measured (Saunders *et al.,* 2016). Researchers gather information for a descriptive design using a variety of techniques, including surveys, observations and pre-existing records (Terrell, 2015). After that, the data is examined using statistical methods or qualitative analysis to compile and display the results. For numerical data, descriptive statistics like means, frequencies or percentages are frequently employed; however, for qualitative data, thematic or content analysis may be employed.

Providing readers with a clear and complete picture of the research topic or population under study is the primary goal of a descriptive design. It is frequently used to collect data on demographics, attitudes, behaviours and other pertinent variables in social science, market research and public health studies (Strydom, 2013). When establishing a foundation for additional research or decision-making, identifying patterns or trends, or establishing a baseline understanding of a phenomenon, descriptive design is useful (Vaezi *et al.,* 2019).

3.6.3 Explanatory design

An approach to research called explanatory design or explanatory research tries to explain the connections between variables or phenomena. It aims to comprehend cause-and-effect connections and offer justifications for the occurrence of particular results. Explanatory design usually comes after exploratory or descriptive research and is used to expand on pre-existing knowledge and theories. Researchers gather quantitative and qualitative data in explanatory design in order to analyze the correlations between variables (Biereenu-Nnaugwu. 2018). To find patterns, correlations or causal relationships, they employ statistical analysis along with other techniques. Deeper comprehension of the underlying mechanisms or processes that contribute to the observed outcomes is the aim.

3.6.4 The evaluative design

A research or design approach that concentrates on evaluating the efficacy, efficiency and impact of a specific intervention, program or design solution is known as evaluative design (Saunders, *et al.,* 2016). It is frequently used to assess the results or outcomes of an intervention or to assess the worth and calibre of a process, service or good. Researchers and evaluators usually use a mix of qualitative and quantitative techniques when gathering data for an evaluation. Surveys, interviews, observations, experiments and the analysis of already-collected data are a few examples of this. The success or efficacy of the intervention or solution under evaluation is then determined by analysing the data that has been gathered (Strydom, 2013).

Providing evidence-based insights and suggestions for decision-making and improvement is the primary objective of evaluative design. It assists stakeholders in appreciating the advantages and disadvantages of the intervention or solution, pinpointing areas in need of development and making well-informed choices regarding its continued application or improvement. In domains like program evaluation, social sciences, healthcare and education, evaluative design is frequently employed. It is essential for assessing the worth and effect of interventions, guiding the formulation of public policy and promoting ongoing development across a range of fields (Malhotra, 2017).

3.6.5 The combined research design

Combined research designs, sometimes referred to as mixed methods designs, combine qualitative and quantitative research techniques into a single study. With the help of this design, researchers can collect and examine both numerical and non-numerical data to develop a deeper comprehension of a research question or subject (Saunders, *et al.,* 2016). When employing a combined research design, scientists gather information through a variety of techniques, including surveys, interviews, experiments and observations. While the quantitative data offers statistical information and enables generalization to a larger population, the qualitative data offers rich, in-depth insights into the experiences, perceptions or behaviours of participants (Strydom, 2013). Researchers can complement and validate findings from each method when they combine quantitative and qualitative data in a combined research design. Additionally, it can assist in addressing research questions from various perspectives, offering a more comprehensive picture of the phenomenon being studied and producing conclusions that are more solid and nuanced.

3.6.6 The choice of research design in this study

The purpose of this study was explorative in nature. The choice was motivated by the fact that the researcher needed to understand the phenomenon in detail and discover thoughts and ideas of how to develop a talent risk management framework. The researcher also needed to determine the critical factors involved in developing a suitable and sustainable talent management strategy for the aviation industry based on the complexities of the entire human capital value proposition of the aviation industry.

3.7 RESEARCH STRATEGIES

The methodical plans and techniques that researchers use to carry out their investigations and accomplish their goals are referred to as research strategies. These tactics direct the research process's overall course and methodology. The research strategy provides a methodological connection between the researcher's philosophy and the choice of data collection and analysis methods (Saunders *et al.,* 2016). The research question, the resources at hand and the characteristics of the phenomenon under study all influence the research strategy selection. Scholars frequently choose and modify approaches according to their own research goals and the best ways to achieve them.

The differences between these strategies as indicated in table 3.9 below, are discussed in detail below.

Table 3.9: Research strategies

Research strategy	A plan of action to achieve a goal. Outlines how a researcher is going to answer his or her research question (Saunders ***et al.***, 2016:177).		
Phenomenology	**Grounded theory**	**Case study**	**Ethnography**
• Assists researchers to explore and comprehend the everyday experiences without the prior knowledge of those experiences • Complex research methodology for understanding in-depth the phenomenon of interest • Fragment of interpretive paradigm • Has many perspectives but major- descriptive and interpretive (hermeneutic) phenomenology	• Can be used to integrate methodology and method • Permitting key concepts and theory to arise out of data • Emphasizes theory development • Uses numerous stages of gathering, sanitizing and sorting the data • Have an inherent potential for bias	• Explores a real-life case or cases over a period of time • Through in-depth data collection comprising numerous sources of facts and case descriptions • Objective is to learn more about a poorly understood or little known situation • Defined by unit of analysis • Other strategies can be used in combination with the case study	• Studies the social world or the culture of a group • objective is to study a group of people who share the same space and interact with one another within a particular context • Several strategies: realist, interpretive and critical ethnography
This Study	Descriptive phenomenology		

Source: adapted from (Saunders *et al.,* 2016).

3.7.1 Phenomenology

Qutoshi (2018) defines phenomenology as a research and philosophical approach that aims to comprehend and characterize people's lived experiences. It aims to investigate the subjective essences and meanings of phenomena as they are experienced by people, as opposed to looking at them from an external or objective standpoint. Seekaran and Bougie (2016) adds that in phenomenology, investigators seek to reveal the fundamental frameworks and components of human experiences through introspection and examination. In order to approach the phenomenon with an open and unbiased mindset, it is necessary to set aside preconceived notions and assumptions. Scholars frequently employ techniques like observations, interviews and introspective writing to compile comprehensive and in-depth accounts of people's experiences. Gaining a profound grasp of the essence and significance of a specific phenomenon as experienced by individuals is the aim of phenomenological research. It highlights how our understanding of the world is shaped by our subjective experiences, feelings, perceptions and interpretations (Vaezi *et al.,* 2019). Phenomenology can be used to investigate and shed light on people's lived experiences and the meanings they attach to them in a variety of domains, such as psychology, sociology, medicine and education (Law & Shafey, 2019).

3.7.2 Grounded theory

Developing theories or explanations based on empirical data is the goal of the qualitative research methodology known as grounded theory (Leavy, 2017). It was created in the 1960s by sociologists Anselm Strauss and Barney Glaser and it has since been applied extensively in many fields. Grounded theory's central tenet is to develop theories directly from the data as opposed to beginning with theories or hypotheses that have already been developed (Saunders *et al*., 2016). It entails an organized, iterative process for gathering, analyzing and developing theories about data. To find patterns, categories and connections in the data, researchers compare and code the information continuously (Leavy, 2017).

As a result of this process, theories and concepts based on the data itself start to take shape. When researching novel topics where current theories might be inadequate or when examining intricate social phenomena, grounded theory is frequently employed. It enables scholars to create theories that are based on the participant's perspectives and lived experiences. The resulting theories, which offer insights and explanations that can be applied to comparable contexts or situations are frequently abstract and generalizable (Saunders *et al*., 2016). It is crucial to remember that the goal of grounded theory is to comprehend people's subjective meanings and interpretations, not to arrive at an objective truth. It highlights how crucial context is as well as how reality is socially constructed.

3.7.3 Case studies

Case studies are a type of research methodology in which a particular person, group, organization or circumstance is thoroughly examined and analyzed (Alpi & Evans, 2019). This qualitative research methodology seeks to comprehend intricate phenomena in the context of everyday life. Sekaran and Bougie (2016) asserts that researchers can investigate and learn more about a variety of topics, including behaviour, experiences, procedures and results thanks to case studies, which offer rich and in-depth descriptions of the subject of study. Researchers gather information for a case study using a variety of techniques, including observations, interviews, document analysis and occasionally surveys. After that, the data were examined through qualitative analysis methods in order to find trends, themes and distinctive features. A thorough grasp of the case and its context is provided by the narrative format in which case study findings are frequently presented (Alpi & Evans, 2019).

When studying complicated or unique situations that require a thorough investigation, case studies are especially helpful. They make it possible for researchers to investigate how different elements interact and comprehend the subtleties and complexity of the topic they are studying. Sekaran and Bougie (2016) agree that case studies can lead to theories, produce hypotheses and offer insightful information. It is crucial to remember that case studies are usually narrowly focused on one or a small number of cases and as such their conclusions might not apply to a wider range of people (Alpi & Evans, 2019).

3.7.4 Ethnography

A qualitative research method called ethnography uses in-depth fieldwork and observation to study and comprehend a specific culture or social group. Its goal is to provide readers with a thorough understanding of the social, cultural and behavioural trends present in a given community or situation. In order to conduct an ethnographic study, the researcher usually needs to spend a considerable amount of time in the community or group being studied and actively participate in it (Alpi & Evans, 2019). The researcher is able to observe and record the daily interactions, cultural practices and daily activities of the community members thanks to this immersive approach. In addition, gathering artifacts, conducting interviews and examining pertinent documents or other materials might be included (Vaezi *et al.,* 2019).

Ethnographic data is usually abundant in context and detail, offering a comprehensive picture of the social dynamics, norms, values and beliefs of the community (Saunders *et al.,* 2016). Finding the deeper meanings and reasons behind people's actions and customs, as well as the larger social and cultural structures that influence their lives, is a common goal of ethnographic research. Anthropology, sociology and other social sciences frequently employ ethnography to investigate a range of topics related to human behaviour, including social interactions, cultural practices, organizational dynamics and consumer behaviour (Saunders *et al*., 2016:187). It enables researchers to get a thorough grasp of the viewpoints and lived experiences of the subjects of the study, offering insightful information for developing theories, formulating public policy or creating intervention plans (Vaezi *et al*., 2019).

3.7.5 The research strategy adopted by this study

The researcher adopted phenomenology as the researcher believed that direct interaction with the participant was required to understand the phenomenon**.**

3.8 RESEARCH PROCESS

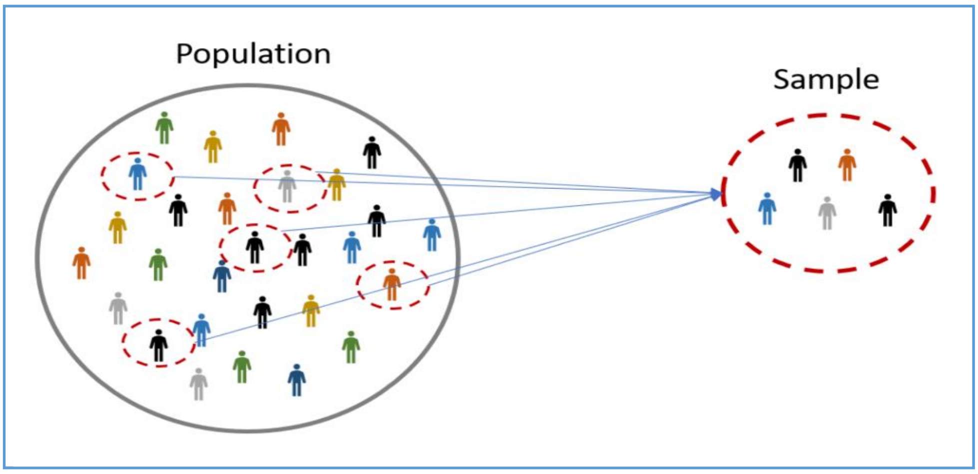
3.8.1 Unit of Analysis

In the research process, the unit of analysis refers to the precise entity or level of observation that is being investigated or analysed. It varies according to the type of the study and the research question. Individuals, groups, organisations, events, texts or any other defined unit relevant to the research purpose could serve as the unit of analysis (Khan, 2014). To ensure the accuracy and validity of the research findings, the unit of analysis must be precisely defined. The unit of analysis selected for this study were individuals who occupied the position of HR Managers at Qatar Airways and SAA.

3.8.2 Target population

According to Taherdoost (2018), *"a population is a collective term used to describe the total quantity of things or cases that are the subject of the study."* Terrel (2016) adds that the target population is the specific group of people or entities to whom the researcher wishes to generalise the findings. The sample is taken from the larger population and the research findings are intended to be applied to that population as depicted in Figure 11 below. The study question should be relevant to the target demographic, which should be clearly specified. It could be a particular demographic group, a geographical location, a company or any other designated population of interest. The target population must be carefully chosen to ensure the external validity and generalizability of the research findings (Taherdoost, 2018). The population whose characteristics are to be measured are called elementary units or elements of the population (Taherdoost, 2018).

Figure 10: Target population versus sample



Source: (Taherdoost, 2018:21)

In this study, the population were Human Resource (HR) managers who understand talent management., Qatar Airlines and SAA's HR managers were targeted for this study, but as it is a qualitative study an equal set of HR managers were targeted to voluntary participate in the study. The eventual sample size was 6 HR managers from each airline hence the sample size was 12 managers.

3.8.3 Sampling method

According to Seekaran and Bougie (2016), a sampling method is a strategy for selecting a subset of individuals or organisations from a broader population for inclusion in a research study. The sample method used is determined by a number of criteria, including the research objectives, demographic characteristics and available resources (Wilson, 2016). According to Saunders *et al.,* (2016), there are two kinds of sampling methods: probability sampling and non-probability sampling. Simple random sampling, stratified sampling and cluster sampling are all probability sampling methods that use a random selection process to provide each member of the population an equal chance of being included in the sample. These methods enable statistical inference and generalizability of results to a larger population and are suitable for quantitative research, whereas non-probability sampling is more suitable to qualitative research.

Non-probability sampling methods, on the other hand, do not use random selection and do not provide all members of the population equal chances of selection. Convenience sampling, purposive sampling and snowball sampling are examples of non-probability sampling procedures. These methods are frequently employed when obtaining a representative sample is challenging or when specialised features or expertise are required (Rahi, 2017). To guarantee that the sample is representative of the target population and that the study findings may be generalised correctly, the sampling procedure should be carefully studied (Wilson, 2016).

3.8.3.1 Non-Probability Sampling

Non-probability sampling is a sample approach in which persons or entities are not chosen at random for participation in a research project. Non-probability sampling, in contrast to probability sampling, does not give every member of the population an equal chance of being included in the sample. Individuals or corporations are instead chosen based on certain criteria or convenience (Saunders *et al*., 2016).

According to Taherdoost (2016), non-probability sampling methods are classified into various types:

- *Convenience Sampling*: this strategy entails picking individuals or entities who are easily accessible to the researcher. Convenience sampling is frequently employed due to its accessibility and convenience; however, it may create bias because it may not adequately represent the total population.
- *Purposive Sampling*: purposive sampling involves selecting individuals or entities based on specified qualities or criteria relevant to the research subject. The researcher deliberately chooses volunteers who have the necessary attributes or skills.
- *Snowball Sampling*: snowball sampling is selecting a small number of people who match the research criteria and then requesting them to recommend other

possible participants. When the target demographic is difficult to contact or identify, this strategy is frequently used.

- *Quota Sampling*: quota sampling entails selecting individuals based on pre-defined quotas to guarantee that the sample accurately represents the population. Quotas are established by the researcher based on certain characteristics such as age, gender or employment.

Non-probability sampling methods are frequently employed in qualitative research, exploratory investigations or when obtaining a representative sample from the community of interest is difficult. Non-probability sampling, on the other hand, may create bias and limit the generalizability of research findings to a larger population (Saunders *et al.,* 2016).

3.8.3.2 Sampling size

The number of individuals or entities included in the sample of a research study is referred to as sampling size. Choosing an appropriate sample size is critical for assuring the reliability and validity of the research findings (Rahi, 2017). The sample size is impacted by a number of factors, including the research aims, the level of precision needed, population variability and available resources. A bigger sample size, in general, produces more accurate and reliable results by reducing the impact of random variation and increasing the statistical power of the study (Saunders *et al.,* 2016). Choosing the ideal sample size, on the other hand, entails a trade-off between precision and practicality. According to Gentles *et al.,* (2015) conducting research with a relatively high sample size can be time-consuming, expensive and logistically difficult. As a result, statistical approaches are frequently employed by researchers. Rahi (2017) states that it is critical to keep in mind that the sample size should be appropriate for the research design and analysis methods used. Different types of studies, such as qualitative research or experimental research, may have different sample size issues. Ultimately, the goal is to select a sample size that is large enough to offer significant and reliable results while keeping the research study's practical limits in mind (Guetterman, 2015).

3.8.3.3 Participants of the study

A participant refers to the individual who responds to the questions in a research study interview (Saunders *et al.*, 2016). The participants were purposely selected from the entire population of 12 managers. Six were from Qatar Airlines based in the Middle Eastern country of Qatar, and the remaining six participants have worked in management roles for SAA primarily based in the City of Johannesburg in South Africa. All 12 participants had the experience, qualifications, skills and abilities deemed most suitable to participate in this study whereby their views, opinions and recommendations would be key to the findings of the study. The inclusion and exclusion criteria could not be clearly defined due to the population size available at South African Airways. The airline was going through business rescue as well as organisational restructuring and therefore the HR department consisted of a total of 12 HR managers. The HR managers at Qatar Airways were chosen based on similar attributes of the HR managers at South African Airways. All of the participants had more than 5 years of human resource experience and all were holders of bachelor's degrees.

3.8.4 Data collection methods and instruments used

Creswell (2007) states that the techniques or procedures used to acquire information or data for a research study are referred to as data collection methods. The methods used to collect data are determined by the study objectives, the nature of the research topic and the available resources. These may include:

- *Surveys*: data were collected through questionnaires or interviews in surveys. They can be carried out in person, over the phone, by mail or online. Surveys enable standardised data collection and can be used to obtain information from a large number of people.
- *Interviews*: in order to acquire information, interviews require direct engagement with participants. They can be either organised (with planned questions) or unstructured (with open-ended responses). Interviews allow for in-depth investigation of topics and capture of rich data.
- *Observations*: are the systematic observation and recording of behaviours, events or phenomena. It can be done in the wild (naturalistic observation) or in

a controlled setting (controlled observation). Observations can provide useful information about real-time behaviours and interactions.

- *Experiments*: experiments involve the manipulation of variables and the measurement of their influence on outcomes. They are frequently carried out in controlled environments in order to establish cause-and-effect linkages. Experiments may employ both quantitative and qualitative data collection techniques.
- *Analysis of existing data sources*: researchers can also examine existing data sources such as archive documents, databases or publicly available datasets. This strategy can save money and time, but it is critical to confirm the quality and relevance of the existing data.

Malhotra (2017) adds that within these procedures, instruments or equipment are employed to collect data. Questionnaires, interview guides, observation protocols, experimental protocols and coding schemes are all examples of instruments. These devices are intended to assure data gathering uniformity and standardisation. Creswell (2014) further adds that the methods and instruments used to gather data should be consistent with the study objectives, research question and type of data required to properly answer the research question.

3.8.4.1 The choice in this study

The primary data collection instrument opted for this study was non-standardised, semi-structured interviews conducted on a one-on-one basis, using an online platform known as Microsoft Teams. This was conducted as the researcher was based in Doha, whilst the participants were in different geographic areas and countries.

3.8.4.2 Data collection procedure

Saunders *et al.* (2014) exerts that the exact procedures and strategies utilised to collect data for a research study are referred to as the data collecting procedure. The process used to gather data is determined by the study objectives, the nature of the research topic and the available resources. Creswell (2014) further adds that surveys, interviews, observations, experiments and document analysis are some of the data collection methods that can be used. Surveys involve the distribution of questionnaires or organised interviews to a large number of participants in order to collect data.

To acquire detailed information from individuals or groups, interviews can be performed in an organised, semi-structured or unstructured fashion. Observations are the systematic observation and recording of behaviours or events in a natural or controlled environment. Experiments entail changing variables and observing how they affect outcomes. Document analysis entails reviewing current documents or creating new ones (Saunders *et al.,* 2016). The data gathering technique should be developed to assure the data's dependability and authenticity. This entails creating clear and objective data gathering equipment, training data collectors, protecting confidentiality and privacy and putting quality control mechanisms in place. When collecting data, it is critical to address ethical implications and gain informed consent from participants (Taherdoost, 2017).

Furthermore, Saunders *et al.* (2014) agrees that the data collecting technique should be connected with the study objectives and designed in such a way that accurate and useful data can be collected to answer the research question. The primary data collection instrument opted for this study was semi-structured interviews which were conducted on a one-on-one basis, using an online platform known as Microsoft Teams. This was conducted as the researcher was based in Doha, whilst the participants were in different geographic areas and countries. After the North-West University granted the ethics clearance, a pilot study was conducted to refine the research questions and the research procedure. Once the pilot study was completed, the participants were identified. Each participant received an introduction letter and consent form via email. Interviews were then scheduled via Microsoft Teams and were conducted online for approximately 30 to 45 minutes each. The participants' permission was sought to have the interviews recorded electronically on Microsoft Teams and transcribed simultaneously using the digital transcription software on Teams. Throughout the interviews, the researcher remained faithful to the questions and was kind and respectful. The participants were thanked for taking part in the study and their responses were assured to be kept private**.** The conceptual and theoretical framework played a crucial role in guiding the data collection and analysis process. By grounding the research in established theories and concepts, it was possible to structure the study, identify key variables, and develop hypotheses. For example, we used Maslow’s Theory of Motivation to illustrate the needs as perceived by talent and how they changed during the COVID-19 pandemic.

3.8.5 Data Analysis

Data analysis, according to Qutosi (2018), is a systematic process of scrutinising and organising all data gathered from interview field notes, transcripts and other materials in order to improve the researcher's understanding of the data and the subsequent presentation of the discoveries and findings (Leavy, 2017). To correctly analyse qualitative data, researchers must select whether to approach the study inductively or deductively. This study examined data using an inductive approach and the grounded theory in the data were generated. Furthermore, the researcher was aware of the participatory character of the study and the collecting of qualitative data. According to Saunders *et al.* (2016), qualitative data can be examined using a variety of approaches such as thematic analysis, content analysis, template analysis, data display, explanation building, narrative analysis, discourse analysis and/or the grounded theory method. There is also a variety of qualitative data analysis software, commonly known as computer-aided qualitative data analysis software. The data from this study was analysed utilising the theme analysis technique. Thematic analysis can be accomplished in a variety of ways, according to Braun and Clarke (2012), Kiger and Varpio (2020) and Nowell *et al.* (2017). However, it is usually done in six steps: familiarisation, data coding, theme creation, theme review, theme definition and naming, and writing-up (Kiger & Vario, 2020). Each stage is discussed in detail below:

3.8.5.1 Familiarisation of the data

The process of being acquainted with the dataset that will be utilised for analysis in a research study is referred to as data familiarisation (Nowell *et al*., 2017). During the analysis phase, it is necessary to comprehend the structure, substance and features of the data in order to obtain insights and make informed judgements. Researchers often engage in a variety of activities to become acquainted with the data. According to Nowell *et al.* (2017), these could include:

- Data exploration: entails looking at the variables, their kinds and distributions. To acquire an initial grasp of the data, researchers can utilise summary statistics, visualisations and data profiling approaches.
- Data cleaning: is the process of identifying and correcting any flaws or errors in the data, such as missing values, outliers or inconsistencies. This phase guarantees that the data is trustworthy and acceptable for analysis.
- Data documentation: producing documentation that defines the data sources, variables and any transformations or preprocessing methods that were used. This documentation contributes to the research process's transparency and reproducibility.
- Data transformation: if necessary, researchers may execute data transformations such as aggregation, recoding or variable scaling to make the data more suited for analysis or to match with the study aims.
- Data quality evaluation: evaluating the data's quality and dependability, including data completeness, accuracy and consistency. This stage aids in the identification of any potential biases or restrictions in the data.

Researchers can make educated decisions regarding the right analytical approaches, identify potential problems or constraints and assure the validity and dependability of their conclusions by becoming familiar with the data (Nowell *et al*., 2017).

3.8.5.2 Data coding

According to Leavy (2017), the process of assigning labels or numerical codes to raw data collected in a research study is known as data coding. It entails categorising and organising data into relevant and manageable analysis units. Saunders *et al*. (2016) further adds that researchers evaluate the obtained data, discover patterns, topics or categories, then assign codes to represent these trends during data coding. The codes might be descriptive names or numerical numbers that summarise the data. This method aids in data organisation and structuring, making it easier to analyse and draw conclusions.

Coding can be done manually, where researchers review the data and assign codes based on their interpretation or it can be done using software tools specifically designed for qualitative or quantitative data analysis. Qutosi (2018) asserts that in qualitative research, coding is often used to identify themes or patterns in textual data, while in quantitative research, coding involves assigning numerical values to variables for statistical analysis. Data coding is an important step in the research process as it helps in organizing and analyzing the data, identifying trends or relationships and drawing meaningful conclusions from the collected information (Saunders *et al.,* 2016). It also enhances the reliability and validity of the research findings by providing a systematic and structured approach to data analysis.

3.8.5.3 Theme generation and review

The creation and assessment of themes are critical phases in qualitative data analysis. These processes entail detecting and categorising patterns, topics or categories that arise from the research data (Nowell *et al.,* 2017). Typically, theme generation begins with a comprehensive assessment of the data, such as interview transcripts, field notes or papers (Saunders *et al*., 2016). To obtain a thorough comprehension of the content and context, researchers immerse themselves in the data. They then begin to find recurring ideas, concepts or patterns related to the study issue. The following phase is theme review after potential themes have been discovered. This entails fine-tuning and organising the themes to ensure they accurately represent the data and are consistent with the research objectives. Researchers may compare and contrast various themes, as well as hunt for links or relationships (Nowell *et al.,* 2017).

Qutosi (2018) further adds that researchers evaluate the themes' dependability and validity during the theme review process. To maintain consistency in theme identification and interpretation, they may include numerous researchers or employ intercoder agreement approaches. The end result of the topic development and evaluation process is a set of well-defined and meaningful themes that capture the core of the data. These topics serve as the foundation for subsequent research analysis, interpretation and reporting (Saunders *et al.,* 2016)

3.8.5.4 Theme definition and naming

According to Braun and Clarke (2012), the process of discovering and defining the major ideas or concepts that arise from qualitative data analysis is referred to as theme definition. It entails categorising and organising the data into relevant themes that encapsulate the core of the obtained information. The process of naming themes entails assigning descriptive and concise labels to each recognised subject. The titles should appropriately reflect the theme's content and meaning, making it easier to grasp and explain the research findings (Nowell *et al.,* 2017). Themes are often discovered through a methodical process of coding and analysing data. Researchers examine the data, looking for patterns, similarities and contrasts before grouping relevant data segments together to produce themes (Braun & Clarke, 2012). These themes serve as a structure for organising and evaluating data, helping researchers to obtain insights and form conclusions. It is critical to emphasise that theme definition and naming should be done rigorously and transparently to ensure that the themes appropriately represent the facts and are supported by evidence. Furthermore, topics in research reports should be well defined and stated in order to increase the credibility and trustworthiness of the findings.

3.8.6 Writing up the data

The writing-up process began with note synthesising and summarising and theme description. The write up portion comprised a presentation and discussion of the results. The portion featured a narrative that logically detailed the data's analysis and interpretation. It also demonstrated why the researcher's theme selection and data analysis were right and significant. Using representative data extracts such as direct quotes from participants and narrative accounts, the study provided reasons for why the researcher's interpretation thoroughly addressed the research issue. All direct data extracts provided enough context to make their significance clear (Kiger & Varpio, 2020:8). For example: When asked about the talent risk management framework or system used by the airline, participant P1 replied: “We are introducing talent review succession planning as part of a framework, which is new.” This was interpreted as there was no talent risk management framework in place. This further enforced the need for the development of a talent-risk management framework.

3.9 PRINCIPLES OF TRUSTWORTHINESS

Trustworthiness is referred to as validity and reliability in quantitative investigations. However, because it is expressed in numerous ways in qualitative investigations, this idea is more ambiguous (Leavy, 2107). Because qualitative researchers do not utilise tools with well-established metrics for validity and reliability, it is important to consider how qualitative researchers ensure that the research study's findings are credible, transportable, confirmable and dependable (Vaezi *et al.,* 2019). Establishing trustworthiness is all about establishing these four things, which are discussed further below. In this study, the researcher established trustworthiness through the phrasing and rephrasing of questions to ensure that participants were honest in their responses. There was scrutiny of the researcher's role in the study to maintain objectivity and diligence in the research process followed. Concerning the components of trustworthiness, the following aspects were observed in the study:

- ***Credibility:*** this was achieved by building trust and rapport with the participants and ensuring that their opinions were accurately captured. The interview schedule was visible to the participant during the interview so that participants could see their comments being recorded. The data were examined and confirmed during the data analysis stage to ensure that the data were correctly interpreted.

- ***Transferability*****:** the transferability of the study was established by consistently linking the research questions, techniques, findings and interpretations to the research objectives. The researcher ensured that the findings were correctly and truthfully interpreted (Vaezi *et al.,* 2019:11).

- ***Dependability*****:** to guarantee that the findings were credible and accurate, the researcher documented all interactions with participants as well as any changes made to the interview schedule or during the course of the study.

- ***Confirmability***: throughout the study, objectivity was maintained and all data were gathered honestly, accurately and without personal bias to the thoughts and opinions stated by participants from both airlines.

3.10 ETHICAL CONSIDERATIONS

The rules of behaviour that guide the researcher's conduct regarding the rights of persons who become the topic of the researcher's work or are impacted by it are referred to as research ethics (Saunders et al., 2019). When research involves human participants, a high level of professional ethics and integrity is required (McNabb, 2020). As a result, data collection did not begin until the researcher received ethical approval from the North-West University.

3.10.1 Informed consent

The researcher informed the participants of the study's purpose and nature (as detailed in the appendix). As a result, all participants in the study gave their consent based on the information provided to them prior to their involvement. The participants' consent was obtained by ensuring that all parties involved signed the consent forms. This was part of fostering ethical behaviour because all individuals engaged voluntarily and were informed that they had the right not to participate if they felt uncomfortable. Everyone who took part in this study did so voluntarily and willingly. None of the subjects were coerced into taking part in the study. The study did not compel anyone to participate. All participants were informed that they were able to withdraw their participation at any point without any repercussions.

3.10.2 Ensuring no risk or harm comes to participants

There was no risk or injury to any of the volunteers and the researcher checked that all participants were adults at the time the study was done. As a result, minors were excluded from the study. The researcher also notified all the participants that they had the right to withdraw from the study if they felt threatened, intimidated or threatened in any way. In addition to the foregoing, the methods for data processing and interpretation always included explaining to the participants exactly what was being done and why. The researcher also reminded the participants that no answer was correct or incorrect because the purpose of the study was to understand the participants' perspectives. In this sense, the researcher must be forthright, honest and transparent while ensuring that no information is concealed from the participants. It was also crucial for the participants to retain a high level of self-respect and dignity.

3.10.3 Ensuring confidentiality and anonymity

All data collected from participants were kept secure and anonymous because no names were required that might have been used to identify the individuals. The obtained data were further secured with a password and was only utilised for academic purposes. Furthermore, all data were saved on Google Cloud in a password-protected server, ensuring that no one else could access it.

3.10.4 The attaining of permission

Researchers must publish well-informed studies in order to safeguard the dignity of their participants and subjects in this study, as required by research ethics. According to Vaezi *et al.* (2019), every researcher must receive a letter of authorization from the organisation as evidence or assurance that the organisation has approved, granted rights (or permission) and is aware of the study being undertaken. This was accomplished by obtaining the requisite permission letters from the airline corporations, which are attached to the dissertation's annexures.

3.11 ELIMINATION OF BIAS

Bias is described as a tendency that inhibits an issue from being considered objectively. Bias can be defined as the act of favouring or unfairly opposing something, or allowing an opinion to influence one's judgement (Snyder, 2019). Bias occurs in research when a "systematic error is introduced into sampling or testing by selecting or encouraging one outcome or answer over others." Furthermore, bias might arise in any research study that is undertaken. To minimise prejudice, a researcher's study must be varied and considerate to participants without discrimination in any way. Gender, race, ethnicity, age and sexual orientation can all lead to prejudice. Snyder

(2019:18) asserts that every form of bias, such as gender, ethnic references, language use and stereotyping must be eliminated in order to reduce bias.

Every attempt was made to guarantee that there was no bias in this investigation. To accomplish this, gender-neutral phrases were utilised in the design of the interview questions and the term 'race' was only used for demographic and academic purposes. Finally, languages that encouraged preconceptions were not employed to break down language barriers. When drafting the questions, relevant and particular wording were chosen and the language used in the interview schedule was straightforward and clear. There were no stereotypes promoted by the terminology utilised. English was employed as a medium of communication because it was accepted and preferred by both airlines.

3.12 CHAPTER SUMMARY

This chapter addressed the components of the research philosophies and methodology utilised to obtain primary data as well as the data collection strategies employed. To guarantee that the research aims and questions were addressed, the study used a qualitative method using semi-structured interview schedules. The difficulties encountered throughout the data collection procedure were discussed, as well as the strategies taken to alleviate study limits and uphold ethical standards in academic research. The next chapter will present the findings from the participant interviews.

CHAPTER 4
DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

Chapter 3 presented an in-depth discussion of the methodology used. This described how data were collected using semi-structured interview questions. The theories discussed in Chapter 2 were the “lenses” through which data were analysed. The qualitative data gathered were analysed using thematic analysis in this chapter. The semi-structured interviews were transcribed and the data were analysed thematically. The research data revealed four different themes. These themes were generated by the thematic analysis using a deductive method. The researcher used an inductive as well as a deductive approach to the data, starting from predetermined themes that intended to reflect on theory or past knowledge. By exploring the subtext and presumptions that support the facts, the underlying themes were found. The four research questions and the four themes that were produced are identical.

4.2 RESEARCH QUESTIONS

4.2.1 Main Research Question

What constructs are to be included in a talent-risk management framework that will assist managers in the aviation industry in dealing with talent crises based on their experiences from the COVID-19 pandemic?

4.2.1.1 Sub questions

- What are the critical factors involved in the development of a talent-risk management framework for the aviation industry?
- What talent-risk management processes are currently in place to meet the needs of talent in the aviation industry?
- What do managers in the aviation industry (skillsets, bias) perceive as their needed competencies to deal with talent-risk management as exposed during the COVID-19 pandemic?

- What talent-risk management challenges are experienced by managers in the aviation industry during the COVID-19 pandemic?

4.3 THEORIES USED AS ANALYTICAL LENSES

The Contingency Theory of Leadership, Maslow's motivation of needs theory, human capital theory and enterprise risk management theory were used for this study. An analytical framework was used drawing from the theoretical framework. Responses were analysed, word by word and patterns were identified.

4.4 PRESENTATION AND DISCUSSION OF FINDINGS

This section presents the findings from the interviews. Data was analysed line by line and coded. The analyses of these will be discussed further in this section.

4.4.1 Demographics of The Participants

This study interviewed 12 HR managers whose demographics are indicated in Table 4.1 below. Six were from Qatar Airways, and six were from SAA. Eight of the 12 participants identified as female while only four participants identified as male. Two of the participants were above the age of 51, two were between the ages of 41-50, seven participants were between 31-50 and only one of the participants was below the age of 30. According to Matarid *et al.* (2018) employees over 41 years tend to stay employed by the same organisation as compared to their younger colleagues. This could be attributed to the fact that people in their forties and above may have more financial responsibilities. To ensure anonymity, the participants were allocated codes.

The below Table 4.1 is a representation of the demographics of the participants.

Table 4.1: Participant demographics

Participants	Code	Age	Gender	Organisation
Participant 1	P1	51 – 60	Female	A
Participant 2	P2	31 – 40	Female	A
Participant 3	P3	31 – 40	Male	A
Participant 4	P4	21 – 30	Male	A
Participant 5	P5	31 – 40	Female	A
Participant 6	P6	31 – 40	Male	A
Participant 7	P7	31 – 40	Female	B
Participant 8	P8	31 – 40	Female	B
Participant 9	P9	41 – 50	Female	B
Participant 10	P10	51 – 60	Male	B
Participant 11	P11	41 – 50	Female	B
Participant 12	P12	31 – 40	Female	B

Source: Author’s own

4.4.2 Interviews

Table 4.2 indicates the schedule of interviews set up according to the convenience of the participants.

Table 4.2: Interview schedule

Date	Time	Participant	Code	Venue
21/05/2023	13:00 – 14:00	Participant 1	P1	On-line MS Teams recording
21/05/2023	14:30 – 15:30	Participant 2	P2	On-line MS Teams recording
22/05/2023	08:30 – 09:00	Participant 3	P3	On-line MS Teams recording
22/05/2023	10:30 – 11:00	Participant 4	P4	On-line MS Teams recording
24/05/2023	09:15 – 09:45	Participant 5	P5	On-line MS Teams recording
24/05/2023	11:30 – 12:00	Participant 6	P6	On-line MS Teams recording
14/06/2023	14:00 – 14:30	Participant 7	P7	On-line MS Teams recording
26/06/2023	16:00 – 16:30	Participant 8	P8	On-line MS Teams recording
06/07/2023	14:15 – 14:45	Participant 9	P9	On-line MS Teams recording
26/06/2023	17:00 – 18:00	Participant 10	P10	On-line MS Teams recording
04/07/2023	10:30 – 11:30	Participant 11	P11	On-line MS Teams recording
14/07/2023	13:30 -14:30	Participant 12	P12	On-line MS Teams recording

Source: Author’s own

Figure 11 depicts a screenshot of the transcribed data.

Figure 11: Screenshot example of the interview responses, transcribed, verbatim.

2. What should the focus areas of that specific talent-risk management framework be?

P1:

I think it's important for an airline to assess their critical roles and make sure that we have pipelines in place because if a critical role goes down, it affects our health and our safety of the airline particularly in keeping planes in the air. I also think that we have to know where our talents are so that we can be more attractive from a brand positioning in the external market, particularly in the high competition that we are experiencing from Saudi and other airlines at this time.

P2:

The basic foundation is always to be aligned with the business strategy because that is going to be changing depending on external factors. The talent strategy has to adapt to that. The talent risk therefore, have to adapt to that as well. So, the foundation is always the business strategy and making sure every time that talent risks are addressed or talked about, its in presence of business leaders. Its not an HR accountability. It's a joint accountability between business and HR. make sure that we are together doing things to address competitiveness, our EDP, are we paying people enough or do we understand what our critical roles are. Those topics must be addressed with the business leaders as well.

P3:

I think that there is a greater need in aviation to ensure that we do have our critical roles and a pipeline of talent for our critical roles because in an emergency situation, we have to keep people safe, so we are talking life and death here. So, I think from an aviation perspective that is very important.

P4:

We need to have a pool not just a pipeline, but have pools of candidates ready for us to start to attract. It is something that we don't have currently. It is fair to say.

Source: Author's own

4.4.2.1 Study themes

The study themes that were identified are identical to the research objective and questions:

Theme 1: Talent risk management framework

Theme 2: Talent risk management processes

Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management

Theme 4: The competency of HR managers in the aviation industry during crisis

The table 4.3 below outlines all the code words generated per theme per participant.

Table 4.3: Data coding into themes per participant

Participant	Theme 1	Theme 2	Theme 3	Theme 4	Totals
P1	11	12	2	4	29
P2	6	10	7	5	28
P3	5	9	2	7	23
P4	5	7	4	4	20
P5	4	9	3	3	19
P6	8	12	3	5	28
P7	11	5	3	7	26
P8	5	13	2	5	25
P9	6	9	1	5	21
P10	6	12	5	9	32
P11	14	6	13	12	45
P12	14	18	18	19	69
	90	**122**	**63**	**75**	**350**

Source: author's own

4.4.2.2 Findings from the interviews

This study looked at two different airlines: one that flew throughout the pandemic and another that was grounded and undergoing business rescue and restructuring. The interviews resulted in rich data being extracted. The interviews were recorded, and these recordings were then transcribed. The data were then analysed and manually coded line by line. Code words were written on sticky notes and put up on a "wall of code". Each theme was represented by a different colour. Theme 1 was colour coded pink, theme 2: red, theme 3: green, theme 4: yellow. The code words were generated as per the sub-categories. Repeated code words were denoted by a dot on the sticky note. If a code word was repeated by the same participant, this code word was not re-entered as this idea was already raised by the participant. This ensured that the code words were reduced to a workable amount while still noting the response of the participants. This manual analysis and coding of data provides the study with trustworthiness. The wall of code also made linking relationships and similar ideas much easier as this provided a visual representation of all code words.

4.4.3 Theme 1: Talent risk management framework

Talent risk management frameworks provide structure to the organizations plan and are key to improving business performance (Trautman, 2022). When effective frameworks are in place, talent management risks are reduced and outcomes are improved. The objective of a talent risk management framework is to attract, develop and retain talent, especially those that have been identified to fill critical roles that may become vacant due to retirement or voluntary or involuntary termination of the current incumbent (Jantjies, 2022). With a proper talent risk management framework developed specifically for the aviation industry, efficiency can be increased within the organisations' current talent pool by outlining what the risks are and what measures to put in place to mitigate these (Gurusinghe, Arachchige, & Dayarathna, 2021).

Table 4.4 describes Theme 1 in a summary.

Table 4.4: Summary of Theme 1: Talent risk management framework

Theme 1: Talent risk management framework	
Research Questions: Is there a need for a talent risk management framework in the aviation industry? What constructs are to be included in a talent-risk management framework that will assist managers in the aviation industry in dealing with talent crises based on their experiences from the COVID-19 pandemic?	
Categories	**Subcategories**
4.4.3.1 Availability of a framework	4.4.3.3.1 The critical factors of a framework

4.4.3.2 Framework development 4.4.3.3 The focus of the framework	

Source: Author's own

4.4.3.1 Availability of A Framework

A talent risk management framework assists managers in identifying the risks or potential threats that exists in the organization (Jooss, Lenz & Burbach, 2023). The presence of a talent risk management framework ensures that the organisation is aware of what their talent risks are in a window of three to six months (Trautman, 2022). This allows the leadership or manager to prioritize the critical risks. Top talent identified as per the specifications of the framework can be developed to take on the critical roles that may also be identified as per the framework (Hatum, 2020). Currently, there are no formal talent risk management frameworks at these selected aviation enterprises. All 12 participants confirmed that there is no formal talent risk management framework in place at their organisation but they realise the importance of one and are currently working on this. When asked about the talent risk management framework or system used by the airline, participant P1 replied:

> "*We are introducing talent review succession planning as part of a framework, which is new."*

Participant P3 concurred by saying:

> *"We did not use Talent Risk Management Frameworks pre covid but we are working towards developing one in the near future."*

Participant P4 agreed by adding:

> *"Talent Risk Management framework is in the pipeline. Leadership meetings have discussed this as a strategy going forward."*

Participant P6 supported this by stating:

> *"Talent risk management frameworks were not a priority during covid but as the skies open up we are aware that there is a need to assess and mitigate our talent risks as we are now competing on a global market."*

The findings indicate that there is no formal talent risk management framework at the selected aviation enterprises. According to Trautman (2023), a talent risk management framework is key to having the right kind of people with the right skillset, at the right place, at the right time to ensure productivity and innovation while remaining competitive. Aung (2022) agrees by adding that talent risk management frameworks are in place to support informed decision making.

4.4.3.2 Framework development

A framework provides the organisation with a structure and direction of where the organisation is going in terms of talent risks. The starting point of developing a talent risk management framework would be by assessing all the available data. These could include data from the International Air Transport Association (IATA), benchmarking data so that the organisation may remain competitive in the global markets. Exit data is very useful as it can provide the organisation valuable information about why they are losing talent. The framework must include the following elements: creating job profiles, assessing data, identifying critical roles, succession planning, talent development, talent pools and pipelines, work life balance, leadership development, embedding empathy and aligning leadership around talent risks. According to Kaliannan *et al.,* (2023), the development of a talent risk management framework would largely contribute to successful outcomes. All 12 participants attest to this. When asked about developing a talent risk management framework for the aviation industry specifically:

Participant P6, responded by saying:

> *"Any industry needs a talent risk management framework. I'm not sure if a standard one would be applicable to aviation, so, yes, we need one specifically for the aviation industry."*

Participant P10 said in agreement:

> *"The airline industry needs a specific talent risk management framework or elements of a generic framework, made specifically for the aviation industry. I don't think that any industry can or should have a generic*

framework because it is based on the competencies that you require as a business."

Participant P11 reported that:

> *"Yes, aviation is very different, you have so many specialized skills and you don't have supply of talent in them and if you look at pilots, technical staff, the flight staffing even the ground staff is definitely very important to have a talent risk management framework because your supply and demand issue and to be proactive. So, you are not caught with less talent and also how you attract and how you retain. And we are moving so fast in the talent framework at the moment, things change, skills change. There's are lots of things happening in the industry and you have to be abreast of the challenges. I don't that there's an airline in the world that is not concerned about their talent especially for critical positions. So, it is absolutely necessary that you do have that in place."*

Participant 12 agreed by adding:

> *"Definitely it is a must to have a specific one rather than a blanket approach.it is contextualized to the airline/ industry that you work at because different industries, different airlines have different talent risks. So, we need to do an assessment on our talent and the risks associated with that and therefore contextualize a framework that address those risks, so therefore it is necessary to have a contextualized, structured framework that would effectively mitigate and manage those risks. So, we need the right people with the necessary skills to achieve these objectives so therefore we need one that is customized for the airline."*

Talent risk management is the process of assessing your talent risks at any one time and ensuring productivity. Trautman (2023) cites that talent risks are assessed and prioritized to put mitigating actions in place. Data from various sources were used to benchmark and improve retention within the organisation. A structured knowledge transfer program needs to be in place to reduce the highest talent risks (Gurusinghe, Arachchige & Dayarathna, 2021). The assessing, aligning the priorities and mitigating risk will then be monitored to ensure efficacy. This will be the foundational components of the talent risk management framework.

4.4.3.3 The focus of the framework

The talent risk management framework of an organisation must reflect the vision and mission of the organisation, while the focus of the framework embodies the business goals and challenges (King & Vaiman, 2019). All of the participants were happy to add to what they believe should be the focus of a talent risk management framework for the aviation industry and all the responses were similar across the different organisations. When asked about what the focus areas should be:

Participant P1 stated that:

> *"I think it's important for an airline to assess their* ***critical roles*** *and make sure that we have pipelines in place because if a critical role goes down, it affects our health and our safety of the airline particularly in keeping planes in the air. I also think that we have to know where our talents are so that we can be more attractive from a brand positioning in the external market, particularly in the high competition that we are experiencing from Saudi and other airlines at this time."*

Participant P3 agreed by adding:

> *"I think that there is a greater need in aviation to ensure that we do have our* ***critical roles*** *and a pipeline of talent for our critical roles because in an emergency situation, we have to keep people safe, so we are talking life and death here. So, I think from an aviation perspective that is very important."*

Participant P7 added in agreement:

> *"****Succession planning****, especially for* ***critical roles****, like when someone in a critical role is about to retire. For leadership roles, to have pipelines in place. There are other plans as well. Competency frameworks looks at the* ***ideal type of leader*** *or competencies we would require in the new era to take the airline forward and our airline operationalizes. Then from a learning and development perspective, talent management, succession planning."*

Participant P11 also agreed by stating:

> *"**Succession for critical positions**, retaining your pilots. Looking at training program of your own talent. Develop them so that they stay. From a talent point of view, employee experience framework or your touch points, that you are not lagging behind. That you have things in price opt attract your talent and retain, industry specific. We are the only premier airline in South Africa. The other airlines are domestic and low cost but we fish from the same pond for talent. We have to keep that in mind. **Leadership development**, ensuring that you develop your leaders so that they can lead and engage with all the staff. Inclusion, engagement and belonging are also important. You should also never disregard your basic **remuneration and benefits**. To make sure that we can compete for the best talent."*

Talent risk management frameworks outline an organization's plan and are critical to increasing corporate success (Trautman, 2022). Talent management risks are decreased and outcomes are enhanced when effective frameworks are in place. A talent risk management framework's goal is to attract, develop and retain talent, particularly those identified to fill essential roles that may become vacant due to retirement or voluntary or involuntary termination of the present incumbent (Jantjies, 2022). The talent risk management framework of an organisation must reflect the organization's vision and mission, while the framework's focus embodies the business goals and difficulties (King & Vaiman, 2019). Efficiency can be increased within the organization's current talent pool by identifying what the risks are and what actions to put in place to reduce them (Gurusinghe, Arachchige, & Dayarathna, 2021).

4.4.3.3.1: Critical factors of a talent risk management framework

Talent management practices are moving away from an exclusively HR-centric approach to a more internal, unit level-based approach which enables the line manager to identify critical elements of talent risk management which may form the basis of the talent risk management framework (King & Vaiman, 2019). Employee surveys are used to gain subjective information about how the employees feel. This may also give the organisation some idea of where the opportunities for improvement lie. Mitigation plans can be put in place. Training and development can be used to ensure that there is a structured transfer of knowledge to reduce talent risks. Crisis intervention coaching should include the element of empathy in leadership. Employee wellbeing and support is an area that was under the spotlight during the COVID-19 pandemic. The participants were asked about what they believe were the critical factors that are important constructs that should be included for the development of a talent risk management framework.

Participant P1 responded by saying:

> *"I think that **data** is absolutely critical. So, I think having the right data on our attrition or our retention, having the **data on our pipelines**. Knowing what our gap analysis are. Also knowing the bench strength of our incumbents in **critical positions**. Also, the processes around talent are our big thorny issues for all talent managers that decision to buy or borrow or build."*

Participant P4 added:

> *"**Succession planning** is important. This ensures that roles are planned for and there is no struggle to fill in a critical role. Post covid, **critical roles** are difficult to fill and there is a smaller **pool** of candidates. People are choosing to work differently. They have different priorities. There is a focus of **work life balance**."*

Participant P6 added in agreement:

> *"**Succession planning**, retention plans are all important but it is also important to perform **exit interviews** to know what we could have done better and see of this can be implemented."*

4.4.3.4 Summary of theme 1

The responses from all the participants on this theme concluded that there is no formal talent risk management framework in place for these selected aviation enterprises and that a need existed for an aviation specific talent risk management framework. The responses from the interviews have provided guidelines on what the focus areas of the talent risk management framework should be. A study conducted by Dube (2021) highlights that due to past catastrophes (recession, pandemic, terrorism) in the aviation sector, there have been an interruption in the supply and demand of aviation talent. The presence of a robust talent risk framework will mitigate this risk (Trautman, 2022). These findings are further supported by the literature discussed in point 4.2.3 that there is indeed a need to develop a talent risk management framework.

4.4.4 Theme 2: Talent risk management processes

This involves the assessment of the talent risk, aligning on the talent risk priorities and mitigating these risks. It is important that senior management are aware of what their critical roles are in an organization. According to Trautman (2022), senior executives have "technical fog" which alludes to them not being aware of what are their top talents' skills. Having the relevant data is critical. Data must be readily available and reliable. The dataset must be inclusive of information related to critical skills at all levels required by the organization. Talent recruitment strategies to include proper job profiling to match the right talent to the right job. Talent training and development are to address the skills gap and succession planning for identified critical roles.

Table 4.5 provides a summary to the talent-risk management process.

Table 4.5: Summary of theme 2: Talent-risk management process

Theme 2: Talent risk management process	
Research question: What talent-risk management processes are currently in place to meet the needs of talent in the aviation industry?	
Categories	**Subcategories**
4.4.4.1 Talent recruitment	4.4.4.1.1 Talent pools 4.4.4.1.2 Talent attraction and sourcing 4.4.4.1.3 Benefits and rewards
4.4.4.2 Talent development	4.4.4.2.1 Assessing and identifying gaps 4.4.4.2.2 Succession planning 4.4.4.2.3 Competency framework and Job profiles
4.4.4.3 Talent retention	4.4.4.3.1 Retention toolkit

	4.4.4.3.2 Exit interviews 4.4.4.3.3 Employee wellbeing and a healthy work life balance
4.4.4.4 Measures in aligning leadership to TRM	4.4.4.4.1 Open communication 4.4.4.4.2 Leadership development and engagement
4.4.4.5 Assessing talent risks	4.4.4.5.1 Data from various sources
4.4.4.6 Preventative actions to manage TRM	4.4.4.6.1 Employee feedback 4.4.4.6.2 Succession planning 4.4.4.6.3 Mental health and well being 4.4.4.6 4 Remuneration and benefits

Source: Author's own

4.4.4.1 Talent recruitment

The recruitment process ensures that the right individual is selected for the right position (Abbasi, 2020). The war for talent on a global level leaves highly sought-after talent, especially for critical roles with many employment options. The recruitment process needs to be a positive experience for the candidate to ensure that in the event of the candidate not being selected, they will be eager to be placed in the talent pool. This also improves the brand of the organisation. The below sub-categories were identified to meet the recruitment needs of the selected aviation enterprises and ensure that they are competitive in the global market.

4.4.4.1.1 Talent pools

A talent pool is essentially a database of possible employment prospects. Workers on the database are often both highly qualified and have already expressed an interest in joining the organisation in some capacity. Organisations can use talent pools to establish relationships with employees whose skills and knowledge correspond with the company's capabilities and values. A good talent pool database includes information about each candidate, such as their abilities, prospective roles they could fill and how well they fit into the business culture. This way, the recruiting process need not be duplicated for each new position. Instead, once a position becomes available in the organisation, a pool of highly qualified individuals who are already acquainted with and interested in the company are available. A total of 4 participants cited that talent pools were an effective recruitment measure, with the following quotations:

Participant P1:

> *"Pool creation and active sourcing strategy."*

Participant P3:

> *"We are attracting talent ourselves. We are also keeping a pool of potential talent as a backup."*

Participant P6:

> *"We are creating a pipeline of talent. Pools of talent readily available for us to draw from."*

Employing talent pools is a strategic way to manage talent risks (Jooss, Burbach & Ruël, 2021). There is a need to ensure that the design of the talent pool corresponds to the values and employment requirements of the organisation. Feedback methods that will allow you to assess the quality and effectiveness of your pool must also be implemented. As a result, developing a talent pool begins with strategy (Haak-Saheem, 2020). The competencies and skills needed in possible individuals to carry out plans and achieve the related objectives must be defined. According to De Smet *et al.,* (2022), the talent pool must include applicants who meet the organization's demands. This requires the assessment of the organisation's current needs. The gaps identified should be the focal point when developing a talent pool.

4.4.4.1.2 Talent attraction and sourcing

Talent attraction is one on the main challenges faced by HR managers. Talent sourcing channels are plentiful in the digital era and the number of applications per post are on the increase. The challenge is in sourcing the right talent with the right competencies for the job. Therefore, it is very important that the job profile is accurate while being attractive to the prospective candidate. The organisation should first look to the talent pool to source talent as these candidates have already shown interest in the organisation and have been placed in the pool because the organisation has seen the value in their talent. The participants agree that the selected aviation enterprises were not sourcing talent in the past as this function was being outsourced but are now attracting talent and sourcing as evidenced by the below responses:

Participant P2:

> *“We are actively sourcing our talent now, previously we were not.”*

Participant P4:

> *“QA is now a sourcer of talent. Previously we were not sourcing talent.”*

However, Participant P12 indicated that at their organisation attraction is outsourced:

> *“We also have candidate pools through our ATS, Neptune. A pool of people that apply for jobs are kept on the data base and this may be revisited. This is a proactive approach”*

The first step in attracting the greatest talent into your organisation is to source them. According to Bannerjee (2019), there is an abundance of talent sourcing programs available. These filter candidates with the minimum applicable requirements. The greatest talent acquisition teams can foster a consistent stream of high-quality potential candidates who are engaged with and interested in joining the organisation through these digital channels (Pillai & Sivathanu, 2020). A clear sourcing process ensures optimum benefits of the talent sourcing operation. It is encouraged to make use of best practises at all times. One needs to take every opportunity to improve the process by continually addressing feedback.

4.4.4.1.3 Benefits and rewards

The organisations hope to attract talent by being transparent about the benefits and rewards that they offer. The selected aviation enterprises offer travel rebates and benefits which are attractive benefits. Talent prefers a healthy work life balance over monetary rewards and benefits. Organisations offering a hybrid model of working or flexibility in the work schedule are preferred. Talents are choosing to work differently post COVID-19 (Gallardo-Gallardo & Collings, 2021) and rewards are being amended to support this.

The below participants attest to this:

Participant P5:

> *"We are forthcoming about the benefits and rewards. We are hoping to attract talent in that way."*

Participant P7:

> *"The focus is more around online, remote working, work life balance. Employee engagement, wellbeing."*

Participant P8:

> *"We attract new talent with our benefits and rewards. We realise that we are competing globally and may not be able to match remuneration on a global scale although we are competitive within our region. We also offer hybrid positions that is attracting a lot of talent post covid."*

Benefits and rewards are vital in talent management because they help to recruit, motivate and retain outstanding employees (Kamel, 2019). Competitive benefits and compensation packages can be an effective way to attract high-quality individuals. When evaluating potential companies, job seekers usually analyse the total compensation package, which includes salary, health benefits, retirement plans and other perks. Employees can be inspired to do their best and stay engaged in their jobs via well-designed incentive and rewards schemes. Recognition programmes, performance-based bonuses and incentives can all serve to reinforce the desired behaviours, boost morale and build a positive work environment (Barkhuizen & Gumede, 2021). Offering enticing bonuses and rewards can boost employee loyalty and reduce attrition. Employees are more likely to stay with a company if they feel valued.

4.4.4.2 Talent development

Talent development is a set of processes aimed to motivate, grow and retain employees. Talent development, as a sub-category of performance management, is widely used to assist organisations in discovering latent talent inside their organisation and empowering high-potential individuals to progress within the firm. Beyond training, talent development includes on-the-job learning opportunities like shadowing and mentorship. Talent development is the organisations attempt at ensuring that the employee is being developed for the role that they are currently in or have been identified for (Kaliannan *et al.,* 2023). This is done through knowledge transfer and is underpinned by succession planning. Career advancement and succession planning opportunities are typically incorporated in airline talent management training and development programmes. By recognising high-potential employees and offering them with personalised training, organisations may create future leaders and ensure a seamless flow of talent within the industry.

4.4.4.2.1 Assessing and identifying gaps

Talent assessment is a good starting point. From assessments, gaps may be identified and measures put in place to optimize business strategy through human capital (Koreva & Vaiman, 2019). It is often that management are not aware of what the talent gaps are until the talent have already departed the organisation. Once the gaps in talent needs are identified, mitigation plans can be put in place. These could either be talent development and training, or structured transfer of knowledge by mentorship. If the gaps cannot be filled by the talent at hand, the recruitment process is initiated. This process will enable the organisation to secure the right talent for the right job. The selected aviation enterprises are embarking on such assessments and the following participants support this strategy:

Participant P1:

> *“Hypo programs, talent assessment, review and succession planning.”*

Participant P4:

"We are looking at having a more interactive discussion with employees to see how we may be able to develop their skills that benefits the employee as well as the company."

Participant P9:

"Developing a competency framework, assessing gaps and using these opportunities for improvement to develop talent."

It is crucial that senior management understands their critical duties in an organisation. According to Trautman (2022), senior executives suffer from "technical fog," which means they are unaware of the expertise of their top employees. According to Lin and Wang (2022), firms are unable to analyse talent risks because they are unaware of why employees leave the organisation. Exit interviews would be a good place to start to figure out why people are departing. This information could be used to identify talent hazards. It must be easily accessible and trustworthy and it must include information about important abilities at all levels required by the organisation. Leaders must be aware of their key roles and be prepared to play them.

4.4.4.2.2 Succession planning

A formal succession planning program gives direction to HR managers and improves engagement of the employee and joy in the workplace (Tucker, 2020). A total of five participants said that succession planning is key to talent development. Succession planning reduce risks to talent management, especially for critical roles. Succession planning is the process of identifying top talent inside an organisation, developing and mentoring them and ensuring a pipeline for at-risk roles (Ali, Mahmood, & Mehreen, 2019). Leadership jobs and critical technical skilled personnel might be classified as "at risk" roles since their abilities are not transferable and are frequently neglected and underestimated. To avoid disruptions in corporate operations, critical knowledge must be shared (Okwakpam, 2019).

The following participants are quoted verbatim:

Participant P6:

“We are developing a robust succession planning program to develop talent at hand.”

Participant P8:

“We match the employee’s competencies against the expected competencies and identify the gaps and develop a training program to address these gaps, from a talent development perspective. If there are no gaps identified, we look at what we can offer the employee to further enhance the skills to perform in their role or in a promotional role. So that’s how we approach succession planning”.

Participant P12:

“This is an area that needs some work. We are looking at succession planning. Especially for critical roles and people that are retiring. These are our gaps.”

Succession planning, as a risk management method aids firms in minimising the risks associated with leadership changes, talent shortages, knowledge gaps and organisational instability (Jackson & Dunn-Jensen, 2021). By proactively identifying and fostering potential successors, organisations may ensure continuity, retain critical talents and maintain a strong people pipeline. Succession planning facilitates the smooth succession of leadership as talent left the firm, whether planned or unforeseen, guaranteeing business continuity while harnessing important abilities through systematic knowledge transfer (Okwakpam, 2019). This contributes to the organization's overall stability and provides assurance to stakeholders. Succession planning promotes employee growth and development by demonstrating to them that they are valued.

4.4.4.2.3 Competency framework and job profiling

Competency frameworks are being developed that defines each job profile. This helps the organisation to match the correct talent to the correct job/role (Midhat Ali, Qureshi, Memon, Mari, & Ramzan, 2021). A competency framework is a paradigm that basically describes organisational performance excellence. A framework of this type often comprises a number of competencies that are used in a variety of vocational activities inside the organisation. Each competency is clearly outlined and defines the standard upon which employees are measured or assessed.

The following participants were quoted:

Participant P9:

> *"Developing a competency framework, assessing gaps and using these opportunities for improvement to develop talent."*

Participant P12:

> *"There will be programs like coaching, mentoring, learning pathways, competency frameworks, etc."*

According to Ruben (2019), businesses can use a competency framework to match their recruitment and selection methods with the required competencies. This enables them to locate and attract individuals who possess the required qualities and habits, resulting in a better match between the individual and the organisation. Heinen *et al.,* (2019) further adds that a competency framework assists in determining the specific competencies and proficiency levels required for each job role. It outlines the knowledge, abilities, talents and attitudes that people should have in order to execute their jobs effectively.

4.4.4.3 Talent retention

Organisations are aware that talent retention in the competitive global markets require many different strategies. While some companies use benefits and remuneration, talent are prioritising work life balance during and post COVID-19. Employees are choosing to work and live differently and there has been a shift in focus over what is a priority (Rodríguez-Sánchez, González-Torres, Montero-Navarro & Gallego-Losada, 2020). Below are some of the talent retention strategies identified from the data, also identified were talent and career development and benefits and rewards that were already discussed in the categories of talent recruitment and talent development respectively.

4.4.4.3.1 Retention toolkit

A retention toolkit provides managers with strategies, focus areas and action plans that keep valued talent engaged, committed and satisfied in their roles (Hakala, 2020). Retaining talent is critical to managing personnel risks in the aviation business, particularly during times of crisis such as the COVID-19 pandemic. Managers might examine talent retention measures to effectively address talent retention. These may include: a healthy work life balance, benefits and rewards, and career development opportunities. Three participants have said that they are using or developing a retention toolkit.

The direct excerpts are:

Participant P1:

> *"Career management, retention toolkit"*

Participant P4:

> *"We have a good retention toolkit."*

Participant P7:

> *"Strategy, action plans, strategic deliverables, kpi's that will be relevant to developing a toolkit."*

Managers can consider the following talent retention tactics to include in their talent retention toolkit in order to effectively address talent retention:

Compensation and benefits are competitive: to attract and retain top people, offer appealing wage packages and perks (Kamel, 2019).

Opportunities for professional development: establish clear avenues for career development and progress inside the organisation. Provide training, mentorship and coaching of employees to help them improve their abilities and attain their full potential (Barkhuizen & Gumede, 2019).

Employee engagement and recognition: create a positive workplace culture that values and recognises employee efforts. Implement staff engagement activities (Wolor, 2020).

4.4.4.3.2 Exit interviews

Exit interviews are useful because they provide a more in-depth look into your workplace culture, day-to-day activities, management solutions and employee morale. An exit interview is conducted to evaluate the entire employee experience within your organisation and to find possibilities to improve retention and engagement. When conducting departure interviews, having a defined set of criteria in place can also play an important role in risk management. When employee issues are dealt with fairly and successfully in the workplace, there is no need for external investigations, litigation or negative publicity. These interviews, when conducted in a regular and standardised manner, can help you develop positive relationships and a pleasant working environment. If you are not already doing exit interviews, their purpose can be quite beneficial.

Participant P5 cites that exit interviews are being used to improve talent retention:

> *"We perform exit interviews to see why our best talent are leaving. We then plan to mitigate this."*

Participant P6 agrees by adding:

> *"Succession planning, exit interview. Proper career management."*

An exit interview provides the organisation with valuable insights into employee retention. Data from the reports may be useful in predicting turnover rates and measures that may be put in place to retain employees in the future (Aqil & Memon, 2020). Rutter *et al.* (2020) adds that exit interviews are surveys that are conducted with employees when they leave an organisation. The results of each survey are used to provide input on why employees are departing, what they loved about their jobs and what aspects of the firm need to be improved. Exit interviews work best when data were collected and tracked over time.

4.4.4.3.3 Employee wellbeing and a healthy work life balance

According to Wood, Park and Kim (2020), a work life balance is being able to "switch off" during non-work hours to improve productivity during work hours. When employees have a healthy work life balance, stress is reduced. Many of the participants agree that talent is looking for a work life balance which includes the hybrid model of working. During the COVID-19 pandemic, employees were mandated to work from home and have seen the benefits that this work style affords. Productivity is not necessarily measured with its equivalence of being present in the work space.

Participant P10 agrees that the focus has shifted to ensuring employee wellbeing:

> *"Workshops were held to improve staff morale. ICAS was consulted to assist with mental and emotional well-being as staff were jobless for a long period of time. Pilots were given psychological assessments and group therapy to work through their emotions. Staff were asked what else could be done to improve their wellbeing. We are working on rebuilding and are motivated and becoming innovative."*

Participant P12 concurs by adding:

> *"We are looking at what defines our talent through our leadership framework and see how we are aligning to that and if not, what do we need to do to improve that. ICAS sessions provided by employee wellbeing supports this journey. They address stress burnout, whatever issues we feel is impacting on the employee health and wellbeing."*

Employee well-being has worsened since the outbreak and beyond. Remote and hybrid work meant working more and not knowing how or when to switch off especially for those working from home for the first time. Mehta and Sharma (2020) asserts that employees who are not feeling well cannot focus on their work. As a result, it is vital to look after the employees and assist them achieve a healthy work-life balance so they can be productive. It is also vital to provide well-being and mental health resources to your employees. If employee well-being is not prioritised, they risk burn-out, being less productive (Sobieralski, 2020) and increasing safety hazards. These dangers include workplace accidents, which can have serious consequences.

4.4.4.4 Measures in aligning leadership to TRM

It is imperative that leadership are kept up to date with talent risks so they may be able to put measures in place to mitigate them. Top talent's decision to remain in employment is often decided by leadership behaviours (Mey, Poisat & Stindt, 2021). Leaders are unable to effectively manage talent risks if they are not aware of them.

This category looks at the measures in aligning leadership to talent risk management. Any organization's leadership must be on the same page when it comes to talent risk priorities. Managers' report data from the evaluation phase to the leadership and feedback is offered and received on time. These risks are then discussed on a regular basis so that leadership is always aware of the talent hazards. These discussions are held to discuss which risks should be prioritised (Trautman, 2022).

4.4.4.4.1 Open communication

Tomcikova, Svetozarovova and Coculova (2021) cite that open communication fosters trust among team members and this was highlighted during the COVID-19 pandemic. Formal communication channels such as emails, memorandums, forums and townhalls may also be used to keep workers informed (Tisdall & Zhang, 2020). Leaders must verify that the information provided is correct and up to date. Open communication should be encouraged as this foster's engagement and involvement during challenging times (Charoensukmongkol & Suthatorn, 2022). Communication of sensitive information should be done in person and displaying a sense of empathy.

The following participants cited the use of meetings to communicate with leadership:

Participant P2:

> "*We have regular enterprise risk meetings with business leaders where we present data to ensure that they are aware of the talent risks at our organization and also to discuss strategies around reducing the identified risks."*

Participant P6:

> *"We regularly meet with leadership and present data available on talent risks. We also discuss mitigation and assess what our competitors are doing."*

During times of uncertainty, effective leadership communication fosters a sense of trust among employees and stakeholders (van Stralen, McKay & Mercer, 2020). Leaders must be open and honest with their employees, sharing critical information and encouraging them to express their concerns. Communication also requires active listening skills (Tisdall & Zhang, 2020). Employees may simply be seeking for a way to express their worries during a crisis. These concerns must be addressed with tact and empathy. This will encourage future employee communication of issues (Watkins & Clevenger, 2021).

4.4.4.4.2 Leadership development and engagement

Leadership development is providing the leader with tools to empower, engage and lead their staff to ensure productivity and therefore the achievement of business strategies. (Alafeshat & Tenova, 2019). Gaps in leadership competencies were identified and training and development were centred around that. Leadership coaching on emotional intelligence and introducing the element of empathy and caring. Leaders were upskilled to ensure adequate crisis management. Some of the participants cite leadership development and engagement as measures. The below are direct excerpts:

Participant P10:

> *"We are trying to develop our managers and that is how we are addressing that risk."*

Participant P12:

> *"The employee engagement session was really good and they are still ongoing. This hopes to equip the managers and the leadership team around the talent risks from talent engagement. There're also key performance indicators which build into the leadership team and what they evaluate on, what people are measured on gets improved. So, what are the key performance indicators from a talent and a leadership perspective that we want to build into performance management. Just providing tools and resources to our management and leadership team on an ongoing basis to equip them better. Providing the management with leadership training to better manage the talent."*

In order to attract and retain top talent, aviation companies usually focus on creating a positive work environment and boosting employee engagement (Mehta & Sharma, 2020). Examples of such efforts include recognition programmes, staff wellness initiatives and opportunities for professional progress. Regular meetings, brief huddles, formal forums and townhalls are all examples of transparent, two-way communication that is required for involvement. Employee involvement in decision making that requires their direct performance, according to Chaudhary and Sisodia (2022), enhances workplace joy and engagement. Recognising and praising good performance is an excellent positive reinforcer and retention approach (Nguyen, 2020).

4.4.4.5 Assessing talent risks

Talent risk management is being able to gauge the talent that you have compared to the demand required and aligning leadership and the organisation on the priorities identified (Bersin & Chamorro-Premuzic, 2019). Assessing talent risks involves evaluating potential challenges and uncertainties related to the acquisition, development and the retention of talent within an organization. This assessment typically includes identifying factors that may impact the availability, quality and suitability of talent as well as potential risks associated with talent management strategies. To effectively assess talent risks, organizations may consider various factors such as talent supply and demand, succession planning, skills and capabilities, employee engagement and retention, diversity and inclusion, talent development and training. These may be identified from the data available as discussed below.

4.4.4.5.1 Data from various sources

Data driven organisations depend on reliable, verifiable data for strategic decision making (Rejikumar, Asokhan & Sreedharan, 2018). Data may be sourced from exit interviews, IATA and benchmarking data may also be used. This lets an organisation know how competitive they are in the global markets. Data received must be analysed and patterns and trends need to be identified. Development plans must then be put in place to manage these risks. When asked what measures are currently in place to accurately assess your talent risks, the following responses were received:

Participant P2:

> *"Making use of exit interviews to forecast risk. We use this data to implement improvements. We maintain an open-door policy to ensure that we keep abreast of the risks and are able to mitigate them."*

Participant P4:

> *"We are a data driven organization. Our data can assess our talent risk at any time."*

Participant P11:

> *"Monthly reports, we look at resignations, we look at plans for the airline. We do research, podcasts, understand where the aviation industry is going to. Understanding our talent, we look at retentions. We look at resignations, we do exit interviews to understand why people are leaving. we do engagement surveys biannual. We look at key areas to drive engagement."*

According to Lin and Wang (2022), companies are unable to analyse talent risks because they are unaware of why people leave the organisation. Exit interviews would be a good place to start to figure out why people are departing. This information could be used to identify talent hazards. It must be easily accessible and trustworthy and it must include information about important abilities at all levels required by the organisation. To adequately manage talent risks, leaders must be aware of their essential jobs and be able to identify top talent that may be developed for these roles. By conducting a thorough assessment of these talent risks, organizations can proactively identify potential challenges and develop strategies to mitigate them (Trautman, 2023). This helps ensure a strong and sustainable talent pipeline, enabling the organization to achieve its goals and remain competitive in the market.

4.4.4.6 Preventative actions to manage TRM

Talent management looks to secure the right skills at the right time to have positive outcomes for the organisation (Barkhuizen *et al.,* 2014). Leadership should be aligned to reducing the risk around talent and put measures in place to mitigate these risks. A proactive approach to this risk would be to develop and train the workforce to ensure that they are engaged and less likely to leave. This also ensures that if some talent leaves and people leave for different reasons, then the workforce at hand are equipped to deal with this risk. Identifying top talent for critical roles ahead of time and developing them is also a proactive approach to reduce risks.

4.4.4.6.1 Employee feedback

A feedback culture is one that fosters trust, empowerment and leads to a positive work environment (Lee & Kim, 2021). Employee feedback is the process of receiving and analysing input from employees about their work environment, job satisfaction and organisational practices. It is a critical tool for organisations to use in order to understand employee perspectives, identify areas for growth and build a pleasant and productive workplace culture. Once employee feedback has been gathered, organisations must analyse and act on the information received. Addressing specific issues, adopting changes based on ideas or reporting the activities performed in response to feedback are all examples of this. Seeking and acting on employee input on a regular basis can lead to increased employee engagement, greater morale and a more happy and productive work environment. Three participants agree that employee feedback is being used as a preventative action for talent risk as evidenced by their quotations:

Participant P2:

> *"We will be launching the employee engagement survey, to hear directly from the people what their pain points are in terms of their employee experience so we may address it before it becomes a problem that translates into attrition or lower productivity or lower engagement. So, we hear from them and ensure that we have actual plans to address those problems."*

Participant P6:

> *"We are launching a program around receiving feedback from our talent. This is feedback during employment, not the exit interview. At the point of the exit interview, we have already lost that particular staff. Nothing can be done about retention about that staff."*

Organisations can take numerous preventative measures to manage talent risks more effectively:

- Developing a talent pipeline by implementing succession planning and talent development programmes to identify and groom high-potential individuals for important jobs (Haak-Saheem, 2020).
- Improving the hiring process by employing stringent selection criteria and assessments to identify individuals with the necessary skills, experience and cultural fit (Ihsan, *et al.,* 2021).
- Creating a work atmosphere that encourages employee engagement and pleasure.
- To retain top talent, offer competitive remuneration packages, opportunities for growth and development, work-life balance initiatives and recognition programmes (Nguyen, 2020).

4.4.4.6.2 Succession planning

The act of identifying and preparing possible successors for important leadership roles within an organisation is known as succession planning. It entails developing a talent pipeline to guarantee a smooth transition when present leaders retire, resign or are otherwise unable to carry out their responsibilities. The goal of succession planning is to reduce the risks associated with leadership gaps and to ensure organisational performance continuity. Organisations can minimise disruptions and maintain stability during leadership transitions by identifying and preparing possible successors ahead of time. Three participants responded by saying that succession planning is being used as a preventative action to mitigate talent risks. Their direct excerpts:

Participant P8:

> *"We have identified successors for various roles and gap analysis for them to acquire the needed skills. We have a pipeline of talent readily available for critical roles around the organization."*

Participant P9:

> “Succession planning, talent management and development. The centre of excellence provides guidance on how we implement plans and put these into operation.”

Succession planning is the process of identifying key roles to be passed on to competent staff. It is about identifying and retaining top talent while keeping them engaged (Tucker, 2020). Effective succession planning assists organisations in maintaining leadership continuity, retaining institutional knowledge and promoting employee career development possibilities. It also boosts staff engagement and morale by displaying a dedication to their development and advancement within the organisation. Succession planning, as a risk management method aids firms in minimising the risks associated with leadership changes, talent shortages, knowledge gaps and organisational instability (Jackson & Dunn-Jensen, 2021).

4.4.4.6.3 Mental health and well being

The state of an individual's emotional, psychological, and social well-being is referred to as mental health and wellness. It includes people's thoughts, feelings and behaviours as well as their ability to cope with stress, manage relationships and make decisions. It is critical for individuals and organisations alike to assess and promote mental health and well-being. The state of an individual's emotional, psychological and social well-being is referred to as mental health and wellness. It includes people's thoughts, feelings and behaviours as well as their ability to cope with stress, manage relationships and make decisions. It is critical for individuals and organisations alike to assess and promote mental health and well-being. This is supported by the below responses as a mitigating action:

Participant P10:

> *“Workshops were held to improve staff morale. ICAS was consulted to assist with mental and emotional well-being as staff were jobless for a long period of time. Pilots were given psychological assessments and group therapy to work through their emotions. Staff were asked what else could be done to improve their wellbeing.”*

Participant P12:

> *"ICAS sessions provided by employee wellbeing supports this journey. They address stress burnout, whatever issues we feel is impacting on the employee health and wellbeing."*

The effects of COVID-19 on mental health and wellbeing is likely to be profound and long-lasting with people prioritizing how they live their lives differently (O'Connor, 2021). During the COVID-19, mental health and wellbeing was under the spotlight. During times of uncertainty, effective leadership communication fosters a sense of trust among employees and stakeholders (van Stralen, McKay & Mercer, 2020). Leaders must be open and honest with their employees, sharing critical information and encouraging them to express their concerns. Communication also requires active listening skills (Tisdall & Zhang, 2020). Employees may simply be seeking a way to express their worries during a crisis. These concerns must be addressed with tact and empathy. This will encourage future employee communication of issues (Watkins & Clevenger, 2021).

4.4.4.6.4 Remuneration and benefits

Implementing best practice remuneration and benefits strategies is key to talent attraction and retention. Employers need to first understand what their talent perceives as preferential remuneration to improve talent retention (Bussin & Brigman, 2019). Airlines are offering travel rebates as part of talent attraction. Offering appealing bonuses and awards can increase employee loyalty and decrease turnover. Employees are more inclined to stay with an organisation if they feel valued and compensated for their contributions (Wolor, 2020). Remuneration and benefits are still high on the list of priorities as evidenced by the following responses:

Participant P1:

> *"We are also doing a really deep dive into the overall benefits and package for people and I think the big thing for the aviation industry is being aware of what the competition is doing and being fully aware of the competitive landscape is. What the new airlines are producing. What people are being paid. Using the benchmark data, we get to accurately place ourselves in the market."*

Participant P3:

> *"Look at the total end to end rewards package. See what the competitors are offering. Ensure that we are on par or have other benefits and attractions that may retain staff."*

Benefits and rewards are vital in talent management because they help to recruit, motivate and retain outstanding employees (Kamel, 2019). Competitive benefits and compensation packages can be an effective way to attract high-quality individuals. When evaluating potential companies, job seekers usually analyse the total compensation package, which includes salary, health benefits, retirement plans and other perks. Employees can be inspired to do their best and stay engaged in their jobs via well-designed incentive and rewards schemes. Recognition programmes, performance-based bonuses and incentives can all serve to reinforce desired behaviours, boost morale and build a positive work environment (Barkhuizen & Gumede, 2021).

4.4.4.5 Summary of theme 2

The responses from all the participants on this theme highlights the talent risk management processes that are currently in place at these selected aviation enterprises and what they are working on achieving going forward. They have also asserted that they are identifying gaps to provide mitigating actions to improve talent attraction. This gives the researcher further information of what talent management processes (career development strategies) needs to be in place for the proposed framework to be developed.

4.4.5 Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management

Effective talent management is key to creating and sustaining a competitive advantage in the competitive global markets. It is therefore important that executive leadership and HR managers are aware of the various factors affecting talent risk management and ensure that they have robust measures in place to overcome these. When employees are engaged and feel invested in, they are inherently more productive

(Tinchev, 2021). Talent risk management frameworks are critical for establishing an organization's plan and improving operational effectiveness (Trautman, 2022). When robust frameworks are in place, talent management risks are reduced and results are improved.

Table 4.6 provides an overview of theme 3.

Table 4.6: Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management

Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management	
Research question: What do managers in the aviation industry (skillsets, bias) perceive as their needed competencies to deal with talent-risk management as exposed during the COVID-19 pandemic?	
Categories	**Subcategories**
4.4.5.1 Skillsets	4.4.5.1.1 Flexibility 4.4.5.1.2 Empathy 4.4.5.1.3 Digital acumen 4.4.5.1.4 Change leadership
4.4.5.2 Awareness	4.4.5.2.1 Awareness of factors

Source: Author’s own

4.4.5.1 Skillsets

A managerial skillset is a collection of specialised abilities and competencies required for effective management and leadership roles in an organisation. These abilities are required for managers to successfully lead and encourage their people, make sound judgements and achieve organisational goals. Individuals aiming for leadership positions must develop and hone these managerial skills. Continuous learning, training and on-the-job experience can all help managers improve their abilities and become more effective in their professions. Critical thinking, problem solving skills, the ability to lead and motivate are essential characteristics of competent managers (Alafeshat & Tenova, 2019). When asked what managers perceive as their needed competencies to deal with talent risk management as exposed during the COVID-19 pandemic, the below sub-categories were mentioned.

4.4.5.1.1 Flexibility

The ability to adapt and adjust to changing events, requirements or situations is referred to as flexibility. Flexibility is an important trait in the context of talent management for both individuals and organisations. Individuals who are flexible are open to new ideas, keen to learn and acquire new abilities and adaptable to diverse work contexts or roles. It also includes the ability to deal with unexpected changes or obstacles with resilience and optimism. Individuals that are adaptable are typically regarded as valuable assets by organisations because they can readily switch between jobs, projects, or teams and adding to overall productivity and success.

Participant P1 said that flexibility was a new concept to their organization:

> *"There had been no flexibility before for the workforce, so it is about working smart."*

Participant P7 responded to needed managerial competency as:

> *"Flexibility, adaptability, digital acumen."*

Flexibility in terms of working hours or place of work was not very common pre COVID-19. The lockdown restrictions mandated that employees must work from home if possible. This lasted several months with some organisation incorporating this into the way they conduct business (O'Connor, 2021). Talent management flexibility extends to recruitment and retention initiatives. Instead of relying solely on certain qualifications or experience, organisations that are flexible in their hiring practices may examine individuals with transferable abilities or potential for growth (Tisdall & Zhang, 2020). Overall, in today's dynamic and frequently changing corporate scene, flexibility in talent management is critical. It enables individuals and organisations to adapt, innovate and prosper in the face of uncertainty, resulting in long-term success.

4.4.5.1.2 Empathy and emotional intelligence

The complexity of leading virtually during COVID-19 necessitated that leaders navigate this new terrain with caution and empathy as employees were faced with many personal and professional challenges (Wittmer & Hopkins, 2022). Empathy is essential in developing strong and cohesive teams in leadership. Empathetic leaders are more likely to grasp their team members' needs, worries and motivations. Because of this understanding, they can provide appropriate assistance, direction and appreciation, resulting in enhanced employee happiness, engagement and productivity. Empathy development needs active listening, perspective-taking and emotional intelligence. It entails being present, non-judgmental and accepting. Individuals can strengthen their relationships, leadership skills and generate more pleasant and meaningful connections with others by practicing empathy. Empathy and emotional intelligence were cited by many participants as a needed competency during and post COVID-19 as evidenced by the below responses:

Participant P3:

> *"An important factor was having the emotional intelligence, high emotional intelligence because suddenly we've found ourselves as HR handling volumes of queries with employees asking for medical help, financial help. At the same time the redundancies were happening and we had to facilitate that as well. So really having sensitivity and good EQ in these situations and making sure that you show care towards the employee, no matter what circumstances that they are in, became extremely critical as well."*

Participant P5:

> *"Along with all the other necessary leadership skills, empathy was really important especially during layoffs. You had to be really sensitive to the employee's needs. They were already facing a lot of personal turmoil with the loss of loved ones, being sick or worried about getting sick. So, the managers had to ensure that empathy was evident when handling these sensitive situations."*

According to Hofmeyer and Taylor (2021), leaders can demonstrate empathy by employing active listening skills, acknowledging employees' concerns and providing reassurance even if they are unable to resolve any of these issues. According to a study conducted by Hajek and König (2022), empathy, while a crucial leadership attribute, is frequently disregarded because a leader can be competent and have effective outcomes without the requirement to be sympathetic. According to Cain, Campbell and Coleman (2023), practicing empathy during the COVID-19 epidemic boosted teamwork, increased overall morale and engagement and produced a sense of wellness among employees because they felt supported, which eventually improved performance.

4.4.5.1.3 Digital acumen

Digital acumen is the level of understanding, expertise and abilities that individuals or organisations have in effectively utilising digital technologies. It entails being able to traverse and exploit digital tools, platforms and tactics in order to achieve the desired results and to remain competitive in the digital age. In today's digital landscape, developing digital acumen is critical since it helps individuals and organisations to harness technology for increased efficiency, productivity, customer engagement and creativity. It also aids in detecting and capitalising on emerging digital opportunities while reducing potential hazards. Continuous learning and investment in digital skill development are required to improve digital acumen and stay competitive in the digital age. The participants had this to say about digital acumen:

Participant P2:

> *"The key skills that are required by the HR manager: focus on data and digital, data because we needed to make decisions quickly and we needed to make sure that we are basing it on accurate data, a shift also to a digital mindset, in which you are not working with your office colleagues, in a space, what does that interaction look like when you have gone completely online/ completely virtual. How do you make sure that the processes work exactly like with the quality parameters addressed? But now we've gone completely digital, we have the digital mindset as well."*

Participant P8:

> *"Managing and working with employees in the hybrid space: connecting and working in the hybrid space. It tells a lot about the ability of a leader to deliver the outputs of your area in this context."*

The way business was conducted during the COVID-19 had to change or be eradicated completely. HR managers had to ensure that they were digitally savvy to ensure organisational readiness during this time of radical change (Sterrett &

Richardson, 2020). Open and timely communication is critical to effective virtual management. Several digital platforms were employed to ensure that managers could reach employees individually or as a group (Tomcikova, Svetozarovova & Coculova, 2021). Tasks could be discussed virtually and collaborative contributions made. Employee engagement was ensured via timely appraisal and feedback. Employees were challenged to be imaginative with their ideas and team building activities were arranged in a remote area (Vecchi, Della Piana, Feola & Crudele, 2021).

4.4.5.1.4 Change leadership

Change leadership is about leading the organisation during times of disruption. The havoc wreaked by the COVID-19 on the aviation space was unlike any other and leaders found it difficult to manage their employees during this time of uncertainty (Sudarmo, 2020). The ability of leaders to navigate and guide their organisations through periods of considerable change is referred to as change leadership. Understanding the need for change, developing a compelling vision and inspiring and motivating people to accept and support the change are all part of the process. Leaders may assist their organisations adapt to new conditions, grasp opportunities and achieve long-term success in a quickly changing business environment by effectively leading change.

Participant P12 attests to this:

> *"I think what managers in the aviation industry perceive as their competency is change. Being able to lead and manage change through a crisis that was unpredictable. The changes that the airline faced was that there was loss of revenue, financial pressure. there was significant impact of employee morale."*

Participant P11 added:

> *"People need more support and managers need to be aware of this to better serve their people. Leaders need to lead differently. But they need the tools to be able to lead differently. But bring that awareness to the leaders so that they are aware of what is needed."*

Several critical elements are required for effective change leadership:

Change leaders must clearly describe the reasons for change as well as the intended future state (Tisdall & Zhang, 2020). They should convey the vision in an enthralling and inspiring manner, ensuring that employees comprehend the goal and benefits of the transformation. Change agents should actively engage with stakeholders such as employees, customers and other interested parties (Mehta & Sharma, 2020). Leaders can acquire useful insights, create support and address issues or resistance by including stakeholders in the change process. Effective change management strategies should be developed and implemented by change leaders. This entails developing a structured plan, establishing clear goals and milestones and providing the tools and support necessary to aid the change process. Change requires adaptability and resilience (Brammer & Clark, 2020).

4.4.5.2 Awareness

Participants were asked if they thought that the HR management know and understand the factors that affect talent risk management. Organisations must be aware of talent risk factors in order to successfully manage and mitigate potential issues connected to talent acquisition, development and retention. Organisations that are aware of these risk factors can address them proactively and make informed decisions to mitigate their impact. Organisations can proactively handle these talent risk factors by retaining knowledge of them through strategic workforce planning, talent management initiatives and regular monitoring and evaluation. This contributes to a resilient and future-ready workforce capable of navigating difficulties and driving organisational success (Hatum & Preve, 2015).

4.4.5.2.1 Awareness of factors

The possible difficulties or uncertainties pertaining to the accessibility, retention, and professional growth of qualified employees inside a company are referred to as talent risk factors. These variables can change based on the sector, the state of the market and the organisational setting. These talent risk factors should be recognized by organisations, and they should create plans to reduce them. This could entail putting in place efficient hiring and retention strategies, spending money on employee training and development programs, promoting a pleasant workplace culture and keeping up with market and industry changes. About 11 participants indicated that they were not aware of this. Some of the below quotes show this:

Participant P1:

> *"Yes, I do. We are part of that. The CEO and leadership sit on that risk register quarterly meeting. His strategy to create this new talent management function for HR answers the question."*

Participant P4:

> *"Yes, that is part of the function. To be aware of our talent risks and how to mitigate them. The HR management team as well as the HR team learnt a lot of lessons from the covid period. So, we are prepared if something like that were to happen again. If the goals and priorities shift, then how to make sure that we adapt really quickly."*

Participant P5:

> *"Yes, of course. I don't think that our mitigation actions can be successful if our HR team itself doesn't understand what we are trying to do here or what we are trying to solve. So that is a big focus for us."*

Participant P6:

> *"They are aware of this as this what their role is. Even if they are not able to control the outcomes right now."*

However, Participant P10 responded by saying:

> *"No. I don't think so. The HR and the subject matter experts could design the frameworks and all the components desired but ultimately it must with the executive level management and them understanding the framework and supporting it. That is not the case here. But that is where you should start. You should get your leadership to buy in and it should be driven through the organization as a program and it could even factor as your key performance management KPI's."*

Risk awareness enables people and organizations to take proactive, well-informed decisions. According to Wangyanwen *et. al.* (2023), understanding potential risks enables individuals to create mitigation or avoidance tactics, improving outcomes and reducing negative effects. The right steps can be made to reduce risks once they have been identified and acknowledged (Pagach & Wieczorek-Kosmala, 2020). This could entail putting preventive measures into place, creating backup plans or dedicating resources to deal with certain risks. Effective resource allocation requires awareness of hazards. Individuals and organizations can focus their resources and efforts on areas that are most vulnerable or could have the biggest impact by recognizing possible hazards. Lee (2022) agrees that individuals and organizations can be better prepared for prospective issues by being aware of risks. This includes creating backup plans.

4.4.5.3 Summary of Theme 3

The responses from all the participants on this theme highlight that the leaders are aware of the factors affecting talent risk management and that there are opportunities for improvement of the skills within the leadership and management. This provides the researcher with valuable insights and further constructs that may be added to the proposed framework. Leadership engagement is critical for driving success in any organisation. When employees are engaged and feel valued, this increases productivity and improves business objectives (Tinchev, 2021).

4.4.6 Theme 4: The competency of HR managers in the aviation industry during crisis

The ability of managers to lead during times of uncertainty and change is key to accomplishing organisational goals. During the COVID-19 pandemic, leaders were required to be adaptable, flexible and agile (Ayiei *et al.,* 2020). The role of managers and leaders were blurred at this time as this radical change required people who may not have been in managerial positions to step up and lead. Leadership is about being able to inspire and motivate your subordinates in a way that brings out the best in them. Leaders create safe learning and work environments that enable employees to develop and share innovative ideas (Sisman, 2016). Effective leaders empower employees to succeed and remain engaged throughout their employment at the organisation (Cretu & Iova, 2015).

Table 4.7 provides a summary of the competency of HR managers in the aviation industry during crisis.

Table 4.7 Summary of Theme 4: The competency of HR managers in the aviation industry during crisis

Theme 4: The competency of HR managers in the aviation industry during crisis	
Research question: What talent-risk management challenges were experienced by managers in the aviation industry during the COVID-19 term?	
Categories	**Subcategories**
4.4.6.1 Changes brought on by COVID-19	4.4.6.1.1 Remote working 4.4.6.1.2 Adaptability and flexibility 4.4.6.1.3 Talent management
4.4.6.2 Challenges experienced during COVID-019	4.4.6.2.1 Communication during times of uncertainty 4.4.6.2.2 Virtual management

Source: author's own

4.4.6.1 Changes brought on by COVID-19

The COVID-19 pandemic has brought about lasting changes to how businesses operate. Managers had to be flexible and adaptable to meet the changing needs of the organisation. It is expected that the aviation industry will rebound at a slower pace post COVID-19, further impacting business operations (Serrano & Kazda, 2020). Many companies implemented procedures in response to the COVID-19 outbreak to mitigate the impact of the outbreak and any associated reactions from economic players (people, authorities and other companies) on their commercial operations. The effectiveness of those measures, however, was not the subject of any empirical studies or reports (Anakpo & Mishi, 2021). In Africa, the pandemic caused a negative growth of -5.1% by 2020, making it the continent's worst recession in 25 years, according to Murithi (2020).

4.4.6.1.1 Remote working

Working remotely is carrying out business operations away from a regular office setting, usually from a client's home or another place. Recent years have seen a tremendous increase in its popularity, particularly as a result of technological improvements that make continuous communication and cooperation possible. Overall, working remotely can be a feasible choice for businesses and individuals, but success depends on careful preparation, good communication and the appropriate infrastructure. The biggest change as agreed by most of the participants was that they had to work remotely. This statement is supported by the below excerpts:

Participant P7:

> *"The way business was conducted changed overnight. We had to adapt to a remote model quickly. Many were not equipped with the resources and facilities. Policy needed to be developed on how work from home must be conducted."*

Participant P8:

> *"The biggest change was the need to work from home. Job losses. SAA was going through a business rescue at the time. This added stress to the entire situation."*

The demand for remote work increased during the COVID-19 lockdown periods. Organisations had to ensure that they were able to continue business operations at the same level of productivity as onsite working (Al-Habaibeh, Watkins, Waried & Javareshk, 2021). By providing flexible work arrangements like remote work choices or flexible schedules, you can encourage a good work-life balance. To avoid burnout and improve retention, encourage employees to prioritize their well-being and take time off (Maurya, Agarwal & Srivastava, 2020). By using these talent retention techniques, aviation industry managers may increase employee satisfaction, loyalty and commitment, which will lower attrition and help manage personnel crises during difficult periods like the COVID-19 epidemic (Black, *et al.,* 2020).

4.4.6.1.2 Adaptability and flexibility

Both individuals and organizations should strive to be flexible and adaptable. The ability to alter one's strategy, conduct or mentality in response to shifting conditions is known as adaptability. It entails having an open mind, being willing to learn and unlearn and having the flexibility to change plans and techniques as necessary. Those that are adaptable can flourish in changing environments and are more likely to come up with novel solutions to problems. The capacity to bend or adjust without breaking is referred to as flexibility. Being adaptable, understanding and prepared to take into account various viewpoints or strategies are necessary. Flexible people are at ease with ambiguity and may switch between tasks, roles or responsibilities. Many participants agreed that they were required to be flexible and adaptable to the changing needs of the organisation (O'Connor, 2020).

The following quotations were extracted:

Participant P2:

> *"What has changed in our talent risk processes is the ability to be super adaptable and agile"*

Participant P6:

> *"We are definitely more aware of what needs to be done. We are more adaptable and this is the change brought about by the pandemic. We are ready for anything."*

A key leadership trait that was highlighted during the COVID-19 pandemic is adaptability. Leaders needed to be flexible to adjust to changing circumstances and the corresponding shifts in leadership philosophies. Using sound judgment and effective decision-making abilities, some decisions have to be taken right away (Byrnes *et al.,* 2022). Being adaptable as a leader means being receptive to fresh concepts, strategies and methods of operation. It requires embracing change, being flexible and acting quickly when conditions change (Tisdall & Zhang, 2020). Leaders had to deal with lockdown, remote working and how this affected corporate operations during the COVID-19 peaks. Leaders were able to successfully navigate the COVID 19 epidemic by adapting their methods, spotting problems and proactively resolving them.

4.4.6.1.3 Talent management

The deliberate process of luring, fostering and keeping talented employees within a company is referred to as talent management. It entails a range of procedures and programs designed to unlock employees' potential and place the right people in the right positions to support company success. A strong workforce, improved employee performance and increased productivity all aid in maintaining an organization's competitive advantage. It demands a thorough strategy that integrates people management with company objectives and values. This is evidenced by the below responses:

Participant P1:

> *"We have brought in sourcing from the talent management perspective. We weren't really sourcing before, we were recruiters. We would attract and we interview and offer but we weren't actually sourcing pools so that is certainly something that is new from a talent acquisition perspective."*

Participant P3:

> *"So, I would say so we are looking at different levels of early career, mid senior and senior leadership offerings so I would say that that's come from talent review and succession planning which is key for us as we weren't doing it and we have these critical positions that have no pipeline provided."*

Participant P4:

> *"It's looking at how we promote people, what is talent? Are we all talents or do we have top valued talent and how we married potential and performance together because there is an established performance culture in the organization? But we never married it to potential so it's that risk that was there and I would say a much closer look at retention because of the aviation crisis and that war for talent."*

Talent management is the strategic process of getting the right talent with the right skillset that can be developed to optimise their potential. Talent should then be engaged to ensure retention. Talent management during this uncertain time had to change to adapt to the changing needs of the business environment (Aguinis & Burgi-

Tian, 2021). Talent management encompasses the strategic approach of acquiring, nurturing and retaining adept individuals within an organization. This entails implementing diverse practices and initiatives to identify employees with great potential, fostering their talents and abilities and aligning them with the goals of the organization (Rahman & Nur, 2023). The ultimate objective of talent management is to ensure that suitable individuals occupy appropriate positions, armed with the essential skills and assistance to propel the organization towards success (Al Hashmi, Azam & Khatibi, 2020).

4.4.6.2 Challenges experienced during COVID-19

Some of the challenges faced by managers during the COVID-19 pandemic were related to the changes that they were faced with in a short period of time. Keeping people motivated, productive and engaged was a constant challenge during periods of remote working. Businesses were resorting to pay cuts or layoffs to offset the financial burden and managers had to deal with various queries and requests from employees during this uncertain time when there were no stable answers (Dube, 2022). Uncertainty was managed during the COVID-19 period by adhering to policy (Rutter, Wolpert & Greenhalgh, 2020).

4.4.6.2.1 Communication during times of uncertainty

Maintaining trust, openness and providing individuals inside an organization with clarity during uncertain times is essential. Keeping staff members informed of any changes, updates or developments by communicating promptly and frequently was important. This aids in dispelling rumours and stopping the spread of false information. Recognize the uncertainties and potential difficulties in the scenario and be forthright and honest about them. While maintaining privacy and adhering to the law, share relevant information. To communicate ideas, use language that is clear and simple. Avoid using technical jargon or terminology that could mislead or confuse staff.

The following responses show communication and empathy during uncertain times:

Participant P2:

"A lot of challenges were faced because everything was so uncertain. But to a large extent, this was mitigated because of continuous communication from the CEO office to the employees. It was quite transparent and open. The CEO was speaking to people virtually or telephonically or through written messages. Even if the path ahead was not clear, he was telling them that the path ahead is not clear but we are with you and we will make sure that we exercise fairness and justice in whatever actions we take. So, it was quite comforting for both managers and employees that the CEO told them that even if we have to let you go tomorrow as soon as the airline business starts to pick up again, we will make sure we reach out to you to bring you back into the family."

Participant P4:

"Uncertainty. We mitigated much of the worry and uncertainty with frequent and open communication from the leadership to the employees."

However, the following participants have indicated that managers were not able to effectively communicate and deal with the challenges:

Participant P5:

"Managers were being called by staff about job security questions. Some managers were not really competent to deal with some of the queries the staff had."

Participant P6:

"The challenge was in getting the correct people to give answers to questions that the employees had. Some managers were facing similar fears. There was a lot of uncertainty around jobs. Nobody could give a clear answer to that."

In times of uncertainty, effective leadership communication helps to build trust among stakeholders and employees (van Stralen, McKay & Mercer, 2020). Leaders must be open with their team members, share pertinent information with them and encourage open communication. Communication also requires effective active listening techniques (Tisdall & Zhang, 2020). Employees may simply be seeking for a way to express their worries during a crisis. Empathy and discretion must be used while responding to these worries. This will encourage the employees to express their problems in the future (Watkins & Clevenger, 2021). To keep workers informed, formal lines of communication including emails, memos, forums and townhalls that provide regular updates may also be used (Tisdall & Zhang, 2020). The extent to which managers communicated with empathy had magnanimous outcomes to gaining trust and respect with subordinates (Yue, Thelen & Walden, 2023).

4.4.6.2.2 Virtual management

The selected aviation enterprises had mandated a work from home policy during the peak of the pandemic. This required employees to learn new online office skills and modes of communication (Chen, 2021). Tasks could be discussed virtually and a collaborative input could be given. Timely evaluation and feedback ensured that employees were engaged. Team building activities were planned in a remote setting and employees were challenged to be innovative with their ideas (Vecchi, Della Piana, Feola & Crudele, 2021). The following responses were noted around virtual management:

Participant P9:

> *"Managing people remotely was a challenge. You had to trust that people were actually working. Outcomes needed to be measurable. People needed to be given very clear instructions so they knew what was expected of them. If was a difficult time."*

Participant P11:

> *"The way we worked was different, face to face versus virtually. The way you work is different. How do we connect, when do we connect? We spent more time on teams on a daily basis. The team was split into working from home and on site as we brought people back gradually. We didn't get the equal time with people. People didn't feel that they got enough or the same attention for the managers."*

Prior to the pandemic, certain industries had already used remote work and virtual management, but employees would still spend a significant amount of time at the conventional workplace. Employees were required to work from home during the pandemic, but there was no clear guidance on how to do this (Hancock & Schaninger, 2020). Some of the positions were not appropriate for remote work. Communication that is both timely and open is essential for effective virtual management. To ensure that managers could communicate with employees both individually and collectively, a variety of digital channels were deployed (Tomcikova, Svetozarovova, & Coculova, 2021). Virtual discussions and collaborative input on tasks are also possible. Employee engagement was ensured through timely evaluation and feedback.

4.4.6.3 Summary of Theme 4

According to the responses received, leadership was able to communicate clearly with employees, however, managers struggled to answer the questions posed during these times of uncertainties. Participants revealed that this may be because they were not the correct people to deal with those queries and because of the radical change, any answers/solutions were probable to change too. The changes and challenges faced by managers and the gaps that were identified provides the researcher further information of what measures needs to be in place for the proposed framework to be developed.

4.4.7 Summary of findings

This chapter reviewed and analyzed the data and presented the findings. Semi-structured interviews were analyzed using manual data analysis. The four themes were pre-empted by the research questions. A total of 12 participants were interviewed after providing informed consent. Six were from Qatar Airways and six from SAA. Data analyzed from the interviews produced the following findings. There is currently no specific talent-risk management framework for the selected aviation enterprises. All the participants agree that there is a critical need for one to be developed for the aviation industry specifically. The primary focus of the framework must be on talent recruitment, talent development, talent retention, measures in aligning leadership to TRM, assessing talent-risks and preventative actions to manage TRM, etc.

Most participants understood the critical constructs of talent-risk management, however, aspects like empathy by management, a healthy work life balance, communication during uncertainty and virtual management are aspects that could increase talent risks as people are prioritizing their lives and work differently during and post the COVID-19 pandemic. Chapter 5 will interpret the findings of the study and develop the talent risk management framework for the selected aviation enterprises.

CHAPTER 5

INTERPRETATION OF FINDINGS AND DEVELOPMENT OF THE FRAMEWORK

5.1 INTRODUCTION

This chapter presents the interpretation of the findings as presented in Chapter 4. It will also make recommendations and the talent risk management framework for the selected aviation enterprises. The results are interpreted in line with the below mentioned research questions. The interpretation process includes summarising the findings, comparing them to current literature and then presenting the researchers' personal viewpoint on this.

The study investigated if a talent risk management framework for selected aviation enterprises could be developed. This study was set during the COVID-19 period which saw a radical change in which business was conducted impacting negatively on talent risk management in the selected aviation enterprises. The global war for talent, mixed with the uncertainty of the global pandemic saw talent prioritizing how they worked differently. Therefore, a talent risk management framework is required specifically to the aviation industry to ensure that talent risks are adequately mitigated. An inductive and a qualitative deductive approach was used which predetermined the four themes from the four objectives.

5.2 OBJECTIVES OF THE STUDY

The objectives of the study are very clearly stated:

Table 5.1: Main Objectives and Sub-Objectives

Main Objective	Sub-Objectives
To develop a talent-risk management framework for the aviation industry for managing their employees	To determine the critical factors involved and the constructs to be included in the development of a talent-risk management framework for the aviation industry.

during periods of crisis, particularly global pandemics like that of the COVID-19.	To determine what talent-risk management processes are currently in place and where the gaps exist in the aviation industry. To explore the perceived competencies managers, need in the aviation industry (skillsets, bias) to deal with talent-risk management. To explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 pandemic.

Source: author's own

5.3 INTERPRETATION OF FINDINGS

5.3.1 Sub-Objective 1: to determine the critical factors involved and the constructs to be included in the development of a talent-risk management framework. (Synonymous to theme 1: talent risk management framework)

The objective which is synonymous to the first theme relates to the possibility of developing a talent risk management framework and the critical constructs of what a talent risk management should consist of. According to the findings of the study, there is currently no talent risk management at these selected aviation enterprises. The participants all confirmed that they are not using a formal talent risk management framework, although they realise the importance and need for one, specifically for the aviation industry. A literature search has revealed that there is no existing talent risk management framework for the aviation industry. This further supports a need for an aviation specific talent risk management framework.

The COVID-19 crisis has highlighted the limitations of current talent management approaches (Baum *et al.,* 2020). With a proper talent risk management framework developed specifically for the aviation industry, efficiency can be increased within the organisations' current talent pool by outlining what the risks are and what measures to put in place to mitigate these (Gurusinghe, Arachchige & Dayarathna, 2021). The findings reveal that the constructs to be included in a framework are: data, succession planning for critical roles, talent pools, leadership development and talent development. Focusing on these constructs is critical in talent attraction and retention.

The demand for qualified talent is on the increase as air travel opens up again with low-cost carriers expanding their reach to meet global demands (Ziakkasa, Suckowb & Pechlivanisc, 2022).

5.3.2 Objective 2: To determine what talent-risk management processes are currently in place and where the gaps exist in the aviation industry. These findings can be used to plan mitigation for the gaps identified. (Synonymous to Theme 2: Talent-risk management process in Aviation Industry)

The second objective was to determine what talent risk management processes were in place and what needed to be in place. Singh (2021) alludes to the talent management process as being a mission-critical process that allows organisations to have the correct amount of talent with the right expertise to meet current and future business objectives. This process includes the attraction, development and the retention of the employee throughout their life cycle at the organization.

The theme was categorized into six categories and subsequently 16 sub-categories as depicted Table 4.5 in Chapter 4.

The following discussion will be on the findings of the talent-risk management processes that are in place at the selected aviation enterprises.

5.3.2.1 Talent recruitment

The findings show that the participants are aware that the use of talent pools are an effective measure to curb talent risk management. The use of talent pools ensure that talent is readily available when there is a pipeline in place. One of the selected aviation enterprises were not sourcing talent in the past as this function was being outsourced but are now attracting talent and sourcing independently to create their own talent pools. The other organization is still outsourcing this function. Outsourcing talent attraction gives the organisation access to a global pool of talent and reduces costs (Chinhamo, 2022). The benefits and rewards are also being used to attract talent. The organisations are forthcoming and transparent about the renumeration they offer. One of the organisations is offering a hybrid model of working to attract talent as participants cite a preference for the hybrid model during and post the COVID-19 (Yang, Kim & Hong, 2023).

5.3.2.2 Talent development

The findings indicate that talent assessments are a starting point for talent development. The gaps identified from these assessments are used to plan talent development programs. According to Masenya (2022), businesses are gaining a competitive advantage by training and developing their own best talent. Job profiling and competency frameworks are also being developed. This helps the organisation to match the correct talent to the correct job/role (Midhat *et al.,* 2021). Succession planning for critical roles has been identified as an area for improvement at one of the selected aviation enterprises. Succession planning involves identifying future leaders and developing their skills according to current challenges (White, 2018).

5.3.2.3 Talent retention

The findings indicate that managers are aware that talent turnover are multi-factorial. They are using data from different resources that will give them information on what the competition is offering to ensure that they are competitive in the global markets; data from exit interviews will let the employer know how they may improve retention and the factors to consider when developing a retention toolkit. The findings also indicate that people are choosing to live their lives differently during and post COVID-19. Talent prefers a healthy work life balance which is supported by a hybrid model of working (Rodríguez-Sánchez *et al.,* 2020).

5.3.2.4 Leadership: Measures in aligning leadership to TRM

The findings from the study show that the leadership is aware of the talent risks within the organisation. Regular enterprise risk management meetings are held to present data on talent risks. Measures to mitigate these risks are also discussed and action plans are put in place. According to Hong, Singh, Elangovan and Yeon (2022), early leadership involvement around risk management strategies have shown better performance outcomes. The findings highlight that the leadership is aware of the talent risks. Talent development and engagement is key to talent risk management. When employees feel valued and are engaged, they are more productive. A study conducted by Achmad, Noermijati, Rofiaty and Irawanto (2023) finds that talent development improves job satisfaction and employee engagement and may also lead to talent retention among the Gen Z.

5.3.2.5 Assessing talent risks

The findings indicate that there are robust measures in place to assess the talent risks and managers are aware of the importance of assessing talent risks. However, it was noted that one of the organisations did not have leadership support as yet, although they realise that that would be a good starting point. It is important that senior management is aware of what are their critical roles in an organization. According to Trautman (2022), senior executives have "technical fog" which alludes to them not being aware of what are their top talents' skills. Organisations need to assess and be aware of what their talent risks are in order to be in a position to mitigate these (Bersin & Chamorro-Premuzic, 2019). Data from various sources were readily available and reliable. The organisations make use of benchmarking data, data extracted from exit interviews as well as data from employee surveys.

5.3.2.6 Preventative actions to manage TRM

The findings suggest that the HR managers are aware of some of the actions that needs to be taken to prevent the risk of talent loss. During and post COVID-19, people are looking for opportunities that are more stable and may afford them a better work life balance. Remuneration and benefits were also highlighted as well as succession planning, however, there was no mention of a plan to transfer structured knowledge. The transfer of structured knowledge is the best and fastest way to mitigate talent risks (Trautman, 2023).

5.3.3 Objective 3: To explore the perceived competencies managers need in the aviation industry (skillsets, bias) to deal with talent-risk management. (Synonymous to Theme 3: The awareness, perceptions and understanding of factors affecting talent risk management)

In the aviation industry, managers need to possess certain competencies to effectively deal with talent-risk management during the COVID-19 pandemic. Some of the needed competencies were found to be:

5.3.3.1 Flexibility and Adaptability

The aviation industry has experienced significant disruptions due to COVID-19. Managers should be able to adapt to new working conditions, such as remote work or reduced workforce, and find innovative solutions to manage talent risks. Employees were required to work from home but not all employees had the resources or the facilities to do this. Managers had to navigate these challenges together with the management of staff remotely. Presence versus productivity were factors that were discussed and managers had to trust that employees could deliver on their objectives. This finding is corroborated by a study by Shirmohammadi, Au and Beigi (2022), who found that employees had to manage the pressures of remote working with taking care of sick family members and worrying about their own health and ability to continue working.

5.3.3.2 Empathy and emotional Intelligence

Managers need to demonstrate empathy and understanding towards employees who may be facing challenges during this difficult time. This includes providing support, maintaining morale, and fostering a positive work environment. The study highlighted empathy as a needed competency when communicating with employees. Arroyo, Barcos, Bellón and Corzo (2022) cites empathy as a necessary trait of a leader during times of crises. Digital acumen and virtual management were also new needed competencies**.**

5.3.3.3 Digital acumen

Managers should possess analytical skills to assess talent-related data and make informed decisions. This includes analyzing workforce trends, identifying skill gaps, and implementing appropriate talent management strategies.

5.3.3.4 Change leadership

Managers should have the ability to navigate through uncertain and rapidly changing situations. This includes making quick decisions, adapting strategies, and effectively communicating with employees during times of crisis. Managers need to develop and implement strategic plans to mitigate talent risks caused by the pandemic. This involves identifying potential talent gaps, developing contingency plans, and ensuring the organization has the necessary skills and resources to recover and thrive post-COVID.

5.3.3.5 Awareness of other factors that may include but are not limited to:

Managers should be aware of biases that may impact talent management decisions. Promoting diversity, equity, and inclusion in talent management practices can help mitigate risks and ensure a fair and inclusive work environment.

Managers should be aware that effective communication is crucial in managing talent risks. Managers should be able to clearly communicate changes, expectations, and provide regular updates to employees. Collaboration with HR departments, unions, and other stakeholders is also important to address talent-related issues.

5.3.4 Objective 4: To explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 term. (Synonymous to Theme 4: The competency of HR managers in the aviation industry during crisis)

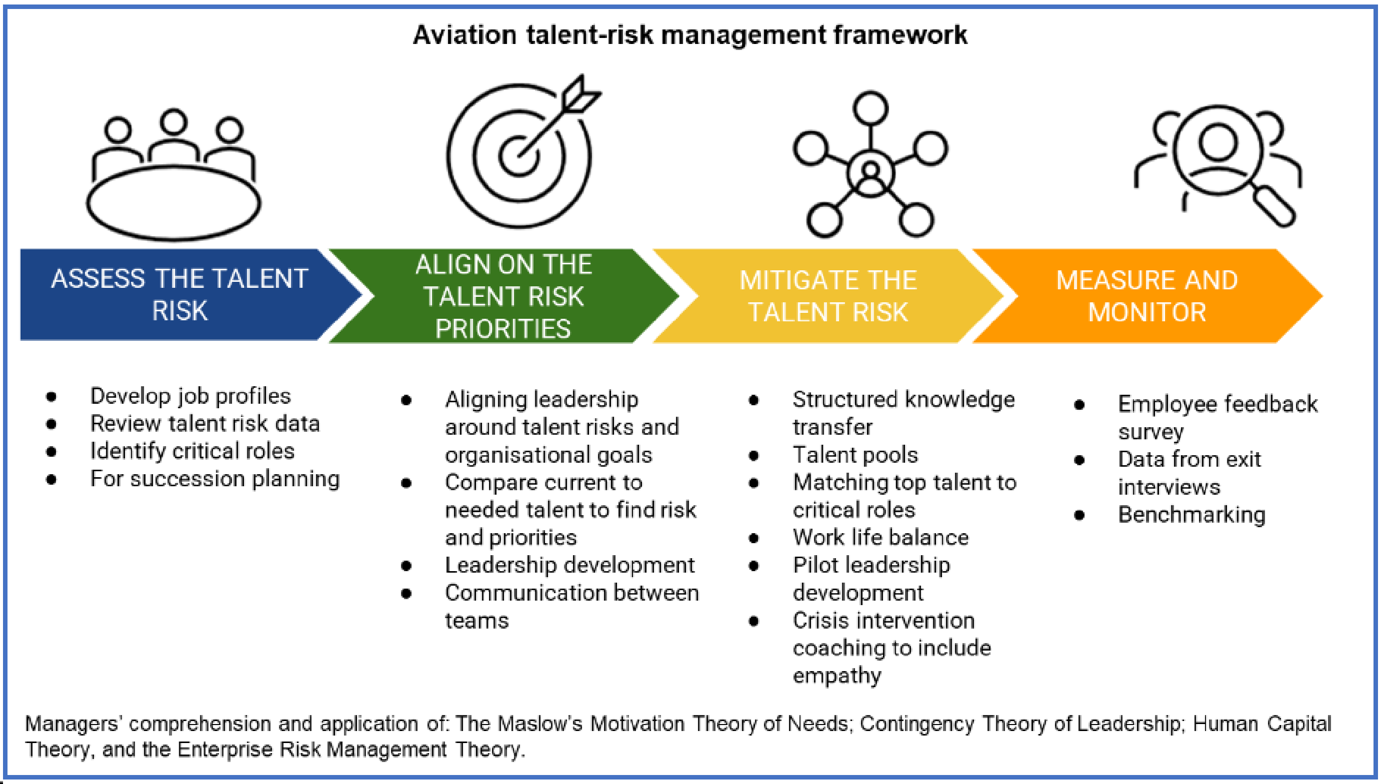
The findings of the study indicate that the greatest challenge faced by managers were that they were not ready to deal with talent risk management during the COVID-19 pandemic. They did not have the answers to the questions posed to them and even if they did, the dynamic of the situation was so agile that the answer could change at any time. According to Lukić-Nikolić, Lazarević and Jaganjac (2022), during crises, HR managers are required to perform the regular functions of HR management while also confronting new challenges and providing solutions for them in real time. The findings of the study highlighted the changes and challenges brought on by the COVID-19 pandemic. With the changes: remote working; flexibility and adaptability to these situations came the challenges of being able to communicate effectively using virtual tools. Being aware of what the challenges are, managers can put measures in place to ensure that they will be ready to manage during crises in the future (Trautman, 2023).

5.4 THE TALENT RISK MANAGEMENT FRAMEWORK

A talent risk management framework was conceptualized for the selected aviation enterprises. This study recommends that this framework (Figure 13 below) be adopted by the selected aviation enterprises. The implementation of this framework will ensure that talent risks are managed. This framework was developed through the interpretation of the findings in this study, relevant literature and is underpinned by the enterprise risk management theory. This framework addresses the issues raised during the pandemic which make it unique to talent risk management frameworks pre-pandemic. A review of available talent management frameworks in other sectors (McKinsey's and Deloitte) highlighted that this framework developed from the study is unique in that it includes crisis management, healthy work life balance, and coaching to include empathy.

The enterprise risk management theory was the most sensible theory to base the framework on, as it complements existing theory on corporate risk management (Jankensgård, 2019). Maslow's motivation theory of needs and the Human capital theory both address the talent management aspect and the Contingency theory of leadership is applicable given the changing circumstances and leadership styles warranted during the COVID-19 pandemic.

Figure 12: Talent-risk management framework for the selected aviation enterprises



Source: author's own

This framework depicted in Figure 13, above, is to be adopted as a proactive approach to mitigate talent risks. The model was based on the outcomes of the reaction of the COVID-19 pandemic. Managers must manage talent-risks by understanding and applying the above-mentioned theories to ensure the process of talent risk management is supported and executed in such a manner that talent is not lost during crisis.

The adoption of the framework addresses the risks as a result of the crisis impacting on the talent that needs to be managed and the risk posed as a result of a lack of talent management during crisis and thus crisis risks are not managed, impacting talent. The four domains of the talent-risk management framework developed as theoretical contribution of the study are discussed in order to comprehend its application and practical contribution to mitigate the risk of not managing talent.

5.4.1 Assess the talent risk

The first step involves assessing the talent risks. This is the most important part of the framework and its implementation. The managers must develop job profiles for each job. This shows them the competencies that are required to perform that specific job. Data from various sources were reviewed to assess talent risks. This is used to forecast risks and implement improvements. Identifying critical roles is also part of assessing the talent risk. Once these are identified, top talent may be identified for succession planning.

5.4.2 Align on the talent risk priorities

The next step involves aligning the leadership around the talent risks. This is done by comparing the talent that you have with the talent that is needed to achieve business objectives. The focus is on risk and priority. Leadership collaborates with managers at all levels to discuss and forecast risk. All members are required to provide brief feedback on talent risks identified in their areas. This enables the leadership to be aware of all risks at every business unit. Leadership development and engagement sessions with crisis management skills like empathy needs to be delivered.

5.4.3 Mitigate the talent risk

Once the risks have been identified and the organisation has the support of the leadership, mitigation measures can be put in place. The managers must ensure that there is a structured knowledge transfer program in place for succession planning to be effective. Talent pools and pipelines need to be in place to ensure that talent is readily available should there be a need. Top talent must be developed for critical roles and retention toolkits must be in place. The toolkit must comprise of, but is not limited to: advocating a healthy work life balance; transparent remuneration and benefits; and career development opportunities.

5.4.4 Measure and monitor

This last phase closes the loop of the talent risk management framework. This is a reassessment of the data to ensure that the measures in place have mitigated the risks. It examines employee feedback and data from benchmarking exercises and exit interviews. This is an equally important step as managers are able to identify gaps in the framework itself and put measures in place to correct this.

5.4.5 APPLYING THE THEORETICAL FRAMEWORK

A theoretical framework provides a conceptual framework for comprehending and analyzing the study problem or subject at hand. By directing the selection and arrangement of pertinent ideas, concepts and models to be utilized to interpret and analyze the data, it serves as the study's framework. It acts as a lens for the researcher to employ while examining the study issue (Varpio *et al.,* 2020). It offers a framework for organizing and analyzing the results and aids in defining the important variables, relationships and concepts that are pertinent to the study. This study will make use of the enterprise risk management theory, the human capital theory and the contingency theory of leadership. To address talent management, Maslow's hierarchy of needs and the Human capital theory were applied.

Fiedler's contingency theory, path-goal theory, situational leadership theory and decision-making theory are the four contingency theories of leadership. This study makes use of Fiedler's contingency theory, which acknowledges that different circumstances call for different types of leadership. Leaders need to modify their approach depending on the circumstances (Fiedler, 1978). A situational leadership theory was created in the 1960s by business and operation psychologist Fred Fiedler, who stated that organizations should assign leaders to tasks that complement their natural leadership styles. The Fiedler contingency thesis of leadership is still applied in workplace settings across the corporate community decades later (Reams, 2023). During the COVID-19 pandemic, leaders adopted the situational leadership style due to the constant change of the business environment.

According to Alajmi (2022), effective leadership is reliant on the interaction of the leader's style and the situational circumstances. Task-oriented leaders and relationship-oriented leaders are two categories of leaders that Fiedler recognized. The fit between a leader's leadership style and the situation's favourability, so the concept goes, determines how well they function. According to Omazi, Laba and Uroi (2023), favourable conditions include the leader having a good relationship with their team, the task being well-structured and the leader having authority. In a challenging environment, the leader's approach could be less effective. The need of appraising a situation and changing one's leadership style as necessary is emphasized by Fiedler's contingency theory.

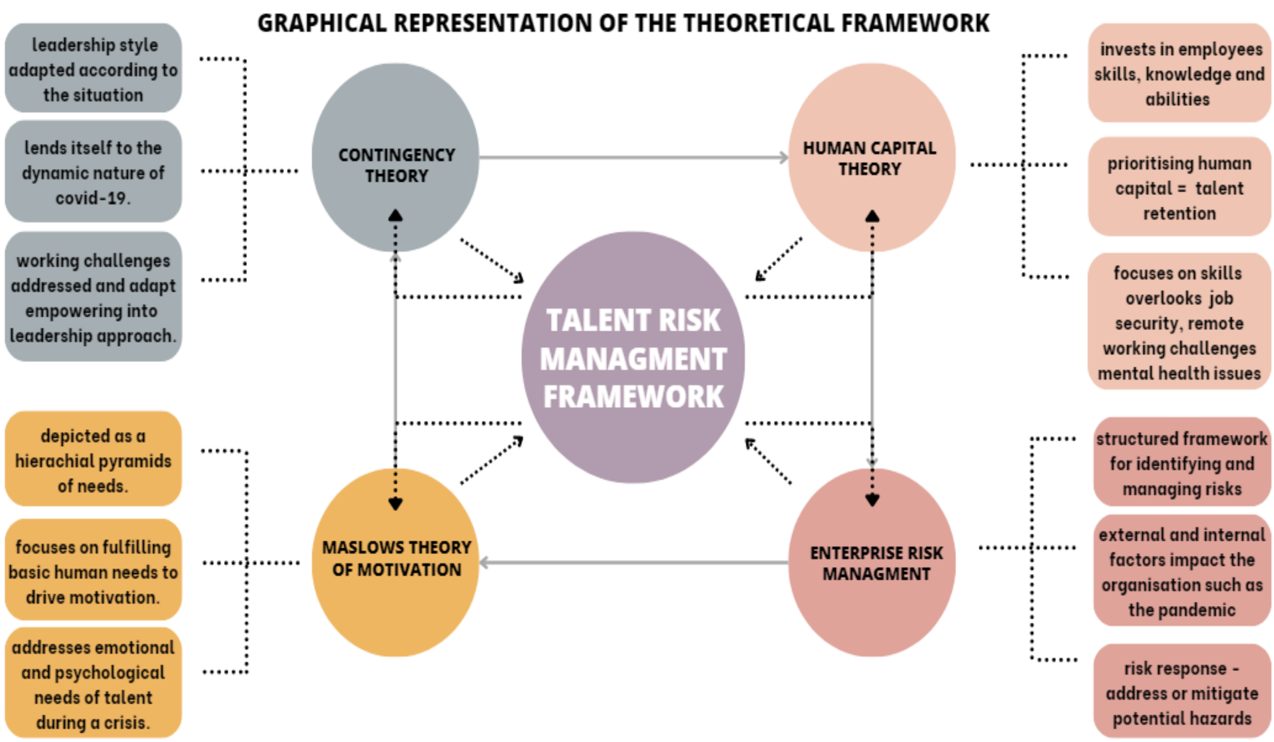
Abraham Maslow's Hierarchy of Needs is described by Matthew (2019). They consist of the following: biological necessities for human survival, such as air, food, water, shelter, clothes, warmth, sex and sleep. The human body cannot function at its best if these demands are not met. Maslow deemed physiological needs to be the most crucial since unless these needs are satisfied, all other wants become secondary (Mathew, 2019). Safety requirements: after a person's physiological requirements are met, their needs for security and safety become apparent. This hierarchy of demands was disrupted in 2020 (Hassan, 2020) by the global lockdown and border closures, which threatened safety. People desire a sense of control, predictability and order in their life. The family can provide for these necessities. Security in the sense of psychological safety, monetary safety (work, social welfare), fearlessness, social stability, property, health and wellbeing (for instance, protection from accidents and injuries) (Mathew, 2019). More than a million jobs in the airline industry were at risk of being lost because of the COVID-19 epidemic (Netnews, 2020). Employees feel safe in a position or at a company that takes their demands for personal growth and professional development into account. According to the researcher, this idea highlights the aspect that draws people to an organization. When there is room for professional development, employees are more likely to be kept on for a longer amount of time.

The Human Capital Theory considers an employee's knowledge, skills and capacities. The most significant assets of an organization are considered to be its human resources (Muriithi & Makau, 2018). The long-term benefit would be employee retention and a decreased risk of losing valuable and scarce talent if the organization made an investment in this talent and offered growth. Employee motivation increases when they see assistance. A culture of job happiness and well-being is fostered by improved employee productivity, which also improves organizational success (Savarimuthu & Jothi, 2020).

Theory of enterprise risk management: According to Peterson (2019), enterprise risk management is a management technique that recognizes, anticipates and gets ready for dangers and hazards that are not covered by conventional operating procedures. After the global economic crisis of 2008, this idea gained traction as strict risk assessments and evaluations were implemented (Florio, 2017). For simplicity of use in a crisis, this theory would address the risk component of talent-risk management. It can be used in situations that are dynamic, such as the modifications brought on by the COVID-19 pandemic (Florio, 2017). The idea of talent management and a methodology for talent management in academy is unclear, claims Aligarh (2017). This study will offer precise definitions and creates a framework for talent-risk management.

Below is a graphical representation of the theoretical framework, showing how these lenses interact with each other, gaps identified and how these are overcome by complementing each other to underpin talent risk management.

Figure 13: A graphical presentation of the theoretical framework



Source: Author's own

5.5 SUMMARY OF THE CHAPTER

The findings of the study were interpreted in this chapter. The recommendations, including the proposed talent risk management framework for the selected aviation enterprises were made. The researcher summarised the results of the study comparing these to existing literature and then providing the researchers own perspective on this. The findings were discussed under the four preconceived themes and categories and sub-categories that were derived from the analysis of the data. The next chapter presents the recommendations and contribution of the study.

CHAPTER 6

CONTRIBUTIONS, RECOMMENDATIONS AND CONCLUSION

6.1 INTRODUCTION

This chapter concludes the study. The purpose of this section is to relook at the research problem and the extent to which this was addressed. The aims, objectives and research questions were also re-examined to see if these were met. Returning to the literature review, the study assesses if these conclusions contribute to the interpretation of the topic provided in the literature and the practical importance of the results. This chapter also provides the contributions that this study made and the recommendations for future research. The limitations of this study are also outlined.

6.2 RESPONDING TO THE RESEARCH PROBLEM

The general problem was that many managers experienced challenges in talent-risk management in the aviation industry (Barkhuizen, *et al.,* 2014), and this was intensified during the COVID-19 lockdown, which commenced in 2019. The specific problem was that there is no talent-risk management framework suitable for the aviation industry during a global pandemic or any global crisis (d'Armagnac, Ariss & N'Cho, 2021) hence aviation managers were not equipped with the skills and specialist knowledge to manage talent during the pandemic (Bhugalia, 2020). This could have led to employees looking for employment elsewhere, causing a talent drain in the aviation industry. The study addressed the research problem by establishing a talent-risk management paradigm that will enable aviation managers to effectively manage crucial resources and human capital during crises.

6.2.1 The Main Objective

To develop a talent-risk management framework for the aviation industry for managing their employees during periods of crises, particularly global pandemics like that of COVID-19. Developing a talent-risk management framework for the aviation industry during crises such as global pandemics like COVID-19 requires a comprehensive and proactive approach. The framework should consider the unique challenges faced by the industry, including workforce disruptions, safety concerns, financial impacts, and regulatory changes. The main objective was supported by the sub-objectives outlined in 6.2.3.

6.2.2 The Main Research Question

In line with the main objective, the main research question was: what constructs are to be included in a talent-risk management framework that will assist managers in the aviation industry in dealing with talent crises based on their experiences from the COVID-19 pandemic? The findings reveal that the constructs to be included in a framework are: data, succession planning for critical roles, talent pools, leadership development and talent development. By incorporating these constructs into a comprehensive talent-risk management framework, managers in the aviation industry can better prepare for and navigate talent crises, such as those experienced during the COVID-19 pandemic, to ensure organizational resilience and success. This main research question was supported by the following sub-questions:

- What are the critical factors involved in the development of a talent-risk management framework for the aviation industry?
- What talent-risk management processes are currently in place to meet the needs of talent in the aviation industry?
- What do managers in the aviation industry (skillsets, bias) perceive as their needed competencies to deal with talent-risk management as exposed during the COVID-19 pandemic?
- What talent-risk management challenges are experienced by managers in the aviation industry during the COVID-19 pandemic?

6.2.3 Study sub-objectives

The first sub-objective was to determine the critical factors involved and the constructs to be included in the development of a talent-risk management framework for the aviation industry. This objective was met and the critical factors and constructs identified were: data, succession planning for critical roles, talent pools, leadership development, and talent development. The second objective was to determine what talent risk management processes were in place and what needed to be in place. This objective was met. The HR managers understood the processes that need to be in place like having talent pools and pipelines in place, being transparent about remuneration and benefits and offering a healthy work life balance development and retention, succession planning for critical roles and aligning leadership to talent risk management. However, they did not have a program for structured knowledge transfer.

The third objective was to explore the perceived competencies managers need in the aviation industry (skill sets, bias) to deal with talent-risk management. This objective was met. The findings of the study revealed that the HR managers were not competent to lead during the COVID-19 pandemic. The fourth and last objective was to explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 pandemic. This objective was met. HR managers found remote working effective, as well as virtual communication, and flexibility and adaptability to changing situations challenging.

6.3 LIMITATIONS

The study sought to develop a talent risk management framework for the selected aviation enterprises in the geographical region of South Africa and Qatar. The demarcation is seen as a limitation as it only examines two different areas and only one airline in each geographical area. The study could have interviewed a larger sample; however, the SAA have a total of 20 HR personnel and only six of them are HR managers which was the target population. In addition, six HR managers were interviewed from Qatar Airways. Nevertheless, the sample size was adequate to meet the research objectives and data saturation was reached. The findings could not be generalized due to it being a qualitative design.

6.4 MANAGERIAL RECOMMENDATIONS

6.4.1 Recommendations for the Selected Aviation Enterprises

HR managers must create job profiles for all positions to ensure best fit of talent for the job. The current to needed talent must be compared to assess risk and priorities. Critical roles and top talent need to be identified for succession planning. HR managers must implement talent development strategies to ensure structured transfer of knowledge to reduce talent risk. Talent development opportunities need to be in place to ensure talent engagement and retention. Leadership awareness and involvement for talent risk management is key as they are the decision makers. It is imperative that leadership development programs include the element of empathy to be adopted and reinforced. Transparent communication to be reinforced to foster trust among employees. Employee health and wellness needs to be prioritised and therefore health and wellness strategies to maintain a healthy work life balance must be implemented. Talent attraction and retention strategies must include a hybrid model of work where it is possible to meet industry demands and be remuneration and benefits should be revisited to ensure that they are competitive. It is also recommended that data from employee feedback surveys, exit interviews, IATA etc. are used to plan mitigation measures.

The findings of the study highlight that there is no formal talent risk management framework for the selected aviation enterprises in place. The study has developed a framework based on the findings that is underpinned by the theoretical foundations of the study. It is recommended that this framework be put in place.

6.4.2 General Recommendations

A future study may be conducted to examine the effectiveness of the study’s newly designed talent risk management framework on the selected aviation firms. Future research may also consider a quantitative study with a large number of people across a greater geographical area utilising a different approach. The framework can also be quantitatively validated in order to support the study's conclusions, establish its generality and make it appealing to a broad audience.

6.5 THESIS CONTRIBUTIONS

By developing a talent-risk management framework for the selected aviation firms, this study contributes to the talent management discipline's body of knowledge. The articles resulting from this study will also make a significant contribution to the academic body of knowledge. This study will also contribute to the improvement of talent management by understanding the possible impact on talent management by the risks posed during times of crisis or change by applying the four domains of talent-risk management as stated in the Talent-Risk Framework developed.

6.6 CONCLUSION

This study interviewed 12 participants from two different airlines. All 12 participants voluntarily completed the interviews. These were conducted virtually and recordings were made. The researcher actively engaged with the data repeatedly: conducted the interviews, listened to ensure clarity, transcribed and made notes. According to Nowell et al., (2017:5), the researcher should actively read the data repeatedly to search for patterns and meaning that are immersed in it. This is especially important when dealing with various complex qualitative data formats, such as the ones used in this study. The data were manually coded and put up on the wall of code to enable a single visual display of multiple ideas enabling the researcher to find relationships and links between themes (Saldana, 2016) that made up the foundation of the framework.

This chapter concludes the research which reached its main objective- to develop a talent-risk management framework for the Aviation industry. The management problem that this study sought to address was that there was no specific talent-risk management framework for the selected aviation enterprises. Four objectives were developed to address the main aim. The outcomes of these objectives were meant to be used to develop the framework.

The first objective was to determine the critical factors involved and the constructs to be included in the development of a talent-risk management framework for the aviation industry; the second objective was to determine what talent risk management processes were in place and what needed to be in place; the third objective was to explore the perceived competencies managers needed in the aviation industry (skill sets, bias) to deal with talent-risk management; and the fourth and last objective was to explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 pandemic. These objectives were all achieved.

This study was conducted using the phenomenological qualitative research method. Data were collected via semi-structured interviews conducted virtually. Four themes were preconceived, and thematic analysis was used to analyse the data. The study contributed to the academic body of knowledge. The most remarkable contribution of the study was the development of the talent risk management framework for the selected aviation enterprises.

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APPENDIX 1: PARTICIPANT INFORMATION AND CONSENT

Private Bag X6001, Potchefstroom South Africa 2520

Tel: 018 299-1111/2222
Web: http://www.nwu.ac.za

Faculty of Economics and management sciences

Researcher: Jessica Haripersad

Tel: +97450469246

Email: jharipersad@sidra.org

Supervisor: Prof AM Pelser

Tel: 082 375 6636

Email: ampelser@hotmail.com

Supervisor: Prof Y. du Plessis

Tel: 083 305 6227

Email: Yvonne.duplessis@nwu.ac.za

Date: 27 January 2022

DEAR HR MANAGER

PARTICIPANT INFORMATION AND CONSENT FORM

I herewith wish to request your consent to voluntary participate in this research, which involves answering a few questions about Talent-risk management through an MS Teams interview. The interview will be arranged at a time convenient to you and will not be more than an hour. Before you give consent, please peruse the information below.

The details of the research are as follows:

TITLE OF THE RESEARCH PROJECT

Developing a talent-risk management framework for selected aviation enterprises

WHAT IS THIS RESEARCH ABOUT?

Aim

The main aim of this study is to develop a talent-risk management framework for the aviation industry

Objectives

- To determine what talent-risk management processes are currently in place and where the gaps exist in the aviation industry.
- To explore the talent risk management challenges experienced by managers in the aviation industry during the COVID-19 crisis.
- To determine the critical factors involved in developing a talent-risk management framework for the aviation industry.

- To explore the perceived competencies managers need in the aviation industry (skillsets, bias) to deal with talent-risk management.

Participants

Human Resource experts who are knowledgeable about Talent-Risk Management.

What is expected of you as a participant?

You have been selected to participate in this research due to your outstanding knowledge of talent risk management to give credibility to the study and solicit your expertise and suggestions on how a talent risk management framework can be created. The study will entail you answering a few questions about talent risk management and the framework if one is already in place. The questions will be answered through a structured interview which should not last for more than an hour and will be via MS Teams.

Benefits to you as a participant

The benefits of this study will include assisting the aviation industry in establishing a talent risk management framework that will streamline workflow during times of crisis in the future.

Risks involved for participants

There are no risks associated with participating in this study. You reserve the right to withdraw at any stage of the research process without any consequence, and there are no anticipated consequences of declining or withdrawing from the study at any time during the process.

Confidentiality and protection of identity

Information obtained during the study will be kept confidential and will only be used for research. Safeguarding all participants' identities will receive high priority, and the privacy of information and anonymity of participants will be kept protected at all times.

Dissemination of findings

The feedback procedure will entail meetings to discuss the research findings and the distribution of research findings to all participants.

If you have any further questions or inquiries regarding your participation in this research, please contact the researcher for more information.

POPI ACT

Please note that the researcher will adhere to all rules contained in the POPI ACT.

COVID-19 REGULATIONS

Hereby the researcher wishes to inform you that she will adhere to all the Covid-19 regulations set. She will also see to it that the participants also adhere to the Covid-19 regulations. Data will also be collected via a ZOOM meeting, which makes it possible to adhere to the Covid-19 regulations.

Yours sincerely,

Jessica Haripersad

+97450469246

DECLARATION BY PARTICIPANT:

By signing below, I …………………………………….………… agree to take part in a research study entitled:

Developing a talent-risk management framework for the aviation industry

I declare that:

- I have read this information and consent form and understand what is expected of me in the research.
- I have had a chance to ask questions to the researcher, and all my questions have been adequately answered.
- I understand that participating in this study is voluntary, and I have not been pressured to participate.
- I may choose to leave the study at any time and will not be penalized or prejudiced in any way.
- I may be asked to leave the research process before it has finished if the researcher feels it is in my best interests or if I do not follow the research procedures as agreed to.

Signed at (place)____on (date) ______/______/20____

____

Signature

APPENDIX 2: ORGANISATIONAL CONSENT – QATAR AIRWAYS

QATAR AIRWAYS القطرية

Ref: QR/HR/CPO/EM22/001

30 January 2022

NWU Business School
North West Universtity
Potchefstroom, 2520

INVITATION LETTER

Dear Sir / Madam,

This is in reference to your request dated 23-Jan-2022, seeking permission for Ms. Jessica Haripersad to conduct research on 'Tale Management Framework for the Aviation Industry'. On behalf of Qatar Airways, I am pleased to cordially invite Ms. Jessica Haripersad to conduct her research on this subject and she may liaise with my office (Ms. Priyanka Crasto, telephone no. +974 40227021) for scheduling the interviews with our HR Management team who have been identified by the Company to participate in the case study.

The research is to be conducted using virtual tools and the interviews will be specific to the list of questions as per the attached questionnaire.

Once the research is completed, the results of the research is to be shared with CPO's office at Qatar Airways, for our records.

We wish you good luck and look forward to hearing from you.

Regards,

QATAR AIRWAYS GROUP
مجموعة الخطوط الجوية القطرية

Antonio Schulthess
Chief People Officer

Encl : Questionnaire

oneworld

Qatar Airways Tower, P.O. Box 22550, Doha, Qatar
Tel. (+974) 40226000 Fax. (+974) 44621533
Qatar Airways Group (Q.C.S.C)

برج القطرية ص. ب. ٢٢٥٥٠ الدوحة – قطر
هاتف: ٤٠٢٢٦٠٠٠ (+٩٧٤) فاكس: ٤٤٦٢١٥٣٣ (+٩٧٤)
مجموعة الخطوط الجوية القطرية (ش. ق. م. م.)

qatarairways.com

APPENDIX 3: ORGANISATIONAL CONSENT – SOUTH AFRICAN AIRWAYS

SOUTH AFRICAN AIRWAYS

South African Airways
Human Capital

Tel: 27 11 978-6136
Email: ShamlaNaidoo@flysaa.com

27 January 2022

To whom it may concern

Dear Sir/Mam

PERMISSION TO CONDUCT RESEARCH FOR PHD STUDIES: MS J HARIPERSAD

This serves to confirm that permission has been granted to Ms Jessica Haripersad to enable her to conduct a qualitative research study at South African Airways (SAA) through interviews, while ensuring that all ethics and confidentiality requirements applicable to the research process will be upheld.

As agreed with Ms Haripersad, the research outcomes and findings emanating from the study will be shared with SAA's HR department when available.

Kind regards

Dr Shamla Naidoo

Lead: Talent Management
Human Capital

APPENDIX 4: ETHICS APPROVAL LETTER

Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Fax: 018 299-4910
Web: http://www.nwu.ac.za

Senate Committee for Research Ethics
Tel: 018 299-484
Feziwe.Mseleni@nwu.ac.za

19 September 2023

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Economic and Management Sciences Research Ethics Committee (EMS-REC)** on, 25/08/2023 the Economic and Management Sciences Research Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-REC) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Developing a talent-risk management framework for selected aviation enterprises

Study Leader/Supervisor (Principal Investigator)/Researcher): **Prof AMF Pelser**

Student: J Haripersad (40544206)

N	W	U	-	0	0	6	2	4	-	2	2	-	A	4
Institution				Study Number						Year			Status	

Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation

Application Type:
Commencement date: 19/09/2023 **Risk:** Minimal
Expiry date: 19/09/2024

Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.

Special in process conditions of the research for approval (if applicable):

-

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- *The study leader/supervisor (principle investigator)/researcher must report in the prescribed format to the EMS-REC:*
  - *annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and*
  - *without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.*
- *The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the EMS-REC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.*
- *Annually a number of studies may be randomly selected for an external audit.*
- *The date of approval indicates the first date that the study may be started.*

n the interest of ethical responsibility, the NWU-SCRE and EMS-REC reserves the right to:

- *request access to any information or data at any time during the course or after completion of the study;*
- *to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process;*
- *withdraw or postpone approval if:*
  - *any unethical principles or practices of the study are revealed or suspected;*
  - *it becomes apparent that any relevant information was withheld from the EMS-REC or that information has been false or misrepresented;*
  - *submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or*
  - *new institutional rules, national legislation or international conventions deem it necessary.*

The EMS-REC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the EMS-REC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely,

Mark Rathbone

Digitally signed by Mark Rathbone
DN: cn=Mark Rathbone, o=North-West University, ou=Business management, email=mark.rathbone@nwu.ac.za, c=ZA
Date: 2023.09.19 09:55:34 +02'00'

Prof Mark Rathbone
Chairperson: NWU Economic and Management Sciences Research Ethics Committee

APPENDIX 5: INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

WELCOME

A. **State Purpose of the study and interview proses**
B. **Obtain informed consent**
C. **Questions:**

Talent-risk management framework (s) for the aviation industry

Can you elaborate more on the types of talent-risk management frameworks or systems used by the airline?

1. Do you think it is a good idea to develop a specific talent-risk management framework for the airline? Please explain your answer
2. What should the focus areas of that specific talent-risk management framework be?

The critical factors involved in the development of a talent risk management framework

1. Explain the critical factors that are important/ constructs that should be included for the development of a talent risk management framework?

The awareness, perceptions and understanding of factors affecting talent risk management

1. Do you think the HR management know and understand the factors that affect talent risk management?
2. What do managers in the aviation industry (skillsets, bias) perceive as their needed competencies to deal with talent-risk management as exposed during the Covid- 19 pandemic?

The competency of HR managers in the aviation industry during crisis

1. What changes in the talent-risk management processes have been brought on by COVID-19?

2. What challenges are experienced by managers in the aviation industry during the COVID-19 term?

Talent risk management processes that are currently in place to meet the talent needs of the aviation industry

1. What talent risk management processes are in place to meet the talent needs of the aviation industry?
    - During the recruitment phase?
    - During the talent development phase?
    - To retain staff?
2. What measures are taken by the HR management in aligning the leadership team in your organization around which talent risks are currently a high priority?
3. What measures are in place to accurately assess your talent risk?
4. What preventative actions are taken by the HR manager to mitigate the talent risk in the aviation industry?

D. **CLOSURE** and Thank you for your participation

APPENDIX 6: TURNITIN SUMMARY

J_Haripersad_PhD_30102023_30_Oct_2023.doc

ORIGINALITY REPORT

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APPENDIX 7: LANGUAGE AND TECHNICAL EDITING CERTIFICATE

Centre for Scholarly Publishing Services (PTY) Ltd

Reg no: 2015/444302/07

26 October 2023

JESSICA HARIPERSAD
Department of Economic and Management Sciences
North-West University
Potchefstroom, South Africa

This serves to confirm that a PhD thesis titled *Developing a talent-risk management framework for selected aviation enterprises by* Jessica Haripersad *and* submitted in fulfilment of the requirements for the degree Doctor of Philosophy in Economic and Management Sciences with Business Administration at the North-West University has undergone both a thorough copy-editing as well as proof-reading processes.

Sincerely,

…………………………..

Solani Ngobeni
Publishing Director
Centre for Scholarly Publishing Services (Pty) Ltd.

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