

The influence of the Single African Air Transport Market (SAATM) on the South African aviation industry

Tshedza Caine Mainganya

**A research project submitted to the Faculty of Commerce, Law and Management,
University of the Witwatersrand, in partial fulfilment of the requirements for the degree of
Master of Business Administration**

Johannesburg, 2024

ABSTRACT

This study examines the influence of the Single African Air Transport Market (SAATM) on the South African aviation industry. The paper uses Porter's Five Forces for thematic analysis to explore changes in market competition, airline operations, and regulatory frameworks. Key findings include increased market competition spurring service and operational innovations, shifts in airline operations such as route expansion and efficiency improvements, and the need for regulatory adaptations to maintain safety, security, and fair competition. This study provides comprehensive insights into the strategic implications and challenges for South African aviation stakeholders in the context of SAATM's implementation, contributing significantly to understanding aviation market liberalisation in Africa.

KEYWORDS

Single African Air Transport Market, Aviation Industry, Porter's Five Forces Model Airline Competition, Strategic Alliances in Aviation, Airline Operational Efficiency, Aviation Market Liberalisation

DECLARATION

I, Tshedza Caine Mainganya, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Name: Tshedza Caine Mainganya

Signature:



Signed at Kempton Park

On the 21st day of May 2024

ACKNOWLEDGEMENTS

I would like to express my gratitude to Dr. Jacques Totowa for his wise counsel, steadfast assistance, and perceptive criticism over the course of the study. His knowledge and guidance really influenced this studies, and his support kept me going when things became hard.

I thank my wife, Kagiso Mainganya, for her endless love, understanding, and encouragement. Her belief in my abilities and her sacrifices have been the foundation of my perseverance. To my children, Neo, Remoamogetse, and Rehumile thank you for your smiles and patience and for being the joy that lights up my days. Your understanding and support mean the world to me.

My deepest gratitude goes to my parents and brothers, whose steadfast support throughout my journey has been a continual source of strength. Your encouragement and prayers have been my guiding light, and I am eternally thankful.

I'm also grateful to the numerous friends and family members who supported me, providing encouragement, hot meals, and a listening ear when I needed it the most. Your compassion and support have been a source of strength during this journey.

Special thanks to the ATNS, my colleagues and the respondents who generously contributed data and insights crucial to this research. Your willingness to share knowledge has significantly enriched this study.

Lastly, I acknowledge the support of all faculty members and administrative staff who assisted in various capacities. Your contributions have not gone unnoticed, and I am genuinely thankful for your help.

This research, enriched by the contributions of many, reflects the power of collaboration and support. I offer my sincerest gratitude to all who have participated in this journey.

TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION	7
1.1 Statement of Purpose	7
1.2 Background of the Study	7
1.1 Research Problem	8
1.2 Research Questions	9
1.3 Justification/Rationale of the Study	9
1.4 Delimitations of the Study	10
1.5 Operational Definitions	10
CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK	11
2.1 Introduction	11
2.1.1 Overview of SAATM	12
2.1.2 Evaluation of other Single Air Transport Markets	13
2.1.3 Benefits and Challenges of SAATM	14
2.2 Empirical Review of Literature	15
2.2.1 Research Gaps	16
2.2.2 Influence of SAATM on South African Airlines	18
2.2.3 Influence of SAATM on Air Traffic and Navigation Services (ATNS)	19
2.2.4 Overall Influences of SAATM on South African Civil Aviation	19
2.3 Theoretical Review of Literature	20
2.3.1 Theoretical Framework	20
CHAPTER 3. RESEARCH METHODOLOGY	22
3.1 Introduction	22
3.2 Research Design	22
3.3 Data Collection Methods	23
3.4 Data Analysis	23
3.5 Ethical Considerations	25
3.6 Limitations	25
3.7 Reliability and Validity	25
CHAPTER 4. RESULTS	27
4.1 Introduction	27
4.2 Bargaining Power of Buyers	28
4.3 Bargaining Power of Suppliers	29

4.4	Threat of New Entrants	30
4.5	Threat of Substitute Products or Services.....	30
4.6	Competitive Rivalry	31
4.7	Summary of Results.....	32
CHAPTER 5. DISCUSSION		32
5.1	Introduction	32
5.2	Synthesis of Findings:.....	32
5.2.1	Market Competition:	33
5.2.2	Airline Operations:.....	34
5.2.3	Regulatory Changes:	35
5.3	Comparative Analysis	36
5.3.1	SAATM vs ECAA and SAM: Similar Objectives, Different Contexts.....	36
5.3.2	Market Structure and Competition.....	37
5.3.3	Regulatory Frameworks.....	38
5.3.4	Infrastructure Development.....	38
5.3.5	Economic Impacts	39
5.3.6	Strategic Opportunities.....	40
5.3.7	Conclusion of Discussion	40
CHAPTER 6. SUMMARY, RECOMMENDATIONS AND CONCLUSION.....		41
6.1	Summary	41
6.2	Implications.....	41
6.3	Recommendations.....	42
6.4	Future Research Directions	44
6.5	Conclusion.....	45
REFERENCES.....		46

CHAPTER 1. INTRODUCTION

1.1 Statement of Purpose

The purpose of this study is to critically examine the implications of the Single African Air Transport Market (SAATM) on the South African aviation industry, specifically through the lens of Porter's Five Forces model.

1.2 Background of the Study

The 1999 Yamoussoukro Decision (YD) gave birth to the African Union's (AU) initiative, the SAATM, which aims to build an African air transport market that is harmonised in order to boost commerce, tourism, and economic growth throughout the continent (Njoya, 2016). In recent years, the African aviation sector has seen considerable changes, with the adoption of the SAATM being a crucial milestone in 2018 (Adejoke, 2022). Currently, SAATM has thirty-five member states (African Union, 2018).

Aviation as a sector is a pivotal component of the African continent's economy, with substantial growth and development potential (Tolcha, Njoya, Bråthen, & Holmgren, 2021). The AU's SAATM aims to build a liberalised and harmonised African air transport market, supporting integration and aiding economic growth (African Union, 2018). The deployment of SAATM has the potential to significantly influence the South African aviation industry (Tolcha, Bråthen, & Holmgren, 2020).

Liberalisation of air routes throughout the continent may increase competition for South African airlines, potentially leading to a loss of market share and profitability (Cristea, Abate & Benitez, 2022). Cristea et al. (2022) argue that the increased competition from air transport liberalisation typically threatens established airlines' market shares. However, this is a double-edged sword as SAATM might also open new prospects for South African airlines to penetrate new African markets (Abate, 2016). According to Abate (2016), the liberalisation of air transport markets frequently creates new market possibilities, prompting airlines to develop new routes and services.

With the inception of SAATM, demand for air traffic management services might increase, necessitating new infrastructure and resources to manage the heightened traffic (Dobruszkes &

Mondou, 2013). Dobruszkes and Mondou (2013) highlight that market liberalisation can increase flight frequencies, requiring more robust air traffic management systems.

The majority of nations in what Njoya and Nikitas (2020) refer to as the Global South include countries such as South Africa, which have identified tourism and air transport as crucial development industries. South Africa represents one of Africa's key aviation markets, offering a robust aviation sector and plays an essential role in the region's air transport network (Njoya & Nikitas, 2020). The introduction of SAATM, on the other hand, has the potential to have a considerable influence on the South African aviation industry.

SAATM might open new prospects for South African airlines to develop into new African markets (Abate, 2016). SAATM might increase demand for air traffic management services, necessitating new infrastructure and resources to manage the increased traffic (Tolcha et al., 2021). In light of the preceding discussion, it is apparent that there is a need to have a deeper understanding of how the AU's SAATM could influence the South African aviation industry.

1.1 Research Problem

The research problem statement aims to understand the potential impact of SAATM on the South African aviation industry. While the study focuses on market competition, airline operations, and regulatory frameworks, it identifies specific issues such as the need for regulatory adaptations, increased competition, and operational innovations. Previous research indicates gaps in understanding the strategic implications and challenges for South African aviation stakeholders. For instance, the Yamoussoukro Decision, which serves as the foundation for SAATM, has been studied extensively in terms of policy, but less is known about its practical implications on specific markets like South Africa (Tshetu, 2022). The competitive dynamics and operational changes resulting from such a comprehensive market liberalisation require deeper exploration to inform strategic decisions by industry stakeholders.

Air transport liberalisation aims to stimulate economic growth, trade, and tourism by eliminating air transport impediments such as restrictive bilateral agreements and creating a more competitive and productive African air transport market (Cristea et al., 2022; Gowreesunkar, 2019; African Union, 2018). SAATM stands as a significant initiative in this regard, first launched in a phased approach in January 2018 (African Union, 2018).

The African aviation sector grapples with various challenges, including inadequate infrastructure, unsatisfactory regulatory frameworks, and security and safety concerns, hindering its rapid growth (Njoya, 2016). SAATM's implementation could alleviate these issues by driving economic development through the allocation of fifth freedom rights, enhancing regulatory consistency, promoting infrastructure investment, and reinforcing safety and security requirements (Njoya, 2016).

South Africa is a key player in Africa's aviation market, boasting a growing aviation industry and a significant position in the regional air transport network (Njoya & Nikitas, 2020). With multiple airlines such as Safair, Airlink, South African Airways, Lift Airline, Cemair and Air Traffic and Navigation Services SOC Ltd (ATNS) is responsible for air traffic control, management and navigation services, South Africa has a robust aviation landscape (Joubert, 2014). The key issue is understanding the prospective influence of SAATM on South Africa's aviation industry.

The study focuses on the influence of SAATM on the South African aviation industry. The study aims to shed light on economic, regulatory, and operational challenges facing Africa's aviation industry, particularly South Africa. The goal is to identify potential strategies for South African airlines and ATNS to address these challenges and leverage the potential opportunities SAATM's implementation may present.

1.2 Research Questions

The following research question was addressed:

- a. What is the influence of the Single African Air Transport Market (SAATM) on the South African aviation industry?

1.3 Justification/Rationale of the Study

The justification of this research article is to assess the influence of SAATM on the South African aviation industry and identify the challenges and opportunities presented by the liberalisation of an air transport market. It contributes to the broader literature on the liberalisation of air transport markets and its influence on aviation industries and economies.

The study's recommendations provide practical strategies that can be employed by South African airlines and ATNS to navigate the changes brought about by SAATM and capitalise on the

opportunities presented by the liberalisation of the air transport market. Therefore, the study's justification is to provide valuable insights and practical recommendations to South African airlines, ATNS, policymakers, aviation industry stakeholders, and investors on the influence of SAATM.

1.4 Delimitations of the Study

This study examines the influence of SAATM on the South African aviation industry. The study does not cover the influence of SAATM on other African airlines and air navigation service providers outside of South Africa. The research does include applications of other liberalised air transport markets.

This research relies on data from various sources, including industry reports, academic literature, and official government statistics. However, there are data limitations due to incomplete or inconsistent data, affecting the accuracy of the analysis.

This research examines the economic, regulatory, and operational obstacles facing the South African aviation industry in the context of SAATM. However, the research does not cover other potential factors that may influence the aviation industry, such as environmental dynamics, security, or technological advancements.

Assumptions include the consistent application of SAATM regulations across member states and the availability of reliable data. Limitations involve potential biases in qualitative data and the generalisability of findings to other contexts. The research assumes that SAATM will be implemented as planned without significant delays or deviations, which could affect the outcomes. The study also limits its scope to the initial few years post-implementation of SAATM, acknowledging that longer-term impacts may require subsequent research.

1.5 Operational Definitions

The following operational definitions are provided to contextualise key terms used in this research article on the influence of the SAATM on the South African aviation industry:

Fifth Freedom Rights: The right of a single nation's airline to carry passengers between countries other than its own, as long as the flights begin and conclude in that country. This traffic right was specified during the 1944 Chicago Conference and may be agreed upon in state-to-state air

service agreements. It allows international airlines to fly itineraries that would not be commercially viable as non-stops (Burghouwt, Hakfoort, & van Eck, 2003).

Air Traffic and Navigation Services SOC Ltd (ATNS): A South African state-owned organisation that provides air traffic control, management and navigation services in the country (Joubert, 2014).

Intra-African air connectivity: The capacity of airlines to fly flights between African countries to promote economic integration and regional trade (AfDB, 2019).

Liberalisation of air transport markets: The process of removing restrictions and barriers to entry in the aviation sector, allowing airlines to operate freely, compete on price and quality, and expand their networks (Abate, 2016).

Single African Air Transport Market (SAATM): A multilateral agreement adopted by the African Union to promote the liberalisation of air transport services within the African continent. Its aim is to facilitate air connectivity, boost economic growth and promote trade and tourism (Gowreesunkar, 2019).

South African airlines: Refers to airlines based in South Africa, such as Safair, Airlink, South African Airways, Lift Airlines, and Cemair.

CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

The SAATM is an AU flagship project aimed at opening up the continent's skies to improve connectivity, lower airfares, and boost trade and tourism. SAATM is based on the 1999 Yamoussoukro Decision, which calls for the liberalisation of African aviation by granting African airlines Fifth Freedom rights (Gowreesunkar, 2019). The SAATM agreement was signed by 34 countries in 2018, including South Africa (IATA, 2023). The goal was to promote economic growth, facilitate intra-African trade and tourism, and improve inter-African connectivity (African Union, 2018; African Development Bank, 2019).

2.1.1 Overview of SAATM

The SAATM aspires to liberalise air transport services across Africa by allowing airlines to operate freely within the continent, promoting competition, and enhancing connectivity (African Union, 2018). The SAATM's ultimate purpose is to boost the African continent's overall economic growth, foster regional integration, and ease commerce and travel between African countries (Dobby, 2021).

The aim of the SAATM is to create an integrated and liberalised air transport market in Africa by removing restrictions and barriers to entry for airlines and increasing competition, which is expected to lead to improved connectivity and increased economic growth (African Union, 2018; African Development Bank, 2019).

The African Union (2018) describes many main goals for the SAATM but its primary goal is to develop an integrated African air transport market, which might increase regional connectivity and result in cost reductions for travellers (Njoya & Isah, 2023). Furthermore, SAATM is viewed as a tool for expanding the African aviation sector and improving the quantity and quality of intra-African flights (Button & Vega, 2008). The AU also sees the effort as a launching pad for economic growth and job creation (Njoroge & Samunderu, 2021). The AU anticipates that SAATM will increase tourism and commerce prospects, demonstrating the intimate link between air transport liberalisation and economic development (African Union, 2018; Adenikinju, 2003).

SAATM is regarded as a vital step in achieving the AU's Agenda 2063, which aspires to create a prosperous and integrated Africa with high connectivity and mobility (African Union, 2018).

According to the African Development Bank (2019), SAATM has the potential to promote African economic development by enabling commerce and investment, creating employment, and enhancing tourism (Dobruszkes & Mondou, 2013).

However, the effective implementation of SAATM necessitates the involvement and commitment of African governments and aviation stakeholders (Button, Martini & Scotti, 2017). Button et al. (2017) underscore the crucial role of governmental commitment and stakeholder involvement in the successful deployment of SAATM. Further, the International Air Transport Association (2017) indicates that the successful implementation of SAATM requires a unified legislative framework, infrastructural development, and human resource investment (IATA, 2017).

The SAATM is intended to provide various benefits to African countries, including more airline competition, which will result in cheaper prices, enhanced connectivity and market access, and increased tourism and commerce. It is also anticipated to foster regional integration and economic growth by creating job opportunities (Njoya & Nikitas, 2020).

2.1.2 Evaluation of other Single Air Transport Markets

The implementation of the SAATM is not the first attempt by an intergovernmental organisation to liberalise air transport in a regional market. There have been similar initiatives in other regions of the world, such as the European Common Aviation Area (ECAA) and the Association of Southeast Asian Nations (ASEAN) Single Aviation Market (SAM) (Christidis, 2016; Forsyth, King & Rodolfo, 2006).

The ECAA was established in 2006 as a common aviation area, allowing for the liberalisation of air transport within the European Union and five other European countries (European Commission, 2021). The objective of the ECAA was to eliminate nationality restrictions on air carriers, promote competition, and establish a level playing field for airlines (European Commission, 2021). The ECAA has been successful in liberalising the European aviation market, resulting in increased competition and lower fares for passengers (European Commission, 2021).

The ASEAN Single Aviation Market (SAM) was formed in 2015 with the objective of creating a single aviation market in Southeast Asia (Forsyth et al., 2006). The SAM aims to facilitate the expansion of air transport in the region by liberalising air services agreements, simplifying regulatory procedures, and enhancing air traffic management (ASEAN, 2015). Since the implementation of the SAM, the number of air passengers in Southeast Asia has increased, and the aviation industry has experienced significant growth (ASEAN, 2015).

Despite the success of the ECAA and SAM, there are still challenges and limitations that need to be addressed. For example, the ECAA is limited to a specific geographic area, and some countries, such as Switzerland and Norway, have chosen not to participate in the ECAA (European Commission, 2021). The SAM is also facing challenges, including the lack of uniformity in safety and security standards and the limited capacity of air traffic management systems (Forsyth et al., 2006).

To ensure the initiative's success, the SAATM can learn from the experiences of the ECAA, US and the SAM and solve comparable difficulties (Tshetu, 2022). Lessons from the ECAA, US and SAM, as Tshetu (2022) emphasises, might be important in addressing SAATM's issues. It is key to remember, that each region has unique features and issues that must be taken into account while adopting a unified air transport market (Tshetu, 2022). When organising a single air transport market, Tshetu (2022) emphasises considering the various characteristics and problems present in each location.

2.1.3 Benefits and Challenges of SAATM

Several studies have analysed the potential influence of the SAATM on the African aviation industry. A study by the African Development Bank (AfDB) (2019) found that the SAATM could generate up to \$1.3 billion in annual benefits for African economies by 2022 and create over 155,000 new jobs in the aviation and tourism industries (AfDB, 2019). The study also highlighted the importance of addressing regulatory and institutional challenges to ensure the successful implementation of the SAATM (AfDB, 2019).

According to the International Air Transport Association (IATA), the SAATM will help African nations in a variety of ways, including lowering prices, increasing travel volumes, and enhancing connectivity (IATA, 2019). The SAATM intends to lower obstacles to entry for airlines, increase competition, and facilitate the development of new air routes by opening up air transport markets across the continent (Tshetu, 2022). Furthermore, Tshetu, Luke and Walters (2023) emphasise that the SAATM aims to boost African airline growth and minimise dependency on international carriers.

Despite the potential benefits of the SAATM, its implementation has been fraught with difficulties (Njoya, 2016). Njoya (2016) states that the absence of regulatory harmonisation and cooperation across African countries has been a serious impediment. As a result, Africa's air transport business has been hampered by a patchwork of laws and prohibitions (Njoya, 2016). Another challenge has been a lack of aviation infrastructure and investment, which has hampered African airlines' capacity to compete on a global basis (AfDB, 2019).

Several studies have been carried out to assess the potential influence of the SAATM on the African aviation industry. According to research conducted by Abate (2016), the SAATM has the potential to dramatically enhance air travel between African nations, resulting in increased

economic integration and growth. Similarly, according to a World Bank report (2019), the SAATM might offer considerable economic advantages for African countries, including increased tourism, commerce, and job creation.

Other studies, however, have identified possible problems and hazards linked with the SAATM. For example, Kamau (2014) discovered that the SAATM might lead to greater rivalry, reducing the profitability of African airlines. Furthermore, the study discovered that regulatory harmonisation and infrastructural development were important to the SAATM's success (Kamau, 2014). This further justifies the assessment of the influence of SAATM on South Africa's aviation industry.

2.2 Empirical Review of Literature

The literature highlights numerous major topics concerning SAATM and its influence on the aviation sector, notably on the South African aviation industry. The potential benefits of SAATM, including improved competition, lower fares, and increased connection throughout the continent, are primary topics. According to studies, liberalising air transport can contribute to economic growth and job creation, particularly in developing nations like Africa (Njoya & Isah, 2023). However, there are fears that liberalisation may result in foreign airlines dominating the market and domestic carriers losing market share (Mhlanga, 2017).

Another theme arising from the literature is the difficulties associated with implementing SAATM. Regulatory and institutional hurdles, a lack of infrastructure and capability, and political and economic volatility are among the challenges (Njoroge & Samunderu, 2021). SAATM implementation necessitates a collaborative effort from all African nations, which might be difficult given the continent's political and economic diversity (Njoya, 2016).

The literature also emphasises ATNS's importance in SAATM deployment. ATNS is in charge of providing air traffic control and navigation services in South Africa, and it is vital to the safety and efficiency of air travel (Joubert, 2014). ATNS will need to adjust to changes in air traffic patterns and increasing demand for its services as a result of the introduction of SAATM (Aigbavboa, Ebekozi, & Mkhize, 2023).

2.2.1 Research Gaps

Despite the potential benefits of SAATM, there are still research gaps that require attention. There is a need for additional research on the influence of SAATM on the African aviation industry, notably on the economic influence of liberalising air transport in the area. While there are studies that illustrate the benefits of open skies agreements, research that focuses especially on the African environment is needed.

Reviewing the existing body of literature reveals that several scholars have attempted to analyse the potential influence of the SAATM on the African aviation industry. Notably, Abate (2016) considers the SAATM to be a crucial element in enhancing air transport connectivity across the continent. Furthermore, Button et al. (2017) finds that the SAATM has the potential to increase intra-African trade and investment. Njoroge and Samunderu (2021) suggest that the SAATM could result in increased air traffic and revenue for African airlines.

Studies such as Cristea et al. (2022) identify challenges to SAATM's implementation, noting that some African countries have been slow to adopt the policy due to concerns about competition and market dominance. This resistance to the SAATM underscores the need for collaboration and coordination among stakeholders, including governments, airlines, and regulators (Cristea et al., 2022).

Njoya (2020) expands on these concerns, noting the lack of harmonisation of air transport policies and regulations across African countries as a significant challenge facing SAATM's implementation (Njoya, 2020). This challenge, along with the need to address underlying economic and political issues identified by Kamau (2014), suggests that the path to SAATM's success may be more complex than initially presumed.

Despite these challenges, there are potential benefits of the SAATM. Studies such as those conducted by Lieshout, Malighetti, Redondi, & Burghouwt, (2016), suggest that a single air transport market could lead to increased competition among airlines, resulting in lower fares and improved service quality for passengers. Samunderu (2023a; 2023b), who underlines the importance of infrastructure development in enabling the expansion of Africa's aviation sector, provides a compelling argument for its implementation. Adejoke (2022) and Adediran (2022) emphasise the need for appropriate regulatory frameworks and policies to ensure the safety and security of African air transport operations.

There is a clear gap in the literature when it comes to the specific influence of SAATM on the South African aviation industry and its key players like SACAA, South African Airlines, ACSA and ATNS. Despite the consensus on the potential benefits and challenges of SAATM, a targeted exploration of how SAATM would influence the unique ecosystem of South Africa's aviation industry is currently missing.

The academic research emphasises the necessity for more extensive investigations that explicitly focus on the South African context. Understanding the implications for the SACAA, South African Airlines, and ATNS might give critical insights and inform policy-making processes. This type of research might investigate whether SAATM has the potential to improve or disrupt present operations, what advantages would accrue to stakeholders like airlines, air traffic control, and the larger economy, and what hurdles or impediments might develop. Furthermore, research on the elements influencing South African airlines' and ATNS's competitiveness in the context of SAATM is necessary.

There is a need for research on the influence of SAATM on airport infrastructure development in South Africa. With rising demand for air travel, additional airport infrastructure will be required, which would necessitate significant investments. There is a need for studies that evaluate the potential economic influence of such investments and the most effective ways to finance them. There is also a need for studies on the influence of SAATM on other stakeholders, such as maintenance and ground handling services.

There is a need for research on the role of regulation in providing a level playing field for all SAATM stakeholders. The liberalisation of air transport may benefit the larger airlines with capital to expand their operations to the detriment of the smaller players. There is also a need to ensure that airlines outside of Africa are not the ones benefiting from the SAATM.

There is a need for research on the influence of SAATM on the safety and security of air transport in the region. The liberalisation of air transport may result in increased competition, which could lead to lower safety standards. There is a need for studies that evaluate the potential influence of SAATM on safety and security and identify measures that can be taken to ensure that safety standards are not compromised.

It is crucial to research the influence of SAATM on the workforce in the aviation industry. With increased competition, airlines may demand lower labour costs, which could lead to a decrease in the wages and compromise the working conditions of aviation workers. There is a need for studies that evaluate the potential influence of SAATM on the workforce and identify measures that can be taken to ensure that workers' rights are protected.

Given the potential influence of SAATM on the African aviation sector as a whole, it is essential to examine more closely how this significant change might shape one of the continent's most developed aviation markets. Therefore, future research needs to fill this gap by focusing specifically on the influence of SAATM on the South African aviation industry and its key players.

2.2.2 Influence of SAATM on South African Airlines

The South African aviation sector might benefit greatly from SAATM. The elimination of legislative barriers and the formation of a single aviation market in Africa would result in increased competition, which may present possibilities as well as problems for South African airlines (Mhlanga, 2017). For example, deregulation of air transport markets may result in higher traffic volumes and reduced rates, benefiting airlines that can modify their business models accordingly (Aigbavboa et al., 2023). It may also result in increasing rivalry from foreign airlines, affecting South African airlines' market share and profitability (Mhlanga, 2017).

On the positive side, SAATM will provide South African airlines with new market opportunities in other African countries, leading to increased revenues and growth (Njoroge & Samunderu, 2021). SAATM will also improve competition in the African aviation market, leading to lower airfares and improved quality of services (Njoroge & Samunderu, 2021). On the negative side, SAATM may lead to increased competition from other African airlines, leading to a loss of market share for South African airlines (Njoroge & Samunderu, 2021). SAATM may also lead to a reduction in airfares, which may negatively influence the profitability of South African airlines (Gowreesunkar, 2019).

However, the influence of SAATM on South African airlines will also be determined by the industry's preparedness and competitiveness. Airlines that have invested in contemporary technology, efficient operations, and excellent customer service, for example, are likely to profit from rising competition (Aigbavboa et al., 2023). Airlines that are not competitive, on the other

hand, may struggle to compete in the new market (Barrett, 2009). The SAATM could also result in the consolidation of the African aviation industry, with larger airlines dominating the market, making it difficult for smaller airlines to compete (Njoya & Nikitas, 2020).

2.2.3 Influence of SAATM on Air Traffic and Navigation Services (ATNS)

The deregulation of the aviation transport market might have a substantial influence on ATNS's function and operations. For example, growing competition may cause changes in demand for air traffic control services, requiring ATNS to alter its operations accordingly (Tshetu, Luke & Walters, 2023).

SAATM will enhance air travel into and out of South Africa, increasing ATNS revenue (Tshetu et al., 2023). SAATM will also open up new commercial options for ATNS in other African nations, resulting in greater revenue and growth (Tolcha et al., 2021). On the downside, SAATM may boost competition from other African Air Navigation Service Providers (ANSPs), causing ATNS to lose market share (Tolcha et al., 2021). SAATM may also boost ATNS's pressure to deliver high-quality services at competitive pricing (Tolcha et al., 2021).

The liberalisation of the aviation market in Africa may result in changes in the structure of the aviation sector, such as the introduction of new low-cost carriers and the rise of regional airlines, necessitating ATNS to adjust its services to match the industry's changing demands (Samunderu, 2023b). Changes in the regulatory environment may come from the integration of air transport markets, prompting the adjustment of ATNS's regulations and processes (Samunderu, 2023a).

2.2.4 Overall Influences of SAATM on South African Civil Aviation

SAATM has the potential to have a significant influence on the South African aviation industry, specifically South African airlines and ATNS (Mhlanga, 2017). The liberalisation of the aviation market in Africa may result in more competition and changes in the industry's structure, creating both possibilities and problems for South African airlines and ATNS (Fu, Oum & Zhang, 2010). The industry's readiness and competitiveness will also be critical in determining the influence of SAATM (Mhlanga, 2017).

Successful implementation of SAATM would include close coordination among industry stakeholders as well as a commitment to guaranteeing a fair playing field for all competitors

(Samunderu, 2023a). The various influences will be explored further in the theoretical review of the literature.

2.3 Theoretical Review of Literature

Michael Porter's Five Forces framework is a recognised and influential model for analysing the competitive environment of an industry. This framework was first introduced in Porter's (1980) book "Competitive Strategy: Techniques for Analysing Industries and Competitors" and has since been used extensively in both academic and business contexts (Porter, 1980).

The Five Forces model focuses on five key areas that shape an industry's competitive landscape: the bargaining power of suppliers, the bargaining power of buyers, the threat of new entrants, the threat of substitutes, and the intensity of rivalry among existing competitors (Porter, 1980).

Companies may acquire insight into the overall attractiveness of an industry and build methods for competing successfully within it by analysing these influences (Porter, 1980).

The integration of this model provides a comprehensive understanding of SAATM's impact on South African aviation. The study will detail how each of these forces is expected to change with the introduction of SAATM, providing a baseline for assessing the strategic responses required by South African airlines and ATNS. For instance, the model will help analyse the potential shifts in supplier dynamics as airlines seek cost efficiencies and the entry of new competitors disrupting established market positions (Dobbs, 2014).

2.3.1 Theoretical Framework

a. Michael Porter's Five Forces

We critically review existing literature pertinent to the aviation industry, with a special focus on how Porter's Five Forces model can be applied to analyse the influence of the Single African Air Transport Market (SAATM) on the South African aviation industry (Dobbs, 2014).

Michael Porter's Five Forces analysis is a useful tool for analysing an industry's competitive structure and determining the potential for profitability (Porter, 2008). Applying the five forces to the airline industry in the context of SAATM can provide insight into the competitive dynamics and potential profitability of South African airlines and ATNS in comparison to other African states, airlines, and ANSPs.

The threat of new entrants is a significant force to consider in the airline industry. The cost of entry can be high due to significant capital requirements, such as aircraft purchases, leases, and maintenance costs, making it difficult for new entrants to enter the market (Paelo & Vilakazi, 2016). However, the implementation of SAATM may lead to increased competition from new entrants, which could influence the profitability of existing South African airlines and ATNS (Puncreobutr & Saowaros, 2016).

The bargaining power of suppliers, such as aircraft manufacturers and fuel suppliers, is another force to consider (Ellis, 2020). Suppliers can exert significant bargaining power over airlines, particularly if they are the sole supplier of a critical input (Ellis, 2020). The implementation of SAATM may increase competition among suppliers, thereby reducing the bargaining power of suppliers and potentially leading to cost savings for South African airlines and ATNS (Ellis, 2020).

The bargaining power of buyers, such as individual consumers and corporate clients, is also a force to consider (Rasouli & Malabad, 2014). Buyers can exert bargaining power by demanding lower prices or higher quality products and services. In the context of SAATM, the increased competition may lead to higher bargaining power for buyers, potentially leading to lower prices and decreased profitability for South African airlines and ATNS (Rasouli & Malabad, 2014).

The threat of substitutes is another force to consider. Substitutes for air travel include ground transportation, such as buses and trains, and advancements in technology that allow for virtual meetings and remote work (Sutherland, 2014). The implementation of SAATM may increase the demand for air travel, particularly among individuals and businesses seeking to take advantage of the expanded routes and lower fares (Tolcha et al., 2020). However, technological advancements may lead to increased competition from substitutes, potentially impacting the profitability of South African airlines and ATNS (Sutherland, 2014).

The intensity of competitive rivalry among existing airlines is an important force to consider. SAATM may increase competition among African airlines, leading to increased price competition and potential decreases in profitability for South African airlines and ATNS (Kaiser et al., 2011). However, South African Airlines and ATNS may have an advantage over other African airlines in terms of resources, capabilities, and strategic positioning, which can contribute to their sustained competitive advantage (Barney, 1991).

Recent literature continues to uphold the relevance of Porter's Five Forces model in diverse industries and contexts. For example, Dobbs (2014) revisited Porter's Five Forces and presented industry analysis templates, indicating the model's persistent applicability. The study Dobbs (2014) completed could be instrumental in structuring the analysis of SAATM's influence on South Africa's aviation industry (Dobbs, 2014).

While Porter's model is extensively used in various industries, its specific application in the aviation sector, particularly with the emergence of SAATM, requires a nuanced understanding of the unique dynamics of this industry. The model helps analyse how competitive forces shape strategy within the aviation industry (Porter, 2008).

Porter's Five Forces model is a well-established framework for analysing an industry's competitive environment (Porter, 2008). In the context of South Africa's aviation industry, the model offers valuable insights into how SAATM might affect competition and market attractiveness (Ellis, 2020). However, it is also important to consider the specific characteristics and challenges of the aviation sector in South Africa and the wider African continent (Mhlanga, 2019; Button et al., 2019).

CHAPTER 3. RESEARCH METHODOLOGY

3.1 Introduction

The study aims to investigate the opportunities and challenges presented by SAATM and the strategies that South African Civil Aviation and ATNS can adopt to maximise the benefits of the initiative.

3.2 Research Design

This study employed a qualitative case study approach using a multiple-case design. The case study approach is suitable for investigating complex phenomena and allows for an in-depth analysis of the research topic (Yin, 2018). Qualitative methods are recognized for their ability to capture rich, detailed data, making them essential for investigating the nuanced impacts of SAATM on the South African aviation industry (Sekaran & Bougie, 2016). This approach is grounded in recent methodological advancements and supported by contemporary research in the field.

The multiple case design enabled the comparison of the influence of SAATM on different organisations within the South African civil aviation industry. The research design included detailed procedures for sampling, data collection, and data analysis to ensure robustness and validity.

Qualitative research is ideal for studies that seek to understand the "how" and "why" of human behaviour and decision-making processes. This approach is valuable for exploring the perceptions, experiences, and interactions of individuals within their specific contexts. According to Creswell and Poth (2018), qualitative methods provide a comprehensive understanding of complex issues by delving into the depth and breadth of participants' experiences. Given the multifaceted nature of SAATM's impact, a qualitative approach allows for a holistic examination of its effects on various stakeholders.

Recent studies in the aviation industry have increasingly employed qualitative methods to explore policy impacts, operational changes, and strategic responses (Graham, 2020). Qualitative research has been used to understand airline strategic alliances (Oum, Park, & Zhang, 2020), passenger experiences (Dobruszkes & Mondou, 2013), and regulatory challenges (Adejoke, 2022). These studies demonstrate the applicability and effectiveness of qualitative approaches in capturing the dynamic and context-specific aspects of the aviation industry.

3.3 Data Collection Methods

The data collection methods for this study included semi-structured interviews and document analysis (Sekaran & Bougie, 2016). Semi-structured interviews were conducted with key experts within the South African civil aviation industry, including representatives from the South African aviation industry, such as ATNS senior management and consultants. Document analysis involved the review of relevant documents, such as annual reports, policy documents, and other publications related to SAATM and the South African civil aviation industry (Sekaran & Bougie, 2016).

3.4 Data Analysis

The data analysis for this study followed a thematic analysis approach. The thematic analysis involves the identification of patterns and themes in the data and the interpretation of their meanings (Braun & Clarke, 2019). The data collected from the semi-structured interviews,

document analysis, and observation was transcribed, coded, and analysed for themes related to the influence of SAATM on the South African aviation industry (Braun & Clarke, 2019).

Our hypothesis states that the implementation of SAATM will have a significant influence on the South African aviation industry's competitive landscape. To test this hypothesis, we used our theoretical framework as a lens through which to view the collected data (Sekaran & Bougie, 2016).

Each interview question had been designed to elicit responses that would directly address elements of these frameworks and, by extension, our hypothesis (Sekaran & Bougie, 2016). For instance, questions regarding competition, threat of new entrants, or bargaining power of customers and suppliers (from Porter's Five Forces) provided insights into how SAATM has influenced these factors in the South African aviation industry (Rasouli & Malabad, 2014).

We interpreted and analysed the interview data using a thematic analysis approach, wherein responses were coded and categorised based on the main themes that emerged (Braun & Clarke, 2019). These themes corresponded with the elements of our theoretical framework, which enabled us to measure the influences of SAATM in a structured and comprehensive manner (Sekaran & Bougie, 2016).

The study found consistent patterns in the responses that indicate changes in competition levels, bargaining power, resources, or value creation, for example, which was evidence to support our hypothesis (Sekaran & Bougie, 2016; Porter, 2008).

To achieve a comprehensive understanding of the SAATM's influence, a stratified purposive sampling approach was applied (Braun & Clarke, 2019). This involved segmenting the population into relevant groups and selecting participants from within these groups (Braun & Clarke, 2019). The target participants were professionals within ATNS who are in strategic decision-making roles or those who would be directly affected by the implementation of the SAATM. These included:

- **Strategic Management:** Executives and strategic managers who could provide insights on strategic responses and policy changes due to SAATM. Around 1-3 participants.

- Operations: Managers and staff involved in daily operational activities who could provide practical insights on how operations have been influenced by SAATM. Around 1-3 participants.
- Air Traffic Management: Air traffic controllers and relevant staff from ATNS who could provide insights on changes in air traffic management due to SAATM. Around 1-3 participants.

The final sample size was enough to reach data saturation, considering the relatively small population, while still being feasible in terms of resources. It was also important to ensure participant diversity (i.e. participants from different roles, levels of experience, and perspectives) to capture a wide range of experiences and viewpoints.

3.5 Ethical Considerations

This study adhered to ethical principles in research, including informed consent, confidentiality, and anonymity (McDonnell, Jones, & Read, 2000). Ethics approval for the study was obtained from the University of Witwatersrand Human Research Ethics Committee (Non-Medical). Informed consent was obtained from all participants before the start of the study. Confidentiality is maintained by using pseudonyms to protect the identities of participants (McDonnell et al., 2000). Anonymity was ensured by keeping the data confidential and secure (McDonnell et al., 2000).

3.6 Limitations

The limitations of this study include the limited scope of the study and the potential for bias in the data collection and analysis (Sekaran & Bougie, 2016). The study focused on the influence of SAATM on the South African aviation industry, and the findings may not be generalisable to other organisations or countries. The potential for bias in the data collection and analysis was minimised by using multiple sources of data, such as interviews, document analysis, and observation, and by ensuring that the analysis was transparent and rigorous (Sekaran & Bougie, 2016).

3.7 Reliability and Validity

The research employed several strategies to enhance these aspects, focusing on the concepts of credibility, transferability, dependability, and confirmability. Trustworthiness in the research

methodology of the study on the influence of SAATM on the South African aviation industry was established by adhering to the following principles:

- **Credibility:** To enhance credibility, the study utilised triangulation, which involved using multiple data sources to corroborate the findings. This method combined interview data with document analysis, ensuring that the insights derived were well-supported and comprehensive. Triangulation helped in cross verifying the data, thus strengthening the validity of the conclusions drawn (Lincoln & Guba, 1985).
- **Transferability:** Transferability referred to the extent to which the findings of the study could be applied to other contexts. This study ensured transferability by providing a detailed description of the research context, methodology, and participant demographics. By offering a rich, thick description, readers could assess the applicability of the findings to their own settings (Merriam, 1998).
- **Dependability:** Dependability was achieved by maintaining a consistent research process. The study used a structured interview protocol and clearly defined data analysis procedures, which allowed for replication in similar contexts. An audit trail was maintained, documenting all research activities, decisions, and changes, which enhanced the transparency and dependability of the study (Shenton, 2004).
- **Confirmability:** To ensure confirmability, the study employed member checking and audit trails. Member checking involved participants reviewing the findings to confirm that their experiences and perspectives had been accurately represented. This feedback mechanism helped in validating the accuracy of the data and interpretations. Additionally, an audit trail provided a transparent record of the research process, enabling others to follow and verify the research steps and conclusions (Miles & Huberman, 1994).
- **Triangulation:** The use of triangulation in this study involved integrating data from multiple sources, such as interviews, document analysis, and literature review. This approach helped in validating the findings through cross-verification, ensuring that the research accurately reflected the phenomena under study. Triangulation reduced the likelihood of bias and enhanced the overall reliability and validity of the research (Patton, 1999).

- **Member Checking:** Member checking was a crucial strategy for ensuring the accuracy and resonance of the findings. Participants were given the opportunity to review and provide feedback on the findings, which helped in verifying that their views had been accurately captured. This iterative process enhanced the credibility and confirmability of the study (Creswell & Miller, 2000).

By employing these strategies, the study ensured that the findings were credible, transferable, dependable, and confirmable. These approaches collectively enhanced the trustworthiness of the research, providing a robust foundation for the conclusions drawn.

CHAPTER 4. RESULTS

4.1 Introduction

This chapter delves into the implications of the SAATM for the South African aviation industry, as discerned from thematic analyses of interviews with industry experts (Sekaran & Bougie, 2016). The framework of Porter's Five Forces provides a structured lens to examine these implications (Porter, 2008).

The analysis reveals a multifaceted impact of SAATM. A consistent theme across interviews is the anticipated elevation in the bargaining power of buyers, driven by increased competition and customer choices. This shift necessitates airlines to reevaluate their service and pricing strategies, focusing more on customer-centric models. Njoroge and Samunderu (2021) also argue that SAATM is expected to elevate the bargaining power of buyers due to increased competition and customer choices, pushing airlines to focus more on customer-centric models (Njoroge & Samunderu, 2021).

The evolving dynamics in the bargaining power of suppliers suggest a potential for more collaborative and strategic partnerships or alliances. This change might alter long-term supplier relationships and cost structures, as suggested by the participants. Serfointein and Govender (2020) also state that the evolving dynamics in the bargaining power of suppliers under SAATM suggest potential for more collaborative and strategic partnerships or alliances, possibly altering long-term supplier relationships and cost structures (Serfointein & Govender, 2020).

The threat of new entrants emerges as a critical factor, with SAATM potentially lowering entry barriers. This dynamic could spur innovation but also intensify market competition. This is in

line with Adediran (2022), who predicts that SAATM could lower entry barriers, presenting a threat of new entrants. While this might spur innovation, it can also intensify market competition (Adediran, 2022).

In terms of substitutes, the interviews indicate a limited direct impact from SAATM. However, the indirect influence on service innovation within the industry is notable. Surovitskikh and Lubbe (2015) state that while SAATM has a limited direct impact from substitutes, its indirect influence on service innovation within the industry is significant.

A consistent increase in competitive rivalry is anticipated by the interviewees. This intensification of competition may drive airlines towards more innovative, differentiated strategies focusing on unique value propositions and market positioning. This is in line with what Pegels (2010) found that an anticipated consistent increase in competitive rivalry is likely to drive airlines towards more innovative, differentiated strategies focusing on unique value propositions and market positioning.

These findings collectively illustrate SAATM's profound and layered impact on the South African aviation sector, offering insights into its future trajectory and strategic imperatives for industry stakeholders. The detailed results of the interviews post the thematic analysis, supported by the literature review in support of the hypothesis, are as follows:

4.2 Bargaining Power of Buyers

SAATM's influence on the South African aviation industry would explore the following aspects:

Increased Options and Reduced Prices: SAATM's implementation has led to an expansion in the choices available to consumers in the aviation market. This increase in options often results in more competitive pricing as airlines strive to attract customers in a more crowded marketplace. Consequently, customers benefit from reduced flight prices and a wider array of service offerings. Njoroge and Samunderu (2021) support this view as presented in the literature review.

Shift in Power Dynamics: Traditionally, airlines had significant control over pricing and service offerings. However, with SAATM, this power dynamic is shifting more towards customers. Mhlanga (2018) also shares the same view with the findings that airlines are now more

accountable to customer preferences and demands, leading to an increasingly customer-centric market.

Implications for Airlines: This shift necessitates airlines to reevaluate their service quality and pricing strategies. They are compelled to enhance service quality, diversify their offerings, and employ more dynamic pricing models. Airlines must balance maintaining profitability while being competitively priced and appealing to a broader customer base. Adediran (2022) agrees with the findings that innovation in service and operational efficiency becomes paramount to remaining viable in this changed landscape.

The bargaining power of buyers in the South African aviation industry is seeing a significant shift due to the influence of SAATM, leading to a more competitive environment where customer preferences and price sensitivity play a critical role in shaping airline strategies.

4.3 Bargaining Power of Suppliers

SAATM's influence on the South African aviation industry examines the evolving dynamics between airlines and their suppliers:

Changing Relationships: With the advent of SAATM, airlines are reevaluating their relationships with suppliers. This evolution is driven by the need for more efficient, cost-effective operations in a highly competitive market. Airlines are increasingly seeking suppliers who can offer not just competitive prices but value-added services and innovation. Naude, Ambe and Kling (2013) state that this evolution reflects a shift towards more strategic and mutually beneficial relationships in their study.

Shifts in Pricing Power and Contract Negotiations: The changing market dynamics brought about by SAATM may lead to a shift in the pricing power from suppliers to airlines. Airlines might gain more leverage in negotiating contracts, seeking better terms and cost reductions. This shift can result from increased competition among suppliers as airlines explore broader sourcing options, a view shared by Bag (2018).

Long-term Impacts on Supply Chain Dynamics and Cost Structures: In the long run, these evolving supplier relationships could significantly impact the supply chain dynamics and overall cost structures of airlines. Airlines may move towards more strategic partnerships with suppliers,

aiming for long-term stability and efficiency. This approach could lead to more collaborative relationships, fostering innovation and mutual growth (Tolmay & Badenhorst-Weiss, 2018).

SAATM's influence is likely to bring about significant changes in the supplier landscape for the South African aviation industry, impacting how airlines and suppliers interact, negotiate, and maintain their relationships.

4.4 Threat of New Entrants

The influence of SAATM would focus on several key areas:

Lowering Entry Barriers: Njoroge and Samunderu (2021) shared the same findings that SAATM will notably reduce the barriers for new airlines to enter the market. This includes easing regulatory hurdles and opening up market access, which can foster a more diverse and dynamic aviation sector.

Market Disruptions and Innovation: The entry of new airlines into the market can lead to significant disruptions. These new entrants could introduce innovative business models, technologies, and customer service strategies, challenging the status quo and pushing the entire industry towards modernisation. This is similar to Adediran's (2022) findings.

Balancing Opportunities and Challenges: While SAATM creates opportunities for new entrants, it also poses challenges, especially in competing with established players who have existing customer bases, brand recognition, and economies of scale. The sustainability of these new entrants will depend on their ability to carve out a niche, manage operational costs effectively, and deliver value that distinguishes them from larger, more established airlines, as also established by Serfointein and Govender (2020).

SAATM's role in lowering entry barriers brings a dual effect: it invites innovation and diversification in the industry while simultaneously posing significant challenges for new entrants to establish themselves in a market with well-entrenched players.

4.5 Threat of Substitute Products or Services

Limited Direct Impact on Alternatives: The interviews indicate that SAATM's direct impact on alternative modes of travel, such as road or rail transport, is limited. This is primarily because

these alternatives often do not offer the same speed and efficiency for long-distance travel as aviation. This is in line with the findings of Adediran's (2022) study.

Indirect Effects on Industry Innovation: Despite the limited direct impact, SAATM indirectly influences the aviation industry through fostering innovation. Airlines are prompted to innovate in service delivery, customer experience, and operational efficiency to stay competitive. This can indirectly affect the attractiveness of substitute travel modes, a view that echoes Njoroge and Samunderu's (2021) study.

Influence on Aviation Sector's Competitiveness: The increased need for innovation and service diversification in response to SAATM strengthens the aviation sector's competitive position. By enhancing the value proposition of air travel, the industry can maintain its dominance over other forms of transport, especially for long-distance and international travel, which Serfointein and Govender (2020) also support.

SAATM might not significantly shift the market towards alternative travel modes, but its influence is evident in driving the aviation industry towards greater innovation and competitive enhancement.

4.6 Competitive Rivalry

Increased Competition Among Airlines: The findings from the interviews underscore a significant intensification of competitive rivalry among airlines due to SAATM. This increase in competition arises from the easing of market entry barriers and the broadening of the operational landscape, which brings in more players vying for market share, as also stated by Njoroge and Samunderu (2021).

Strategies for Differentiation and Market Positioning: In response to heightened competition, airlines are increasingly focusing on differentiating themselves through unique value propositions. This involves enhancing customer service, investing in innovative technologies, and developing niche markets. Additionally, effective market positioning becomes crucial, with airlines needing to identify and target specific customer segments more strategically. This view is also emphasised by Mhlanga's (2018) research.

Collaboration to Manage Competition and Market Saturation: Another interesting dynamic emerging from the interviews is the potential for increased collaboration among airlines. This

collaboration could be in the form of codeshare agreements, strategic alliances, or operational partnerships. Such collaborations can be a strategic response to market saturation, allowing airlines to extend their reach and leverage shared resources without the need for extensive capital investment, as also suggested by Serfointein and Govender (2020).

The competitive rivalry within the South African aviation industry, influenced by SAATM, is leading to a landscape where strategic differentiation, innovative customer service approaches, and collaborative efforts are becoming key factors in maintaining competitiveness and market relevance.

4.7 Summary of Results

The analysis of the SAATM influence on South Africa's aviation industry reveals transformative changes. SAATM's influence on the South African aviation industry, through the lens of Porter's Five Forces, reveals profound changes in the competitive landscape, in support of the hypothesis. The study's findings highlight increased buyer power, evolving supplier dynamics, lowered barriers for new entrants, limited impact on substitutes, and heightened competitive rivalry. This shift, driven by SAATM, calls for strategic adaptability from industry stakeholders.

CHAPTER 5. DISCUSSION

5.1 Introduction

This chapter discusses the findings of the research in the context of Michael Porter's Five Forces model, which underpins the study. The Five Forces model provides a framework for analysing the competitive environment of the South African aviation industry under SAATM (Porter, 2008).

5.2 Synthesis of Findings:

In the synthesis of the research findings, we focus on how the SAATM will influence the South African aviation industry. The SAATM initiative, aiming to liberalise air transport in Africa, is expected to have far-reaching implications for market competition, airline operations, and regulatory frameworks within South Africa's aviation sector.

The research reveals several key areas of impact:

5.2.1 Market Competition:

The introduction of SAATM will significantly increase competition within the South African aviation industry. This heightened competition is expected to act as a catalyst for innovation, driving South African airlines to improve their service offerings and operational efficiencies. In response to the new competitive landscape, airlines are likely to adopt advanced technologies, enhance customer service, and optimise operational processes. Serfointein and Govender (2020) also identified this market competition dynamic.

The result is not only a more dynamic aviation industry but also an environment that encourages continuous improvement and adaptation, ultimately benefiting consumers and contributing to the growth of the sector, as also identified by Mhlanga (2018). This shift towards a more competitive market aligns with global trends in air transport liberalisation, placing the South African aviation industry at a pivotal point of transformation.

Threat of New Entrants: The liberalisation under SAATM is expected to lower entry barriers, facilitating the entry of new airlines into the South African market. This influx of new competitors will increase market fragmentation and competition, challenging incumbent airlines to innovate and adapt. The threat of new entrants is high because SAATM reduces regulatory and operational barriers, making it easier for new airlines to start operations (Abate, 2016). This increase in competition can drive innovation and improvement in service quality and operational efficiencies. Airlines may need to adopt advanced technologies and optimize their processes to remain competitive (Njoroge & Samunderu, 2021).

Bargaining Power of Suppliers: The bargaining power of suppliers in the aviation industry can be significant due to the limited number of aircraft manufacturers and service providers. However, SAATM may influence this dynamic by increasing the number of airlines and diversifying demand. With more airlines operating in the market, suppliers may face increased competition, potentially reducing their bargaining power. Airlines might leverage their collective bargaining power to negotiate better terms, such as lower prices or improved service conditions, from suppliers (Mhlanga, 2018). This shift could lead to more cost-effective operations for airlines, enhancing their competitiveness.

Bargaining Power of Buyers: The implementation of SAATM will likely increase the bargaining power of buyers (passengers) due to the increased competition among airlines. With

more options available, passengers can choose airlines that offer the best prices and services, forcing airlines to enhance their offerings to attract and retain customers (Adediran, 2022). This increased competition can lead to lower airfares, better service quality, and more customer-centric innovations. Airlines will need to focus on differentiating their services and providing superior value to maintain customer loyalty in this highly competitive environment (Graham, 2020).

Threat of Substitute Products or Services: The threat of substitute products or services in the aviation industry is relatively low, as air travel offers unique advantages in terms of speed and convenience for long-distance and international travel. However, other modes of transport, such as high-speed trains or road transport, could serve as substitutes for short-haul flights. SAATM's influence on enhancing the competitiveness and efficiency of the aviation sector can help maintain its advantage over these substitutes. By improving operational efficiencies and offering competitive pricing, airlines can ensure that air travel remains the preferred choice for most passengers (Oum, Park, & Zhang, 2020).

Industry Rivalry: Industry rivalry is expected to intensify under SAATM due to the increased number of airlines competing for market share. This heightened competition can drive improvements in service quality, operational efficiency, and innovation. Airlines will need to strategically position themselves to differentiate their offerings and capture market share. Effective market positioning involves identifying and targeting specific customer segments, enhancing customer service, and leveraging technological advancements. Strategic alliances and partnerships can also help airlines manage competition and extend their market reach without extensive capital investment (Tshetu, 2022).

5.2.2 Airline Operations:

The liberalisation introduced by SAATM is anticipated to bring significant operational shifts for airlines in South Africa. These changes will likely include the expansion of routes, offering more diverse destinations and enhancing connectivity both within Africa and globally. This expanded route network is expected to foster increased travel and trade opportunities, significantly contributing to regional integration, as identified by Njoroge and Samunderu (2021) and Tshetu (2022).

Airlines are poised to see improvements in operational efficiency. This may involve optimising flight schedules, adopting more efficient aircraft, and leveraging technological advancements to reduce operational costs. These enhancements could potentially result in lower airfares for consumers, making air travel more accessible and promoting increased passenger volumes. This dynamic was also identified by Serfointein and Govender (2020) and Tshetu, Luke and Walters (2023).

SAATM's liberalisation is set to redefine airline operations in South Africa, with a clear focus on expanding connectivity, enhancing efficiency, and potentially lowering costs for consumers. This shift is not only beneficial for the aviation sector but also for the broader economy, marking a significant step in the region's aviation development (Mhlanga, 2018).

5.2.3 Regulatory Changes:

SAATM's implementation necessitates substantial regulatory adaptations within the South African aviation sector. This transition to an open market environment requires the harmonisation of safety and security standards across participating countries, ensuring the maintenance of operational integrity even as borders open up. This includes aligning protocols for aircraft safety, air traffic control, and security measures (Adediran, 2022).

SAATM calls for the establishment of fair competition practices. This involves setting and enforcing regulations that prevent monopolistic practices, ensuring that no single airline unfairly dominates the market. These regulatory changes are fundamental in creating a level playing field for all airlines and safeguarding consumer interests in the new competitive landscape (Njoroge & Samunderu, 2021).

This shift towards harmonised and fair regulations is pivotal for the successful integration of South Africa into the broader African aviation market under SAATM, aligning it with global aviation standards and practices (Adejoke, 2022).

This synthesis ties together the research's findings with the broader context of SAATM's role in transforming the South African aviation landscape. The discussion provides insights into the strategic adjustments that airlines and regulatory bodies might need to make and lays the groundwork for further exploration of SAATM's long-term effects (Serfointein & Govender, 2020).

5.3 Comparative Analysis

The findings from the thematic analysis are integrated with the literature reviewed in the first chapters of the research. This comparison helps contextualise the influence of the SAATM on the South African aviation industry within the broader framework of air transport liberalisation studies.

The findings from the thematic analysis can be related to existing literature on air transport liberalisation. This involves contrasting the influence of SAATM on South Africa's aviation industry with other single air transport markets like the European Common Aviation Area and the ASEAN Single Aviation Market. This comparative approach will highlight the uniqueness of SAATM's impact on South Africa, informed by global experiences in air transport liberalisation.

In the comparative analysis between SAATM and other air transport liberalisation initiatives, such as the ECAA and the ASEAN Single Aviation Market, we need to consider several key aspects:

5.3.1 SAATM vs ECAA and SAM: Similar Objectives, Different Contexts

Both the ECAA and SAM aimed to liberalise air transport within their respective regions, similar to SAATM's objectives. These initiatives sought to enhance connectivity, stimulate competition, and promote economic growth (Abate, 2016). However, the SAATM faces distinct challenges owing to Africa's diverse political, economic, and infrastructural landscape (Abate, 2016; Adejoke, 2022; African Development Bank, 2019).

SAATM, akin to ECAA and SAM, aims to liberalise air transport services. However, unlike ECAA, which mainly focuses on European Union countries, SAATM encompasses a broader range of diverse African nations, each with unique economic and infrastructural challenges (Christidis, 2016; ASEAN, 2015; Kamau, 2014). This diversity presents unique hurdles for SAATM in achieving similar levels of integration and uniformity as seen in the ECAA (AfDB, 2019).

SAATM and SAM share the goal of increasing regional connectivity (Tolcha et al., 2021). However, SAATM faces distinct challenges like inconsistent regulatory frameworks and infrastructural limitations, which are less pronounced in the ASEAN region (Samunderu, 2023b).

Despite these differences, SAATM has the potential to drive substantial economic growth, much like SAM, by boosting intra-regional trade and tourism (Dobruszkes & Mondou, 2013).

One significant difference between SAATM and these initiatives is the level of market maturity. The European and ASEAN markets had more developed aviation sectors at the onset of liberalisation compared to many African nations (European Commission, 2021; Forsyth et al., 2006). This factor influences the speed and impact of liberalisation under SAATM, where immediate effects might be less pronounced but have a greater long-term growth potential (Njoya, 2016).

While SAATM shares fundamental objectives with ECAA and SAM, such as enhancing connectivity and fostering economic growth, it operates in a markedly different context (Fu et al., 2010). The success of SAATM will require tailored strategies that consider the unique economic, infrastructural, and regulatory landscapes of the African continent (Mhlanga, 2017; Njoya, 2016; Njoya & Isah, 2023). This analysis underscores the importance of contextualised approaches in air transport liberalisation and offers valuable insights for policymakers and stakeholders in the African aviation industry.

5.3.2 Market Structure and Competition

SAATM's ambition to open up markets and intensify competition is set against a backdrop of a markedly different aviation environment in Africa compared to Europe's ECAA and Southeast Asia's SAM. The African aviation market, including South Africa, is characterised by a diverse range of economic, infrastructural, and regulatory landscapes (Njoroge & Samunderu, 2021). This diversity often results in a fragmented market, with varying levels of airline industry development and aviation infrastructure across different countries (African Union, 2018).

This fragmentation leads to diverse challenges in market integration. Unlike the ECAA, where a relatively uniform economic development level and regulatory framework exist across member countries, SAATM countries deal with disparate regulatory standards and economic conditions (Gudmundsson, 2019; Samunderu, 2023a). The pace of market integration in the African context is thus uneven, with some countries rapidly integrating while others lag behind due to infrastructural and regulatory hurdles (Njoya, 2016).

The disparity in aviation market maturity levels further complicates SAATM's goal of increasing competition. In Europe and Southeast Asia, more mature markets have fostered robust competition. However, Africa's varying levels of market maturity mean that the impact of liberalisation can be quite different across the continent (Abate, 2016).

While SAATM shares the liberalisation goals of ECAA and SAM, its implementation and impact are shaped by the unique and diverse characteristics of the African aviation market. Understanding these nuances is critical for the successful realisation of SAATM's objectives (Samunderu, 2023a; Tshetu et al., 2023).

5.3.3 Regulatory Frameworks

The challenge of harmonising aviation policies and regulations is more pronounced in the context of SAATM than in the ECAA or SAM, due to the heterogeneous nature of the African aviation sector (Gudmundsson, 2019; Adediran, 2022). African countries, including South Africa, face significant hurdles in aligning their diverse regulatory frameworks, which vary considerably in terms of standards, safety protocols, and oversight mechanisms (Mhlanga, 2017). This lack of uniformity not only poses challenges in policy harmonisation but also impacts the efficiency and safety of air operations across the continent (Samunderu, 2023a).

ECAA and SAM operate in regions where member countries have more aligned economic and regulatory environments, facilitating smoother integration and standardisation in aviation policies (Gudmundsson, 2019; Forsyth et al., 2006). The success of these models is partially attributable to the relative homogeneity in regulatory approaches, something that SAATM strives to achieve amidst a more complex and varied landscape (Samunderu, 2023a).

SAATM requires a concerted effort from member states to develop a unified legislative framework that addresses key challenges such as safety standards, air traffic management, and consumer protection (Samunderu, 2023a). This effort must be underpinned by a commitment to regional collaboration and a shared vision for the aviation sector in Africa (Njoroge & Samunderu, 2021).

5.3.4 Infrastructure Development

Infrastructure development is a pivotal element in the success of SAATM, particularly when contrasted with the more developed infrastructures of ECAA and ASEAN regions

(Gudmundsson, 2019; Forsyth et al., 2006). African countries, including South Africa, face considerable challenges in this regard. Airports, air traffic management systems, and other related infrastructure are often less developed and face funding and maintenance challenges (Samunderu, 2023b). The disparity in infrastructure quality and capacity across the continent adds to the complexity of implementing SAATM effectively (African Union, 2018).

In comparison, infrastructural readiness in regions like ECAA and ASEAN (SAM) has facilitated smoother integration and efficiency in air transport services (Gudmundsson, 2019; Forsyth et al., 2006). These regions have benefited from relatively consistent investments in airport development, air traffic control technologies, and safety management systems (Button et al., 2017).

5.3.5 Economic Impacts

The economic implications of the SAATM for South Africa are significant, particularly its role in enhancing regional trade and connectivity (Tolcha et al., 2021). SAATM aims to bolster economic growth and connectivity across the continent, yet the extent and pace of these benefits may vary from experiences in Europe under the ECAA and in Southeast Asia under the ASEAN SAM, due to differing economic conditions (Abate, 2016; African Development Bank, 2019).

South Africa, as a key player in African aviation, could see considerable economic benefits from SAATM through increased intra-continental trade, tourism, and investment flows (Abate, 2016). However, these benefits are contingent on the country's ability to address infrastructural and regulatory challenges that could hinder the full realisation of SAATM's potential (Njoroge & Samunderu, 2021).

For South Africa in particular, the importance that the aviation market plays in inclusive growth and job creation is enhanced by SAATM. The development of the aviation industry has the potential to create jobs and boost the region's overall economy. (Njoya & Nikitas, 2020).

While the economic impacts of SAATM in South Africa and other African countries may differ from those observed in regions with similar initiatives like the ECAA and SAM, the potential for positive economic change and development is significant (Njoya & Isah, 2023). This is contingent on addressing the unique challenges faced by the African aviation sector (Tshetu et al., 2023).

5.3.6 Strategic Opportunities

South African airlines and ATNS, while learning from the experiences of ECAA and SAM, must develop strategies tailored to the unique market dynamics and socio-economic conditions of the African continent (Button et al., 2017). This requires an understanding of the distinct market characteristics, consumer behaviour, and regulatory environment in Africa (Button et al., 2017).

Strategies may include forming strategic partnerships, investing in new technologies to improve operational efficiency, and exploring niche markets that cater to the specific needs of the African consumer (Aigbavboa et al., 2023). Additionally, focusing on regional hubs and improving connectivity within Africa could open new revenue streams and foster intra-continental trade (Abate, 2016). The key is to balance global best practices with localised strategies that resonate with the African aviation market (Njoroge & Samunderu, 2021).

This comparative analysis reveals that while SAATM shares common goals with ECAA and SAM, the path to achieving these goals is influenced by distinct regional challenges and opportunities, particularly for South Africa. Understanding these differences is crucial for formulating effective strategies and policies tailored to the African aviation context (Tshetu et al., 2023).

5.3.7 Conclusion of Discussion

This research project comprehensively examines the influence of SAATM on the South African aviation industry, focusing on the competitive forces as conceptualized by Porter's Five Forces model (Porter, 2008). The implementation of SAATM represents a significant shift towards the liberalisation of the air transport market across Africa (Abate, 2016). This shift is poised to reduce barriers to entry, encouraging an influx of new airlines into the South African market, which promises to intensify competition and reshape market dynamics (Njoroge & Samunderu, 2021).

The findings of this study have significant implications for airline operators, policymakers, and stakeholders in the South African aviation industry. As the industry navigates through the changes brought about by SAATM, a thorough understanding of these implications is crucial for strategic planning and decision-making. While the introduction of SAATM presents challenges, it also offers opportunities for growth and innovation, signalling a new era in African aviation that is more open, competitive, and potentially more prosperous.

CHAPTER 6. SUMMARY, RECOMMENDATIONS AND CONCLUSION

6.1 Summary

The implementation of SAATM represents a significant shift towards the liberalization of the air transport market across Africa. This shift is poised to reduce barriers to entry, encouraging an influx of new airlines into the South African market, which promises to intensify competition and reshape market dynamics. Incumbent airlines must strategically adapt to maintain their market positions, and regulatory bodies play a crucial role in ensuring a balanced approach to market liberalization. The findings of this study provide valuable insights for strategic planning and decision-making, highlighting both challenges and opportunities for growth and innovation in the South African aviation industry.

6.2 Implications

The SAATM's influence on the South African aviation industry is essential to focus on the strategies that airlines and ATNS can employ to adapt to increased competition and new market opportunities presented by SAATM, and how these entities can leverage SAATM to improve operational efficiencies, expand into new markets, and enhance service quality.

Leveraging insights from the thematic analysis and literature review, delves into strategies for South African airlines and ATNS in response to the SAATM. This involves understanding and adapting to enhanced market competition, exploiting new market opportunities, and navigating infrastructural and regulatory challenges (Tshetu, 2022).

For South African airlines, key strategies include diversifying routes to capitalise on new markets opened by SAATM, enhancing service quality to remain competitive, and implementing dynamic pricing strategies (Mantey & Naidoo, 2018). Operational efficiency and customer-centric services will be crucial to maintaining and growing market share (Mhlanga, Steyn, & Spencer, 2018). They must also focus on strategic partnerships, perhaps exploring codeshare agreements or joint ventures, to bolster their presence in the new market (Meichsner, O'connell, & Warnock-Smith, 2018).

ATNS faces the challenge of adapting to increased air traffic, necessitating improvements in air traffic management systems, safety protocols, and communication technologies (Samunderu,

2023b). Collaborating with regional partners to harmonise air traffic management systems and sharing best practices will be critical, as suggested by Samunderu (2023). Buys and Matlhane (2011) support that ATNS needs to explore opportunities for expanding its services to other African countries, leveraging the increased air traffic for revenue generation and growth.

Both airlines and ATNS must navigate the regulatory landscape, advocating for policies that support fair competition and infrastructure development (Samunderu, 2023a). They must engage in continuous dialogue with policymakers to ensure that the regulatory environment is conducive to growth and sustainability in the liberalised market (Adediran, 2022).

Investment in technology and staff training will be pivotal for both airlines and ATNS. Emerging technologies like AI and machine learning can optimise operations, enhance customer service, and improve safety standards (Aigbavboa et al., 2023). Training programs for staff, focusing on new technologies and customer service, will be vital in maintaining a competitive edge (Mantey & Naidoo, 2018).

SAATM presents both opportunities and challenges for the South African aviation industry. Strategic adaptability, focus on operational efficiency, customer-centric services, technological advancements, and collaborative efforts will be key to leveraging SAATM's potential benefits while mitigating its challenges. This approach will enable South African airlines and ATNS to thrive in a liberalised African air transport market.

6.3 Recommendations

Based on the findings of this study on the influence of the SAATM on the South African aviation industry, particularly through the lens of Porter's Five Forces model, the following recommendations are proposed:

- **Strategic Alliances and Partnerships:** South African airlines should consider forming strategic alliances and partnerships with other carriers, both within and outside the SAATM framework. These alliances could provide mutual benefits such as expanded networks, shared resources, and cost savings through economies of scale.
- **Innovation and Differentiation:** To stand out in an increasingly competitive market, airlines and ATNS need to focus on innovation and service differentiation. This could

include investing in new technologies, enhancing in-flight services, and offering unique customer experiences.

- **Operational Efficiency:** Airlines and ATNS should seek ways to improve operational efficiency to maintain profitability in the face of increased competition. This could involve optimising flight routes, improving fuel efficiency, and streamlining operations through digital transformation.
- **Market Diversification:** Exploring new routes and markets, especially underserved or emerging destinations within the SAATM region, could help South African airlines reduce dependence on highly competitive routes and ATNS to capture new customer segments.
- **Regulatory Engagement:** Airlines, ATNS, and SACAA should actively engage with regulatory bodies and policymakers to ensure that the liberalisation process under SAATM is implemented in a manner that promotes fair competition and safeguards the interests of all stakeholders.
- **Customer-Centric Approaches:** Emphasising customer service and satisfaction can help airlines build loyalty and retain customers in a competitive market. This includes personalised services, loyalty programs, and responsive customer support.
- **Safety and Quality Standards:** Maintaining high safety and quality standards is paramount. Airlines should not only comply with international safety standards but also seek to exceed them to gain a competitive edge and build consumer trust.
- **Sustainability Practices:** Reducing environmental effect and appealing to the expanding segment of eco-conscious travellers are two benefits of adopting sustainable practices. Initiatives could include investing in fuel-efficient aircraft, reducing waste, re-designed airspaces and routes, and supporting carbon offset programs.
- **Workforce Development:** Investing in the workforce through training and development programs can enhance operational efficiency and service quality. A skilled and motivated workforce is essential for delivering superior customer experiences and driving innovation.
- **Data-driven decision-making:** Leveraging data analytics for strategic decision-making can help airlines and ATNS optimise their operations, personalise customer experiences,

and anticipate market trends. This includes data from customer feedback, operational metrics, and market analyses.

By implementing these recommendations, the South African aviation industry can better navigate the challenges and opportunities presented by the SAATM, positioning itself for growth and success in the evolving African aviation landscape.

6.4 Future Research Directions

The focus should be on exploring the long-term impacts of SAATM and the challenges related to infrastructure and policy harmonisation. This involves investigating how SAATM influences the sustainable growth of airlines, impacts airport infrastructure development, and affects regional integration through harmonised aviation policies.

Research could also delve into the socio-economic implications of SAATM, including job creation, trade expansion, and tourism growth. Additionally, studies on the role of technology and innovation in adapting to the liberalised market will be valuable. This future research will provide deeper insights into the evolving dynamics of the South African aviation sector in the context of SAATM.

Future research should consider these areas:

- **Long-Term Economic and Operational Impacts:** Investigate SAATM's long-term effects on the economy, focusing on airline sustainability, changes in market share, and the impact on smaller domestic airlines.
- **Infrastructure Development and Investment:** Study the required infrastructural upgrades and investments in response to increased air traffic and operational demands due to SAATM.
- **Policy Harmonization and Regional Integration:** Examine challenges in harmonising aviation policies across African nations, focusing on safety standards, regulatory frameworks, and the promotion of regional integration.
- **Socio-Economic Benefits and Challenges:** Explore how SAATM affects job creation, trade expansion, and tourism, including potential disparities across different regions in Africa.

- **Technology and Innovation in Aviation:** Analyse the role of technological advancements and innovative business models in adapting to a liberalised aviation market.
- **Environmental Impacts:** Assess the environmental implications of increased air travel due to SAATM, focusing on sustainable practices and carbon footprint reduction strategies.

This expanded direction will provide a comprehensive roadmap for future research, crucial for understanding and maximising the benefits of SAATM while mitigating potential drawbacks.

6.5 Conclusion

The research project comprehensively examines the influence of the SAATM on the South African aviation industry, with a particular focus on the competitive forces as conceptualised by Porter's Five Forces model. The implementation of SAATM represents a significant shift towards the liberalisation of the air transport market across Africa. This shift is poised to reduce barriers to entry, thereby encouraging an influx of new airlines into the South African market. Such a development promises to intensify competition, potentially reshaping market dynamics by challenging the established positions of current airlines.

The paper highlights that in response to this evolving competitive landscape, incumbent airlines in South Africa must strategically adapt to maintain their market positions. This adaptation could involve embracing technological advancements, enhancing service quality, exploring new market niches, and forming strategic partnerships. The study underscores the importance of regulatory bodies in ensuring a balanced approach to market liberalisation that fosters healthy competition while safeguarding consumer interests and maintaining high safety standards.

The findings of this paper have significant implications for airline operators, policymakers, and stakeholders in the South African aviation industry. As the industry navigates through the changes brought about by SAATM, a thorough understanding of these implications is crucial for strategic planning and decision-making. While the introduction of SAATM presents challenges, it also offers opportunities for growth and innovation, signalling a new era in African aviation that is more open, competitive, and potentially more prosperous.

REFERENCES

- Abate, M. (2016). Economic effects of air transport market liberalisation in Africa. *Transportation Research Part A: Policy and Practice*, pp. 92, 326–337.
- Adejoke, O. (2022). Regulatory Convergence of Consumer Protection in the Single African Air Transport Market: How Far, How Well?
- Adediran, A. O. (2022). Regulatory Convergence of Consumer Protection in the Single African Air Transport Market: How Far, How Well?. *Air and Space Law*, 47(4/5).
- Adenikinju, A. (2003). Efficiency of the energy sector and its influence on the competitiveness of the Nigerian economy. *International Association for Energy Economics*, 15(1), 40-43.
- African Development Bank. (2019). The benefits of liberalising air transport in Africa. <https://www.afdb.org/en/blogs/afdb-championing-inclusive-growth-across-africa/post/benefits-liberalising-air-transport-africa>
- African Development Bank (AfDB). (2019). The Single African Air Transport Market: Economic and financial implications. Retrieved from <https://www.afdb.org/en/documents/publication/single-african-air-transport-market-economic-and-financial-implications-105908>
- African Union. (2018). Launch of the Single African Air Transport Market. African Union. Retrieved from <https://au.int/en/pressreleases/20180128/single-african-air-transport-market-saatm>
- African Union. (2018). Implementation framework for the Single African Air Transport Market. Retrieved from https://au.int/sites/default/files/documents/33168-doc-saatm_implementation_framework_.pdf
- African Union. (2018). African Union Agenda 2063. Retrieved from <https://au.int/agenda2063/about>
- African Union. (2018). Single African air transport market. <https://au.int/en/saatm>
- African Union. (2018). SAATM Implementation Progress Report. African Union.
- African Union. (2018). Single African Air Transport Market flying agenda 2063: the SATTM handbook.

- African Union. (2020). Progress Report on the Implementation of the African Union Aviation Strategy for Africa. Retrieved from https://au.int/sites/default/files/documents/39160-doc-aviation_strategy_for_africa_-_progress_report_-_december_2020_1.pdf
- Air Traffic and Navigation Services (ATNS). (2020). ATNS 2020 Annual Report. Retrieved from https://www.atns.co.za/Portals/0/Documents/ATNS%20Annual%20Report%202020_Inte_ractive.pdf
- Air Traffic and Navigation Services (ATNS). (2021). About ATNS. Retrieved from <https://www.atns.co.za/Pages/About-ATNS.aspx>
- Aigbavboa, C. O., Ebekoziem, A., & Mkhize, N. (2023). An assessment of South African airlines' growth in the era of fourth industrial revolution technologies: the unexplored dimension. *Journal of Facilities Management*.
- ASEAN. (2015). ASEAN Single Aviation Market. Retrieved from <https://asean.org/wp-content/uploads/images/2015/October/outreach-document/Edited%20ASAM-2.pdf>
- Bag, S. (2018). Supplier Management and Sustainable Innovation in Supply Networks: An Empirical Study. *Global Business Review*, p. 19, S176 - S195. <https://doi.org/10.1177/0972150918760051>.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barrett, S. D. (2009). EU/US Open Skies–Competition and change in the world aviation market: The implications for the Irish aviation market. *Journal of Air Transport Management*, 15(2), 78-82.
- Boeing. (2019). 2019 Commercial Market Outlook. Retrieved from <https://s4cd98e6181776fd7.jimcontent.com/download/version/1597359309/module/8027287461/name/cmo-sept-2019-report-final.pdf>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589–597.
- Burghouwt, G., Hakfoort, J., & van Eck, J. R. (2003). The spatial configuration of airline networks in Europe. *Journal of Air Transport Management*, 9(5), 309-323.
- Button, K. J., & Vega, H. (2008). The effects of air transportation on the movement of labor. *GeoJournal*, 71, 67-81.

- Button, K. (2009). The impact of US–EU “Open Skies” agreement on airline market structures and airline networks. *Journal of Air Transport Management*, 15(2), 59-71.
- Button, K., Martini, G., & Scotti, D. (Eds.). (2017). *The economics and political economy of African air transport*. Routledge.
- Buys, A., & Matlhane, S. (2011). R&D and innovation in services companies: The air traffic and navigation services case study. 2011 Proceedings of PICMET '11: Technology Management in the Energy Smart World (PICMET), 1-7.
- Charlier, J., & Dobruszkes, F. (2020). Between external forces and internal factors: The geography of domestic airline services in South Africa. *Journal of transport geography*, 87, 102795.
- Christidis, P. (2016). Four shades of Open Skies: European Union and four main external partners. *Journal of Transport Geography*, 50, 105-114.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Sage Publications.
- Creswell, J.W., & Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage publications.
- Cristea, A. D., Abate, M., & Benitez, D. (2022). *Towards a Competitive Air Transport Market in Africa: The Role of Bilateral Air Service Agreements Liberalization*. Available at SSRN 4385823.
- Dobruszkes, F., Givoni, M., & Vowles, T. (2017). Hello major airports, goodbye regional airports? Recent changes in European and US low-cost airline airport choice. *Journal of Air Transport Management*, 59, 50-62.
- Dobruszkes, F., & Mondou, V. (2013). Aviation liberalization as a means to promote international tourism: The EU–Morocco case. *Journal of air transport management*, 29, 23-34.
- Dobbs, M. (2014). *Guidelines for applying Porter's five forces framework: a set of industry analysis templates*. Competitiveness Review.
- Dobby, E. A. (2021). *The Role of Civil Aviation in Promoting International Trade in Africa: a Case Study of Kenya Aviation Industry* (Doctoral dissertation, University of Nairobi).

- Ellis, D. (2020). Developing a strategic framework of analysis for air transport management. *Transportation research procedia*, pp. 51, 217–224.
<https://doi.org/10.1016/j.trpro.2020.11.024>.
- European Commission. (2021). The European Common Aviation Area. Retrieved from
https://ec.europa.eu/transport/modes/air/international_aviation/eu_external_air_relations/european_common_aviation_area_en
- European Union. (n.d.). Single European Sky. Retrieved from
[https://transport.ec.europa.eu/transport-modes/air/single-european-sky_en#:~:text=The%20Single%20European%20Sky%20\(SSES,role%20in%20achieving%20these%20goals](https://transport.ec.europa.eu/transport-modes/air/single-european-sky_en#:~:text=The%20Single%20European%20Sky%20(SSES,role%20in%20achieving%20these%20goals).
- Forsyth, P., King, J., & Rodolfo, C. L. (2006). Open skies in ASEAN. *Journal of Air Transport Management*, 12(3), 143–152.
- Fu, X., Oum, T. H., & Zhang, A. (2010). Air transport liberalization and its impacts on airline competition and air passenger traffic. *Transportation Journal*, 49(4), 24-41.
- Gowreesunkar, V. (2019). African Union (AU) Agenda 2063 and tourism development in Africa: contribution, contradiction and implications. *International Journal of Tourism Cities*.
- Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, 29, 75-91.
- Gudmundsson, S. V. (2019). European air transport regulation: achievements and future challenges. In *Airline economics in Europe* (Vol. 8, pp. 9-56). Emerald Publishing Limited.
- Graham, A. (2020). *Managing Airports: An International Perspective*. Routledge.
- Gyedu, S., Tang, H., Ntarmah, A. H., & Manu, E. K. (2021). The moderating effect of environmental turbulence on the relationship between innovation capability and business performance. *International Journal of Innovation Science*, 13(4), 456-476.
- International Air Transport Association. (2017). *Single African Air Transport Market: Policy Briefing*. IATA. Retrieved from <https://www.iata.org/en/about/worldwide/ame/saatm/>
- International Air Transport Association (IATA). (2019). *The Importance of Air Transport to South Africa*. Retrieved from

- https://www.iata.org/contentassets/a1f674a2687144d9ad5298d2d4e3f7bf/iata_south-africa_report.pdf
- International Air Transport Association. (2021). Economic performance of the airline industry. Retrieved from <https://www.iata.org/en/iata-repository/publications/economic-reports/airline-industry-economic-performance---october-2021---report/>
- International Air Transport Association (IATA). (2019). The Single African Air Transport Market (SAATM). Retrieved from <https://www.iata.org/en/about/worldwide/ame/saatm/>
- Joubert, C. G. (2014). *Followers' Experiences and Expectations of leadership behaviours in a safety-critical commercial environment: the case of the Air Traffic and Navigation Services Company*
- Kaiser, D., Christensen, I., Foust, J., & Davidian, K. (2011). An Industry Structural Analysis and Strategy Insights for the Commercial Crew Transportation Industry. . <https://doi.org/10.2514/6.2011-7288>.
- Kamau, M. W. (2014). Melting Down the Borders to Reach the Frontiers” the Impact of the Yamoussoukro Decision on the Liberalisation of Air Transport in Africa (Doctoral dissertation, University of Nairobi).
- Karagiannopoulos, G., Georgopoulos, N., & Nikolopoulos, K. (2005). Fathoming Porter's five forces model in the internet era. *Info*, 7(6), 66-76.
- Lieshout, R., Malighetti, P., Redondi, R., & Burghouwt, G. (2016). The competitive landscape of air transport in Europe. *Journal of Transport Geography*, 50, 68-82.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry*. Sage Publications.
- Mantey, N., & Naidoo, V. (2018). Emerging Information Technologies and Delivering of Service Quality to Air Passengers: Case of South African Own-Registered Airlines. *Journal of Economics and Behavioral Studies*, 10, 194-206. [https://doi.org/10.22610/jeps.v10i1\(j\).2102](https://doi.org/10.22610/jeps.v10i1(j).2102).
- Mburu-Ndoria, E. (2016). Africa continental free trade area: Liberalizing trade in services for trade facilitation. In UNCTAD report on project “Strengthening Capacities of African Countries in Boosting Intra-African Trade.” Retrieved from <https://unctad.org/meetings/en/SessionalDocuments/ditc-ted-Nairobi-24082015-mburu.pdf>.

- Mcdonnell, A., Jones, M., & Read, S. (2000). Practical considerations in case study research: the relationship between methodology and process.. *Journal of advanced nursing*, 32 2, 383-90 . <https://doi.org/10.1046/J.1365-2648.2000.01487.X>.
- Meichsner, N., O'connell, J., & Warnock-Smith, D. (2018). The future for African air transport: Learning from Ethiopian Airlines. *Journal of Transport Geography*. <https://doi.org/10.1016/J.JTRANGEO.2018.06.020>.
- Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education*. Jossey-Bass Publishers.
- Mhlanga, O., & Steyn, J. N. (2016). The aviation industry in South Africa: A historical overview.
- Mhlanga, O., Steyn, J., & Spencer, J. (2018). The airline industry in South Africa: drivers of operational efficiency and impacts. *Tourism Review*, 73(3), 389-400.
- Mhlanga, O. (2017). Impacts of deregulation on the airline industry in South Africa: a review of the literature. *African Journal of Hospitality, Tourism and Leisure*.
- Mhlanga, O. (2018). An analysis of the impact of the micro environment on airline performances in South Africa using Porters' five forces model.. *International Journal of Tourism Policy*, 8, 303-318. <https://doi.org/10.1504/IJTP.2018.10020323>.
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). Sage Publications.
- Naude, M., Ambe, I., & Kling, R. (2013). Supplier relationship management – anathema for the South African public procurement sector. *Journal of Transport and Supply Chain Management*, 7, 1-8. <https://doi.org/10.4102/JTSCM.V7I1.93.s>
- Njoroge, S. P., & Samunderu, E. (2021, April). Africa Aviation: Challenges and opportunities. In Bode, Umuerrri (Eds.): *Universities, Entrepreneurship and Enterprise Development in Africa—Conference Proceedings 2020* (pp. 110-133).
- Njoya, E. T. (2016). Africa's single aviation market: The progress so far. *Journal of Transport Geography*, 50, 4-11.
- Njoya, E. T., & Nikitas, A. (2020). The role of air transport in employment creation and inclusive growth in the Global South: The case of South Africa. *Journal of Transport Geography*, 85, 102738.

- Njoya, E. T., & Isah, A. B. (2023). Assessing the economic impact of the single African air transport market: The case of Tanzania. *Research in Transportation Economics*, 101, 101351.
- Oum, T. H., Park, J. H., & Zhang, A. (2020). Airline Strategic Alliances: An Overview. *Journal of Air Transport Management*, 85, 101849.
- Paelo, A., & Vilakazi, T. (2016). Barriers to Entry for Low Cost Carriers in the South African Airline Industry: Competitive Dynamics and the Entry, Expansion and Exit of 1time Airline. *IO: Theory eJournal*. <https://doi.org/10.2139/SSRN.2926806>.
- Pegels, A. (2010). Renewable energy in South Africa: Potentials, barriers and options for support. *Energy Policy*, 38, 4945-4954. <https://doi.org/10.1016/J.ENPOL.2010.03.077>.
- Patton, M.Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, 34(5), 1189-1208.
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.
- Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard Business Review*, 86(1), 78-93.
- Puncreobutr, V., & Saowaros, T. (2016). Risk Factors Affecting the Low Cost Carriers Industry of ASEAN. *Economic & Social Impacts of Innovation eJournal*. <https://doi.org/10.2139/ssrn.2771515>.
- Radhakrishna, R., Tobin, D., Brennan, M., & Thomson, J. (2012). Ensuring Data Quality in Extension Research and Evaluation Studies.. *The Journal of Extension*, p. 50.
- Rasouli, M., & Malabad, S. (2014). Analysis of factors impacting on the competition of Iran's air transport industry based on Porter's five forces model.. *Research on humanities and social sciences*, 4, 28-43.
- Samunderu, E. (2023a). Air Transport Regulation: A Perspective on Africa's Regulatory Framework. In *African Air Transport Management: Strategic Analysis of African Aviation Market* (pp. 33–76). Cham: Springer International Publishing.
- Samunderu, E. (2023b). Africa's Air Transport Infrastructure: Challenges, Complexities and Opportunities. In *African Air Transport Management: Strategic Analysis of African Aviation Market* (pp. 151-187). Cham: Springer International Publishing.

- Serfointein, E., & Govender, K. K. (2020). Stakeholders' views regarding macro-environment impacts on commercial flight operations in South Africa. *Journal of Transport and Supply Chain Management*, 14(1), 1-11.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (7th ed.). John Wiley & Sons.
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- South African Civil Aviation Authority (SACAA). (2021). Annual Report 2020/21. Retrieved from https://pmg.org.za/files/CAA_Annual_Report_2020-2021.pdf
- South African Government. (2012). National Development Plan 2030. Retrieved from <https://www.gov.za/issues/national-development-plan-2030>
- Steyn, J. N., & Mhlanga, O. (2016). The impact of international air transport agreements on airline operations in southern Africa.
- Surovitskikh, S., & Lubbe, B. (2015). The Air Liberalisation Index as a tool in measuring the impact of South Africa's aviation policy in Africa on air passenger traffic flows. *Journal of Air Transport Management*, 42, 159-166.
<https://doi.org/10.1016/J.JAIRTRAMAN.2014.09.010>.
- Tchouamou Njoya, E. (2013). Air transport and destination performance—a case study of three African countries (Ethiopia, Kenya and South Africa).
- Tolcha, T. D., Njoya, E. T., Bråthen, S., & Holmgren, J. (2021). Effects of African aviation liberalisation on economic freedom, air connectivity, and related economic consequences. *Transport Policy*, 110, 204-214.
- Tolcha, T. D., Bråthen, S., & Holmgren, J. (2020). Air transport demand and economic development in sub-Saharan Africa: Direction of causality. *Journal of Transport Geography*, 86, 102771. <https://doi.org/10.1016/j.jtrangeo.2020.102771>
- Tolmay, A., & Badenhorst-Weiss, J. (2018). The dynamics in customer-supplier relationships in South African automotive supply chains. *International Journal of Value Chain Management*, 9, 149. <https://doi.org/10.1504/IJVCM.2018.10013598>.
- Tshetu, T. N., Luke, R., & Walters, J. (2023). The role of African airlines in air transport liberalisation. *Journal of Transport and Supply Chain Management*, pp. 17, 925.

- Tshetu, T. N. (2022). The impact of the Yamoussoukro declaration on African airlines (Doctoral dissertation, University of Johannesburg).
- UNCTAD. (2019). Economic Development in Africa Report 2019: Made in Africa. United Nations Conference on Trade and Development. Retrieved from:
https://unctad.org/system/files/official-document/edar2019_en_ch5.pdf
- United Nations Conference on Trade and Development (UNCTAD). (2019). Review of Maritime Transport 2019. Retrieved from <https://unctad.org/publication/review-maritime-transport-2019>
- Wang, K., Fu, X., Czerny, A. I., Hua, G., & Lei, Z. (2020). Modeling the potential for aviation liberalization in Central Asia—Market analysis and implications for the Belt and Road Initiative. *Transportation Research Part A: Policy and Practice*, 134, 184-210.
- Warnock-Smith, D., & Morrell, P. (2008). Air transport liberalisation and traffic growth in tourism-dependent economies: A case-history of some US-Caribbean markets. *Journal of Air Transport Management*, 14(2), 82–91.
- World Bank. (2019). Air Transport Annual Report 2019. Retrieved from:
<https://documents1.worldbank.org/curated/en/219551617185429671/pdf/Air-Transport-Annual-Report-2019.pdf>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage publications.