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# Strategy Development of Low-Cost Airlines in South Africa

**Wolmarans, Barry**

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# Strategy Development of Low-Cost Airlines in South Africa

*Barry Wolmarans*

**A research report 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**

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# Abstract

This study was undertaken to establish the current strategies and strategies available to the low-fare airlines of South Africa. The research was based on a qualitative methodology, based on 11 respondents over 9 interview sessions, the data was analysed using thematic content analyses.

The incumbent low-fare airlines during the period of research were faced with a market which had shrunk in size, a reported over capacity and major increases in some of the base costs such as fuel and airport taxes, which placed significant pressure on yields, with two airlines reporting loses and one airline exiting the market.

The key driver to sustainability of the low-fare airlines in South Africa, has been shown to be the reduction in costs, by implementing revenue management technology to monitor all aspects of the operations, introduce modern fuel efficient fleets, and expand operations by code share and alliances.

A current gap in the low-cost business model within the South African context is the lack of secondary airports suitable for the operation of the current fleet. It has been suggested through the interview process that a cost advantage would be generated for an airline to operate out of these secondary airports.

Additional recommendations that were developed were the initiatives to widen distribution channels through social media and alliance and code share agreements that would assist in generating higher passenger volume. A modern fleet would provide a lower cost basis, which would allow for lower fares or higher margins.

# Declaration

I, Barry Wolmarans 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 Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Barry Wolmarans

Signed at Wits Business School, Johannesburg

On the 17th day of October 2012

# Dedication

This research report is dedicated to my family for supporting me an encouraging me through the duration of my MBA. A special dedication is to my Grand Mother, Mildred Mather, who has been a beacon of strength for me.

# Acknowledgements

I would like to acknowledge my supervisor for the duration of the project, Mr Mark Peters, for the support and guidance he provided. Additionally I would like to thank the 11 respondents who agreed to be interviewed and give time out of their day for the interviews.

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# 1 Introduction

## 1.1 Purpose of the Study

The purpose of the research was to investigate the future strategies available to low cost airlines in order to be sustainable in the future. The report presents the current and future strategies of the low-cost airline senior management, aviation analysts and the analysis of previous strategic responses to various industry forces.

The outcome of the study has been to present strategic recommendations for incumbent airlines.

## 1.2 Context of the Study

South Africa has produced several low-cost, low-frill airlines over the last 10 years, many which have successfully competed against the national airline South African Airlines, which in turn introduced its own low cost airline Mango.

As part of the Industry Policy Action Plan (IPAP) (2010) of February 2010, the South African government will accelerate the development of the tourism sector, in order to diversify the South African economy and contribute to fulfilling the objectives of the National Industrial Policy Framework (2011). In order to provide stimulus the South African Government will undertake an investigation on the fare structures of the airlines, which will provide a basis for regulation within the Consumer Protection Act, to ensure transparency across the pricing and ticketing terms and condition.

One of the major hurdles associated with accelerated growth of tourism is the high costs of international and regional pricing, due to low competition within this market (Industry, 2010).

### 1.2.1 The Low Cost Model

Many authors, such as Gillen and Morrison (2003) and Boguslaski, Ito and Lee (2004), have considered Southwest airlines to be the founder of the low-cost low-frill airline model, this concept has been further evolved by airlines such as Ryan Air to the extent of proposing payment for the use of lavatories and “standing” seats as reported by the BBC (Lane, 2010).

In essence the traditional low-cost low-frill model consists of an operator who utilizes a single type of aircraft, across short distances (typically less than 1000nm), with a high-density passenger configuration. Limited onboard services are provided at a cost to the passengers. The operation aims to maximize efficiency of operations along point-to-point routes, thus emphasis is placed on quick turnarounds between flights. Further characteristics of the low cost model, include operations out of secondary airports, no seat allocations, online ticket purchasing and no loyalty programs (O'Connell & Williams, 2005). A further characteristic is the lack of interlining and code shares (Alamdari & Fagan, 2005). Interlining is the ability for passengers to transfer from one flight to the next seamlessly, baggage transfers and ticketing are arranged by the interline agreement between the airlines.
Code sharing allows for an airline to buy seats on another airlines aircraft and sell them as their own, effectively increasing the airlines routes without dispatching an aircraft.

The low-cost low-frill model positions airlines within Porter’s generic strategy of “Overall Cost Leadership”, which is characterized by aggressive cost reductions, driving of efficient operations and reduction in overheads such as service, sales and advertising (Porter, 1998).

### 1.2.2 The South African Context

To date the South African airline market is serviced by two full service domestic carriers, British Airways operated by Comair, South African Airways, and four "low cost" airlines; Kulula, 1time, Mango and Velvet Sky.
South African Express and SA Airlink operate many of the secondary routes, into the smaller cities in South Africa.

In the recent past both Kulula and 1time have diversified their operations from the core airline operation.
Kulula have stated that they aim to generate at least 50% of its revenue from non-airline activities, such as pilot training and lounges (Bleby, 2011), while 1time have purchased a maintenance division from Safair, Jetworx (Swanepoel, 2008).

Both Kulula and 1time have shown growth within the domestic market and the ability to generate profits, even through the recession. This has been a hallmark of the low cost airline model globally, with many low cost airlines prospering while legacy carriers either exited the market or converted to a low cost model (Franke & John, 2011).

The domestic market has been described as extremely competitive, with suggestions that South African Airways may be adopting the future strategy that all domestic flights will be undertaken by Mango, which has recently taken over the South African Airways Durban to Cape Town route. Comair is looking towards the East and West African Regions for future growth. 1time has invested solely into the Southern African market (BusinessDay, 2010).

The implication of the IPAP and the increased competitive nature of the South African domestic market will have a significant effect on future strategy formulation.

### 1.2.3 The Low-Cost Evolution

As the South African airspace becomes more saturated with low-cost low-frill airlines and airport capacity is exhausted (Smith, 2011), they will be forced to adopt a differentiation strategy (Porter, 1998) as has been faced by many US airlines, which have started to include onboard services such as live satellite TV (Lawton & Solomko, 2005). Ryanair, the overall cost leader have pushed the envelope of being the pioneer, by proposing standing arrangements (Lane, 2010).

In addition to new entrants into the South African market, the threat of substitutes in the form of high-speed cross-country rail links have been alluded to by the South African transport ministry (Mthembu, 2010).

An alternative evolution of the low cost model, has been suggested by (Wensveen & Leick, 2009), which is essentially reproducing the low-cost low-frill model on long haul sectors. The model has historically seen mixed results within the Asia-Pacific regions, with the question many critics questioning the sustainability of such a model (Ionides, 2006).

**The evolution of the European and United States Low Cost Carriers**

Alamdari and Fagan (Alamdari & Fagan, 2005) conducted a study comparing various European and US low cost models in 2005 to that of the original Southwest model. The results of the study shown that all the low cost airlines had adopted a certain degree of differentiation away from the pure low cost model of the South West model in response to increased entrants into the market. The striking conclusion to this study was that there is a strong correlation between adhering to the low cost model and profitability, and that an airline such as Jet Blue who offers inflight entertainment and premium seating options does not generate revenue higher than that of its competitors (Alamdari & Fagan, 2005)

## 1.3 Problem Statement.

### 1.3.1 Main Problem

Develop possible strategies, scenarios and implications for low-cost airlines, with the final conclusion providing a set of recommendations to the low-cost airline community.

### 1.3.2 Sub Problem 1

Develop the strategic positions that determine the interactions between incumbent airlines and potential entry threats with respect to, competitive rivalry, suppliers, buyers and substitutes.

### 1.3.3 Sub Problem 2

Create a set of scenarios that incumbent airlines are most likely to face within the foreseeable future.

## 1.4 Significance of the Study

Much of the literature available is mainly concerned with the traditional short haul, low-cost model with particular focus on the sustainability of the existing low cost model (Barrett, 2004), reactions of legacy carriers to the entry of low-cost airlines (Franke, 2004) and the selection criteria of passengers choosing between a legacy carrier and a low-cost carrier (O'Connell & Williams, 2005). Very little literature is available on the future growth strategies of low-cost airlines within saturated markets. Some attention has been paid to the alternate business model of the long-haul low-cost carrier.

The study has evaluated the strategies of South African based low-cost airlines, key success factors of existing low-cost airlines and full service airlines, in order to generate future competitive strategies for the low-cost airlines.

## 1.5 Delimitations of the Study

The study has been based on qualitative data obtained from interviews, and annual reports. Interviews and the annual reports were limited to South African based airlines.

## 1.6 Definition of Terms

- Bilateral Agreement – A treaty between governments that has the provisions for traffic rights, route capacity, designations, ownership, control and tariffs for air traffic routes between the countries (Australian_Goverment, 2012).
- Contestable – an industry with no entry or exit barriers (Grant, 2010)
- Cost Leadership – is the aggressive pursuit of cost and overhead reduction, unrelenting cost control and operating at the correct scale efficiencies. Cost Leadership is a strategic position as defined by Porter (Porter, 1998)
- Duopoly – a defined market with two market players competing with each other (Cabral, 2000).
- Monopoly – a defined market with a single market player (Cabral, 2000)
- Oligopoly – a defined market with a few market players competing with each other (Cabral, 2000).
- Strategy – the means to achieve objectives (Robert, 2010).

## 1.7 Assumptions

The following assumptions have been made for the purpose of this study:

- Information gained from interviews and annual statements will be assumed to be correct and unbiased.
- Airlines are concerned with maximizing competitive advantage in order to maximize economic profit.
- The airline market is considered to be oligopolistic
- The market is considered rationale.

# 2 Literature Review

The literature review is aimed at providing academic context to the study. An introduction to the theory of strategy will be presented, which will include the evolution of strategy, the need for strategy, contemporary theories on strategy, the development and the implementation. The theory of strategy is presented first to identify the broad strategic theories that are prevalent within the field of strategy. These generic strategic theories will provide a foundation to any strategy formulation processes.

Game theory and Scenario planning is introduced as a set of tools that can be used to formulate and present strategy under a dynamic framework. Game theory will provide a dynamic framework that will be used to evaluate the formulated strategy and the resulting market interactions. Scenario planning is used to establish boundaries and constraints on the framework.

Once a broad foundation on strategy has been established, strategy formulation and strategic interactions will be investigated for the airline industry, specifically the low-cost airline industry. This will provide an academic and historical perspective of the strategy formation process related to the fundamental theories of strategy as well as providing initial inputs for the scenario planning and game theory frameworks.

## 2.1 The Theory of Strategy

### 2.1.1 Defining Strategy

Michael Porter (1996, p. 64) defines strategy as: “The essence of strategy is choosing to perform activities differently than rivals do”, this introduces the concept of positioning by performing activities differently to competitors in order to gain a competitive advantage that is difficult to copy.

Complementary to Porters definition is the definition by Robert Grant (2010 p4), “It is a unifying theme that gives coherence and direction to the actions and decisions of an individual or an organization” he follows this closely with “Strategy is about winning”.

The concept of winning, or victory could be considered as the founding factor of strategy and will be discussed in 2.1.2

### 2.1.2 The Evolution of Strategy

As an introduction to Contemporary Strategy a brief overview of the evolution of strategy will be presented, starting of with Sun Tzu’s the Art of War.

Many authors consider Sun Tzu’s The Art of War (500 B.C.) as the first publication to scribe the fundamentals of strategy, although the application of Sun Tzu was the strategy of winning battles, rather than corporate success. The success of Sun Tzu has resulted in many of the founding strategies of battle being transformed and applied to the practice of corporate strategy, such as offensive and defensive strategies (Grant, 2010).

Mintzberg and Lampel (1999) have identified ten schools of strategy formation:

1. Design School
2. Planning School
3. Positioning School
4. Entrepreneurial School
5. Cognitive School
6. Learning School
7. Power School
8. Cultural School
9. Environmental
10. Configuration School

Up until the 1970's*The design school* had been considered to be the original theory of strategy, with emphasis placed on achieving the optimal balance between the internal strengths and weakness and the external environments threats and opportunities (Mintzberg & Lampel, 1999).

*The planning School* developed in congruence with the Design School with the premise that strategy development is a formal process, with distinct steps and checklists and supported by formal plans, budgets and procedures. The planning school lost support in the 1980s (Mintzberg & Lampel, 1999).

*The positioning School*, whose proponent is Michael Porter, became the theory of choice in the 1980s. This view concludes that strategies can be grouped into generic strategies, and companies should choose a position in order to be competitive (Mintzberg & Lampel, 1999).

*The Entrepreneurial School*, embraced the concept of intuition as a guiding principle, as opposed to hard data in the positioning school, and procedures of the planning school. The strategies developed under the entrepreneurial school were visionary closely controlled and implemented by the leaders (Mintzberg & Lampel, 1999).

*The Cognitive School*, investigates the process of thinking up strategies, and the implication of these process, established in 1980s is still prevalent in contemporary articles, Hamel and Valikangas (2003) introduce the concept of the "Cognitive Challenge" which is essentially freeing the organizations thought process to consider alternate solutions (Mintzberg & Lampel, 1999).

*The Learning School*, is based on the premise that strategies are emergent. Prahalad and Hamel (Hamel & Prahalad, 1994) place emphasis on foresight and that companies should continually evolve and learn about the future in order to be successful.

*The Power School*, proposes that strategy is dependent on power, internal strategy development is political, while external power is the interaction of the company with its external environment (Mintzberg & Lampel, 1999).

*The Cultural School*, this concept is based on the formulation of structure through culture, and the influence on culture in discouraging change (Mintzberg & Lampel, 1999).

*The Environmental School*, is based on strategy development related to the externalities of the environment as seen as reactive strategy (Mintzberg & Lampel, 1999).
*The Configuration School* can be considered a hybrid school combining a multitude of schools in explaining various aspects of the strategy formation, however the downside is the lack of flexibility with change requiring a huge transformation (Mintzberg & Lampel, 1999).

Collis and Montgomery (2008) have hypothesized that the need for the evolution of strategy has been necessitated by the rapid and increasing pace of the global competitive market and the rapid technological change. Furthermore much of strategies that were developed addressed the inward factors of the company, with the theory's being built upon new strategic notions without accepting and building on previous strategic notions or disproving the previous schools, resulting in a multitude of strategy concepts and frameworks which lead to confusion for the managers of today (Collis & Montgomery, 2008).

### 2.1.3 Contemporary Strategy Theories

**Core Competencies**

Prahalad and Hamel (1990) introduce the concept of core competencies, a core competencies of an organization is the collective learning of production skills and the integration of multiple technology streams with the intent to harmonize internal functions. This harmonization is across the traditional boundaries of strategic business units (SBUs), and encourages communications and the leveraging of competencies dispersed throughout the organization to deliver the core products.

A core product is defined as the components, which add value to the end product, and is the tangible outcome, or end result of the core competencies. The end product is the packaging of the core products for purchase by the customers.

The process of moving from core competence to end product is layered and requires that each layer be formed correctly to ensure the final result is as desired (Prahalad & Hamel, 1990), this talks directly to the activity fit as discussed by Porter (1996).

This relationship can be described as a tree structure, with the core competencies forming the roots and foundation of the organization, the core products form the trunk, the branches, and business units, leveraging off from the core products are the end products, which are offered as fruit

Core competencies provide access to a wide section of the market, as well as communicating the benefits of the end product to the company. By creating a harmonized environment of technologies, core competencies become difficult to imitate, the more complex the harmonization the more difficult the core competence is to imitate (Prahalad & Hamel, 1990).

By identifying the core competencies and by employing a continuous improvement process, companies are able to build a long standing competitive environment that allow organizations to build agility and create previously unimagined products (Prahalad & Hamel, 1990).

**Positioning**

Although Porter established his theories of strategic positioning in 1980, his theories are still widely implemented.

The theory of positioning ascribes that successful companies have crafted a unique position within their sphere of influence. These unique positions are created through, activity differentiation, trade-offs and activity fit (Porter, 1996).

Strategic positioning activity differentiation is a result of performing activities differently from their rivals or similar activities in a different way. It should be noted that Porter differentiates strategic positioning from operational effectiveness, operational effectiveness is the concept of doing activities more efficiently and reducing the average unit cost, this although essential and complementary to strategic positioning is easily copied (Porter, 1996).

In order to craft a unique strategic position that is difficult to imitate, the activities should be unique, three positions are prescribed by Porter which are based on the customers needs, accessibility and the variety of the companies products and services:

- Variety Based Positions

  This position provides a narrow product or service offering based on a subset of the needs of an end user. The company creates a unique set of activities in which it specializes. This position is able to serve a large customer base.
- Needs Based Positions

The needs based position, fulfils a greater subset of the customers needs than the variety based position. However where variety based positions are able to access a broad customer base, a needs based position needs to target a certain market segment.

- Access Based Positions

  This position is created when customers need to be reached by different sets of activities.

The above positions are not mutually exclusive and thus some overlap may exist (Porter, 1996).

In order to select a position, Porter (1996) insists on the need for trade-offs to be made, this requires a company to make a decision as to which position it wants to adopt, and what trade-offs need to be made in order to fully prescribe to the position. Porter (1998) introduced the concept of trade-offs in his generic strategies, where by a company needs to choose between one of three positions:

- Focus
- Cost Leadership
- Differentiation

The need for trade-offs is to ensure that coherency exists between the activities and the resources required, straddling might cause the incorrect resources to be used, which may lead to inefficiency. Furthermore trade-offs allow for easier coordination and control and create a consistent company image (Porter, 1996).

Activity fit refers to the way in which the chosen activities relate to one another. Fit is important as it adds another layer of protection against imitation. By creating a fit that is unique and complementary with other activities it creates internal synergies and efficiencies that are difficult to view

from the external environment due to their strong cohesiveness and thus creates a unique position within the market.

Three types of fit have been prescribed by Porter (1996):

- First Order – Simple Consistency

  Results in an accumulation of competitive advantage, due to consistency between activities and strategy, making it easier to communicate and implement the strategy.

- Second Order – Reinforcing

  Activities reinforce and complement one another in order to improve the competitive advantage and hinder imitation.

- Third Order – Optimization of Effort

  The third order fit, is complete integration and optimization of activities which results in a seamless activity set which is difficult to observe externally.

Selecting a high order fit will improve the sustainability of the competitive advantage, making imitation difficult for competitors. Furthermore a correct fit will ensure that any degradation due to the adoption of a straddling position will be exposed (Porter, 1996).

Thus Porter (1996) concludes that strategy is the creation of a unique and valuable position, which requires a unique set of intertwined activities and established trade-offs in order to maintain the competitive position.

**Resources**

The resource based view places emphasis on the resources of the firm being the foundation of the firm strategy both from a corporate and business strategy level (Grant, 1991). Additionally the resource based view considers both the internal factors influencing the companies, as well as the external competitive forces that are prevalent (Collis & Montgomery, 2008).

The resource based view is based on the theory that the resources and capabilities provide the fundamental directions of the firms strategy as well as the source of profit of the firm (Grant, 1991). A resources is defined as the input to the production process, including equipment, employee skills and patents to list a few, whereas a capability can be defined as the ability of the firm to utilize the resources to undertake an activity (Grant, 1991).

Grant (1991) states that resources need to be both sustainability of the competitive advantage and the ability of the resources to extract economic rent. Such a resource would be considered valuable and thus enable a company to undertake activities at a lower cost or perform them better than the competition (Collis & Montgomery, 2008).

Collis et al (2008), suggest that three market forces determine how valuable a resource is deemed, these three forces being scarcity, appropriability and demand. Furthermore it is also suggested that the resources cannot be evaluated in isolation, but rather how they interact with and the applicability to the external market directly impacts the value of that resource.

In order to determine the value of a resource Collis et al (2008) have suggested five tests that a resource should pass.
The first test is that of inimitability - if resources are easy to imitate, they lack strategic value, as the revenue stream is only sustainable up to and until the point that competitors imitate the resource. A hard to copy resource should have one or more of the following characteristics:

- Physical uniqueness – eg. Real estate location
- Path dependency, this refers to the accumulated result of the paths taken by various resources which are difficult to replicate. This has a similar connotation to Porter”s (1996) concept of activity fit.
- Casual ambiguity is the difficulty in gaining insight into and duplicating the social organizational constructs of the organization.
- Economic deterrence, is a pre-emptive move by making large investments in an asset before the competition. This is also a powerful

strategic signal, indicating commitment to the market (Dixit & Nalebuff, 2010).

The second test of value is that of durability, which is a test of how long the resource will remain strategically valuable before it is obsolete or imitated (Collis & Montgomery, 2008).

The appropriability test, measures how much of the value is captured by the owner of the resource (Collis & Montgomery, 2008).

Substitutability is the fourth test and measures the degree as to which the resource can be substituted to perform equivalently or more effectively than the held resources (Collis & Montgomery, 2008).

The fifth and final test is competitive superiority, it determines which of the resources are the source of competitive superiority,and, which can be determined through the method of disaggregation (Collis & Montgomery, 2008).

With the above tests completed managers should be able to craft the strategies available to them, leveraging off of their strategically valuable assets in order to gain competitive advantage (Collis & Montgomery, 2008). Furthermore a successful company will continually evaluate the resources of the firm in order to establish if they are strategically valuable based on the current economic environment.

**Throwing out the 'rule' books**

The common consensus among many authors (Hamel & Prahalad, 1989; Hamel & Valikangas, 2003; Mintzberg, 1987; Porter, 1991) within the strategy field is that the age-old concept of "strategic planning" is now defunct and that a more dynamic and innovative crafting of strategy is required in order to succeed in the turbulent times of the future.

Hamel and Prahalad (1989) introduce the concept of “Strategic Intent” which can be explained as an obsessive quest for market leadership or more simply put, winning. Strategic intent is an all-encompassing strategic position, involving the commitment, involvement and input across the organization, from the top management to the blue-collar workers. The advantage of strategic intent is that it provides a long-term beacon, which the organization can rally towards by implementing short to medium terms strategies and uses organization wide targets to achieve this intent.

The nature of strategic intent is that the current capabilities and resources may not be sufficient to reach the overall goal, and thus a further purpose of the strategic intent is to reduce the gap by implementing innovative solutions to make the most of limited capabilities and resources.

The following factors, as described by Hamel and Prahlad (1989), are essential to Strategic Intent:

- The Strategic Intent must be understood and owned by the entire organization in order to succeed.
- The required skills must be imparted to the organization in order to make the goals achievable
- Initiatives should be tackled one at a time in order to avoid overloading the organization and generating conflict and confusion.
- Measurement and feedback mechanisms should be in place to measure progress and provide information to modify the short-term strategy if required, thus creating a dynamic process.

In the creation of Strategic Intent, organizations need to fundamentally change the way of doing business in a way that is advantageous for the organization and creates a disadvantage for the competition (Hamel & Prahalad, 1989).

This is done by:

- Building layers of advantage
    - Building and enhancing internal competencies to face the challenge of tomorrow.
    - Building strong brands

- Searching for loose bricks
    - By investigating profitable segments or sections of the value chain that are currently uncontested, and exploiting the gap.
- Changing the terms of engagement
    - By altering the way that the business is done, and challenging the norms that have been established by the competitors.
- Competing through collaboration
    - Merging, Acquisitions or Joint ventures to create a competitive advantage.

Kim and Mauborgne (2004) have rejected Porter's theory of generic strategies and have built on Hamel and Prahalad 's 'Strategic Intent', with their notion of 'Blue Ocean Strategy'.

Blue Ocean Strategy proposes that a company can adopt a low-cost position as well as a differentiated position and create value for the customer and the company, which is in stark contrast to Porter's notion that a company has to adopt a particular generic strategy and make trade-offs in order to achieve a viable position in the market.
The essence of 'Blue Ocean Strategy' is that companies should not look at its traditional sphere of competition which was coined 'Red Oceans', but should investigate and develop markets that traditionally have little or no competition, the 'Blue Oceans'.
The benefits of the 'Blue Ocean' is:

- Untapped Market Share
- The creation of powerful brands that stand the test of time
- A difficult to imitate value proposition, due to a divergent business model that is difficult to adopt by competitors

(Kim & Mauborgne, 2004)

A natural complement to the ‘Blue Ocean Strategy’ lays in the breaking free of product life cycle. The product life cycle was introduced by Theodore Levitt (1965), with the life cycle consisting off:

- Stage 1: Market Development
- Stage 2: Growth
- Stage 3: Maturity
- Stage 4: Decline

In order to slow down the product life cycle, companies have augmented and positioned their products and services to the point where the product and service offerings have become homogeneous. The heavily augmented products are vulnerable to new products and services, which are simpler and more in tune with the customers demands (Moon, 2005).

Moon (2005) has suggested three positioning strategies based on the concepts of disruptive innovation. Disruptive innovation can be defined as the creation of an entirely new market through the creation of a new product or service. This new product or service is initially deemed worse or inferior than the established customer perception (Christensen & Overdorf, 2000)

Moon (2005) suggests that companies should consider three positioning strategies in order to disrupt the competition. Reverse Positioning, Breakaway Positioning and Stealth Positioning.

*Reverse Positioning* is the act of stripping down the levels of augmentation of a product or service offering and only adding carefully selected attributes, thus repositioning the product competitively as well as moving the product to the left of the product life cycle. An example of Reverse Positioning is Jet Blue, which striped its product offering, air transport, to the barebones and augmented its offering with leather chairs and limited inflight entertainment, thus being able to maintain its low-cost position, yet differentiate itself from the competition (Moon, 2005).

*Breakaway Positioning* is associating a product or service with a new category, thus altering the fundamental perception of the product and the competing products (Moon, 2005).

*Stealth Positioning*, conceals the true identity of a product by associating it with another category, thus being able to ‘sneak’ into previously untapped markets (Moon, 2005).

In order to embrace disruptive innovation, companies need to overcome the inherent aversion to change that organizations exhibit, Christensen and Overdorf (2000) highlight three possible solutions to this:

- Creating new Organizational boundaries in which the new product or service can be created.
- Creating an new organization via a spinout, when the core process requirements of the new product or service are in conflict with that of the original company
- Acquiring the process and technologies required for the new product, when internal capabilities are insufficient.

The barriers to adopting disruptive innovation has been clustered into five groups by Assink (2006)

The first group is the ‘adoption barrier’, which consists of the following inhibitors (Assink, 2006):

- Dominant Design – if existing products or services are successful, incumbents will resist disruptive innovation
- Organizational Dualism – Patterns of previous success inhibit the company from innovating.
- Excessive Bureaucracy – Heavy reliance on procedures and procedures that inhibit creativity and the speed of adopting and implementing new innovations.

- Shifting from the Status Quo – Disruptive innovation implies risk, whereas corporations seek stability, thus prefer to proceed with what is known.

The second group is the ‘mindset barrier’ (Assink, 2006):

- The inability to unlearn – The company has the inability to unlearn pervious logic, thus cannot adopt innovation.
- Lack of distinctive competencies – The company lacks the managerial competencies to pursue innovation.
- Obsolete mental models and theory in use – Out dated theory and mindsets block the adoption of new innovation.

The Third group is the ‘risk barrier’ (Assink, 2006):

- The learning trap – deviating from what the company does well and the process required to innovate creates conflict.
- Lack of realistic revenue and return on investment expectations
- High risks and uncertainty
- Risk adverse climate
- Unwilling to cannibalize existing products or services

The fourth group is the ‘nascent barrier’ (Assink, 2006):

- Lack of creativity
- Lack of market sensing and foresight
- Senior management turnover
- Innovation process mismanagement

The last group is the ‘infrastructure barrier’ (Assink, 2006)

- Lack of mandatory infrastructure – resources are unavailable to exploit innovation possibilities
- Lack of adequate follow through.

### 2.1.4 Strategy Development

#### The Importance of Vision

The importance of a company's vision is that it defines the aspects of a company that cannot change and those that can and will change. Collins and Porras (1996) proposed that a company's vision statement should be comprised of two components the core ideology and the envisaged future.

The Core ideology consists of core values and the core purpose. The values are the guidelines that steer the company and are timeless in their nature. The core purpose coveys the reason for the companies existence, and provides inspiration and guidance to the employees. It should be noted that the core ideology and the core competence of the company are distinct, yet related in order to achieve strategic coherence (Collins & Porras, 1996).

The envisaged future consists of setting an audacious goal. (Collins & Porras, 1996), This is inline with 'Strategic Intent' which creates a gap between resources and skills available today and what is needed in the future to realize the audacious goals. Thus the vision becomes a method of broadcasting the strategic intent, and implementing it within the organization.

#### Scenarios and Games

Scenario planning is a tool that helps organizations envisage future possibilities that may occur, and evaluating strategic approaches to align the internalities of the company to external uncertainties should they occur (Heijden, 1997).

Scenarios address the uncertain future, thus enabling companies to evaluate future directions and provide a starting point for strategic decisions, as well as a tool for ongoing evaluation (Heijden, 1997).

Building scenarios uses existing knowledge, codified and tacit knowledge as an input to the process. Codified knowledge is information that is well understood and can be placed in context easily, where as tacit knowledge is more abstract in nature and cannot be easily contextualized. . A further input to the scenarios is for the strategist to try and include unknown elements in order to fully explore possible scenarios (Heijden, 1997).

The knowledge inputs required are both of the internal environment of the organization and the external environment in which the company operates. The aim of the scenario is take the tacit knowledge, and the unknown elements and transform them to a more codified form through a scenario (Heijden, 1997). The knowledge inputs can be obtained using various strategy frameworks such as Strengths, Weaknesses, Threats and Opportunities matrix(SWOT) as well as Porter's Five Forces (Porter, 2008).

Sunter and Ilbury (2011) name the codified knowledge that is unchangeable by the organization as the 'Rules of the Game', the remaining tacit and codified data form part of the 'Key Uncertainties' which drive the formation of the scenarios.

Once the scenarios have been developed, strategic options can be formulated based on the outcomes of each of the scenarios that confront the organization with choices that it needs to make in order to pursue a selected scenario. This leads into the decision phase where the most relevant option is selected, and the company commits to the option, and reconfigures accordingly (Ilbury & Sunter, 2011).

The incorporation of Game Theory within scenario planning allows for the reaction of the competition to be analysed based on the action of the company (Bradenburger & Nalebuff, 1995).
Two types of games have been described by Bradenburger and Nalebuff (1995) rules based games and freewheeling games.

The theory of backward reasoning involves looking into the future of the game, and then reasoning backwards, looking at the actions and reactions required to arrive at the future point (Bradenburger & Nalebuff, 1995), by doing this potential outcomes to games can be solved for.

Rules based games are based on a set of rules that are explicitly defined, such as trade agreements and government regulations, this ties directly to Ilbury and Sunter's (Ilbury & Sunter, 2011) 'Rules of the Game'. The theory revolves the concept of action-reaction, however the reaction may not be proportional to the action.

Freewheeling games are based on interactions between players that are not externally restricted. The prescribed practice is that players cannot extract more value from the game than what they have contributed (Bradenburger & Nalebuff, 1995).

Both types of games require the strategist to think outside of their current environment and place themselves within the minds of the opposition in order to gain insight into the mindset of the opposition (Bradenburger & Nalebuff, 1995). Managers who are able to develop deep insight into the behaviour of their competitors are able to create and test scenarios in which they reshape the dynamics of the game to match their core competencies (Bradenburger & Nalebuff, 1995; Heijden, 1997)

Many authors (Bradenburger & Nalebuff, 1995; Hamel & Prahalad, 1989; Porter, 1991) in the field of strategy have suggested that 'zero-sum games', an outcome with only one winner, is not the optimal solution and that an alternative outcome that results in 'win-win' situations should be sought out, this is done through collaborative competition.
The 'win-win' approach has the following advantages as described by Bradenburger and Nalebuff (1995) are:

- Relatively unexplored approach thus previously hidden opportunities may be found.

- As the opposition is not forced into a retreating position, retaliation from competitors is less.
- The win-win game is more sustainable due to all parties experiencing positive gains.

The business game, is tasked with the creation of value, Identification of the players within the game is important Bradenburger and Nalebuff (1995) highlight the following players within the business game:

- Customers
- Suppliers – includes items such as labour and raw material
- Substitutors – Are alternative players whose client will purchase goods from or suppliers will sell goods to
- Complementors – Are players within the game who offer customers complementary products or who sell complementary resources to suppliers.

Further elements that need to be identified in order to complete the game:

- Added Value – the value that each player brings to the game
- Rules - provide structure to the game
- Tactics – strategic moves used to shape the game
- Scope – defines the boundary of the game

By manipulating the elements the strategist is able to craft various games, and through backward reasoning is able to identify the moves required to reach the end game, this captures the essence of what scenario planning is (Bradenburger & Nalebuff, 1995; Heijden, 1997; Ilbury & Sunter, 2011).

## 2.2 The Business of Airlines

Once a strategy has been defined, it is important that the entire organization aligns to the strategy including the business model.

A business model defines the value creation and the value capture functions of the business (Chesbrough, 2006). Further to this Chesbrough (2010) defines that a business model should also capture the market segment, revenue generation mechanism, along with describing the position of the firm within the value chain and the competitive strategy that will allow for the company to gain advantage over its competition.

A framework of six business models has been defined by Chesbrough (2006).

- Undifferentiated
    - Businesses compete on price and availability, and do this in an undifferentiated way to their competitors.
- Some Differentiation
    - Partial differentiation offered on products and service, this attracts customers who are not primarily attracted by price and availability.
- Segmented
    - The ability to compete in multiple segments simultaneously. Price sensitive customer base provides high volume, while the performance segment creates the high margins.
- Externally Aware
    - Company looks externally for ideas and technology, and information sharing
- Integrated Innovation Process
    - Formalized and integrative roles of suppliers and customers in the firm's innovation process. Supply chain knowledge, and in depth knowledge of customers.
- Adaptive Platform

- Multiple applications of business models, suppliers and the customers become business partners. The company's technology is the basis platform of the value chain.

(Chesbrough, 2006)

In order to remain competitive companies need to change their business models, however this change is met with barriers within the company originating from internal resistance to change or that the underlying assets within the business are in conflict with new business model (Chesbrough, 2010)

Once the business model has been defined, the tactics can be derived. This consists of set of defined choices and the consequences of these choices, are defined by the underlying strategy. Casadesus-Masanell and Ricart (2010) define choices into three categories namely, policies, assets and governance choices. Policy choices are defined as the overriding course of action that define the way the business operates, while asset choices refer to decisions made that affect the tangible resources, governance issues refer to the contractual arrangements established within the company and its supplier (Casadesus-Masanell & Ricart, 2010).

The tactics can be defined as the residual options available to the company to maximize the available value given the choices and consequences established within the business model (Casadesus-Masanell & Ricart, 2010).

Casadesus-Masanell et al (2010), provide a flow chart outlining the choices and consequences as derived for the low-cost carrier Ryanair, this can be seen in Figure 1 , the boxed text refers to the rigid consequences, while the plain text refers to flexible consequences and the underlined bold text refers to the choices.

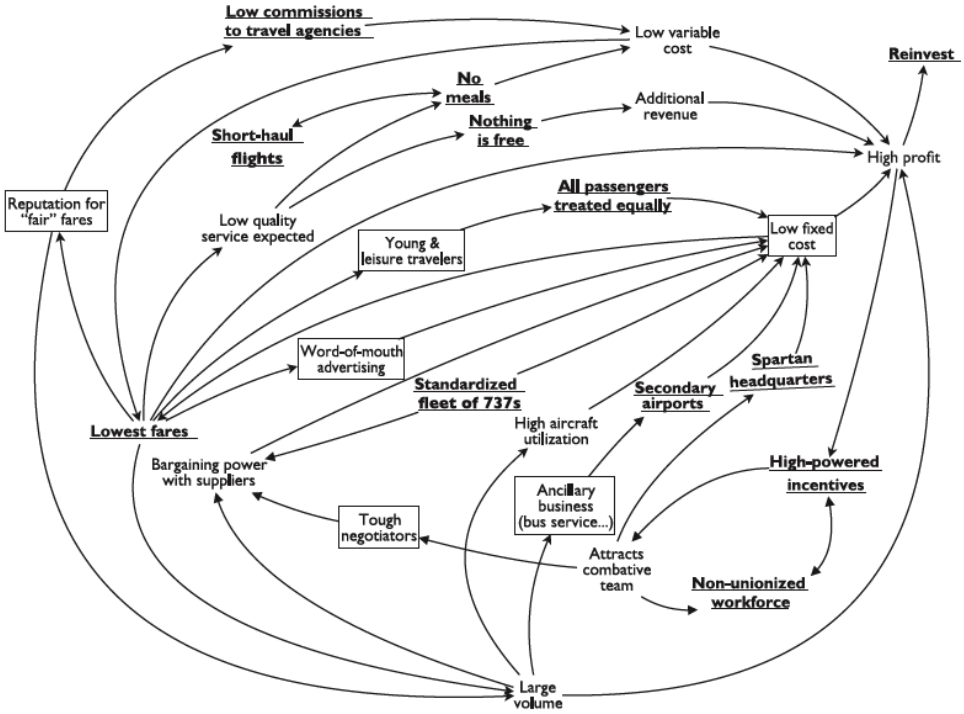


**Figure 1, flow-chart of Ryanair's Business Model (Casadesus-Masanell & Ricart, 2010).**

### 2.2.1 Low Cost vs. Full Service Carrier

The low cost carrier has core properties of high aircraft utilization, normally of a single type; reservations are done primarily online reducing the third party commissions associated with travel agents. Further key characteristics are a single class layout, minimum cabin crew requirements, no preassigned seats, no onboard entertainment and meals and drinks may be purchased. In addition the aircraft are turned around quickly and thus generally they do not transport cargo (Francis, Humphreys, Ison, & Aicken, 2006).

From a route perspective, traditionally low-cost carriers operate from secondary airports on point-to-point routes, with flights being of the short-haul nature rarely exceeding six hours of flight time (Francis, Dennis, Ison, & Humphreys, 2007).

Low cost airlines derive their competitive advantage, by maximizing aircraft utilization, with high frequencies and low gate turnaround times.

The low-cost airline model, is typically categorized by Porter's (1998) 'overall cost leadership' generic strategy. This generic strategy requires efficient scale facilities, pursuit of cost reductions through tight cost and administrative control, without foregoing on quality and service. The aim of this strategy is to generate above average industry returns.

While low-cost airlines generally tend to unbundle the services (Gillen & Morrison, 2005), traditional full service carriers maintain the bundling, offering on board entertainment and catering. Traditional full-service airlines tend to operate on a hub and spoke network out of primary airports, which reduces the utilization of the aircraft due to the arrivals and departures of connecting flights being closely scheduled, resulting in a wave pattern of traffic at the hubs, with peaks of high intensity and troughs of low traffic volume. Bookings can be made through multiple channels including third party travel agents, online, call centres and ticket desks.
Aircraft are configured in multi-class layouts, and traditionally fleets have been mixed. Passengers are pre-assigned seats and full service carriers tend to carry cargo (Wensveen & Leick, 2009).

According to Gillen and Morison (2005) entrenched full service carriers have continued to expand and develop the hub and spoke networks, as opposed to new entrants who are adopting the low cost model of point-to-point. The development of the existing hub and spoke network, is considered a high cost strategy due to the reduced productivity of aircraft and crew and the congestion created due to the closely spaced arrivals and departures. The value in the hub and spoke system is that the airline is able to transport the passenger from the initial point of departure, through its hub and onto the next destination, the low-cost airline may only capture a portion of the legs that a passenger flies, as passengers normally choose the cheapest legs to their final destination.

### 2.2.2 Market response of the full service carrier to the low cost carrier

The advent of the low-cost airlines in the European market, grew the passenger base from 600,000 passengers in 1996 to 1,500,000 in 2001 indicating that the low-cost price has enabled travellers who would have previously travelled by road or rail to travel by air, thus creating a new market as opposed to poaching from the full-service carriers, however migration has occurred as price sensitive travellers move from full-service carriers to the low-cost alternative (Binggeli & Pompeo, 2002).

In addition to creating a new market, the selection of secondary airports not only reduced the airport related fees, allowing for a less congested airport and surrounding airspace, it has a direct impact on the local economy surrounding the airports. Thus by secondary airports subsiding low cost carriers by reduced airport costs as the benefit of generating traffic for the low cost carrier, and increasing revenue to the airport through secondary incomes such as retail store rental (Cristina, 2006).

With the entry of low cost airlines creating a new market and encroaching on the existing, market, full service airlines have competed by engaging in price wars or predatory pricing, cloning and alliances (Gillen & Morrison, 2005).

Gillen and Morrison (2003) have identified three dimensions to predatory pricing within the airline market.
The first dimension is that the full-service airline, sell an itinerary consisting of multiple trips as opposed to a single trip, thus aggressively discounting the inbound flight to the hub to promote revenue generation on the outbound flights.
The second dimension, is the bundling of services, which creates a more valuable package than the unbundled low cost model, this is perpetuated with reward programs which offers travellers to claim discounts on flights as a reward for flying. These reward programs are commonly known as frequent flier programs.

Frequent flier programs have been adopted by various international low cost airlines, the primary reason is to reduce the elasticity of demand towards the airline once they are a member, however these frequent flier programs add complexity and expense to the low cost carriers, the success of the implementation would be governed by their simplicity, efficiency and effectiveness (Richard, 2005).

The final dimension of predatory pricing is the ability to allocate capacity across the hub-and-spoke network to suit demands and match routes with aircraft capabilities. This is only possible with a diversified fleet, which adds additional flexibility, which is not possible in single type environment. This may provide a significant barrier to entry as the full service airline may flood a route with capacity at low-cost in order to prevent market entry.

It has been shown by (Pitfield, 2008) that pricing rivalry between low cost airlines has resulted in airlines competing with prices below the break even point. Which has resulted in many an airline with a week balance sheet exiting the market.

Apart from predatory pricing, full service airlines have also attempted to incorporate the low-cost business model within their own operations. However the complexity and the cost of the hub-and-spoke network is a limiting factor (Gillen & Morrison, 2005), and many airlines have failed due to this straddling strategy (Porter, 1996).

In recent years, full service airlines have adopted the concept of airline alliances which have presented an alternative strategy to network growth, by partnering with other airlines to grow their network reach without the capital investment. This adds further convenience to the passengers bundle, as the passengers can travel seamlessly through the extended networks (Gillen & Morrison, 2005).

### Core competencies

There are four core competencies that all airlines to need to achieve, these being: safety, punctuality, consistency of service especially related to baggage delivery and scheduling, with these in place the market is price driven (Atalık & Özel, 2008).

## 2.2.3 Proposed Future Strategies

Binggeli and Pompeo (2002) have suggested that short to medium term growth will occur by expanding networks into regions which are currently underserved by incumbents while long-term growth will require acquisition of market share from both full service and low-cost competitors.

### The Long-Haul Option

Authors (Binggeli & Pompeo, 2002; Wensveen & Leick, 2009) have suggested that a possible future strategy would be to enter the long-haul market, with suggestions that entry into this market would again stimulate a new market by enabling a population who previously were unable to afford long-haul flights.

Wensveen and Leick (2009) have highlighted the fact that major differences exist between the short-haul and long-haul low-cost business model, with many of the operational efficiencies which have created the competitive advantage in the short-haul model, no longer applicable or valid in the long-haul model. These include aircraft turnaround, frequency and aircraft utilization.

Furthermore the fundamentals of long-haul operations are, as distance increases, operating costs increase and unit costs decrease, thus making it difficult to compete with an all economy layout. The full service carriers

operate mixed classes, with first and business class passengers subsidizing the fares of economy class (Wensveen & Leick, 2009).

Aspects of unbundling services such as in-flight entertainment would be problematic as although in-flight entertainment has been found not to be related to the selection of a particular airline, passengers appreciate the presence of in-flight entertainment and are not willing to pay for it (Alamdari, 1999).

**Altering the fundamentals**

The low-cost model targeted the leisure market, however recent passenger surveys have shown an increased propensity of business travellers to utilize low-cost carriers due to the increased price sensitivity of todays small to medium businesses (Mason, 2001), this move was spurred by the economic recession of 2007 (Neal & Kassens-Noor, 2011).

Mason (2001) has suggested two barriers that limit low-cost carriers access to large corporate clients, the first being large corporates have established service agreements with carriers who are able to cater for most of the corporations travel needs, secondly corporations utilize travel agents to facilitate bookings. As low cost carriers tend to use direct online bookings, corporations tend to overlook the low-cost option (Alamdari & Mason, 2006).

The reliance on the internet for ticket booking has also shown to alienate a certain portion of travellers who do not have access to the internet, and are unsure of the safety of online transactions. This is particular true in Asia were the traditional method of purchasing travel tickets is done through travel agents as internet penetration is less than that of Europe and North America, this can also be considered true for most parts of Africa (Fourie & Lubbe, 2006; Lawton & Solomko, 2005). Lawton and Solomko (2005) suggests a hybrid approach offering both online and travel agent based booking as adopted by Ryanair.

As the gap between prices decreases between the full service carrier and the low cost carrier and new entrants emerge, the low cost carriers will need to look to alternate positions to differentiate themselves (Lawton & Solomko, 2005).
The diminishing gap can be seen in the Asian market where incumbent full service carriers are operating wide body aircraft, which have a lower cost per seat compared to the narrow bodied aircraft typically used in Europe and North American carriers. The lower cost per seat on the wide bodied aircraft make entry by a low-cost carrier difficult as they would have to invest in wide-bodied aircraft which are considerably more expensive than the traditional narrow bodied aircraft employed by low-cost carriers (Lawton & Solomko, 2005).

In South Africa the national carrier is able to compete directly with the low-cost carriers on price due to government subsidies, and similar operating conditions such as the limited number of secondary airports, this again is an example of the diminishing gap between low cost-carriers and full service airlines (Fourie & Lubbe, 2006).

## 2.3 Conclusion of the Literature Review

Various schools of strategy have emerged over the past decades, be it Porters Positioning or the Blue ocean theory, the common thread of thesis is that strategy is imperative to the survival of a business. The strategy should create value buy differentiating the company from the existing and potential competitors in order to attract new market segments, or capture more of the existing market share. These strategies should be intrinsic across the entire organization to ensure organizational alignment in order to improve the chance of success.

Airlines are no exception to this, and essentially have to craft a clever strategy to overcome the inherent homogeneity of their service in order to thrive. This will require the development of new unseen business models to ensure sustainability.

The literature has shown that the low-cost airline of today are constantly reinventing the business of low-cost carriers in order to grow and maintain market share, however in contrast research has shown that low-cost airlines that have differentiated do no out perform those who have remained true to the model (Alamdari & Fagan, 2005). Additionally legacy airlines that are competing with the low-cost airlines are now adopting the practices of the low-cost carriers either by introducing a low-cost brand or migrating its core brand to a low-cost model with mixed results.

The increased competition has resulted in predatory pricing and 'tit for tat' price wars, requiring incumbent airlines to develop alternate models in order to remain profitable.
Various mitigation strategies have been proposed by different authors, these include:

- The adoption of a long-haul low cost carrier (Binggeli & Pompeo, 2002; Wensveen & Leick, 2009).
- Altering distribution strategy (Binggeli & Pompeo, 2002; Wensveen & Leick, 2009).
- Entering in alliance agreements (Gillen & Morrison, 2005).

### 2.3.1 Research Propositions

Successful strategy development is a key factor to the success of a firm, the airline industry is no exception to this. The literature has listed several proposed strategies that low-cost airlines are able to pursue.
The following strategies are available to low cost airlines in SA:

- Regional and international expansion by developing the low-cost long-haul model.
- Strategic Alliances with long-haul providers
- Further product differentiation:
    - Further unbundling of services, reducing marginal costs further in order to reduce fares with the example of RyanAir
    - Rebundling of certain value-added services, example inflight entertainment.

- Diversification to exploit economies of scope
- Actively targeting the business segment with a new business model.

The applicability of these strategies will be tested for suitability within the South African context, as well as the development of additional strategies that may be arise.

# 3 Methodology

## 3.1 Research Methodology

This study has used a qualitative methodology in order to develop the strategic options of low-cost airlines, through a series of interviews and the content analysis of various company issued reports and documents.

Qualitative research can be used to study problems as they occur within their natural setting, through the collection of qualitative data which is sensitive to the people, places and institutions under study, with an analyses that is able to provide a set of patterns or themes relevant to the study (Creswell, 2007).

As strategy formation, although grounded in microeconomics, is based on the non-quantitative beliefs and concepts held by the senior management of a company, the qualitative approach is ideally suited to capture these values.

Furthermore this study has proposed strategy formation based on interviews with senior management and the analysis of annual reports in order to extract current and emergent strategies. Creswell (2007) provides the characteristics of qualitative research, which is tabulated in Table 1, and compared to this study.

Based on the table it can be seen that the qualitative approach is applicable to the nature of this study.

**Table 1: Qualitative Study Characteristics (Creswell, 2007)**

| Characteristic | Description | This study |
|---|---|---|
| **Natural Setting** | Data is collected in the field at the location of the participant | Interviews at company Headquarters |
| **Researcher as key instrument** | Researcher collects data themselves | Interviews to be conducted by researcher |
| **Multiple Sources of data** | Multiple forms of data used, including interviews, document and observations | Interviews and Annual reports to be used |
| **Inductive data analysis** | Data is organized using a bottom up approach creating patterns, categories and themes to draw a conclusion | Ideas and themes obtained from the interviews and annual reports will be coalesced in order to generate a perspective |
| **Participants Meaning** | The researcher attempts to learn the meaning that the participants hold about the problem | Interviews will be held in order to develop an understanding of the industry and strategy related issues |
| **Emergent Design** | The research plan I flexible, and may be guided by the outcomes of the on going research | Semi Structured interviews may lead to new areas that are required to be explored in order to develop a complete understanding |
| **Theoretical Lens** | Prescribed theoretical lens may be applied | Academic body on strategy formation will be used to interpret the outcomes of the interviews |
| **Interpretive inquiry** | The outcome of the inquiry is based on the interpretation of the strategy, and may be interpreted differently by a reader | Although the study will interpret strategy based on academic theory, it is possible that the reader may draw a different conclusion |
| **Holistic Account** | Multiple perspectives are reported on in order to identify and understand the factors involved | Multiple interview sources, as well as local and international annual reports will be used |

## 3.2 Research design

The research design has been based on the high level thematic content analysis (Stemler, 2001) of the interviews and of annual reports. As the purpose of the study is to provide possible strategic outcomes, elements from grounded theory (Creswell, 2007) will be used in conjunction with content analysis.

As not much information on the topic was available in the current body of literature an inductive process was used. The themes or categories that are developed during an inductive content analysis are derived directly from the analysis of the data (Elo & Kyngas, 2008).

The interviews were conducted based on open ended questions, with the overall theme of the interview guided by the topic of the research. Schorn (2000) suggested that the interview be started with a leading question, which would form the foundation of the discussion followed with probing questions as the interview progressed. For the purpose of this interview the leading question which was used was “Does South Africa have a true low cost carrier”.

## 3.3 Population and Sample

### 3.3.1 Population

The population of the study consisted of 11 individuals interviewed over 9 interviews, additionally 3 years of annual reports were reviewed for the airlines detailed in Table 2 was selected on the basis that all airlines within South Africa should be interviewed,. The airlines analysed are detailed in Table 2.

**Table 2: Airlines analysed**

| Airline | Type |
|---|---|
| Kulula | Low-Cost |
| Mango | Low-Cost |
| 1time | Low-Cost |
| SAA | Full Service |

### 3.3.2 Sample

**Interviews**

The senior management, such as CEO, COO and Strategy Officers, were interviewed in order to gain incite on strategy formation within the airlines, and possible future strategies.

In addition to the airlines, a group of external consultants and analysts were also interviewed in order to obtain an objective view of the industry, and to aid the validation of all the interviews by means of triangulation (Creswell, 2007).

The schedule of interviews is presented in Table 3, in total nine interviews were conducted out of the planned thirteen.

**Annual Reports**

In a study conducted by Bowman(1984), which evaluated 82 companies through the method of content analysis, using both the coding methodology as well as the counting of lines methodology. The study showed that the content analysis of annual reports provided useful strategic insight into the commercial environment in which the company operated, as well as the control measures that are in place within the company.

Thus for the purpose of the study, and in order to develop an understanding of the competitive environment and the strategic responses of the airlines the last 3 years worth of annual reports has been analysed, as outlined in Table 4

## 3.4 The Research Instrument

The research instrument employed for this study was a semi-structured interview, which can be seen in Appendix A, and the review of company annual reports.

The semi-structured interview provided an overall framework to guide the interview but with sufficient flexibility for the direction of the interview to be changed should a topic of interest arise.

## 3.5 Procedure for Data Collection

The interviews were conducted on the premises of the airline at a mutually agreeable time. The interviews were recorded with the permission of the interviewee.

## 3.6 Data Analysis and Interpretation

Data has been analysed as prescribed by Creswell (2007). The analysis procedure is broken into three phases:

1. Open Coding
2. Axial Coding
3. Selective Coding

Open coding requires the examination of the text, for the important themes within the transcripts or reports, these themes are grouped within categories using a constant comparative approach (Creswell, 2007)

The categories are divided into properties, which represent an alternative perspective of the category, this deconstructing is done multiple times until a unit element is obtained (Creswell, 2007).

The Axial Coding requires, the category most aligned with the purpose of the study to be identified as the central category. The relationship of the other categories to the central category is explored and this provides the causality of the other categories to the central category. Once this has been established the relationships can be graphically mapped (Creswell, 2007).

The final step is the selective coding, which draws on the output of the axial coding to generate hypothesis, based on the relationships established (Creswell, 2007).

## 3.7 Limitations of the Study

The study has been based on a limited set of interviews, however due to the small nature of the airline industry the interview sample should be sufficient in order to describe the conditions within the South African Market.

## 3.8 Validity and Reliability

Validity of a study can be defined as the ability of a study to provide a right answer, while the reliability is defined as being the ability to produce the same answer if the study is performed again at any point in time (Kirk & Miller, 1986).

### 3.8.1 External Validity

External validity is the measure of applicability to members outside of the sample group, or in other words the generalizability of the results of a study (Marczyk, DeMatteo, & Festinger, 2010).

### 3.8.2 Internal Validity

Internal validity is the ability of the study to rule out alternative analysis or hypothesis of the results (Marczyk, et al., 2010).

Data will be meticulously recorded, sorted and annotated in order to rule out any ambiguity or misinterpretation.

### 3.8.3 Reliability

Due to the time sensitive nature of strategy, the reliability of the study would be limited to a few years after the study.
It should also be noted that much of the data is based on interviews, which will be assumed to be true and reflective of the company, the content of these interviews will be time dependent based on current external and internal conditions that the company is facing.

# 4 Presentation of Results

## 4.1 Introduction

The results of this study were extracted from a series of interviews held with professionals within the airline industry, further data was used from annual reports

The results of this analysis are presented below as well as a brief summery of the interviewees and the secondary data sources utilized.

## 4.2 Description of Interviewees and Secondary Data Sources

The primary source of data for analysis was obtained from interviewing airline industry professionals.

### 4.2.1 List of interviews

A total of nine interviews were conducted with a total of eleven individuals taking part, in total sixteen individuals were approached for interviews. Table 3 lists the schedule of interviews, the dates the interviews were conducted and the interview identifier.

**Table 3: Interview Schedule**

| Interview ID | Date | Type | Number of Interviewees |
|---|---|---|---|
| I1 | 6-02-2012 | Low Fare Airline A | 1 |
| I2 | 9-02-2012 | Consultant A | 1 |
| I3 | 15-02-2012 | Industry Representative A | 2 |
| I4 | 8-03-2012 | Industry Representative B | 1 |
| I5 | 8-03-2012 | Consultant B | 1 |
| I6 | 12-03-2012 | Low Fare Airline A | 1 |
| I7 | 13-03-2012 | Airline B | 2 |
| I8 | 13-03-2012 | Low Fare Airline C | 1 |
| I9 | 14-03-2012 | Airport Management A | 1 |

### 4.2.2 List of Annual Reports Analysed

Table 4 lists the annual reports analysed for content. The annual reports were utilized in the following way; to develop an understanding of the operations of each airline and for comparative purposes. The table also includes each reports unique identifier that has been referenced in the results.

The annual reports provided a good way to compare the macro industry factors that were prevalent during the review periods, however they are not as forthcoming with information as the US and European annual reports are with information, thus have limited benefit of providing finer details to the operations of the airlines. Furthermore SAA, and Comair do not segment their annual reports, thus it is difficult to fully interpret the individual components from a financial analysis point of view.

**Table 4: List of Annual Reports reviewed**

| Date | Comair | South African Airways | 1Time |
|---|---|---|---|
| 2009 | COM09 | SAA09 | 1TI09 |
| 2010 | COM10 | SAA10 | 1TI10 |
| 2011 | COM11 | SAA11 | 1TI11 |

## 4.3 High Level Themes

In order to obtain the high level themes that emerged from the interviews the coding concept as described in section 3.6 will be used

The interviews resulted in the formation of the following two high-level themes

- Operating Environment with the South African domestic market
- Business Model of the South African Low Cost Airline

These high-level themes were subdivided into sub categories related to these themes, however there is a causal link between these high level themes and they are not mutually exclusive.

### 4.3.1 Operating Environment

The high level themes that were identified during the interviews naturally led to the PESTLE framework. The PESTLE framework provides an external view of the environment that companies operate within. The PESTLE acronym stands for Political, Economic, Social, Technological, Legislation and Environmental. The PESTLE framework was developed from the PEST model to include the ever-increasing environmental and legal requirements on companies (Frost, 2003).

Table 5 the individual items which form the sub categories of the major PESTLE headings were identified during the interview process as themes which repeatedly appeared across all of the interviews as well as the annual reports.

The table was populated if the particular respondent agreed with the notion, a cross if the respondent disagreed with the notion and left blank if the theme was not mentioned. The themes are described on the following pages.

**Table 5: PESTLE framework**

| | Interviews | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | I1 | I2 | I3 | I4 | I5 | I6 | I7 | I8 | I9 |
| **Political** | | | | | | | | | |
| Bilateral | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Subsidization | ✓ | | ✗ | ✗ | ✗ | ✗ | ✓ | ✗ | ✓ |
| **Economic** | | | | | | | | | |
| Fuel | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Dollar/Rand | ✓ | ✓ | | | ✓ | | ✓ | | |
| ACSA | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| ATNS | ✓ | ✓ | | | ✓ | | ✓ | | |
| Market Size | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | |
| Over Capacity | ✓ | ✓ | ✓ | | ? | ✓ | ✓ | ✓ | ✗ |
| Labour | | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| **Social** | | | | | | | | | |
| Spoilt Consumers | | | ✓ | | | ✓ | ✓ | | ✓ |
| Unflown | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | |
| **Technology** | | | | | | | | | |
| Fleet | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Distribution | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Revenue Management | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| **Legal** | | | | | | | | | |
| CPA | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| **Environmental** | | | | | | | | | |
| Noise | | | | | | ✓ | | | |
| Carbon | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | |

## Political

### Bilateral

Bilateral agreements between governments limit the number of passengers that can travel between the signatory countries on different airlines. This is seen as a major restriction in the regional growth potential.

Although the Yamoussoukro decision has been in effect since 1999 the effect of bilateral still hinders the concept of an African Open Skies. It was noted by the respondent that steps are being made to open up the African skies by the airlines and relevant airline associations.

### Subsidization of Flag Carriers

As flag carriers are predominantly state owned, there is speculation amongst private airlines that anti-competitive behaviour exists in the form of subsidies to these parastatels relaxing the pressure on these parastatel organizations to generate a profit, furthermore many of the bilateral agreements also tend to be with flag carriers.

It should be noted that there is a difference between subsiding operations and subsidizing growth strategies, which is akin to a private company approaching shareholders for capital to grow. This was a similarity drawn by one of the respondents related to a state owned company asking its shareholders, the government, for investment to fund a growth strategy.

Three of the respondents alluded to subsidization while five of the respondents either suggested that there was no direct evidence to prove the subsidization or that the government subsidy was for growth and not the subsidization of operations.

## Economic

### Fuel

The fuel price is considered to be one of the major cost bases for the airlines, this along with the volatility of the price and the secondary influence of the volatility of the rand/dollar exchange is a considerable threat to the yield of an airline.

Fuel is considered as one of the largest expenses and threats by all respondents, the risk is due to the volatility.

### Dollar/Rand Exchange

As many of the costs associated within the airline industry are priced in dollars there is a significant impact on yield due to a volatile exchange rate. Some of these input costs are aircraft hire, spare parts, overseas maintenance and the oil price.

The respondents suggested that hedging was a possibility in order to dilute some of the volatility, however the hedging practice also has a downside risk which could results in excessive financial losses.

### ACSA

The Airports Company of South Africa (ACSA) is an airport management company that operates the major airports in South Africa. ACSA has been targeted by many within the industry for exorbitantly raising airport taxes in order to cover recent capital expenditure in the expansion of current airports and the construction of the new airport at King Shaka. It was estimated by one respondent that the cost of ACSA charges is approximately 10% of the airlines costs.

ACSA operates all the major airports in South Africa, this is viewed by the industry respondents as monopolistic behaviour and thus due to the lack of competition from secondary airports they are able to charge monopoly prices.

In addition, many of the airlines excluding Lanseria, are unable to accommodate larger aircraft, such as the Boeing 737 or the Airbus A320, this is primarily due to the runway characteristics not being long, wide enough or not able to handle the weight of the aircraft, furthermore many of the secondary airports have to truck the fuel in, where some of ACSA airports have fuel delivered by pipeline.

In order to achieve a secondary point of view an airport management was approached. The point of view portrayed by the airports is that firstly is that the airlines are misrepresenting the true sources of costs, an ACSA document outlining the airport tariffs can be found in Appendix B.

The airport taxes and landing fees are featured in the government gazette and regulated by the government. The additional costs such as fuel surcharges and CAA charges are not charged by ACSA however are lumped in as Airport taxes as a possible means to mislead the public.

Furthermore ACSA has also established a 90% target for on-time performance in order so ensure efficient operations, airlines who are not able to comply with this on-time performance will have there operations restricted, thus non compliant airlines will not be allowed gate privileges  which will incur additional costs to the airline.

The ACSA airports also have significant growth plans for its airports, and more notably Oliver Tambo (Johannesburg) will have restrictions as to who may operate out of these airports, thus many operators will have to look to secondary airports to base their operations out of.

**ATNS**

Air Traffic and Navigation Services (ATNS) is the sole service provider for managing the South African air space, has also been linked to increases in service fees beyond that of inflation. This fact was only mentioned by four out of the nine respondents

**Labour**

Airline labour is heavily unionized and crews receive payment that is inline with the international benchmarks as commented by five of the respondents In addition there is significant pressure from the government to increase employment, many of the respondents suggested that South African Airways is specifically affected by this, by being a parastatel company they are not able to trim their staff in order to be efficient, due to the social responsibility of the government to be a source of employment.

It was also suggested that as an airports company with a government shareholder, ACSA also faces a labour problem. Airlines globally are moving towards automated check in as this reduces costs, this will be a problem for The Airports Company which will have to struggle between the economic need to reduce costs, and the social need of providing employment. The airports management respondent countered this by saying that the airports are currently executing a self-service strategy.

**Market Size**

There is a general consensus that the market size of people served has decreased in size. Furthermore the general theme is that many corporates are now trading down from utilizing full service business class tickets on domestic routes to the low cost or economy fares. All respondents confirmed that although the primary market is the leisure traveller, the business traveller is becoming more prevalent on the low fare airlines.

Volume is seen as a key driver to a successful low frill business, the current prediction is a proximately a 5% growth within Africa for the next 20 years, based on information from Boeing and Airbus (Airbus, 2011; Boeing, 2011). The current airlines are looking at ways to increase the volume. However the growth within South Africa is seen as approximately 1% as reported by two respondents.

There are three considerations that have been put forward by the various interviewees. The first being expansion into Africa, the second is expansion within the South African market looking at the unflown ,market, and the third method of increasing volume is through codeshares and interlining agreements with international airlines.

### Over Capacity

All respondents barring one indicated that there is a perceived over capacity in the market, especially on routes serving the golden triangle. Furthermore there is a belief among all respondents that there are too many airlines operating within the South African context, it was further proposed by one respondent that there are too many airlines within the African context, based on the example of comparing the populations of India and Africa which are similar and the number of airlines servicing the populous, a second example was given of the comparison of the number of airlines within South African and Australia.

## Social

### Spoilt Consumers

There was a common consensus among the respondents that the south African consumers are spoilt, when it comes to flying with respect to that most historically tickets prices have been inclusive of everything, whereas on a Ryanair ticket nothing is free and all additions to the basic seat price are for

the cost of the passenger. Furthermore it was stated by two respondents that South Africa has historically had the lowest airfares globally for similar length routes.

With the theme of spoilt passengers some of the respondents suggested that a true low frill airline may not be accepted by the South African public.

In addition 1 respondent further alluded to the spoilt consumers property on the basis that South Africans are not willing to wake up at the early hours of the morning to catch a cheap flight, which is evident that the low fare airlines no longer offer the early flights (2am in the morning).

**Unflown Market**

The opinion on the unflown market is split, one belief is that the current market is correctly identified and that the currently unflown market is not able to afford the ticket or the expenses after the flight, car rental hotels etc.

In addition to this three of the respondents suggested that a large percentage of the unflown community are unsophisticated travellers, and as such need to be educated with respect to luggage allowances, punctuality and general travel behaviour.

The second school is that there is an untapped market waiting to be served, in the form of the “up and coming” middle class, and with the possibility of migrant workers who currently spend large amounts of time and money going home. This migrant traffic, was seen as to be very seasonal and thus may not be sustainable on its own by the respondents.

Africa

The respondents were all asked about expansion into Africa, all respondent agreed that Africa has potential however the extent as to the volume that could be achieved varied. Both perspectives agreed that Africa has poor

connectivity with some flights requiring a connection to Europe first in order to visit some of the African countries, thus the point-to-point concept would be ideal, in addition the road infrastructure  within Africa is poor, which is also a positive reason to connect Africa in the air.

The potential problems related to the expansion into Africa, will be the competition of the incumbent national carriers and the protectionist environment that the flag carriers operate this is addition to the bilaterals make entry into the market.

A secondary problem is that of volume, there is speculation that if there is a sustainable traveller market, it can sustain the volume that is required for a sustainable African operation. One respondent suggested that many of the routes would not be able to maintain the frequency or the load factors required to sustainably schedule a 737-800 or equivalent on such a route, and thus smaller gauge aircraft would need to be utilized.

## Technology

### Fleet

All respondents agreed that a modern fleet is a crucial step to profitability, in that the modern aircraft are more fuel-efficient and have reduced maintenance costs associated with it. This has the direct impact of reducing operating costs as well as improving on time performance.  It was also speculated that airlines not operating the latest aircraft would not be sustainable do to higher fuel burn and maintenance downtime. Furthermore it was noted that the future impact on noise and emissions tax would make the older generation aircraft unprofitable to operate.

One respondent added the caveat of the procurement of new aircraft, and that is that of the significant capital expenditure and financing costs that are attracted by the procurement of new aircraft.

**Distribution**

Two themes emerged from the discussion around distribution, the first was the strategy of pure play internet keeping to the core original low-cost airline model as developed by Ryanair and EasyJet, this according to the respondents is the lowest cost approach, the downside of this relates to penetration of internet in South Africa, approximately 10% (Esterhuizen, 2012), and the number of credit card holders only 7% of adults (FinScope, 2010).

The second observation is that to increase the channels of distribution, beyond that of the internet. However many proponents of the first strategy suggest that additional distribution channels add cost. As the airlines currently operate their distributions at either 0% commission or on homebuilt distribution systems, any additional distribution channels would have to occur at now cost to the airlines, thus the distribution channel would either need to bare the cost or pass on the cost to the passenger.

Two respondents mentioned that social networking would be the next distribution platform of choice, the respondent both mentioned advances in social network ticketing systems in place by foreign airlines.

One respondent noted that foreign low cost operators tend not to hold onto their aircraft for large time periods but rather evaluate the residual value of the aircraft selling it off and purchasing new aircraft, thus maintain a modern fleet with low maintenance overheads and maximizing their capital expenditure reclamation.

**Revenue Management**

A key aspect to profitability is be able to control each aspect of the business, thus revenue management systems are essential in controlling and monitoring each aspect of the business in order to maximize the yield opportunity. All

respondents agreed that revenue management systems were key to monitoring the yields of the airline and thus by having integrated systems that monitor the entire operation, operators are able to identify unnecessary costs and inefficiencies in order to tighten costs.

## Legal

### Consumer Protection Act

The Consumer protection act was one of the leading causes of concern related to legislature in South Africa. With the focus related to refunds of cancelled tickets, missed flights and the costs associated with flight delays. There is move by the industry representatives and the airlines to produce an industry charter related to the consumer protection act and present it to the Consumer Protection Commission. Although the Act was mentioned in eight of the nine interviews, the respondents did add that they were currently forming an industry code which they were presenting to the commission.

## Environmental

### Noise Pollution

Noise pollution was mentioned in all the annual reports, although at present there are no current restrictions related to noise at the airports as confirmed by two respondents.

### Carbon Emissions

At the time of the research there were no carbon emissions taxes presently within South Africa, however there was talk about introducing carbon tax legislation within South Africa, however these would be resisted by the airline community for as long as possible according to the respondents. Carbon tax has been introduced by the European union which not only effects the

European over flight but the entire route, this has a negative impact on the price of the airline tickets, which impacts global travel.

### 4.3.2 The Business model

**Revenue generation**

Airlines generate their revenue from three major revenue streams, the core business of flying, with revenue generated from ticket sales, ancillary revenue and interest payments from financial institutes..

Ancillary revenue from complimentary products, lounge access, hotels and car rentals through joint ventures or commission based relationships with these vendors, makes up the second revenue stream. One respondent suggested that possibilities to exploit resources within the airline, such as databases, in order to generate non-airline based revenue is possible and has been undertaken by 1 airline.

The third revenue input is that of interest, and contributes significantly to the profit of the airlines. The airline essentially is a cash business with passengers paying upfront for their tickets and thus the airlines hold significant cash which can be used to generate revenue. This however raised the concept of forward selling, which is the practice of heavily discounting tickets and selling them months in advance in order to generate cash today, although airlines are able to generate cash quickly this way, they face the potential risk of not being able to cover the costs when the tickets are exercised, this was alluded to as the current practice of velvet sky in order to pay for their fuel and maintenance bills

**Costs**

*Fuel*

Fuel was mentioned as the biggest variable cost, at approximately 40-50% of the cost of the operation is related to the price of fuel, this was confirmed by all the respondents.

**Maintenance**

Maintenance was considered to be a large contributor the fixed costs of the airline by three of the respondents, this was partially due to the monopoly of SAA technical. However the geographic distance of South Africa from the major aircraft producers require airlines and maintenance facilities to hold significant spares in order to reduce lead time on crucial spares, and the shipping expenses were costly especially if the parts were required on short notice.

**Market Orientation**

There were two distinct market orientations that evolved from the discussion the first being airlines which essentially adopt a product orientation and those who adopt a market orientation.

Three respondents suggested that airlines adopt product orientation, where the product is dictated to the consumer who needs to adopt the product or find an alternative, this was suggested on the basis of fulfilling the basic needs of air travel and that the wants should be paid for. Two respondents suggested that airlines follow a more market orientated approach discovering what the customers need and tailoring a product for them.

**Product**

Many of the respondents likened the airline ticket to that of a commodity homogenous in nature, with very few differentiators.

The common consensus was the differentiation could be developed by, customer service, the brand, and by ancillary products offered to complement

the base. It was noted that the brand is very difficult to extend beyond its traditional roots and transfer to non-related revenue generation.

One respondent however cautioned against the focus of ancillary revenue, as this may lead to a departure from focusing on the core ‘nuts and bolts’ of an airline operation and thus moving away from a core competence of airline management.

**The “Low Cost” Model**

All respondents noted that the low cost model as applied to the Ryanair or Southwest is not applicable to South Africa, this was based on the lack of differential cost basis available to the airlines in order to adhere to the model.

The primary inhibitor of the low cost model is that of the lack of low cost infrastructure able to support larger aircraft like the 737-800. The low cost infrastructure alluded to by the airlines is that of low-cost airports, in the form of secondary airports. Its should be noted that one respondent indicated that there has been an increased trend among international low cost airlines such as Easy Jet and RyanAir that have now started to utilize primary airports

A second inhibitor is that of volume, South Africa does not have the volume of traffic as seen by the European and US markets to facilitate a pure low cost model.

The respondents concluded that the true low cost model has changed since the inception of the original South West model, with Ryanair adhering to the original model most consistently.

When queried as to the sustainability of the model, all but one respondent commented that the model was not sustainable. The one respondent who suggested the model was not sustainable was on the basis of increased overheads as the airline grows. The other respondent countered this argument that if a low cost model is to be adhered to then this needs to be

managed as such, thus not having expensive buildings or costs associated with personal assistants or unnecessarily growing overhead costs should be managed in accordance with the low fare model.

All the respondents concluded that the “low cost” airlines in South Africa were indeed “low fare” airlines.

**The future model**

Based on the market outlook that was experienced during the period of research the airlines were focused on the ‘stitching’ and focusing on reviewing internal business processes in order to reduce the cost per seat in order to provide a competitive price but also improve the yields available to the airlines.

*Hybridization*

There was a consistent trend among all the airline respondents that there is a trend towards hybridization, where the full service and low cost models will merge in the form of a highly customizable product offering, where the passenger is offered a base ticket price and then pays for the add-on’s, lounge access, flexibility and a premium seat. Examples of Jet Blue and Virgin Blue were given as examples of international airlines offering this. This brings in the notion of the “Customer pays for everything” thus all aspects of the flight are charged for independently, leading to incremental revenues.

The key to this hybridization according to the respondents is to introduce this at the lowest possible cost in terms of processes and expenditure, it was suggested that integrated yield management systems would aid with this customization ability. One respondent did comment that there would be resistance on the part of the consumers on adopting this hybridization approach where passengers will have to pay for previously included privileges, such as luggage, the suggestion was also made that this form of customizability would add complexity and price.

*Contractual Solutions*

Furthermore the concept of interlining and code sharing was alluded to as a possibility of increasing the volume of travellers, this essentially involves partnering with international airlines in order to provide a seamless travel booking for the passenger and expanding the routes of the international routes without the necessary capital expenditure.

*Long-Haul Low Cost*

One respondent alluded to the long-haul low cost model, however there was uncertainty of the feasibility of the long-haul model, as the fundamentals of the model such as high crew and aircraft utilization are impeded.

*Regional Expansion*

Regional expansion was also alluded to as an untapped market, however there was a cautious stance related to an African strategy due to the complexity of bilaterals, and high levels of competition from the incumbent flag carriers. In addition there was concern related to the volume of passengers available

*Consolidation*

The consensus among the respondents was that the market could sustain between 2-3 airline, when asked if the market would consolidate, the consensus was that consolidation would be difficult due to incompatibilities of the various airlines such as fleet mismatch, brand as well as the potential incompatibilities that a merger between a private and a state owned enterprise. Thus failed airlines would fall by the wayside, while the survivors take up the market share.

**Success Factors**

All respondents concluded that the four success factors as listed by Atalik and Ozel (2008) were, safety, consistency of service, on-time performance and scheduling. In addition to these four factors, success would be enjoyed by airlines which were able to reduce their cost bases , and execute higher volumes.

Safety was considered mandatory by all respondents, stating that very few people would be willing to buy a discounted ticket on a known unsafe airline.

On-time performance was described as very important, respondents saying that on-time performance is a ‘hygiene factor’, ‘that we just need to get right’. This is also a marketing tool used by airlines to attract customers, and is prevalent in the annual reports. Furthermore one respondent suggested that companies are using the live on-time performance metrics on the ACSA website as a barometer to choose which airlines to deploy their staff on.

Furthermore on-time performance is an operational imperative as falling below certain limits has an impact on the availability of airlines to get access to the gates. Airlines who fall below the on-time performance have the possibility of being allocated remote bays at the busier ACSA controlled airports, in order not to effect the entire operation.

The third most prevalent success factor was that of brand, which was tied in closely with brand affinity by the passenger, this was corroborated by all three airlines.

Two respondents mentioned that an additional success factor of ‘cash on hand’ is crucial, thus airlines with a strong balance sheet are able to survive in times where the operating environment is lean.

A crucial success factor was that of matching the demand and capacity, three respondents claimed that this was imperative, by matching capacity and

demand the respondent suggest that this is the most efficient means of deploy the aircraft. However the respondents did mention that all though this was a key to efficient asset allocation the actual implementation of this was extremely difficult especially when it comes to fleet expansion, with the airlines often lagging the demand, due to the large planning cycle associated with fleet acquisition.

**Economies of Scale**

The concept of the ‘right size’ of airline was discus with all the respondents, as such there is no clear cut answer to a minimum efficient scale, as much of this relates to the route that the airline services, frequency of operation, gauge of aircraft, and demands experienced.

The general consensus was that for an airline to effectively operate a single route, for example Johannesburg to Durban, requires at least two aircraft one to be operational and a second as a spare. In addition to this it was also concluded that between 5-8 aircraft would be the most efficient size to operate the golden triangle.

Furthermore the common consensus is that the South African market can only sustain between 2-3 domestic airlines, excluding the two players, Airlink and Express, who are said to be niche players within the market. The reason for the reduced number of airlines is that with reduced capacity in the market fares would be able to be increased, as per the rules of supply and demand, and airlines would able to increase their yield, however as commented by one respondent the more airlines that are available to compete within the market increase consumer welfare as the prices are lowered due to increased supply and competition.

Two of the respondent’s  placed uncertainty over whether the ticket prices were driven by oversupply and price competition or if it was primarily driven by the elasticity of demand of the consumers.

**Competitive Environment**

All respondents mentioned that the industry was exceptionally competitive, and this was further reinforced at the hesitance and refusal of some of the individuals contacted for the interview process.

All respondent claimed that collusion was not evident in the market, as this was illegal. Price matching was considered to be common practice among the airlines in order to attract market share, however this is done alongside the yield management system, and is considered by the airlines as ‘tactical’ pricing.

It was noted by all of the respondents that pricing was transparent due to pricing being readily available on the Internet, this made competitive rivalry even stronger.

The major substitute for the airlines as discussed by most of the respondents was the South African Road Network, which was considered to be adequately connected for families to easily traverse the country cheaper than by flying. In addition some routes, such as Johannesburg to Kruger-Mpumalanga International were not considered suitable for the South African domestic market, as the total travel time which includes driving to the airport, checking in and flying to the destination, was in effect the same as driving. The convenience factor for driving to your destination was alluded to, as South Africans are historically car orientated, and if you fly you have to bear the further expense of car hire.

## 4.4 Summary Results pertaining to the research questions

### 4.4.1 Sub Problem 1

The competitive environment between the airlines was described as extremely competitive. The discussions relating to collusion, tacit signalling and anti-competitive behaviour was not reported by the respondents.

The consensus on the market size was that South Africa airspace is currently overtraded within the domestic market, and that potentially only 2-3 airlines would be feasible operating within the current market space.

Respondents did raise concern regarding the monopoly of the Airports Company of South Africa, and the increases in airport taxes, which many of the respondents suggested that these increases made profitability for airlines difficult.

Furthermore some respondents argued that the subsidization of South African Airways was uncompetitive, as this removed the pressure for the state owned pressure to generate a profit, thus placing an unnatural price pressure in the market. This notion was supported by 3 respondents 5 respondents suggested that the subsidy the national carrier received was likened to that of a listed company asking shareholders for capital in order to fund growth, and furthermore that the state owned airline is endowed with being an employer due to its government ownership, and thus cannot shed employees for the sake of overhead reduction.

The price of fuel was seen as a major threat and risk to the industry, the volatility of the price coupled with exchange rate volatility make forecasting difficult. The cost of fuel was suggested to be approximately 50% of the airlines cost.

Maintenance provider, SAA Technical, were also seen to operate within a monopolistic environment, however the respondents concluded that they were benchmarked according to international rates. However the impact of South Africa's location, parts availability and lead-time was raised by one respondent as a cause for increased costs and inefficiencies related to maintenance.

The passengers were considered to be fairly inelastic in their demand, and thus prompted concerns on how the airlines would be able to affect a price increase without affecting the market size considerably. In addition the passenger within the South African market were considered to be spoilt, in terms of historically low airline tickets, as well as many of the ticket features, such as carry on luggage, multiple baggage allowance, were expected to be inclusive of the ticket, whereas overseas passengers are expected to pay extra.

One of the major substitutes to the South African domestic airline market is that of the existing road network, where in some occasions, example from Johannesburg to Kruger-Mpumalanga international the time taken to travel by road is equivalent to the total traveling time by air(including driving to the airport, checking in etc.) and cheaper. Furthermore it was also suggested that traveling by road is still far cheaper for a family, than traveling by air.

### 4.4.2 Sub Problem 2

Due to the strategic nature of the scenarios and the competitive nature of the industry the respondents were not willing to detail the scenarios that they used, however were only willing to say that they particularly detained fluctuations in fuel and exchange rates, as well as the issue of financial liquidity. The largest concern of the airlines was that of the price of fuel.

# 5 Discussion of the Results

## 5.1 Introduction

The environment in which the South African domestic airline operates can be considered extremely difficult with many state owned or partial state owned institutions having monopoly stakes in many of the supporting infrastructure, such as primary airports, air navigation services, and maintenance facilities. In addition to the monopoly of the underlying support services, there are no secondary airports available to the airlines in order to obtain a cost base differential.

In addition the original Ryanair model called for non-unionized employees, this is not the case in South Africa and the aviation industry is heavily unionized, furthermore it was note that the South African crew are being remunerated according to international benchmarks, this in essence is to prevent the loss of crew to international carriers.

Furthermore the South African domestic market does not have the passenger volume that is seen by the European and United Sates low cost carriers, thus the benefits that the low cost carriers receive in Europe, with respect to subsidization by the secondary airports is not realized in the South African market.

These factors, lack of secondary infrastructure, and high input costs with low market volume, has lead to the South African ‘low cost’ carriers to be defined as low fare or low frill airlines, this is purely on the basis that the airlines do not have a differential cost basis compared to that of the traditional full service domestic airline model, this sentiment was agreed with by all the respondents.

## 5.2 Porters Five Forces

In order to provide structure to the discussion of the results Porters five forces will be used in conjunction with the PESTLE analysis and the business model results presented in Chapter 4. Porters five forces provide a holistic method of incorporating the various internal and external factors which have strategic value, furthermore the model is based on sound economic principles.

### 5.2.1 Suppliers

The South African suppliers to the aviation industry are very limited with many service providers operating as monopolies.

Porter (2008) indicates that a buyer is sensitive to the price charged by its supplier is related to the proportion of the cost of the service to the overall cost structure of the buyer, product or service differentiation, competition within the supplier and the criticality of the product to the buyer.
Furthermore Porter (2008) states that the bargaining power of suppliers is governed by the size and concentration of suppliers relative to buyers, the prevalence of information in the market, and finally the ability of the buyer to integrate vertically.

**Airport Infrastructure**

The Airports Company of South Africa (ACSA) is considered to be one of the key reasons for reduced yield and losses incurred by the airlines, due to their increase in aircraft taxes. One respondent estimated the contribution to airline costs at approximately 10%, thus the airlines are sensitive to increases of this cost.

ACSA operated airport essentially operate as a Monopoly on the Golden Triangle routes, with only Lanseria operating as competition to Oliver Tambo International airport in Johannesburg. Although South Africa has secondary airports, there are none, excluding Lanseria, which are able to support the operation of a 737-800, or A321 size aircraft due the runway infrastructure not

being suitable for operation of these aircraft. Thus airlines are essentially a captive audience to these airports, as an airport is a critical requirement for airline operation.

A secondary concern related to secondary airports is the volume of people they are able to attract within their catchments area to make operation out of these airports viable. With low volumes the additional expense of ground staff, and repositioning staff and aircraft may not make these secondary airports viable.

Future developments by ACSA may necessitate low fare airlines to venture to secondary airports, as ACSA may impose operational and capacity constraints. With Oliver Tambo reaching capacity during portions of the day, there were plans under discussion to limit access to the airports based on performance. By introducing a capacity constraint the airport would theoretically be able to charge monopoly prices as the demand would exceed the supply, however some of this increase may be mitigated by the fact that airport charges are regulated by the government. Any increases would put further pressure on the yields of the low fare operators, making the option of secondary airports more viable.

In addition to the capacity constraints that may unfold in the future, currently a two way hold-up problem exists between the low cost airlines and the ACSA operated airports. The lack of secondary airports, which essentially translates into lack of competition, and thus higher prices prevent the low fare airlines from realising a true low cost airlines model.

There is however an operational hold-up which exists related to on-time performance. ACSA are operating on a 90% on time performance statistic if airlines are unable to consistently meet these criteria, they are relocated to remote bays as opposed to obtaining air bridge access. This has an affect of incurring additional costs in order to ferry passengers from the aircraft to the terminal by bus, as well as the additional time requirements to turn the aircraft around, this negatively impact yields of an airline and furthermore detracts

from the low-cost model. The hold-up related to the airport is that airliners essentially reduce the efficiency of the airports scheduling, which has a negative impact on other operators of the airport. These hold-up problems also suggest that a move to a secondary airport would alleviate these issues, as the smaller airports are less congested.

As a possible remedy to the monopoly of ACSA, Kulula attempted vertical integration when the company showed interest in the acquisition of the old Durban International Airport in 2009 (Styan, 2009). This acquisition never occurred. The proposition of airlines vertically integrating is very small, as one respondent confirmed due to the massive capital expenditure required, the proposed price for Durban International airport was 3 billion rand.

From a Porters analysis perspective ACSA has significant market power, with the low-fare airlines being sensitive to increases in airport taxes.

**Fuel**

Fuel is the largest contributor to cost as per all the respondents, between 40-50%, the volatility in price also makes fuel on of the largest risks and threats to the business, and as such is one of the factors that are used in forecasting scenarios.

Due to the huge portion of the fuel to the airlines costs airlines are highly sensitive to fuel price fluctuations, airlines would ideally source fuel at the cheapest possible location. As the retail price of aviation fuel is not regulated, the price of fuel varies from airport to airport. This is especially a factor for airports that have the fuel trucked in as opposed to being piped in. The example given during the interview process is that of airlines tankering fuel on their Johannesburg to Durban flights in order to avoid fuelling in Durban, which has its fuel tanked in. Thus the additional premium that tankering fuel as opposed to having a dedicated pipeline to the airport would need to be considered.

In order for low-fare airlines to reduce fuel exposure, the common consensus is to operate new aircraft and replace them continuously as is practiced by Ryanair.

**Maintenance**

Labour was considered to be a large fixed cost to the airlines, the maintenance operators operate within a duopoly, with the two service providers being Jetworx and SAA technical, however it seemed in the current market only SAA technical were being utilized.

Although SAA technical is operating as the sole provider to most of the airlines, essentially as a monopoly, with capacity constraints it still charges maintenance rates in accordance with international benchmarks. In addition to labour charges, the cost of part is generally more expensive due to shipping and storage premiums that need to be added to the price due to geographic displacement

It was noted that operators have utilized foreign maintenance service providers in the past for major maintenance, however this incurs the additional cost of deploying aircraft and crew overseas.

All the respondents suggested that new aircraft lighten the maintenance burden due to increased reliability, and has the direct consequence of a lower maintenance bill and improved on time performance.

**Labour**

Airline labour is high skilled especially related to cockpit crew and cabin crew requiring specialist and expensive training. Although the respondent did not allude to scarcity of labour the annual reports did refer to skills shortage. In addition the airline crews are heavily unionized, this has resulted in wages which are benchmarked at international levels. One respondents suggested that the wages are kept high due to the threat of crew immigrating to countries

especially within the middle east. The unionization of labour is in contrast to the original low cost model, where Ryanair and Southwest only employed non unionized labour in order to reduce the threat of collective bargaining and keep labour costs down.

In addition parastatal companies or companies with government shareholders are under pressure to be employees in order for them to be responsible employers as part of the South African governments job creation initiative. In addition it is speculated that private companies are also pressured to increase employment. This places additional cost pressure on the airlines, in addition to paying higher wages, they are expected to employ more personnel. This is counter to the airline current drive on reducing the current cost per seat.

**Summary of Suppliers**

The four main contributors to the underling costs have been discussed in the preceding text, these costs are all critical to the functioning of the airline, due to the criticality, speciality and the magnitude of the costs of these factors relative to the overall operating costs, the low fare airlines are specifically sensitive to increases in these input costs. Furthermore the market environment of monopolies and unionised labour allows for the suppliers in wield significant market power over the airlines.

### 5.2.2 Buyers

As with the suppliers the factors which determine price sensitivity are:

- The proportion of the cost of the good relative to the overall cost
- Product differentiation, which leads to product stickiness
- Competition within the market
- Criticality of the product to the buyer

And bargaining power:

- Size and number of suppliers relative to buyers
- Buyers information
- Ability to integrate vertically

The buyers for the low-fare airlines are the passengers, although cargo is transported, the fare paying passengers is the prime revenue generator.

**The Current Market**

The current market according to the respondents and the annual reports has shrunk, with the common reason being the economic recession with consumers curtailing expenses.

It was also noted that the current low-fare market has shown an increase in business travellers as many companies have traded from the full-service legacy carriers to the low-fare models.

When evaluating the proportion of cost for the traveller, the distinction was made between some travelling individually or travelling with a family. This seemed to have an effect on the elasticity of the individual who was paying for the ticket, as per the respondents. It was stated that an individual traveling for leisure is far more willing to pay for an airline ticket for themselves as the cost proportion is lower and the fare is comparable with driving and the individual saves on the time taken to drive. This however changes as more family members are added to the journey and the combined airfares now become a large proportion of the overall holiday. This becomes a decision gateway for a family, to either pay for the airfare, travel by road, or choose an alternate closer destination that does not require air travel.
The decisions for business travel was not discussed, however the size of the company was related to the willingness to travel and the choice between low-fare and full service as discussed in the literature.

The product differentiation plays an important role in the switching of customers on the basis of price. The general consensus was a ticket on a low-fare airline in South Africa was essentially a commodity with very little differentiation, with a statement being made “that the only difference is the colour of the tube that you fly”. The Airlines attempt to differentiate through

brand and customer service. This low differentiation implies that passengers are easily able to switch from one airline to the next; all the airline respondents corroborated this. Airlines attempt to make their service more ‘sticky’ with the introduction of reward programs, the effectiveness of the reward program was suggested to be limited to business travellers who essentially gained ‘free’ rewards while for leisure passengers price leadership was the priority.

All respondents concluded that the competition within the domestic market was fierce, with multiple airlines targeting a shrinking market with a reported overcapacity. This has a direct effect of reducing prices as airlines compete for market share, this was confirmed by all the respondents, and that consumer welfare was improved by an increased number of competitors, as would be expected, however as a natural consequence yield is reduced placing financial pressure on the airlines.

The criticality of the ticket in terms of needs is low, air travel according to the respondents is still seen as a luxury item by the leisure travellers and thus travel by air is easily forgone for a cheaper option of alternate transportation methods or by not traveling at all. For business travellers the criticality of travel is more important, however flexibility of the ticket also plays an important part of the choice between flying full-service and low-fare. Flexible tickets have not been part of the traditional low cost model, however the respondents suggested that flexibility options would be available to travellers as premium add on to the base tickets.

All the respondents commented that an airline ticket can be likened to that of a commodity, and beyond a safe operation, on-time performance and consistent service delivery the traveling public will ‘chop and change’ brands depending on which airline offers a schedule that is convenient and the lowest ticket price. The respondent noted that there was a degree of brand loyalty, and as such there is a strong focus on brand promotion and customer service.

The importance of reward programs was weighted more for the full-service carriers who had either alliance with international carriers or the ability to utilize the ‘air miles’ on the airlines own international routes. The respondents suggested that the low-fare rewards program offered very little incentive to draw repeat passengers.

All the respondents commented on what they call ‘spoilt consumers’ and is an interesting social force that the airlines have had to deal with and continue to deal with. The spoilt consumer as described by the respondent is the passenger, which has historically become accustomed to an all inclusive tickets, and now resists the model of ‘paying for everything’, examples such as carry-on baggage, or passenger selected seating which have been included historically in the fare of South African low fare carriers, are now starting to be unbundled and the passengers will have to pay for the extras they want.

This concept of spoilt passengers lead to the discussion of market research and orientation, the respondents were split between product and market orientations, however the majority tended to be product orientated. The product orientated respondents suggested that the airlines were in a better position to dictate the needs of the passenger, and thus implement changes and expect the passengers to adopt the new practices. The danger of this practice is the possibility of alienating your clients, which then switch to the competitors, however at the majority of the respondents were in favour of the product orientated position, if all the airlines adopt similar strategies the passengers would be left with no alternative but to adopt or not fly. The product orientated approach lends itself to the low-cost model as it allows the airline to shape the product in order to reduce the costs as much as possible.

**A New Market**

As with market orientation the respondents are torn between an idea of whether a sustainable new market exists. The common consensus is that volume is key factor to sustainability of a low cost and low fare airlines.

However the key constraints in opening up air travel to the previously unflown, is primarily reducing the costs associated with air travel, without the utilization of secondary airports, which would reduce the costs sufficiently to appeal to lower income levels and thus attract the volumes required to make this model sustainable, it would not be possible to implement.

The second constraint is related to travel value chain of the passenger. The first chain in the link is related to ticket acquisition. The original low cost model calls for pure Internet distribution, as this is the lowest cost method of distribution as it removes any commission associated with travel agents. Internet ticket distribution is a primary means of ticket distribution for all of the South African low fare airlines, with Mango being the only airline to distribute through other channels, the other low fare airlines have stayed away from other distribution channels due to additional cost attached to these channels, which will either need to be passed onto the passenger or absorbed by the airline.

Pure internet distribution has with respect to opening up new markets has the distinct disadvantage within the South African context as the reported internet penetration is only 10% (Esterhuizen, 2012), in addition to the low internet penetration is the low distribution of credit cards,7% (FinScope, 2010; Styan, 2009), which is the prime payment method for online purchases. Thus many potential passengers are unable to access the airlines in order to purchase a ticket.

Moving along the value chain is access to the airports, and in particular the secondary airports. The secondary airports have limited access to public transport, thus opening up the market would be limited to those consumers who had vehicles.

The last part of the value chain, once the airline product has been consumed, is the holiday, if the passengers cannot afford a holiday, they will have no point in purchasing a flight ticket.

These are seen as the major stumbling blocks to opening up air travel to lower income passengers who have previously not flown, and thus the volume required would not be obtainable. In addition to the economic factors, there are additional social factors that the respondents suggested would hamper opening up a new unflown market, and that would be passenger sophistication, passengers would need to be educated with relation to baggage allowances, arriving on time, and the transportation of prohibited items.

**Summary of Buyers**

In alignment with Porters 5 forces, the passengers, wield considerable force over the airlines, as the switching costs to the competing airlines are negligible. In addition the passengers were mentioned to be particularly price elastic, especially the leisure traveller, thus placing pressure on the pricing policies of airlines. Furthermore difficulty is faced in establishing new markets of previously unflown passengers.

### 5.2.3 Substitutes

A substitute is described as a product which does not compete directly with the product, however provides the opportunity for buyers to switch to alternate products should the price of one product increase (Besanko, Dranove, Shanley, & Schaefer, 2010).

The general consensus among the respondents was that the general substitute for the leisure passenger was traveling in there own vehicle, this was due to the quality of our road networks which link the major cities, in addition the cost of traveling with a family of four by road was noted as being considerably cheaper than flying.

### 5.2.4 Potential Entrants

**Entry Barriers**

It was a common consensus among the respondents that the barriers to entry for an airline were low. This was primarily due to the over abundance of ‘cheap’ older generation available either for charter or purchase on the market.

Entry barriers are considered to be related to the following factors according to Porter (2008) and Grant (2010) are:

- Capital Requirements
- Economies of Scale
- Absolute Cost Advantage
- Product Differentiation
- Access to Distribution Channels
- Government and Legal barriers
- Retaliation by incumbents
- Incumbency Advantage

**Capital Requirements**

The capital requirements for an airline start-up is comparatively low , as very few sunk costs have to be employed. Aircraft can be chartered, and buildings rented. Additionally as mentioned earlier, the cost of chartering or procuring old aircraft is considerably less than a latest generation aircraft, the draw back to this scenario is forfeiting the fuel economy.

**Economies of Scale**

Closely related to the capital requirements is Economies of Scale, the size that airlines need to enter the market in order to be successful was discussed with all the respondents, and in summary there was no common consensus on a minimum efficient scale, beyond that to operate a single route, example

from Johannesburg to Durban, you would need to aircraft one on standby and one operational. This in itself presents quite a significant financial barrier as the start up airline would essentially have 50% of its operational assets being unproductive, however the respondents countered that without this redundancy delays would be inevitable, and the cost to reputation would be high.

Furthermore between 5 and 8 aircraft would be required to operate effectively on the golden triangle as per the respondents this is in alignment with the fleet size during the period of research, noting that the below three airlines serviced additional airports beyond, Johannesburg, Durban and Cape Town.

- Mango - 5 (Respondents)
- Kulula – 9 (Respondents)
- 1time – 12 (Annual Report/Respondents)

**Absolute Cost advantage**

The common conclusion related to absolute cost advantage of either the incumbents or the potential entrant was that a start-up initially has a cost advantage compared to the incumbent, and thus has the initial potential to undercut the incumbents due to lower overheads. However this initial advantage is short-lived, as the airline expands its routes and increases its fleet size, the initial cost advantage is lost.

**Product Differentiation**

All the respondents concluded that the low-fare airline ticket could be likened to an undifferentiated commodity. And thus the new entrant does not have to spend exorbitant amounts of money on brand awareness. It was however noted that the airlines did see brand as a means to differentiate their airline from the competition.

**Access to distribution channels**

The distribution channels for the low fare airlines can be separated into two categories ticket distribution and access to the airport.

***Ticket Distribution***

Access to ticket distribution has a very low entry barrier to perspective entrants, especially with the propensity of the airlines to use the internet for online ticketing, which is open to all at a relatively initial cost and off the shelf ticketing technology.

Much discussion was done related to ticket distribution and whether or not the low-fare airlines have positioned their ticketing distribution inline with the socio-economic features of South Africa, with very limited internet penetration, and usage of primary financial institutions credit card facilities. The argument for alternate means of ticket distribution through mobile phones, which have a far wider penetration, two respondents commented that Kenya airways have had success with this method of distribution.

Mango Airlines is the only airline to adopt distribution through retail outlets such as Computicket, Checkers and Edgars, and one respondent commented on the success that has been achieved notably on the Edgars channel.
The success of the Edgars channel was hypothesised to be due to the ability to get credit access from these stores in the form of an Edgars card, and thus not being reliant of the primary financial institutions for credit. The respondent also suggested that these channels did not incur the airline significant costs, and that the cost is born by the retailer, who recovers the cost by adding a small markup on the ticket price.

In contrast, other respondents argued that distribution through means other than the Internet add unnecessary cost.

Although been internet based, one distribution channel that all respondents agreed upon was social networking. This channel not only has the ability to distribute tickets but to also obtain feedback from passengers. This format is currently under experimentation in Asia.

### *Airports*

The first phase of product fulfilment occurs at the airport, as most of the airports that the South African low-fare airlines operate out of ACSA controlled airport they are unable to gain a cost differential from a full service airline, and thus the departure from the true low-cost model. In addition one respondent suggested that the major hub, Oliver Tambo Johannesburg international airport is already approaching capacity and thus new entrants would find it difficult to obtain arrival and departure slots, it was also stated that in the future constraints would be placed at the airport that relate to who could operate out of the airports, the determining factors being aircraft performance. Thus potential entrants would need to investigate alternative airports in the form of secondary airports, which during the time of the research were not being utilized by any of the low-fare airlines with the exception of Lanseria.

### Government and Legal Barriers

The common consensus among the respondents was that there were no significant government and legal barriers to prevent entry. Potential airlines would be required to obtain an operating license and operate within the requirements of the South African Civil Aviation Authority(SACAA), South African Companies Act, and the Consumer Protection Act.

At the time of the research the Consumer Protection Act was the legal barrier that the incumbents were addressing, and drafting a charter in order to present to the commission in order to outline the industries requirements. Some of the issues that were listed for discussions were ticket cancellation

refund policy and payments related to delays associated with connecting flights and overnight delays.
The main concern related to these two aspects was the sustainability of these practices with respect to low-fare airlines, the traditional low-cost model does not allow for ticket refunds, or rebooking of tickets if the passengers are late, in addition as the low-fare airlines are not responsible for onward connections they cannot be expected to be held liable for the costs incurred should the airline be delayed and the passengers miss their connecting flight.

There are however very large entry barriers for start-up and incumbent airlines that wish to operate within the African context due to many bilaterals and a protectionist trade environment.

**Retaliation by incumbents**

The airline industry globally has seen many instances of incumbent airlines retaliating against the entry of low cost carriers by predatory pricing in order to deter entry (Grant, 2010). However all the respondents stated that this does not happen within the South African market as such practices are illegal as they are seen as uncompetitive practices.

**Incumbency Advantage**

The only incumbent advantage alluded to by the respondents is that of brand presence and brand loyalty.

**Exit Barriers**

All the respondents however countered that the exit barriers were even lower than the entry barriers, and that airlines that are sustainable easily fall by the way side. This has been seen by the downfall of Velvet Sky airline during the period of this research.

**Sustainability Barrier**

This leads to a third barrier, which is introduced as a sustainability barrier. Sustainability is a fairly high barrier for new entrants to overcome, the reason for being this is the low yields that are persistent within the South African domestic market, required volume of passengers required, and the extremely competitive local market.
In addition airlines which have utilized older generation aircraft will be exposed to increased maintenance costs, aircraft down time and the volatility of an increasing fuel price. Airlines operating older generation aircraft who have not put in place a fleet renewal plan, will struggle to upgrade their fleet due to the prohibitive capital investment required and financing requirements, putting them at a disadvantage to the airlines operating the latest generation aircraft.

Beyond operating the most fuel-efficient aircraft, the airlines need to operate the airline in a sustainable manor, by at minimum operating in accordance with the critical success factors of:

- Safety and Reliability
- Consistency of Service
- On-time Performance
- Scheduling Capacity with Demand

Safety and reliability is directly related to the fleet operated by the airline and strict adherence to the maintenance schedule. One of the respondents suggested that passengers feel safer in newer aircraft, additionally newer aircraft have fewer maintenance issues causing fewer delays and passenger anxiety. In addition to modern aircraft, airlines also need to operate a standby aircraft regardless of the age of their aircraft, this allows airlines to rotate aircraft for major maintenance as well as provide a replacement aircraft

should an active service aircraft be grounded due to maintenance. A lack of a suitable replacement aircraft, plagued Velvet sky on their first day of operation, delaying the first flights, damaging the airlines reputation from the very first day as reported by one of the respondents .

Consistency of service, is closely related to customer service and is one way in which the respondents suggest the airlines are able to differentiate themselves by creating a brand identity which closely relates to experience when travelling with the airline. According to the respondents this has proven to be an effective way of retaining customers albeit a small percentage, three respondents claimed that many clients would fly Kululu because of the quirky jokes and the sense of on-board fun, while others prefer the more toned down approach of 1time. This can only be considered a week force of customer retention, as according to the respondents one of the strongest drivers, apart from ticket prices, which will cause passengers to switch is the on-time performance of the airline.

On-time performance was considered by every respondent to be the most important factors to implement effectively within its operation, although some on-time performance is out of the controls of the airlines, such as weather and air traffic delays, data shown to the author showed that a very high percentage of delays were due to the airlines themselves and not by external factors such as weather, air traffic control, and airport delays. Some of the delays are attributed to aircraft technical issues, which in turn relate directly to the maintenance practices of the airline and the age of the fleet.

The trickiest part of an airline operation is scheduling, which has been described by some respondent as a mix between magic, art and science. Scheduling has a direct impact on not only the hour by hour operation but the future operation of the airline with respect to fleet renewal and capacity adjustments. It was agreed upon by the respondents that the airline that can successfully match the capacity with the demand and maximize asset utilization would be the most successful airline, as with all industries this is an impossible feat to accomplish. The airlines have to deal with seasonality on a

weekly basis, with demand the greatest on the leading up to and during the weekend and the lowest on a Tuesday. Similarly peaks are experienced during school vacations, although these trends are well established the airlines are unable to match the demand perfectly as they are either over or under subscribed due to the physical nature of the aircraft and the scheduled environment that they operate in. Thus the airlines are required to utilize advanced computer simulations and analysis, as part of their revenue management system in order to attempt to forecast the demand and allocate the aircraft accordingly. A second constraint to matching the demand and capacity is that of the single aircraft type, by operating a single type the low-fare and low-cost airlines lose the flexibility to allocate large aircraft to more popular routes, while the smaller aircraft can be utilized on routes that have lower demand, as demand changes the mixed fleet can be rearranged to suit. The low fare airlines are in the position of running routes that may not run at optimum load factors, due to fleet inflexibility.

**Summary of Potential Entrants**

As has been discussed in the previous paragraphs, the entry and exit barriers for the low-fare airline industry are exceptionally low, and can be described as constable (Grant, 2010), this is further compounded by the ability to enter without significant sunk costs, thus allowing fly by night operators to enter the market. This threat of unhindered entrant has the result of the incumbent airlines keeping their prices low in order to stave of the potential threat of entry.

### 5.2.5 Rivalry among Industry Competitors

All respondents approached for interviews stated that the airline industry was an extremely competitive industry, with the battle being fought primarily on price.

Porter (Porter, 2008) and Grant (Grant, 2010) lists some of the factors that determine the competitive nature of the industry as follows:

- Concentration
- Diversity of Competitors
- Product Differentiation
- Excess Capacity
- Cost structures
- Industry growth

**Concentration**

The South African Airline Industry can be considered to have a low concentration with three low-fare airlines, two full service airlines, and two airlines servicing a niche market unserved by the larger airlines. This situation can be described as an oligopoly, and as such without the presence of collusion or indirectly through tacit collusion, competitive rivalry is high.

It was also noted by two respondents giving two different examples, that not just South Africa but Africa has too many airlines.
The first example given was the number of airlines in India, which has approximately the same population figures as Africa, compared to that of South Africa. The second example being the comparison between Australia and South Africa.

The summary from data collected off various Internet sites is given in the below table:

| Country/Region | Population | Area(km^2) | GINI Coefficient[%] | Low Cost/Fare | Full Service |
|---|---|---|---|---|---|
| Australia | 22,328,800* | 7,692,024[A] | 30.5 | 3[$] | 1[$] |
| South Africa | 49,991,300[*] | 1,219,090[B] | 65 | 4[$] | 2[$] |
| Africa | 1,022,234,000[*] | 30,065,000[C] | - | 11[$] | 32[***+] |
| India | 1,170,930,000[*] | 3,287,590[D] | 36.8 | 5[$] | 2[$] |

[*]World bank 2010 data(accessed April 2012)

[***]Number of airlines registered with the African Airline Association - http://www.afraa.org/index.php/membership/current-members (accessed April 2012)

[+]Respondent suggested well over 100

[$] Various air travel booking websites

% - https://www.cia.gov/library/publications/the-world-factbook/rankorder/2172rank.html (accessed April 2012)

A - http://www.ga.gov.au/education/geoscience-basics/dimensions/area-of-australia-states-and-territories.html (accessed April 2012)

B - http://www.statssa.gov.za/census01/census96/HTML/CIB/Land.htm (accessed April 2012)

C - http://www.enchantedlearning.com/geography/continents/Land.shtml (accessed April 2012)

D – www.thecolorsofindia.com(accessed April 2012)

Although further statistical analysis would need to be undertaken, with a larger and accurate data set in order to determine the relationship between land area, population and the number of airlines that can be supported, it can be seen from the data that South Africa has more airlines than India, which has a much larger land mass and population than South Africa. South Africa also has more airlines than that of Australia which has a land mass of roughly 6 times that of South Africa.

The GINI coefficient was also included, which is a measure of the inequality of wealth distribution, 100 on the scale would mean the wealth is perfectly distributed, while 0 would indicate the wealth is held by 1 person (WorldBank, 2012).

The GINI coefficient indicates that both Australia and India have much lower GINI than South Africa, thus in these countries the wealth is distributed more equally than South Africa. In essence this may be an indication that these countries would have a larger pool of potential passengers than a country with a lower GINI coefficient, and thus potentially have higher passenger volumes

which would be able to sustain more airlines. This however is in opposition to the situation that was observed in South Africa with 6 airlines in operation, and confirms the sentiment by the respondents that there were too many airlines for the reported over capacity in the market.

This translates into the fundamental requirement of a successful airline to operate profitably, volume. With more airlines the market and the passenger volume is divided among the airlines, thus the fixed cost per passenger increases, placing pressure on yields.

**Diversity of Competitors**

Grant (Grant, 2010) suggests that intensity of rivalry can be reduced in favour of collusive of behaviour depending on the similarity of the companies in terms of cost structures, origins and objectives.
An indirect observation related to the management interviewed was that all the respondents had either worked for Comair and/or SAA in their employment history. This phenomena is evident further down the management chain, with cross pollination between the airlines as well as previous history in the air force.

However all the respondents concluded that there was no collusion within in the industry as it was illegal, and that airlines have been taken to task historically for uncompetitive behaviour. Such a case was the lawsuit against SAA which Comair filed and won, the court case was based on the remuneration of travel agents by SAA in order to ensure loyalty to SAA and exclude Comair (Crotty, 2012).

**Product Differentiation**

As previously discussed the low-fare airline ticket has been equated to a commodity, with low differentiation, and passengers have the ability to switch between different airlines at will, thus competitive rivalry is high, with low margins and competition based on price.

Furthermore competition based on price is further exacerbated by the consumers access to pricing information on the internet, thus the passengers are easily able to compare prices and pick the airline that has the lowest fare based on the schedule requirements.

**Excess Capacity**

All but one respondent commented that the market face over capacity and as a result putting price pressure on the airlines, and diminishing yields. This attached with a reported shrinking market by the respondents and within the annual reports, increases competitive rivalry within the industry. Excess capacity creates consumer surplus, and thus increases the consumer welfare, consequently an under supply increases supplier welfare, and allows for increasing margins and the ability to charge monopoly prices on the assumption that new entrants are not likely (Grant, 2010).

**Cost Structures**

The common consensus among literature and the respondents is that airlines operate within an environment of extremely high fixed costs relative to the variable costs. Porter (Porter, 2008) suggests that this leads to intense price competition, resulting in competitors price cutting below average cost in order to attract marginal customers.

The ticket price of an airline is managed by a computerised revenue management system, which adjust the price of the ticket based on historical demand, time before departure as well as optimizing the yield which the airline will get for the flight. Although the systems is automated, the airline respondents responded that if competitors did have promotions or lower prices, that the revenue management system would be adjusted as tactical pricing measure.

Literature suggests that competition based on pricing results in a downward spiral to a zero sum game, where there are potentially only one or two

survivors, with companies with the largest balance sheets often being the survivors.

**Industry Growth**

The respondents and the annual reports both suggested that historically there had been a contraction of the market and that the future outlook for the South African domestic market was either stagnant or a growth of around 1%. Porter (2008) suggests that markets with low or stagnant growth has high competitive rivalry due to the battle for market share, this was evident with the South African context.

The outlook for growth within Africa was considered to be more promising than the domestic market, with forecasted growth from Boeing and Airbus (Airbus, 2011; Boeing, 2011) and being between 5 and 6 %. However as discussed earlier the barriers to the African market are higher due to the reported bilateral agreements in place and the protectionist environment in which the flag carriers operate within. Additionally there is concern that the volume required for entry and sustainable operation will not be present.

**Summary of Competitive Rivalry**

Competitive Rivalry was reported by all the respondents as being extremely high, with price being the tool to compete against. The largest drivers to the competitive environment, is the commoditization of the travel experience on a low fare carrier, a reported over capacity in the market, high fixed cost structure and transparent pricing to the competitors and the consumer. This pricing rivalry has put pressure on yields that has reduced margins further.

### 5.2.6 Summary of Porters Five Forces

The Porters five force analysis has revealed an industry with extremely low entry and exit barriers, although a high barrier to remaining within the industry and operating profitably exists. Furthermore the buyers, the passengers, wield significant power over the incumbent airlines.
The suppliers many of whom are monopolies, remove the differential cost bases that a true low-cost airline requires to operate, and thus the airlines within the South African context operate a low fare or discount airlines. This low differential cost base, a low concentrated market operating with over capacity has resulted in extreme levels of rivalry and price based competition. The result of this is an industry plagued with low margins.

## 5.3 The Business Model

### 5.3.1 Historical Operations

Chesbrough (Chesbrough, 2006) defines the business model as the value creation and value capture functions of the business. For the traditional low cost carrier and the low-fare model the value creation for the consumers was offering much lower fares to the flying public, and as such creating a new market. The value capture differs from the traditional low-cost carrier, such as Ryanair, and the low-fare airlines within South Africa.

The low-cost model, allowed for a large cost differential to be established between the low-cost carries and the traditional full service airlines, thus allowing for higher yields. This was established by unbundling the airline core offering, operating out of secondary airports and lower staff wages. In contrast the South African low-fare model does not have the luxury of these cost-differentials and I essence competes on the same basis as the full service carriers.

The South African low-fare airlines operate out of primary ACSA airports, and received no cost relief from these airports for operations as a low-cost airline. The inhibitors to operating out of secondary airports is the lack of adequate primary infrastructure such as wide runways, and aprons unable to support the weight of the aircraft. Additionally airlines are concerned as to whether or not the secondary airports would be able to attract the volume of passengers required to make these airports sustainable from a business perspective.

In addition the labour in South Africa including cockpit and cabin crew is heavily unionized, and crew salaries are based on international benchmarks.

The further departure from the original model is that of the complete unbundling of services, the low-fare airlines of South Africa do not have incremental charges for booking a specific seat, or paying for luggage, or paying extra for booking through channels other than the Internet, eg. Call centre or airport kiosks. This was partially due to the perceived spoilt consumer who would not readily accept such a bare-bone proposition.

The result of this departure from the low-cost model is that of low fares but also much lower yields compared to the traditional low cost model.

Using Chesbrough (2006) business model frameworks, the low-cost and low-fare models can be classified as Undifferentiated, resulting in competition on price and availability, this is congruent with the discussion on Porters five forces. Full service airlines operate in the realm of Segmented, as they are able to compete with multiple segments simultaneously, by provide economy class and business class, they are able to obtain volume from the price sensitive customers in economy class and achieve the higher yields in the business class segment. This has been the staple method of operating full service carriers, with business class paying for the high fixed costs, while the high volume of economy class passengers paying for the variable costs.

Using Porters (1996) generic positioning theory the traditional low-cost models, and the low-fare airlines of South Africa would be positioned as cost

leaders, with the primary trade-off being the differentiated position. The cost leadership position is far more difficult to maintain as a low-fare airline due to the undifferentiated cost base available to the airlines in South Africa, especially the lack of secondary airports. Thus the only method for the airlines to pursue the cost-leader strategy is through efficiency and best practice.

Porter (1996) states operational effectiveness, which encompasses efficiency and best practice, is required for superior performance, however this alone will not result in a sustainable performance. Operational effectiveness and strategy are required. This is the battle that the airlines faced, and all the respondent commented that a fundamental part of the airlines operation is cost reduction on all fronts of the operation, and that has become a part of the companies core culture of continued improvement in order to reduces the cost per seat.

One of the methods employed by the airlines is technology, both Kulula and Mango airlines operate the most modern fleet, within the South African market. Compared to the older generation aircraft operated by 1time, which although were cheap to procure, have high maintenance and fuel costs. In addition the common consensus among the respondents was that and old fleet was more susceptible to delays and thus contravening one of the critical success factors of on-time performance. A modern fleet is a common attribute of the successful European and US based low cost carriers who continuously procure new aircraft selling their old aircraft before they lose value.

Further technology inputs are that of the revenue management system, in particular Comair have introduced the new Sabre technology which the airline reports will have a significant impact on how revenue is managed and controlled, as well as allowing for flexibility in the product offering, notably the move to a hybrid airline product.

Porter's concept of activity fit, and creating a unique position within the market is what the airlines are continuously doing through internal process improvements and stripping out inefficiencies. It could be said that both Kulula

and Mango operate within the Second Order, or reinforcing category, due to the continuous improvement process, such as fleet modernization, upgrades to revenue management systems and internal process improvement. According to the respondents, it would however be impossible to reach the Third Order fit due to the dynamic nature of the airline industry, and the need to continuously improve and innovate, and as such the activity set is always being tweaked.

The literature on strategy, has the common thread of creating a position that is difficult to imitate, whether it be through resources, competencies, activities or positions.

The common denominator among the respondents is that most aspects of the low-fare and low-cost airline industry are easy to imitate, and that the product is not differentiated. Similar aircraft can be purchased or chartered, staff have the ability to move between airlines, and the switching costs of passengers moving from one airline to the next is zero. There is a belief that there is a strong first mover advantage, that the airlines which adopt the modern technology first will have a competitive advantage for a while until the competition employ the equivalent technology.
The most valuable resources and difficult to imitate aspects are those of brand and company culture. One respondent suggested that the family like culture of the company, as well as the expected culture of continuous improvement and innovation have seen the company through many difficult times and has allowed the company to be flexible and respond quickly to changing market conditions.

This company culture is inline with the theory of Hamel and Prahalad's 'Strategic Intent' (Hamel & Prahalad, 1989), as developed further below.

Under the heading of 'Building layers of advantage', the three low-fare airlines 1time, Kulula and Mango have built strong identifiable brands, which the respondents claim are important and one of the strongest differentiators. Kulula and Mango have seen the need for modern fleet in order to cushion the

blow of the fuel price volatility, reduced maintenance and the ability to maintain on-time performance.

The discussions around the heading of ‘Searching for loose bricks’ was that there were very few ‘loose bricks’ available to the South African low-fare airlines. The discussion resulted around new segments that could be targeted, particularly lower income segments. The consensus was that this market may exist, however these consumers would not be able afford anything beyond the air ticket, and thus the need for a ticket is eliminated or that the demand would be too seasonal to be viable, for example the migrant worker segment.

The African segment, was discussed as a possible method to open up new markets, all respondents agreed that Africa was a good opportunity, however there were many challenges to implementation and concerns about volume, and the airline respondents concluded that they would continue to investigate the African market however their focus was firmly within the domestic market.

‘Changing the terms of engagement’ can clearly be seen as the initial start up of the low-fare carrier Kulula by Comair. The respondents all conclude that it would be difficult to change the game significantly, however Mango have taken the steps to expand accessibility of tickets by distribution through retail outlets.
One of the biggest changes to the terms of engagement would be the move to secondary airports, this would move the airlines from a low-fare to a low-cost airline, the common consensus among many of the respondents that this is an avenue that needs to be pursued.

Competing through collaboration, based on the over capacity in the market reported by annual reports and the respondents, the common consensus is that market rationalisation would occur. This meaning that under performing airlines would fall out of the market. This led to the discussion on whether mergers and acquisitions would occur, and the common consensus was that this would be highly unlikely, due to the fact that state-owned and privately

owned airlines would not be able to integrate, and that there would be no value for low fare airlines to acquire airlines witch operate different aircraft types.

The possibility of a joint venture with secondary airports was discussed by one respondent, the airlines should establish joint-ventures with secondary airports, and thus establish themselves as a true low cost carrier.

Other forms of joint ventures, is that of alliances and codeshares with international based airlines. This has the ability of getting the domestic product to international customers, by means of codeshares. A passenger booking a ticket on an airline that flies to Johannesburg, would now be able to book a ticket to Cape Town, without booking a secondary ticket for the Johannesburg Cape Town segment. This has the advantage of increasing volume of passengers and international product penetration, but has the downfall of adding additional costs, such as baggage transfers, as well as exposure to certain elements of the consumer protection act related to liability for delays. There are also costs associated with the management of the alliance.

### 5.3.2 The Future Hybrid

All the respondents commented on the new hybrid that is currently being proposed, the proposition is that the airline will completely unbundle its offering, and that the passenger will have the ability to create a ticket as per their needs, thus options such as ticket flexibility, more leg room, luggage and lounge access will now be able to added to the base ticket, essentially offering the minimal no-frill service as a traditional low cost carrier, while also offering the premium services that the traditional full service carriers provided. This concept is similar to the concept, that Jet Blue has incorporated into its product offerings, such as extra legroom, and on-board entertainment and internet, according to Chesbrough (2006) this would place the hybrid model as ‘Some Differentiation’, as well as fall into the category of ‘Reverse

Positioning' in alignments with Moon (2005) thus allowing to attract customers who are not primarily attracted by price and availability, and reposition the product offering on the product life cycle.

This hybrid concept gives the airlines the ability to provide further product differentiation, as well as appeal to the customers who traditionally flew the low-fare airlines, as they did not offer flexibility or lounge access.

This introduces the concept of straddling positions, between the cost-leader and the differentiated position. Porter suggests that this position is not sustainable, as by opting to offer some of the service of a full service carrier, there is potential to introduce inefficiencies which counter the low-cost model. There is also the risk of brand confusion, an airline that was once a low fare airline offering minimal leg room and sparse service, now provides on-board entertainment and increased legroom.

Countering Porter's positioning strategy is Blue Ocean Strategy (Kim & Mauborgne, 2004), which suggests that companies are able to pursue both a low cost and a differentiated position. The respondents countered the negative effect of straddling, by only implementing add-on products that are able to implemented at either no additional cost or at a low-cost, thus maintaining the low-cost leader position without taking on significant cost to provide product differentiation. The airlines plan on managing these add-ons through sophisticated revenue management systems, like Sabre which Comair have implemented.

The hybrid model, which would be customizable by the passenger, has the secondary ability of removing direct comparitibility of the final ticket price on the internet. The user would be required to complete the entire booking process before they reach the final process, as opposed to the past process which the passenger simply entered the date and itinerary and was prompted with a final price. This however would only be applicable for passengers choosing the add-ons to the ticket, and thus competitive pricing would still be

high on the base ticket, the airlines would be able to generate higher yields on the add-ons depending on the target market and the value proposition.

The hybrid model, would place the low-fare airline directly in competition with the full service airlines traditional business clients, interestingly enough this would potentially have internal conflict with two of the South African Airlines Companies South African Airways and Comair, who both have low-fare airlines and full-service airlines within their portfolio. The discussion around whether there was space for both a full-service and the new hybrid low-fare airline was met with uncertainty, and that it is better to cannibalize your own customers than have them stolen by the competition.

## 5.4 The Games that Airlines Play

### 5.4.1 Players

The players that operate within the airline have been identified within the Porters Five Forces analysis. These being:

- Customers
    - Leisure and Business Passengers
    - Unflown Market

- Suppliers
    - Labour
    - Airports
        - Primary Airports controlled by ACSA(eg. Oliver Tambo, Cape Town, King Shaka)
        - Secondary Airports non ACSA controlled(eg. Lanseria, Wonderboom, Pietermaritzburg)
    - Fuel
    - Aircraft
    - Maintenance Organizations

- Substitutors
    - Road Network utilizing own transport or public transport
- Complementors
    - Incremental revenue income from car hire, hotel packages booked through the airline.
- Competitors

### 5.4.2 Rules

The rules that the airlines operate under resulting from the interviews have been listed below:

- 4 Critical Success Factors of success
- Civil Aviation Authority Regulation
- Consumer Protection
- Companies Act
- Competition Act
- Labour Law
- Bilateral Agreements
- Environmental

### 5.4.3 Tactics

The tactics available to the airlines and which were discussed in the interviews, Porters 5 forces and the literature are:

- Collusion
    - Collusion would entail the airlines working together to artificially raise the prices and avoid price wars. This could also be in the form of tacit collusion, where airlines signal prices through advanced publications of fares, which the competitors would follow. This however is an illegal practice
- Price Matching
    - Would entail a tit for tat pricing scheme, where airlines compete on price reducing ticket fares to steal market share.
- Business Model Changes

    - Business model changes, imply doing business different from the status qou, either by operating out of secondary airports, establish long-haul operations or by operating within a niche market
- Restricting Entry
    - As has been shown, low entry barriers exist within the airline environment, by operating at ticket fares lower than potential entrants or obtaining exclusive rights at secondary airports may provide sufficient barriers to deter entry, some of these practices would be seen as uncompetitive.
- Facilitating Exit
    - Airlines who would be able to operate at a lower cost base than their competitors. The new price may not be feasible for the other incumbents to follow and thus they lose market share which may lead to the competitors exiting the market. A lower cost base could be achieved by a modern fuel-efficient fleet and operating out of secondary cheaper airports.
- First Mover Advantage
    - A distinct advantage that has been shown to an effective is the first mover advantage, airlines that have adopted certain strategies, such as utilization of secondary airports, have shown an initial competitive edge over the competition. The competitive edge lasts until the competition imitates the incumbents position.

### 5.4.4 Scope

The scope that the airlines operate within or possibilities that resulted in from the interviews:

- Domestic Market
- Africa Market
- Long Haul Carrier

### 5.4.5 Changing the variables to add value

**Players**

The variables that the airlines are able to manipulate are limited. The players in the game, notably the supply side – the passengers, wield considerable power over the airlines from a price sensitivity point of view; additionally the volume of the passengers is a key driver to profitable operation of an airline. The key to attracting additional volume would be to reduce the ticket price and accessibility of the product to the passengers, thus expanding into the previously unflown market.

**Suppliers**

The porters five forces discussion evaluated the suppliers as wielding significant power over the airlines, additionally the South African Low-Fare airlines are not able to establish a differential cost basis compared to the US and European counterparts, especially with the use of secondary airports. This is the variable as to which the respondents suggest would be able to lead to significant value addition, on the basis that the airport has the correct infrastructure to support the operation of aircraft as utilized by the low-fare airlines. This has the value of reducing airline costs, thus improving yields as well as increasing consumer welfare by reducing the cost of tickets, which should stimulate the volume.

One of the immediate variables that the airlines can alter is that of the fleet, all the respondents concluded that airlines operating old fleet will not be sustainable if the oil price continues the upwards trend. Additionally the improved reliability of these aircraft will conform the on-time performance rule, as well as conforming to the implied future regulations pertaining to noise and carbon emissions.

Beyond the aircraft and the airports the airlines utilize the airlines are unable to alter the other supplier variables.

**Substitutors**

The only method for airlines to manipulate the substitutors is to reduce the cost of flying on an airline comparable to that of traveling by personal vehicle or public transport, this would only be marginally possible if the airlines are able to significantly reduce their cost base.

**Complementors**

The incremental revenue attracted from the additional sales of car rentals and hotel accommodation was seen as exceptionally marginal and not seen as a differentiator.

The hybrid model however, creates an abundance of complementary products, by unbundling the tickets to a base ticket, and allowing the consumer to take control of the additional features for their trip. This is a variable that the airlines are able to leverage, by creating additional revenue from ‘plus one’ sales, as well as adding value to the consumers, by allowing them to pay for only the services they require.

**Tactics**

*Collusion*

Collusion either tacit or implicit would add value for the incumbent airlines, as they would be able to position the pricing closer to the monopoly pricing and thus increasing the yield, however this would significantly reduce the consumer welfare.

The factors that increase the potential for collusion is the familiarity of the competitors, the small concentration of the competitors as well as the ease of access by competitors to the pricing of the other airlines, as discussed under Porters Five Forces.

The factors beyond the legal ramifications of collusion, is the price sensitivity of the passengers and thus increasing the potential of competitors to undercut, in order to gain market share.

All the respondents concluded that the collusion was not tolerated within the industry due to the uncompetitive nature that is not allowed within the competitions act of South Africa.

*Price Matching*

Airlines called this practice, tactical pricing, by responding to the competitors price and adjusting their own price in order to ensure that load-factors are maintained. This is alignment with the discussion related to the cost structures, with airlines having high fixed costs, there is an incentive for airlines to compete on cost in order to cover the variable costs.

This can be seen as ‘tit for tat’ pricing and literature points to this practice as reducing the value for the airlines due to lower yields being obtained but increasing value for the consumers who receive lower ticket prices.

*Business Model Changes*

Various changes to the low cost business models have been suggested by literature, one being the long-haul model, the common consensus among the respondent is that the efficiency in fleet and labour usage is lost, the efficiency being with respect to utilization in order to minimize costs per seat.

Many of the respondents consider that Africa has potential value that is currently untapped, however the question on how to tap this value was raised,

especially with respect to obtaining sufficient passenger value, and optimising the usage of fleet and personnel on such trips, which would be much longer than the low-cost definition.

The additional barrier to the long-haul model within the African context is that of bilateral agreements and the protectionism of flag carriers.

A method to overcome these bilateral agreements is through the utilization of alliances with the neighbouring airlines, thus allowing for increased domestic volume as the airline would act as a feeder airline. However the implications of the consumer protection act would come into account, due to the liability of delays.

*Restricting Entry and Facilitating Exit*

These practices, restricting entry and facilitating exit are both illegal and seen as uncompetitive. Thus airlines flooding the market with capacity or reducing prices significantly below the incumbents could be seen as uncompetitive behaviour and thus seen as illegal.

*First Mover Advantage*

One of the practices that the airlines have leveraged is the first-mover advantage, and can be seen by the entry of Kulula as the first low-fare model in South Africa, which was promptly imitated by the 1time, Mango and Velvet Sky. This can be further be seen by the first-mover advantage of Kulula operating from Lanseria airport, the subsequent imitation, as well as the later withdrawal by 1time from the airport.

Thus the low-fare airlines are highly susceptible to imitation by the competitors, however the airlines that are able to innovate and implement value additive features would be able to achieve higher yield initially until they are imitated.

## 5.5 Summary of Discussions pertaining to the research questions

### 5.5.1 Sub Problem 1

The extremely competitive environment which the airlines operate in has resulted in the main strategic responses of airlines been to compete on price, in an environment which lacks the cost base differential that international low cost airlines are able to achieve an thus obtain higher yields.

In addition the market has been shown to be flooded with capacity which places further price pressure on the airlines to decrease their ticket prices.

The incumbent airlines are unable to deter entry by potential incumbents, and it has been shown that the entry barriers for potential startups is extremely low, this however is offset by the barrier which was coined the sustainability barrier, and was shown that the incumbent airlines who have operated for longer periods have a greater chance of success, and that the exit barriers are extremely low for either failed start-ups or incumbents who are poorly managed. Sustainability of the airlines is driven by passenger volume, and adhering to the 4 key success factors; Safety, Consistency of Service, On-time performance and scheduling.

The low fare airlines in South Africa, and globally, suffer from a lack of differentiation of their products beyond their respective brands, and thus passengers switch from brand to brand based on their perceptions and experiences, this will be partly overcome by the hybrid model which will reposition the airline to a wider segmentation.

The incumbent airlines have very few variables to alter in order generate a competitive advantage over the other incumbents, and it is often the airlines which obtain the first mover advantage that are able to gain an advantage for a period of time before they are imitated.

The key strategic move for an airline would be to reduce the prices of tickets in order to increase the volume of passengers. This however is only possible by operating out of secondary airports, utilizing a fuel efficient and reliable modern fleet, utilisation of modern technology such as revenue management systems to reduce the overall cost of operation.

A potential differentiator for the incumbent airlines would be to enter contractual agreements with African airlines in order to be a feeder airline for onward connecting flights, this could be done through code-shares and alliances, wealthy airlines could also acquire an African airline and thus overcome the restrictions associated with the bilateral agreements.

A further method would be to increase the access to tickets by increasing the amount of ticket distribution channels, airlines need to investigate methods of distributing tickets to a larger passenger pool, than just to customers who have credit cards.

The concept of a long-haul low cost carrier would be difficult to implement as it violates many of the basic rules of a low-cost carrier, especially related to crew and aircraft utilization.

### 5.5.2 Sub Problem 2

The major threat for the incumbent airlines is an increase in base costs and a decrease in passenger volume. The base cost that has shown the highest volatility and escalation has been the price of fuel.

These will be the bases of the scenarios.

**Fuel**

*Increase in Fuel*

Airlines operating older fleet will be significantly penalized as their direct operating costs will increase significantly, and will place significant price pressure on their yields, potentially requiring these airlines to price at prices below cost in order to maintain competitive. This scenario is seen as the most likely by the respondents, and places uncertainty over the sustainability of 1time airlines fleet.

Airlines operating a modern fleet will still be affected by an increase in fuel, but to a lesser extent, thus yields would be not as negatively affected. This is a position, which the airlines may utilize in order to facilitate the exit of incumbent airlines operating older aircraft, by absorbing some of the fuel cost and generating a lower yield.

By partially absorbing the increased fuel cost, the ticket price would be affected less dramatically and thus the passenger volume would not be affected as significantly. However if the increase in fuel is considerable, the volume of passengers may be affected due to the elastic demand of the passengers.

*Decrease in Fuel*

A decrease in the fuel price is seen as a very low probability. A significant decrease in fuel would see airlines operating the older cheaper aircraft succeed as they would not have the financial burden associated with the financing of a modern fleet.

## Volume

*Decrease in Volume*

A decrease in volume would place pressure on yields, as the market would be further flooded with over capacity, requiring the airlines to drop the price of the tickets in order to maintain market share. Airlines which are unable to maintain this decreased yield would exit the market, which would then re-establish a more sustainable price equilibrium in the market as the overall capacity has decreased, thus the surviving airlines volume would increase.

This has been said to be the most likely outcome based on the reported over capacity in the market, during the duration of the report. This situation presented itself with the exit of Velvet sky airline during the time this research was conducted.

*Increase in Volume*

A significant increase in volume would be the most ideal scenario for the incumbents on the assumption that there is no entry form a new start-up. The respondents do not see a significant increase in volume as high probability event.

# 6 Conclusions and Recommendations

## 6.1 Introduction

The airlines operating within the South African domestic market who have adopted the low-cost model have not fully been able to implement the models due to a lack of cost base differentials, and thus have been described as low-fare airlines for the purpose of the study.

The study was completed through the interviewing of 11 industry representatives, the data was analysed through the method of content analysis using the PESTLE framework as method the extract the themes. In order to facilitate the discussion Porters Five Forces was used in conjunction with the body of knowledge established within the literature review. The results of the Porters Five Forces discussion was used as the input into the discussion resulting into the variables that the airlines are able to alter.

## 6.2 Conclusions of the study

The first conclusion of this study, is that South Africa does not have a true low-cost carrier, it has a low-fare model, which is due to the lack of a cost base differential, especially with the heavy reliance on primary airports. This is in direct contrast to the operations in Europe and the United States. The low cost carriers have a cost advantage compared to the full-service carriers and are thus able to generate larger yields.

The analysis and interview data, concluded that the airline industry is extremely competitive and that the primary method of competition was pricing rivalry. Pricing rivalry tends to be a destructive strategy, often resulting in a zero-sum game with the more powerful airlines with the strongest balance sheets surviving.

The low-fare airlines during the period of study, all reported losses, and were currently focused on the basic airline operation and reducing the operational costs and developing the concept of a hybridised model in order to provide a greater level of differentiation, and expand the segment that would be attracted to the product. The concept of hybridization is to offer a basic ticket at the lowest possible prices and allowing the passenger to book additional features such as flexibility or a seat with more legroom.

Africa is seen to have great potential however there are many entry barriers with related to bilaterals and a protectionist environment regarding national flag carriers, a suggested solution to this would be to develop code shares and alliances with African and international airlines in order to provide a domestic feeder service in South Africa.

The major challenge that the airlines faced is the over capacity within the market and high base costs with regard to fuel and airport taxes, the combination has resulted in yield pressure and financial losses. This has been reported as unsustainable and that rationalisation within the market will occur, reducing the number of incumbents.

The key to success for the incumbent airlines is to increase the differentiation between the competitors, reduce the price of the tickets to attract a larger passenger volume and increase the number of distribution channels to improve accessibility to the product.

## 6.3 Recommendations

The recommendations of the research is that the low fare airlines investigate the feasibility of the following:

- Utilization of Secondary Airports
- Modern Fleet
- Widen Distribution Channels
- Alliances and Code Shares

### 6.3.1 Utilization of Secondary Airports

The key to move the low-fare airlines of South Africa to a low-cost airline would be for them to operate out of a secondary airport in order to receive either significantly reduced airport taxes or subsidisation. As in Europe. operating out of secondary airports will provide these airlines with the cost-base differential, which will allow them to operate at a lower cost thus reducing the ticket price and potentially increasing yields.

Secondary airports would also tend to be less busy, allowing the airlines greater schedule flexibility, thus being able to match capacity and demand by schedule flexibility without the restrictions of departure and arrival slots at the primary South African Airports.

The utilization of secondary airports has further socio-economic benefits of job creation within the airports and the surrounding areas as passenger volumes increase, bringing increased consumer spend.

A distinct first mover advantage exists for the airlines that move to secondary airports, especially if the airlines can establish exclusive operations as Comair did at Lanseria with the introductions of Kulula. This entry may need to be facilitated by a Joint-venture with the airports in order to provide funding to sufficiently upgrade the airports to accommodate the airlines aircrafts. This would drastically increase the entry barriers for other airlines.

### 6.3.2 Modern Fleet

A modern fleet would allow the airlines to operate at a higher fuel efficiency, with lower maintenance, this would result in lower direct operating costs as well as improved reliability and on-time performance. A secondary effect would be the reduced exposure to noise and carbon emission regulation should they become effective in South Africa.

Again the first mover advantage would assist the airline in positioning themselves as lower cost airline than the competition, this could be used as a strategy to lower prices and increase market share.

### 6.3.3 Widen Distribution Channels

The ability to book a ticket by means other than a credit card an the internet is essential in the south African market which has a reported low internet and credit card penetration. Only one airline, Mango, has widened its distribution beyond Internet and credit cards and has shown past success. With increased distribution channels, access to the product is increased and thus passenger volume should increase.

Airlines should pursue technologies such as mobile phones, which can be used as a method of booking and payment, online checking and boarding passes. Beyond the initial investment, this essentially would be a low cost distribution channel which would widen the access to a larger portion of the population.

Technology such as social media should also be explored, as this would provide a close to real-time method of interacting with the flying passengers, integrating social media with an online booking system would provide a powerful means of interacting with the online community on a pre-existing platform.

### 6.3.4 Alliances and Code Shares

With the establishment of alliances and code share, incumbent low-fare airlines are able to provide a feeder service for onward flights, this has the ability to not only increase the volume of passengers, but also provide international presence of the brand.

Alliances and Code Shares would be a contractual solution to increasing the volume and the reach of the brand, without additional capital investment in fleet. From the passengers' perspective, booking tickets to the final destination would be simplified, as the low-costs airlines routes would now be present within the partnered airlines booking system, the reverse could also hold true allowing the low-cost airline to leverage the onward routing destinations of the partnered airlines.

The disadvantages to this approach would be the additional liability attached due to the contractual obligations to fulfil the ticket requirements of the onward flight, thus in the event of passengers missing the flight due to the low-cost airlines delay they would need to accept the burden of providing accommodation for the passenger and rescheduling the onward flights.

## 6.4 Suggestions for Further Research

The supply side of the airline industry is exceptionally well guarded due to the competitive nature of the industry, and companies are reluctant to divulge information related to their operation for fear of the competition being given an advantage.

The demand side of the industry is however completely open for research, and as a force on the industry these buyers wield exceptional power over the airlines, and thus would provide a valuable point of study.

The first aspect of future research would be the study of the elasticities of the consumers and the drivers thereof of business and leisure travellers.

Secondly would be to determine the wants and the needs of the flying public related to the expectations of the airlines, in order to further develop the rationale between either adopting a market or product orientation by the airline.

Additionally the validity of the usage of secondary airports, should be investigated with respect to the principle of a hoteling line, to see if the volumes that the airlines require for sustainable operation can be achieved.

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# *A Interview Guide*

- What can be described as the critical success factors for airline X?
- What are X's 'Big, Hairy and Audacious' goals for the future?
- How do you see the future of the short haul market?
- What will the critical success factors be for future success within the airline market? How do you plan to take airline X there.
- What can be seen as the biggest threats to the airline industry, how would you overcome this
- Based on the reported saturation of the airline market, what is the future outlook.
- What are the typical scenarios that your organization is currently forecasting.
- How would you define the rules of interaction between the airlines within South Africa, with respect to rival and raising of entry barriers
- How does airline X respond to
    - Price Rivalry – Punishment by undercutting or tacit collusion(signalling)
    - Proposition of new entrants
    - Supplier power, especially maintenance contracts
    - Growing elasticity of consumer demand
- What are airlines X core competencies, which are unique and how do you maintain these assets.
- How willing is airline X change to adopt new business models – disruptive technologies.
- How would you define airline X, as a low-cost/low-frills or low-fare/discount airline.
- Minimum Efficient Scale – Ryanair 200+ Aircraft
- Sustainability

# B ACSA Cost Schedule

## AIRPORTS COMPANY SOUTH AFRICA

**Airport tariffs**

**1. Background**

Airports Company South Africa (ACSA) was established through the Airports Company Act of 1993. The Act also provided for the establishment of a Regulating Committee, which is to ensure an appropriate quality of service and prices.

The tariff application process is known as the Permission Application and the promulgation of allowable increases, the Permission. The Permission Application is submitted by ACSA, after consultations with the airlines, whilst the Regulating Committee promulgates the Permission. The Permission Application is based on an Approach also determined by the Regulating Committee. This Approach provides for the rules and calculations for tariffs. Currently, a single-till, price-cap approach with some rate of return based characteristics (i.e. a hybrid price-cap / rate of return approach) is in use.

Annually, ACSA is allowed to increase airport tariffs as provided for within the Permission. Airport tariffs relate to passenger service charges, aircraft landing fees and aircraft parking fees. Landing fees and parking fees, which are dependent on weight and origin of aircraft, are recovered directly from the airlines, whilst passenger service charges are recovered through the air ticket directly from the traveller.

**2. The term "Airport taxes"**

The term 'airport taxes' is often used for all charges, costs and taxes recovered through the air ticket, thus creating an impression that 'airport taxes' accrue to ACSA. ACSA passenger service charges are but one of the charges collected through the air ticket. These charges are required by National Treasury to be split between taxes, regulated charges, non-regulated charges and airline costs.

| **Sub-categories on air ticket** | **Description:** |
|---|---|
| Taxes | • Value added tax<br>• International departure tax |
| Regulated charges | • ACSA passenger service charge<br>• SA Civil Aviation Authority safety charge |
| Non-regulated charges | • ACS passenger charge (ACS is a company owned jointly by the airline associations |
| Airline Charges (recoveries) | • Fuel surcharge<br>• Insurance |

The Airline fuel surcharge is the biggest component of the 'airport taxes'.

## 3. ACSA Passenger Service Charges

The current ACSA passenger service charges, inclusive of VAT, effective from 1 October 2011 are –

- Domestic: R110
- Regional: R227 (Botswana, Namibia, Swaziland and Lesotho)
- International: R299

The above passenger service charges followed an effective increase of 69.6% on 1 October 2011. This high increase was the result of delays experienced in the promulgation of the 2011 to 2015 Permission. A 34.8% tariff increase had to be recovered over a period of 6 months only.

## 4. Tariffs on completion and commissioning of infrastructure ('pre-funding')

Prior to 2008 the Regulating Committee followed an Approach whereby tariffs were allowed during the construction of new infrastructure. This provided for smoothed introduction of airport tariffs over time. For the purpose of the 2008 – 2012 Permission the Regulating Committee decided on changing these rules to only allow tariffs on new infrastructure that has been commissioned, so-called 'pre-funding'.

The impact was that tariffs were reduced, critically, at the time when ACSA had already committed to a particularly large capital investment programme (R16Bn), to provide the capacity that the industry required.

*Actual tariffs: 2004 to 2009 (excluding VAT)*

| **Passenger service charge** | **2004 R** | **2005 R** | **2006 R** | **2007 R** | **2008 R** | **2009 R** |
|---|---|---|---|---|---|---|
| Domestic | 30.70 | 35.09 | 35.09 | 26.32 | 32.46 | 35.96 |
| International | 89.47 | 101.75 | 101.75 | 70.18 | 87.72 | 98.25 |

This change would inevitably lead to abnormal high tariff increases once the infrastructure was completed and commissioned. The Permission Application by ACSA in 2009, requesting a 132.9% tariff increase for 2011 was based on this premise.

## 5. Tariff benchmarking

ACSA subscribes and provides data for annual benchmarking studies on airport charges. In the most recent publication of Jacobs Consultancy (now LeighFisher), *Review of Airport Charges: 2009*, ACSA's airport charges were benchmarked as 40$^{th}$ most expensive out of the top 50 airports included in the study. Stated differently, ACSA was rated as the 10$^{th}$ cheapest.

## 6. GDP growth as the driver for traffic volume growth

The airline industry often states that airport tariffs have a material negative impact on traffic volume growth. There is no empirical evidence that proves such statements. Studies have shown that airport tariffs have very limited impact, if any, on traffic volume growth.

In an independent study commissioned by the Department of Transport and the Regulating Committee in 2009, the findings were that at most, a 132.9% tariff increase in 2011 would have had a once-off negative growth impact of 5% on domestic traffic and none on international traffic. The actual tariff increase for 2011 was 33.0%. The total calendar year to date figures (Jan - Nov) show a growth of 3.7%. Domestic passenger traffic has grown by 4.2% whilst international traffic has grown by just over 2%.

Further, studies show that GDP growth and traffic volume growth have a correlation of more than 90%. GDP growth has been found as the primary driver for traffic volume growth. Refer table below.

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|
| Traffic growth | 2.9% | 0.7% | 8.7% | 7.4% | 12.1% | 11.4% | 10.8% | 10.6% | (7.7%) | (1.7%) |
| GDP growth | 2.7% | 3.7% | 3.0% | 4.5% | 5.3% | 5.6% | 5.5% | 3.7% | (1.7%) | 2.8% |
| Tariff increase | 11.4% | 22.4% | 13.3% | 3.0% | 14.3% | 0.0% | (25.0%) | 23.3% | 11.9% | 18.5% |

## C FinScope Survey

### Financial services consumption

- These tables indicate the extent of general uptake of financial services and products – formal and informal

| | 2010 (n=3900) | 2009 (n=3900) | 2008 (n=3900) | 2007 (n=3900) |
|---|---|---|---|---|
| **Financial services consumption** | **63%** | **60%** | **63%** | **60%** |
| ATM card | 57 | 55 | 58 | 55 |
| Debit/cheque card | 39 | 33 | 27 | 25 |
| Savings/transaction account | 34 | 36 | 38 | 43 |
| Mzansi account | 15 | 13 | 11 | 10 |
| Cellphone banking | 12 | 4 | 4 | 4 |
| Current/cheque account | 10 | 9 | 9 | 8 |
| Credit card | 7 | 8 | 9 | 9 |
| Internet banking | 7 | 4 | 4 | 4 |
| Deposit account | 6 | 5 | 6 | 5 |
| Home loan from a big bank | 5 | 5 | 5 | 6 |
| Bank vehicle finance | 5 | 4 | 3 | 3 |
| Personal loan from a big bank | 5 | 3 | 3 | 4 |
| Postbank savings/transaction account | 4 | 3 | 3 | 4 |
| Savings book at bank | 4 | 3 | 3 | 3 |
| Overdraft | 3 | 3 | 2 | 2 |
| Personal garage card/petrol card | 2 | 2 | 3 | 2 |
| Money market account | 2 | 1 | 1 | 1 |
| Call account | 1 | 1 | 1 | 0 |
| **Credit and loan products held – formal** | **24%** | **24%** | **16%** | **26%** |
| Store card or account | 10 | 19 | 9 | 16 |
| Credit card | 7 | 8 | 5 | 9 |
| *Home loan | 12 | 5 | 3 | 6 |
| Vehicle/car finance through bank or dealer | 5 | 4 | 3 | 3 |
| Personal loan from a big bank | 5 | 3 | 3 | 4 |
| Overdraft facility | 3 | 3 | 2 | 2 |
| Personal loan from a smaller bank | 1 | 1 | 1 | 1 |
| Personal loan from a retail store | 1 | 3 | 2 | 5 |
| **Credit and loan products held – informal** | **12%** | **14%** | **13%** | **8%** |
| Borrowing from a friend or family | 9 | 12 | 11 | 5 |
| Borrowing from a local spaza | 2 | 1 | 1 | 1 |
| Borrowing from a mashonisa/loan shark | 1 | 2 | 1 | n/a |
| Borrowing from a stokvel/umgalelo/savings club | 1 | 1 | 1 | 1 |
| Borrowing from an employer | 1 | 0 | 1 | 1 |
| Borrowing from or arrangement with pawn shop | 0 | 0 | 0 | n/a |
| **Funeral** | **46%** | **40%** | **43%** | **46%** |
| Belong to a burial society | 16 | 20 | 25 | 29 |
| Funeral policy with a bank | 12 | 12 | 8 | 7 |
| Funeral cover through an undertaker/funeral parlour | 12 | 8 | 9 | 9 |
| Funeral policy with an insurance company | 10 | 8 | 8 | 8 |
| Funeral cover from a funeral home | 5 | 5 | 3 | 0 |
| Funeral cover from any other provider | 5 | 2 | 3 | 0 |
| Funeral cover from a shop or store | 3 | 3 | 0 | 0 |
| Funeral cover/insurance from current employer or union | 3 | 1 | 1 | 2 |
| Funeral policy through a cellphone company | 1 | 0 | 0 | 0 |
| **Short-term insurance products held** | **15%** | **11%** | **10%** | **10%** |
| Vehicle insurance | 11 | 7 | 7 | 7 |
| Household content insurance | 9 | 6 | 6 | 5 |
| Insurance on house structure | 7 | 5 | 5 | 3 |
| Cellphone insurance | 5 | 3 | 4 | 2 |
| Insurance for hand tools or agricultural equipment | 1 | 1 | 1 | 0 |

(FinScope, 2010)