# AIRLINE OPERATING COSTS AND PASSENGER TRAVEL EXPERIENCE E COMMERCE PERSPECTIVE

P. CHAMPANIE



AIRLINE OPERATING COSTS AND PASSENGER TRAVEL EXPERIENCE: E-COMMERCE PERSPECTIVE.

P. E. Champane

Mini-dissertation submitted in partial fulfilment of the requirements for the degree Master of Business in Operations and Decision Management at the (Mafikeng Campus) of the North-West University

Supervisor: Professor, SM Kapunda

January 2012

2012 -06- 1 5 Acc No DDO146

#### ABSTRACT

This study aims at establishing if the benefits of adopting e-Commerce can improve the airlines competitive advantage (by reducing its distribution costs) and improve the passenger travel experience. The researcher was motivated by the effective use of e-Commerce by other airlines to reduce their product distribution costs, helping them increase profits and become more competitive in the market. The researcher targeted Air Botswana primarily due to the fact that the Airline launched its e-Commerce website in January 2010. Relevant and credible literature on air transport management and e-commerce strategies is reviewed in order to ensure the research findings are credible for the purposes of developing this new and informed knowledge. This paper utilises the Saunders research 'onion' to set out a clear path for the purposes of guiding the researcher throughout the study from the initial understanding of the research philosophies, through the approaches and choice of research strategies necessary for generating and analysing quality data. The researcher also targeted 100 passengers on board various flights on Air Botswana and distributed questionnaires to capture data which would fulfil the study's objectives, mainly, to determine the significance of the adoption of e-Commerce on the passenger travel experience, and to recommend how the airline can leverage on this technology in sustaining business survival and growth.

Based on the data analysis, a conclusion is drawn that, the airline has an opportunity to reduce its in-direct expenses, primarily ticket distribution costs, by selling directly on its website instead of subscribing to global distribution providers. A further conclusion is made that the passenger travel experience, which begins with a ticket purchase, is further improved by availing fares and other airline services online. This finding may motivate the airline to change its product distribution strategy in order to take advantage of the benefits of selling its ticket stock direct on-line.



North-West University
Mafikeng Campus Library



#### **DECLARATION OF ORIGINALITY**

I, Paul Champane, declare that this dissertation is my own work and has never been submitted in any form for another degree at any university or other institute of tertiary education. Information derived from the published and unpublished work of others has been acknowledged in the text and a list of references is given in the reference list. This dissertation shall not under any circumstances be presented to any other institution for an award of any degree.

Paul Champane (Mr.)	Date

#### **ACKNOWLEDGEMENTS**

The researcher would like acknowledge the support provided by the Management of Air Botswana who provided authorisation to use its data for the purposes of this study. The researcher would above all also acknowledge the support from the Director of Finance of Botswana, Mrs Mphi Tlhomelang who was also very instrumental in assisting the researcher to gain access to the organisations data. Lastly, the researcher would like thank the University of North-West for giving me the necessary access to electronic library resources which were very useful for this research. It would also be inconsiderate to go without acknowledging the professional guidance from all the lecturers of University of North West who assisted me throughout the course and most importantly, my supervisor, Professor S.M Kapunda of University Of Botswana who assisted me throughout this study.

# DEDICATION

This work is dedicated to my parents and my entire family for their support and encouragement, and for believing in me.

# **Table of Contents**

Abstra	oct
Ackno	owledgements
APPE	NDICES11
1.0	INTRODUCTION
1.1	Background12
1.2	Statement of the Problem15
1.3	Aim of the Study
1.4	Objective of the Study17
1.5	Research Questions
1.6	Significance of the Study
1.7	Conclusion
2.0	LITERATURE REVIEW19
2.1	Introduction19
2.2	Air Botswana Operations and Environment
2.3	Airfares and Business Model Framework in Regulated and Unregulated Markets21
2.3.1	Pricing-How it has been neglected by the Airline Industry
2.3.2	The Impact of Regulation on Pricing Strategies
2.3.3	Traditional Carriers Response to De-regulation –Yield Management

	2.4	The Emergence of a New Business Model and Pricing – Low Cost Carriers23	
è	2.4.1	General Approach	
	2.4.2	Pricing Strategy of LCCs	
•	2.4.3	Airline Business Strategies	
	2.5	Cost Structure of Air Botswana25	
	2.5.1	Background Information25	
	2.5.2	Airline Cost Model26	
*	2.5.3	Trends in Airline Cost Distribution	
	2.6	Airline Performance31	
	2.7	Airline Cost Cutting Initiatives and E-Commerce	
	2.7.1	Airline Cost Cutting Initiatives	
	2.7.2	Ticket, Sales and Distribution Cost	
4 (4)	2.7.3	Background of Distribution Costs	
	2.7.4	Reduction of Distribution Expenses	
	2.7.5	Reduction of Booking Fees by Selling Directly On-line	
	2.7.6	Adoption of E-Commerce to Reduce Booking Fees	
	2.7.7	E-Commerce Benefits to Customers	
	2.7.8	Types of Products are Most Likely to be Purchased Online	
7	2.7.9	Types of Consumers which are most Likely to Purchase Online41	
4	2.7.10	Online Purchasing Behaviour and Socio-Demographic Factors41	
*	2.7.11	Online Purchasing Behaviour of Passengers42	
	2.7.12	Online Consumer Sales	
	<b>6</b>   P a	g e	

2.8	Conclusion45	
3.0	METHODOLOGY47	
3.1	Introduction	
3.2	Research Philosophy	
3.3	Epistemology47	
3.4	Positivism47	
3.5	Realism48	
3.6	Interpretivism48	
3.7	Research Approach49	
3.8	Research Strategy50	
3.9	Research Choices	
3.10	Time Horizon50	
3.11	Data Generation Methods51	
3.12	Data Analysis51	
3.13	Reliability, Generalisation and Validity52	
3.14	Ethics	
3.15	Limitations52	
3.16	Conclusions52	
4.0	DATA ANALYSIS INTRODUCTION	
4.1	Introduction53	
4.2	Air Botswana Operating Environment54	
4.3	Summary Findings55	
7   P.a	g e	

. . . . .

\*:

4.4	Financial Accounting Data55
4.5	Operating Cost Summary55
4.5.1	Direct Operating Expenses (appendix 2(a))
4.5.2	Indirect Operating Expenses
4.6	Net Commissions59
4.7	Distribution Costs
4.8	Flown Revenue and Booking Expenses61
4.9	Travel Agent Revenue vs. Booking Fees63
4.10	BP Office Revenue vs. Booking Expenses64
4.11	Air Botswana Online Revenue vs Booking Fees64
4.12	Summary of Findings
4.13	Customer Satisfaction Survey
4.14	Demographics in the Survey
4.15	Survey Results
4.16	Summary of Findings
5.0	CONCLUSIONS AND RECOMMENDATIONS
5.1	Introduction
5.2	Conclusion
5.3	Recommendations
5.4	Limitations of the Study and Recommendations for Further Research 80
60	Pibliography 81

# **Table of Illustrations**

Figure 1 Airline Cost Model	3
Figure 2 Direct Operating Costs	3
Figure 3 Indirect Operating Costs	)
Figure 4 Total Airline Operating Costs	)
Figure 5 Cost Distribution 2000-200331	
Figure 6 World Airline Net Profits 1989-200632	
Figure 7 Net Commission payments 1996-2006	i
Figure 8 Ticketing, Sales and Promotion expense as a percentage of Total	
Operating expenses for US major Carriers 1990-2001	•
Figure 9 Ticketing, Sales and Promotion expense per dollar Passenger Revenue	
for US Major Carriers and GDS Booking Fee trend 1995-200238	
Figure 10: Internet Bookings in the US Airline Industry for the past five years and	
estimation of the next two years	)
Figure 11 On-line Consumer Sales- 2001	}
Figure 12 Saunders research 'onion'	7
Figure 13 Air Botswana Direct Operating Expenses	6
Figure 14 Air Botswana Indirect Operating Expenses5	7
Figure 15 Air Botswana Total Operating Expenses5	8
Figure 16 Air Botswana Net Commission Expenses5	9
Figure 17 Air Botswana Product Distribution Expenses6	0
Figure 18 Air Botswana Product Distribution Profile	0
Figure 19 Ticket, Sales and Promotion Expense trend (2008-2011) and	
Booking fee trend (April 2010-March 2011)6	2
Figure 20 Air Botswana Revenues & Booking Fees per Sales Channel6	2
Figure 21 Travel Agent Revenue vs. Booking Expenses6	3
Figure 22 Air Botswana Sales Office Revenue vs. Booking Expenses	4
Figure 23 Air Botswana Online Revenue Vs. Booking Expenses6	5
Figure 24 Age of Respondents6	7

Figure 25 Gender of Respondents	68
Figure 26 Profession of Respondents	68
Figure 27 Education Level	69
Figure 28 Purpose of Travel	70
Figure 29 Payment Method	71
Figure 30 Purchase Point	71
Figure 31 Type of User on Website	72
Figure 32 Reasons for Ticket Purchase	73
Figure 33 Future Improvements	74

# **Table of Appendices**

Appendix 1 Access approval letter from the Finance Director of Air Botswana	88
Appendix 2(a) Direct Operating Expenses	89
Appendix 2(b) Indirect Operating Expenses	90
Appendix 3(a) Flown Sales by Ticketing Office Report	91
Appendix 3(b) GDS Costs	92
Appendix 4 Customer Survey	93
Appendix 5 Passenger Name Record Data	94
Appendix 6 Market Share data	95

#### CHAPTER 1

#### 1.0 INTRODUCTION

#### 1.1 Background

Air Botswana Corporation was established through an Act of Parliament in 1988 (The Air Botswana Act, 1988) as a parastatal organisation, wholly owned by government of Botswana. One of its main objectives of the Airline is to provide the general public with air transport services for both passenger and cargo operations. The other main objective is to make a profit. It was registered as a full scheduled carrier and active member of the International Air Transport Association (IATA) in the same year. The Government department responsible for this Airline is the Ministry of Transport, and it appoints the board of the airline, which also comprises of the Chief Executive in charge of running the entity (The Air Botswana Act, 1988). The Airline currently operates a fleet of three small ATR42-500 turbo-prop aircraft. The Airline has recently acquired two bigger ATR70-500 turbo-prop Aircrafts to replace an old BAE-146 regional jet. Currently, Airline services regional and domestic routes. Regional routes include Johannesburg, Harare and Lusaka (Kgotla, 2009-10).



During its years of operation the Airline has experienced many operational difficulties which have led to financial losses (Kgotla, 2003-04). The losses occurred in an environment that was particularly beneficial to Air Botswana, as a 'national flag carrier.' The Airline was protected from domestic and international competition, through restrictive laws and bilateral agreements between aviation regulators of neighbouring countries, especially South Africa (Kaboyakgosi, 2003: 23).

Entry into scheduled domestic air transport services is restricted to Air Botswana. Cross border supply of air transport are also regulated by bilateral agreements. Under such agreements regulating countries designate a carrier or carrier that may operate between them. The current agreement, including the international, only allows Air Botswana and South African Airways (Kaboyakgosi, 2003: 18).

The luggage, freight loading and unloading market is also restricted to Air Botswana (Kaboyakgosi, 2003: 18). As a result of these losses, government has, through a number of initiatives tried to rescue the Airline but nothing positive has come up from these efforts. These efforts include, capital injection into the corporation, restructuring, staff retrenchments and privatisation. As a result of these changes, the airline has been through many destabilising phases, ranging from being a domestic carrier growing to regional carrier status, serving the whole of the southern African region and later downsizing to serve only four domestic and two regional airports (Barrowclough, 2008:63).

Efforts to privatise the Airline failed for a number of reasons, but were mainly due to the unviability of the airline for prospective buyers and clear dissenting views within government, parliament and cabinet on what should be done with the 'National Carrier.' When the last privatisation initiative failed in early 2008, the government took a decision to have an external entity run the affairs of the airline, through a 'management contract.' The management contractor will be tasked with ensuring that the airline is ready for privatisation in the next three years. This will entail making the airline profitable, through a number of Strategic initiatives including, re-fleeting and staff rationalisation (Bopa, 2009)

Air Botswana is currently at the crossroads of its existence. Even though the Airline posted profits for the financial year 2007/2008, there remain great internal and external operational challenges. The airline is faced with very high operating costs that have resulted in operational losses in subsequent years and prevented the airline from being able to effectively compete in its traditional markets. The failure of the airline to adequately address the operational challenges it faces can be directly attributed to the failure of its owners, Government, to decide what to do with airline, and as a consequence, the organisation has been in a perpetual state of 'limbo'. In this state, the Airline has failed to address operational issues in order to prepare it for new challenges in the market place, which could lead to its demise if not adequately addressed (Kaboyakgosi, 2003: 10). These challenges include, the deregulation of international and local skies, global alliances, fluctuating fuel prices, declining passenger numbers, electronic commerce, privatisation and the advent of low-cost carriers (Barrowclough, 2008:83). These developments taking place are not unique to the national carrier though, as in general the industry is inherently unstable because it is an

industry which is constantly buffeted by new developments and constraints-regulatory, operational and technological (Doganis 2001: 244-245).

These developments will dramatically alter the way in which Airlines, including Air Botswana are operated and managed. They have necessitated the need for airlines to develop new policies and strategies to effectively compete in the market place for passengers who have more choice between the traditional Airlines and new entrants in the market. These carriers utilise the internet to reduce cost, and gain competitive advantage over their rivals. According to Williams (2002, p.45.48), the cosy world of the past in which carries were protected from the onslaught of competition by the actions regulators has been replaced by one which each party has to ensure its own survival. This is the situation in which Airlines, like Air Botswana, now find themselves in, where new entrants, including, South African Airways, are now competing heavily in its traditional market.

The Airline traditionally sells its seat inventory via its own sales offices, and general sales agents who are paid commission. Due to the Airlines size, and nature of operations, it has been the belief of management over the years that in order to effectively compete and have presence in international markets, the airline must pay a premium in commission fees to travel agents in order for them to favour Air Botswana over its competitors on the same routes. Whilst many carriers, including those in sub-Saharan Africa are moving away from paying travel agent commission fees and adopting new distribution strategies that focus more on directly selling to consumers to avoid Global Distribution booking fees, Air Botswana has kept its commission fee structure in place, whilst signing up more sales agents, and increasing its presence in global distribution systems (Air Botswana Marketing and Sales Report, 2010).

This strategy has contributed to an already large cost burden which the airline is incurring due to high fuel prices, and aircraft leasing costs. The Airline utilises a cost-plus model for pricing local fares, the consequences of which, are that it gives the airline no incentive to cut operating costs. But the threat of new entrants into its markets, who are competitive in terms of fares, will force it look at its cost pressures in order to derive savings and to be price competitive in the market (Air Botswana Marketing and Sales Report, Anon., 2010).

In January 2010, the airline launched its own e-Commerce website, with the intention to sell a portion of its seat inventory directly to the consumer (The Gazette, 2010). In 2011, the

airline also developed a new business strategy for the years 2011-2014. The main objectives of the airline are to be a strong regional player, with the capability of operating long-haul routes. These objectives including the launch of the e-Commerce website are a clear indication that the airline has ambitions to be a regional and global player in the market (Air Botswana Corporate Strategy, Anon., 2011).

#### 1.2 Statement of the Problem

The aim of the study is to examine the adoption of e-Commerce as a cost-effective distribution channel for Air Botswana in order to increase awareness of the technology's benefits. Additionally, it is envisaged that the highlighted benefits of e-Commerce will convince the airline to consider adapting it as its main distribution channel, to manage increasing selling expenses and increase customer convenience.

Several authors, researchers and think tanks have cited e-Commerce and other internet driven technologies as being the innovations required to help airlines manage costs and improve the customer value proposition. (McIvor, et al. (2003); General Accounting Office Report, 2003:15). The United States General Accounting Office (2003:18) argues that although distribution costs represent relatively small amounts of an airline's total costs (labour and fuel represent nearly half an airline's expenses), ensuring a competitive distribution system is important to the industry because each time a consumer purchases an airline ticket through a travel agent, the global distribution system used by the travel agent charges the airline a set booking fee.

A large number of legacy carriers are still overly reliant on Global Distribution systems for the sale of a majority of their seat inventory. The over reliance on GDSs' for airline inventory sales has permitted GDSs' to raise the booking fees they charge airlines by nearly 7 % per annum between 1990 and 2000(McIvor, et al. (2003). These high booking fees contribute to already high costs airlines incur from other operations resulting in losses for most including Air Botswana (O'Conner, 2002).

As a consequence airlines have been at the forefront of innovating new technologies to sell their inventory on-line directly, bypassing the GDSs' and also saving on agent commission expenses (Global Aviation Associates, 2002). Buhalis (2002) also argues that the emergence of the internet in the mid-1990s as well as the development of intranets and extranets forced airlines to refocus their strategy on technological innovations in order to

enhance their competitiveness. Airlines identified the Internet as a major opportunity to tackle distribution costs and to reengineer the structure of the industry. Former British Airways CEO, Rod Eddington *cited* in Buhalis (2002) admitted that BA spent £1.1 billion on distribution in 2001 and that was their third most significant expense after labour and fuel.

E-commerce helps airlines to limit the number of their sales offices and to reduce their dependency on Computer Reservation Systems (CRS) and sales agents. In Europe, United States and Asia, low cost and legacy carriers have adapted their product distribution to sell a majority of their inventory directly online using their own websites (Yang, 2001).

O'Connor (2002) states that the distribution of airline seats, traditionally dominated by travel agents, is rapidly changing as traditional and online agencies are increasingly threatened by the growth in direct-to-consumer airline websites, reduced or capped commission levels, and heightened industry cooperation among airlines. The utilisation of direct to consumer airline websites as a selling channel for airlines not only offers convenience for customers but provides cost savings by bypassing global distribution systems and their fees and encouraging passengers to book via Internet sites.

Despite their huge potential in reducing product distribution fees for Airlines, African Airlines including Air Botswana have not fully embraced e-commerce as a primary channel for selling their inventory, choosing to still rely on GDSs to achieve market presence(The ICAO Secretariat, 2009). Additionally Air Botswana in particular has no formalised product distribution strategy (Air Botswana Marketing and Sales Report, Anon., 2010). The lack of a clearly defined product distribution strategy makes it impossible for the airline to control its cost of sales which are very high. These occurrences, compounded by high direct operating costs which include fuel, leasing costs etc. have rendered the business unprofitable in the last two financial periods (Air Botswana Corporate Strategy, Anon., 2011).

The executive management should therefore seriously consider reviewing Air Botswana's current business operations with the view to formulating a new product distribution strategy, which will not only increase its presence in targeted markets, but also place it in a new sustainable competitive position in the global air transport market.

It is in this context that the researcher intends to investigate if an African airline (Air Botswana), given the environmental and technological challenges it faces, can benefit from

the adoption of e-Commerce as the main channel in its product distribution strategy. The benefits will come from possible cost savings to be made by adopting such a model, and how its adoption can place it in a sustainable competitive platform. Lastly, the benefits will also come from improvements in customer satisfaction borne from the adoption of an e-Commerce driven distribution strategy.

#### 1.3 AIM OF THE STUDY

The aim of the study is to examine the adoption of e-Commerce as a cost-effective distribution channel for Air Botswana.

#### 1.4 OBJECTIVES OF THE STUDY

- To assess current environmental factors which are affecting the airline and the position of the airline within the market.
- · To analyse and assess the following factors in the airline industry,
  - Direct Cost and Indirect costs of Airlines and how they affect the fare charged to customers.
  - ✓ The impact of e-Commerce on airline distribution strategies,
  - ✓ The market potential of an e-Commerce driven product distribution strategy.
- To recommend the ideal distribution channel for the airline.

The success of the above proposed research is largely influenced by how effectively the existing data from both internal and external sources can be gathered, analysed and evaluated to give a true representation of the facts on ground with regard to Air Botswana's operating costs and how the adoption of e-Commerce can reduce them. These include data generated from airline internal resources and other industry related sources such as International Air Transport Association data resources and government departments.

#### 1.5 RESEARCH QUESTIONS

- What competitive, political and social environment is Air Botswana operating and competing in?
- Are Air Botswana's Direct and Indirect Costs in-line with industry standards i.e.? What is the trend of the distribution costs at Air Botswana?
- Determine the booking fees of each selling office(Online, Travel Agents, Air Botswana Sales Offices)

- Are Air Botswana's sales offices (Online, Travel Agents, Air Botswana Sales Offices)
   financially healthy i.e. are booking fees higher or lower than revenues generated.
- Would consumers rather buy tickets online or in physical sales channels? What are their concerns regarding buying online?

#### 1.6 SIGNIFICANCE OF THE STUDY

The results of this research will be used to determine whether e-Commerce is a viable route for the Air Botswana to take in order to manage and/or reduce operating cost, effectively compete in the market and improve the passenger travel experience.

The researcher would like to state that all the modules of this course have been very important towards the development on new knowledge through this research project. It is believed that this study would shed some light of knowledge into Air Botswana's business operations, which will motivate new global strategic management thinking towards Air Botswana's role, both from organisational and national perspectives.

The researcher is currently heading the airline's Information Technology department. With an Information Technology background, the course has greatly enriched the researcher's strategic thinking skills, which has motivated this choice of research topic. This is evidenced by the fact that, the researcher has found it necessary to go an extra mile outside his field and conduct this study to develop a new knowledge necessary to strategically reposition Air Botswana to face the onslaught of competition coming its way. It is believed that this research will also contribute significantly to Air Botswana's strategic objective of rationalising costs to become a 'lean' focused entity in market.

#### 1.7 CONCLUSION

This chapter introduced the problem statement, the aim and objectives of the research. The problem statement highlighted the specific area in which e-Commerce adoption can make a contribution to reducing costs and improving passenger satisfaction at Air Botswana.

#### **CHAPTER 2**

# 2.0 LITERATURE REVIEW

#### 2.1 Introduction

The international airline industry provides service to virtually every corner of the globe, and has been an integral part of the creation of a global economy. The airline industry itself is a major economic force, both in terms of its own operations and its impacts on related industries such as commerce and tourism etc. (Kaboyakgosi, 2003). This sentiment holds true for Air Botswana, the national airline of the Botswana government. Air Botswana's strategic mission is to be the 'airline of first choice' (Air Botswana Corporate Strategy, Anon., 2011). After years in the wildness, and under threat of privatisation, the Government and sole owner of Air Botswana has decided to avail support (in the form of funds or guarantee) to re-fleet and re-structure the airline, in readiness for new competition that the airline will face in the future, with the recent de-regulation of the local skies, and future de-regulation of international skies (Mguni, 2010). Additionally the Government intends to support the airline in its strategic intent to develop new regional routes in the financial year 2011-12, and introduce international routes before 2014. The Government of Botswana's support is largely due to the realisation that Air Botswana's regional and global reach, can be leveraged to promote tourism and commerce in the country (Air Botswana Corporate Strategy, Anon,. 2011).

In order to achieve the above objectives, the airline is faced with addressing two important areas of the business, cost management and yield management, to effectively compete in the chosen markets. In terms of cost management the airline is faced with high direct operating expenses, including Lease fees. It is also faced with high indirect operating costs, primarily product distribution fees. Additionally, the area of yield management, including increasing fares to off-set costs, and/or selling high yield fares has been largely overlooked by the Airlines principals. The inability to address and manage these two crucial aspects of the business has resulted in substantial losses for the airline for the last couple of years (Air Botswana Corporate Strategy, Anon, 2011).

In view of the above ambitions of the airline, it is ideal to conduct a literature review on different sources in the areas of airline cost management, product distribution in airlines, global distribution systems, pricing and yield management in airlines, journals articles and different internet resources such as the IATA websites etc. Search engines words used to

locate the electronic resources using internet includes; Air Botswana, Global Distribution Systems (GDS), air transport, product distribution, global distribution, yield management, cost model in airlines. These will lead to some of the sources in the bibliography section of this report.

#### 2.2 Air Botswana Operations and Environment

In order to adequately research whether the airline can benefit from the adoption of e-Commerce; it is prudent to reflect on Air Botswana's current operations and the environment within which it operates in. An insight into what factors, both internal and external, contribute to the successful operation of an airline will help the research appreciate the importance of adopting e-Commerce in this industry. To achieve this objective it is necessary to critically review a report formulated in 2003 from Botswana Institute for Development Policy Analysis by Mr Gape Kaboyakgosi on Air and road transport in Botswana (Kaboyakgosi, 2003). The objective of the report was to make an assessment of the transport sector in Botswana by analysing policy and performance in the air and road sector. Among other key objectives of the study, was the identification of reform needs for the two sectors for the purposes of assisting policy makers of SADC countries in deciding on possible areas of liberalization and harmonization of regional transport policies and strategies. With particular reference to the air transport policy, the study highlights that;

#### a) Air transport is tightly regulated in Botswana.

#### Market Access:

In order for airlines to operate scheduled flights into Botswana, the government requires first to enter into a bilateral agreement between itself and the airlines origin government. Air Botswana is also the only airline allowed to operate domestic scheduled flights within the country (Kaboyakgosi, 2003).

#### b) Price Regulation

The Government of Botswana regulates ticket fares on all domestic routes. For international flights, airlines price based on market forces, utilising IATA standard fares. The Government also requires that the Airline consult it accordingly before making any policy or fare changes. The requirement also stipulates that fares must be published in the Government Newsletter (Kaboyakgosi, 2003).

#### c) Subsidies and Investments.

Kaboyakgos (2003:10) states that the government has supported the airline when it has incurred financial losses. An illustration of this occurrence was in 1994 when, Government converted the airlines accumulated losses into equity. In 2009 Government also financed the purchase of two ART72 aircraft for the airline at the cost of P260million (Kgotla, 2009:10).

The study also highlights changes that are taking place within the airline industry which the Government of Botswana and Air Botswana must address. The Botswana Government is party to two multilateral agreements that will affect its air transport sector.

The Botswana government signed the SADC Protocol on Transport and Meteorology agreement. In terms of air transport, one of its primary objectives is to "ensure global competiveness of regional air services in the global context, by overcoming the constraints of small national markets, market restrictions and the small size of some SADC airlines." (Kaboyakgosi, 2003)

The Yamoussoukro Decision, which is an Open Skies policy for Africa calls for all African Airlines to be allowed to operate scheduled flights over and land in any territory of member states without the requirement for bilateral agreements. The aim of the agreement is to increase the market reach of airlines within the African continent (Ricover and Ndhlovu, 2009).

While the government of Botswana has not fully implemented any of the above agreements, it is seeking to de-regulate local skies, in order to allow other carriers to compete with Air Botswana on domestic routes first (BEAC, 2008). But Kaboyagosi (2003) reiterates that cross-border flights will still be controlled via bilateral agreements and operated by only one carrier, Air Botswana.

#### 2.3 Airfares and Business model framework in regulated and unregulated markets.

In order to appreciate Air Botswana's current operations and financial state, it is necessary to get an appreciation of how fares are formulated, and how they contribute to profitability. It is also necessary to understand and appreciate the different factors that influence how fares

are set at the airline, whether or not they contribute to profitability. Lastly it is also prudent to investigate the Airlines operating model, and ascertain if it factors on the airlines profitability and competiveness. It is in this regard that it is necessary to review the report by Knorr (2004); the objective of the report was to evaluate legacy carrier pricing trends, before and after deregulation of skies and how it has influenced many into bankruptcy. The report further assess how many legacy carriers are now systematically adopting more simpler innovative pricing models, and business models that Low Cost Carriers have utilised to achieve financial success.

#### 2.3.1 Pricing-How it has been neglected by the airline industry.

Knorr (2004) argues that innovative pricing, as one of four components of the product mix has been largely ignored by businesses in their quest to achieve sustainable competitive advantage over their rivals. As a result of this neglect, he attests that airlines have largely kept traditional approaches to pricing- such as cost-plus pricing or simply following prices set by the competition. According to the author, price is the only tool in the marketing mix which generates revenues directly, whereas others initially cause costs to rise. He further explains that there are only three profit drivers available for management to exploit, being cost, volume and price. Whilst cost can be reduced, it is not that possible to achieve optimal level due to pressures related employee and union resistance. Increases in volumes are also nearly impossible to achieve in saturated markets, leaving price as the only avenue that can be exploited to achieve profits (Knorr, 2004).

#### 2.3.2 The impact of regulation on pricing strategies

According to Knorr (2004:6-7), under regulation of skies, airlines could not set ticket prices without first seeking government approval. And usually fares were set at Cost-plus basis, guaranteeing a minimum return for the airline. As a result of this regulation, the regulation produced two adverse consequences- airlines had no incentive to reduce cost by streamlining operations and increasing productivity. On the other hand fare levels were very high, resulting in low load-factors.

#### 2.3.3 Traditional Carriers response to De-regulation- Yield Management

Holloway (2003) contends that de-regulation allowed airlines to set their own prices for the first time. De-regulation also brought about a concept called Yield Management, which was

used by the airlines to maximise profits (yields) by allocating seats, a perishable commodity in limited supply, among differentiated customers.

However in order to make gains from effective Yield Management, airlines must use it as part of a comprehensive marketing strategy based upon the following elements,

- Price discrimination (Fare Classes) based on product differentiation by offering passengers on-board and ground services including frequent flier bonus miles etc.
- Inventory and availability control systems to forecast passenger demand patterns.
- Connection to global distribution systems to communicate seat inventory to intermediaries (travel agents) and consumers (Holloway, 2003)

Knorr (2004) concludes by noting however that traditional carriers are hampered in effectively leveraging Yield Management to maximise profits because of the nature of their operations. They operate a "Hub and Spoke network", which entails operating a number of routes, with low passenger numbers. These routes would not be profitable if operated directly but by flying passengers to a hub(main Airport) and then connecting them on another flights, optimal passenger numbers can be achieved to fly on-ward, enabling the airline to achieve profits. This operation has, however its disadvantages, including

- Low average utilisation of aircraft due to long waiting times for transfer passengers, which translates into higher cost per seat miles as the aircraft and crew productivity are sub-optimal.
- High transaction costs due to complexity of capacity planning, crew roistering, flight scheduling and ground-handling
- Complex fare structure with significant cross-subsidization among passenger classes.

# 2.4 The emergence of a new business model, and pricing-Low Cost Carriers 2.4.1 General Approach

Low Cost Carriers (L.CCs) however utilise a different business model/network approach from traditional carriers, which according to Knorr (2004) translates into cost per seat mile that in comparison with traditional airlines like Lufthansa or Delta Airlines, are 30-50% lower.

LCCs offer non-stop point-to-point services to and from uncongested airports instead
of connecting flight via a hub airport. Passengers who wish to connect to another
flight have to claim and check-in their baggage for the next leg of their itinerary

- separately. This process, results in shorter turn-around and ground times for the aircraft and eventually in a higher daily aircraft and crew utilization.
- Staff productivity is higher than traditional carriers due to outsourcing, longer daily, monthly and annual working hours.
- With LCCs the fare only includes basic transportation in a single class cabin.
   Passengers who wish to consume food or beverages have to purchase them at an extra cost or bring their own meals.
- Costly frills like advance seat reservation, frequent flyer lounges or inter-lining agreements with other carriers are not offered.
- Distribution costs are minimised by bypassing computer-reservation systems and travel agents through the direct selling of seat inventory via the internet and call centres, and the issuing of paper-less tickets.

#### 2.4.2 Pricing Strategy of LCCs

Although LCCs also try to maximise yields, they differ from traditional carriers in terms of pricing strategy. Most importantly there is no cross-subsidization amongst routes. Every single route they operate in must be profitable or else it is dropped. Fare segmentation only occurs based on two variables,

- The date of booking, with the lowest fares generally available weeks before the scheduled date of departure. Those who book a few days before the date of departure are charged more
- The effective demand for a specific flight; flights at off-peak times are offered at lower prices than those during peaks times(Knorr, 2004).

Knorr (2004) also highlights that fares are usually sold on a one-way basis, with very few restrictions imposed as opposed to traditional carriers. In order to keep transaction cost low, LCCs also a small number of fare classes as opposed to traditional carriers. Finally LCCs cap their highest fare categories, thereby insuring they undercut their traditional competitors' unrestricted one-way fares.

#### 2.4.3 Airline Business Strategies

Knorr (2004) also assets that for airline pricing strategies to work they must be complemented by an effective business model, hub and spoke or low cost carrier, they cannot have a hybrid of the two. Knorr (2004) describes that, when deregulation took place,

and low cost carriers started competition with traditional carriers, airlines such as British Airways, Delta Airlines and countless others, tried to imitate the low cost carrier model in order to put up a fight. They reacted with a mix of lower fares, relaxation of booking and travelling restrictions and others suspended on-board meals and beverages in economy class etc. Others went further and set up Low Cost Carrier subsidiaries. However both strategies have failed due to the following reasons,

- Traditional carriers have found it difficult to undercut Low Cost Carrier fares, whilst at same time operating at a profit. This is due to their high cost base, which results in a higher cost per seat mile.
- Traditional airlines have over the years advertised themselves as "Quality" or "Full Service" carriers. Consequently their passengers have become conditioned to expect a minimum standard with respect to on-board service and other "frills", even when travelling on heavily discounted Economy Class Tickets. As a result, traditional carriers have been rated less favourably by disappointed customers than competing Low Cost Carriers; thereby damaging their brands.
- On short-haul flights operated by Low Cost Carriers, most "frills" offered by traditional
  carriers have proved to be of no true value to consumers, at least with respect to
  extremely high fares they were charged in return. Even traditional carriers high value
  customers, business travellers, are beginning to populate Low Cost Carriers' flights.

#### 2.5 Cost Structure of Air Botswana

#### 2.5.1 Background Information

Knorr (2004) states that airlines can achieve profitability by manipulating the following three profit drivers; cost, volume and price. Since Air Botswana operates in a government regulated market it cannot effectively utilise pricing strategies to increase profits. It cannot also increase volumes adequately due to equipment constraints and increased competition in its market. As result of regulation on price and the implementation of cost-plus pricing, airlines have had no incentive to reduce cost by streamlining operations and increasing productivity (Kaboyakgosi, 2003: 23).

It is necessary to analyse airlines costs to get a clear understanding of how an airline operates, how these costs are factored into airfares, and how they can be reduced to reduce airfares and improve competitive advantage. To achieve this, in is necessary to conduct a

literature review on different sources in the areas of airline operating costs in order to understand the role of costs and how they affect the price of airfares.

#### 2.5.2 Airline Cost Model

#### a) Background Information:

Doganis (1989:16) states that the costing of an airline service is an essential input to many decisions taken by airline managers, as to whether to run a service along a given route or whether the service will be making money or not. The way the costs are broken down and categorized will depend on the purpose for which they are being used.

#### b) Description Of Airline Cost Model

The operating costs of airlines are divided into operating and non-operating items, to distinguish the latter as the costs and revenues not directly associated with airlines. Own air services. The operating items are then further divided into direct and indirect operating costs, where the former include all costs that are dependent on the type of aircraft being operated and the latter, all the costs that have to be incurred irrespective of the aircraft type (Ssamula and Del Mistro, 2004). Refer to Figure 1 below:

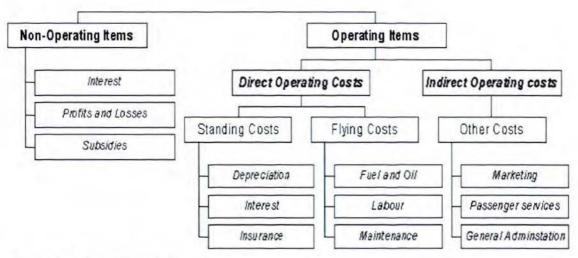


Figure 1 Airline Cost Model

Source: Ssamula and Del Mistro, 2004

#### Standing Costs

#### Depreciation

According to Ssamula and Del Mistro (2004:34) depreciation is defined as the charge an airline incurs for the expense for the flight equipment losing its value over time.

#### Interest Rate

Interest rate is defined as the cost of borrowing money; it is given as a percentage value that is applied to the outstanding loan. Because the airline industry is a highly capital intensive industry, it means this component should be included. The interest rate is set depending on the economic conditions i.e. Inflation; bank lending rates, forex rates, etc. in the country where the loan is acquired (Ssamula and Del Mistro 2004).

#### Insurance

Insurance is an annual amount of money paid each year, in case of any risks that may be incurred to the aircraft and other assets owned by the airline during their useful life. These include fire, hijacking, and theft etc. (Doganis, 2006).

#### Flying Costs- Direct Operating Costs

#### Fuel and Oil

Doganis (2006) states fuel as another major element in the cost of flight operations The amount of fuel used up at the block time, is given in terms of volume (US gal/hr.) and varies at climbing, descending and cruising.

#### Maintenance

Maintenance includes labour and material costs for inspection, servicing, and overhaul of the airframe and its accessories, engines, propellers, instruments, radio, etc. The authors further state that the relationship between the costs of components from Department of Transport (US) (Kane, 1996) and ICAO (Doganis, 1989) reflects that insurance and maintenance amount to an average of about 2,5% and 9,8% respectively of the total operating cost of an airline service.

#### Crew Costs

The flight crew costs include all costs associated with the flight and cabin crew including allowances, pensions, salaries, etc. They usually are the largest element in operating

expenses (Ssamula and Del Mistro, 2004). Refer to the Figure below of direct operating costs.

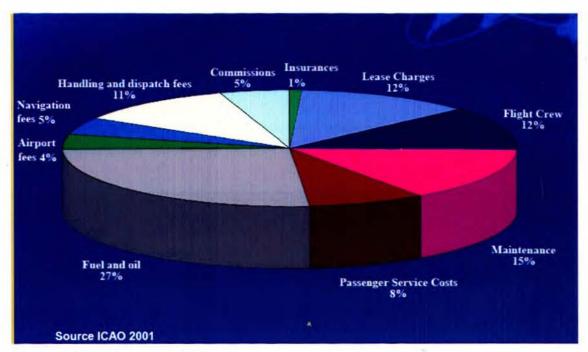


Figure 2: Direct Operating Costs

Source: (International Civil Aviation Organisation, 2001 Cited in Horder, 2003, p.16)

#### Other Costs-Indirect Operating Costs

#### Landing and Parking Fees

Stratford (1973), states that these fees are included as an operating expense and are also of significance in actual and comparative aircraft cost estimates. Landing fees are based on the gross weight of the aircraft, but a number of exceptions to this exist and international flights and short sector flights are in some cases liable to special rates for landing fees. Parking fees are also charged depending on the weight of the aircraft per 24-hour period, after a specific time period.

#### Passenger Fees

Doganis (2006) states that airport charges include a passenger charge for handling relating to the number of passengers disembarking from an aircraft. Most airports presently collect a fee directly from the passengers, termed the airport tax and are included in the fare paid by the passengers.

#### Ticketing, Sales and Commission

Doganis (1989) states that sales, ticketing and promotion charges are those costs incurred in ticketing sales and promotion activities as well as all office and accommodation costs arising throughout the process. LaCroix, Sumner (1984) shows that the percentage of costs that are allocated to ticketing, sales and commissions, amount to 15, 5% of indirect operating cost.

#### General Administration

Doganis (1989) states that general administration costs contribute 6.1% of airline indirect operating costs. Refer to the figure below of indirect costs.

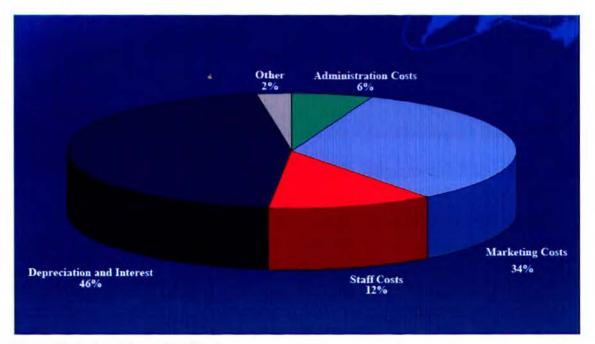


Figure 3: Indirect Operating Costs

Source: (SH & E International Air Transport Consultancy, 2003 Cited in Horder, 2003, p.17)

#### **Total Airline Operating Costs**

The Below figure depicts total operating costs of a typical airline.

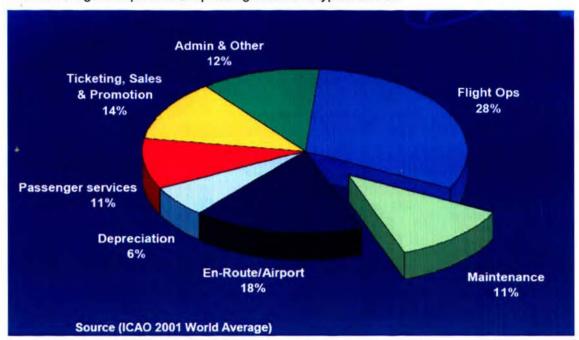


Figure 4: Total Airline Operating Costs
Source: (International Civil Aviation Organisation, 2001 *Cited* in Horder, 2003, p.6)

#### 2.5.3 Trends in Airline Cost Distribution.

According to the Association of European Airlines Report (2004) between 2000 and 2003 cost distribution between Direct Operating Costs and Indirect operating Costs remained more-or-less similar as Fuel and oil, Maintenance and overhaul and flight deck crew costs were still the highest direct costs. While the Ticketing Sales and Promotion had the biggest share of indirect cost. Refer to the Figure below of Cost Distribution trends between 2000 and 2003.

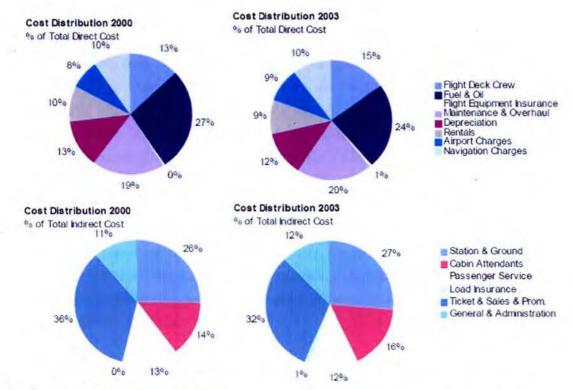


Figure 5: Cost Distribution 2000-2003

**Source:** (Association of European Airlines, 2004 *Cited* in AEA Operating Cost Summary Report, 2004, p.10)

#### 2.6 Airline Performance

The airline industry has been in a financial crisis for much of this new century. The problems that began with the economic downturn at the beginning of 2001 reached almost catastrophic proportions after the terror attacks of September 11, 2001(Belobaba, 2005). According Air Transport Association of America (2007), the airline industry posted cumulative net losses of over \$40 billion from 2001 to 2005, and only in 2006 was it able to return to the black with a total net profit of just over \$3 billion.

Belobaba (2005) also states that the 9/11 events resulted in immediate layoffs and cutbacks of almost 20% in total system capacity, in anticipation of the inevitable decline in passenger traffic due to concerns about the safety of air travel.

However, the airlines were in serious trouble well before 9/11, as the start of an economic downturn already had negatively affected the volume of business travel and average fares. At the same time, airline labour costs and fuel prices were increasing yearly (Massachusetts Institute of Technology, 2005).

According the Airline Industry Consortium (2005), the ability of the network airlines to generate adequate revenues to cover their operating costs was severely impacted by major shifts in passenger choice behaviour, particularly on the part of business travellers. The overall volume of business air travel demand decreased in early 2001 due to the overall economic downturn. Business air travel was further affected by the increased "hassle factor" and greater uncertainty in passenger processing times caused by increased security requirements due to the 9/11 event. The combination of reduced business travel budgets and substantial cutbacks in airline passenger service quality led more business travellers' to look for alternatives to paying premium air fares – teleconferencing and other travel substitutes, alternative travel modes, and especially, low-fare airlines for business travel. As a result, total US airline industry passenger revenues dropped by over 20% between 2000 and 2002, and were still 10% below 2000 levels in 2004, as shown in Figure (Massachusetts Institute of Technology, 2005).

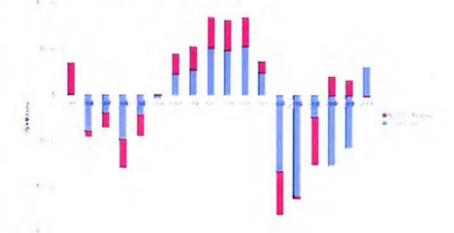


Figure 6: World Airline Net Profits 1989-2006

Source: (Airline Industry Consortium, 2005 *Cited* in Airline Industry Overview, 2005)

The growth of low-fare air travel options combined with a reduced willingness on the part of business travellers to pay the higher air fares charged by traditional carriers played a major role in contributing to the poor financial performance of traditional network airlines, both in the US and in many other countries (Airline Industry Consortium 2005).

European Airlines did not fare better. According to the Association of European Airlines Report (2004), despite cost reductions and more efficient use of resources, the 25 participating member airlines accumulated a loss (after interest) of almost USD 900 Million.

For the year under review, the (Association of European Airlines Report 2004) reported that apart from decreasing yields and passenger numbers, airline operating costs were generally still too high and accounted to the USD 900 Million in losses for the carriers. Fuel & Oil (37%), 'Maintenance & Overhaul (9%) and Flight Deck Crew (13%) was the main cost items in the direct costs. Tickets & Sales and Promotion (36%) took the biggest share of indirect costs. By 2007 Fuel & Oil expenses made up 22.7% of total operating expenses, confirming it as the biggest expense in airline operations (AEA Report, 2007).

As a conclusion, even though airlines encountered revenue growth problems between 2000-2006 due to low yields and declining passenger numbers due to the 9/11 tragedy, it became clear that they also had fundamental operating cost and productivity problems. In order to achieve sustained competitiveness and profitability, airlines had to device new ways of doing business, in order to reduce those costs which they could manage.

## 2.7 AIRLINE COST CUTTING INITIATIVES AND E-COMMERCE

### 2.7.1 Airline Cost Cutting Initiatives

Drawing further from the above analysis of airline costs, it is apparent that cost pressures are a major factor in airline profitability and their ability to achieve sustainable competitive advantage over their rivals. It is thus necessary to conduct a further critical review on different sources in the areas of airline cost cutting measures, to get an understanding of strategies aimed at achieving savings in airline operations.

#### 2.7.2 Ticket, Sales and Distribution Cost

As discussed in the analysis above, airlines face consumer pressure to lower fares while struggling to control costs. This situation is compounded further due to loses that are being realised by airlines around the world. According to Global Aviation Associates (2002) Product distribution is one area that airlines are focusing on in order to reduce operating expenses. Yang (2001) states that direct operating costs are more or less "fixed" and there is not much an airline can do to cut them down. So most airlines would focus their cost-saving efforts on reducing indirect costs. A major part of indirect costs, are ticketing, sales and promotion costs which comprise of distribution costs, and the following areas,

- Reservation system cost
- Sales offices (stations) cost
- · Advertising and sales promotion cost
- · Agent fees and commissions
- Booking fees

#### 2.7.3 Background of Distribution Costs.

The distribution of airline seats has been traditionally dominated by travel agents, but this state of affairs has been rapidly changing due to the adoption of new technology by the travel industry especially airlines. O'Connor (2002) states that, both traditional and online agencies are increasingly threatened by the growth in direct-to-consumer airline websites.

According to O'Conner (2002), the perishable nature of the airline product heightens the importance of effective distribution. Any seats left unsold on a particular flight cannot be stored and subsequently sold at a later date — "in effect, their revenue is lost forever." Industry cost structures, with a high proportion of fixed costs which must be covered irrespective of sales levels, further increase the importance of selling every seat on every flight at an optimum price, as every extra pound earned adds directly to profitability (O'Conner, 2002).

To ensure the above, in the 1960s and 1970s, airlines developed CRSs (Computer Reservation Systems) to enhance efficiency to a labour-intensive and error-prone function of recording reservations and tracking inventory. In the following years, these systems were marketed to travel agents to expand the efficiency of the reservation process and as a marketing tool to increase sales of their seats (Global Aviation Associates, 2002).

The deregulation of the skies in the USA in 1978 accelerated travel agents' adoption of CRSs as it brought about more routes, more fares, and more limitations, necessitating the need to access more accurate, relevant and timely information on seat inventory (O'Conner, 2002. Global Aviation Associates report (2002) states that only a few carriers were successful in marketing their systems, as the cost of purchasing the necessary hardware was expensive, and the slow pace of technology advancement only served to protect the incumbent CRSs providers from completion. By 2000, there were four main Global Distribution System companies: Sabre, Galileo, Amadeus, and Worldspan, providing access to airline inventory for travel agents across the world. These systems facilitated the distribution of nearly 95% of scheduled airline tickets (O'Conner, 2002).

However GDS use by airlines to distribute their inventory is costly. Because the four GDS providers service nearly 95% of all airlines, this market situation has enabled them to raise the booking fees they charge airlines by nearly 7 % per annum between 1990 and 2000, even though the marginal cost of transactions fell over the same time period. These booking fee increases resulted in robust net profit margins (an average of 13.6 %) for the publicly traded GDS companies, which was more than twice the average margin of the U.S. major airlines (Global Aviation Associates, 2002).

To elaborate, according to O'Conner (2002) who cites Chris Tarry, transport analyst for Commerzbank Securities, "BA's selling cost per passenger in March 2002 was £20.60 – 10.9% of its average ticket price. According to its own figures, BA's distribution costs account for 16-17% of the cost of selling each ticket – slightly higher than the industry average of approximately 15%, estimated by Goldman Sachs. Costs focus on three areas – travel agent commissions (traditionally between 8% and 10% of the ticket price), credit card transaction fees (between 2% and 4% of the ticket price) and GDS segment fees (of between \$10 to \$12 per booking)."

As a consequence of high fees GDSs charge, they have consistently maintained profit levels that far exceed the airlines they serve. In 1999, in terms of revenue, Sabre was the largest GDS with revenues 85% greater than Amadeus and 60% greater than Galileo. Sabre's revenues equated to roughly that of America West, one of the smaller major U.S. carriers. However, Sabre's profits were more than three times those of America West. Sabre processed over 353 million flight segments in 1999 (Global Aviation Associates, 2002).

By the 1990s booking fees were so high that they were approaching 3.4% of a round trip ticket price and distribution channel costs were varying between 3% and 20%. Thus airlines had no alternative but to adopt more efficient technologies and distribution channels to reduce these high costs (Global Aviation Associates, 2002).

#### 2.7.4 Reduction of Distribution Expenses

According the Global Aviation Associates report on travel distribution (2002) at the beginning of the 1990s, reservations and sales expense comprised nearly 20% (approximately \$10.5 billion) of total operating expenses. In the following years, airlines have reduced distribution costs in nearly all categories except for booking fees. Specifically, costs for travel agent commissions, reservations, ticket issuance, and the very labour-

intensive check-in process have been reduced substantially. For example, airlines have been reducing commission expense for years and no longer pay travel agent base commissions for travel sold in the United States.

As a result, commission expense, a major component of reservation and sales expense, has dropped dramatically. By 2001, these measures led to a reduction of reservation and sales expense to 10.1% of total operating expense (Global Aviation Associates 2002). The Association of European Airlines Report (2007), states that by 2006 airlines have significantly reduced reservation and sales expense (Ticket, Sales and Promotion Expense) over the years to 11.2% of total operating expense.

This also included net commission expenses which feel dramatically by 0.3%pts from 2005 to 2006.

## Net Commissions [% of Passenger Revenue]



**Figure 7:** Net Commission payments 1996-2006 **Source:** (Association of European Airlines, 2007 *Cited* in AEA Operating Cost Summary Report, 2007, p.11)

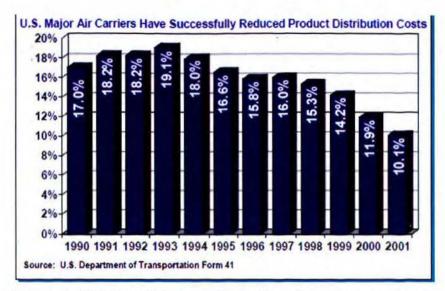


Figure 8: Ticketing, Sales and Promotion expense as a percentage of Total Operating expenses for US major Carriers 1990-2001

Source: (Global Aviation Report, 2002 Cited in Economics of Travel Distribution in an

Internet Driven Environment, 2002, p.6)

## 2.7.5 Reduction of Booking Fees by selling directly on-line

Global Aviation Associates Report (2002) explains however that booking fees, which form part of ticket, sales and promotion fees, have remained largely unaffected by airlines initiatives to reduce these costs. This is largely due to the power of GDSs. Figure 8, reveals that from 1995-2005, although airlines were managing to control Ticket, sales and promotion costs, booking fees were steadily rising.

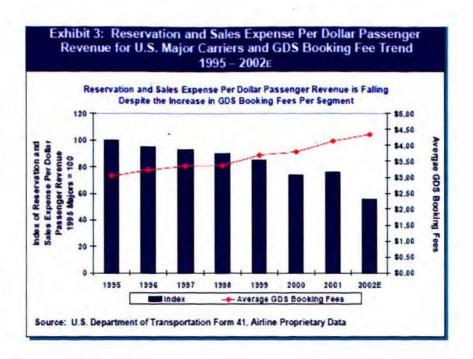


Figure 9: Ticketing, Sales and Promotion expense per dollar Passenger Revenue for US Major Carriers and GDS Booking Fee trend 1995-2002

**Source:** (Global Aviation Report, 2002 *Cited* in Economics of Travel Distribution in an Internet Driven Environment, 2002, p.6)

As can be deduced from the graph, while reservations and sales expenses, as a percentage of the revenue, have declined steadily over the years, GDS booking fees have steadily increased, resulting in these costs constituting a significant portion of product distribution costs. In fact, Global Aviation Associates (2002) asserted that in 2002, booking fees would constitute an estimated \$4.36 per booked segment, resulting in a total expense to the airlines of approximately \$2.2 billion. This cost is passed on to the consumer in the form of higher ticket prices. In 2002, for example, booking fees will be approximately 3.4 % of the average system round-trip fare (Global Aviation Associates report on travel distribution, 2002).

## 2.7.6 Adoption of E-Commerce to reduce Booking Fees

Although network carriers cannot easily avoid the GDSs, in part because the complexity of the product offered often requires the expertise of the travel agent (Global Aviation Associates, 2002), many are trying to address excessive high GDSs booking fees, by adopting the Low Cost Carrier model of selling a portion of their seat inventory on their own websites. According O'Connor (2002), low cost carriers are highly selective about how they sell their seat inventory as they balance efficiency of channels against their cost of doing business. Thus they sell directly to consumers via their own websites and call-centres, 38 | Page

instead using travel agents and GDS based distribution. This reduces transaction costs as they pay agents no commission, charge passengers extra for credit card bookings and avoid segment fees by not using the GDS – which results in considerable savings.

Yang (2001) states that reduce distribution costs, airlines would have to turn to e-Commerce, or e-distribution channels, to limit the number of their sales offices and to reduce their dependency on Computer Reservation Systems (CRS) and sales agents. At least in the USA, big airlines have already been doing that. They have set up on-line sales networks, and almost every airline's web site offers on-line booking functionality. Some airlines jointly set up on-line booking sites to offer B-B, B-C, and other travel-related services.

	Total # of on- line air tickets buyers	Total # of on-line travel market revenue	% of total US airline bookings
1996	25.3 m	US\$276 m	1.3%
1997	32.2 m	US\$827 m	2.9%
1998	41.0 m	US\$1.9 b	4.3%
1999	48.1 m	US\$ 3.2 b	5.9%
2000	54.2 m	US\$ 4.7 b	7.4%
2001 (estimated)	60.5 m	US\$ 6.5 b	9.2%
2002 (estimated)	<b>2002</b> (estimated) 71.9 m		11.1%

Figure 10: Internet Bookings in the US Airline Industry for the past five years and estimation of the next two years.

Source: (E-Commerce in the Airline Business, 2002 Cited in Yang, 2001, p.3)

Global Aviation Associates, (2002) states that an airline website is the least costly distribution channel, whereas booking travel though a traditional travel agent could cost an airline 15 % to 20 % of the revenue generated while travel booked directly by the consumer on the air carrier's website can cost the carrier as little as 3 - 5 % of the value of the ticket. This could explain the reason why most airlines are gradually moving most of their ticket sales to the internet as illustrated in the above graph.

To further illustrate the benefit of adoption of e-Commerce by airlines to reduce distribution costs, according to Merrion Stockbrokers *cited* in O'Connor (2002), the Internet offers savings of 50% over travel agent bookings and 30% over in-house telesales centre. Where e-tickets are used, costs can be reduced even further, with additional savings of nearly \$10 per ticket. Using such a strategy has allowed Ryanair to reduce their selling costs to 8.4%, against an industry average of nearly 15%.

#### 2.7.7 E-Commerce benefits to customers.

Passengers have benefited the most from the adoption of e-Commerce, in fact more so than airlines according to Yang (2001). E-Commerce technology has changed consumer behaviour from the planning, booking, through to the payment stage of purchasing a ticket. During the planning process, ecommerce has created a virtual world where consumers are able to discover information about airfare, hotels, car rental, destinations and including directions (Farrokh, 2009).

Farrokh, (2009) further asserts that information gathering has minimized consumer risk and uncertainty on the travel destination decisions and also maximized the perceived quality of travel experiences. Additionally, the convenience of being able to access the airline booking systems anywhere where internet is available, at work, at home, and elsewhere via mobile devices, is also an attribute that makes airline websites worthwhile for consumers(Farrokh,2009).

Apart from the convenience, efficiency, greater flexibility and wider choice of use that an airline website affords its users (McIvor et al., 2003), this channel, along with other travel channels (e.g. travel agents etc.) is competing for money from consumers, resulting in a decrease in fares (Global Aviation Associates, 2002). To further illustrate, Henry Harteveldt of Forrester Research Cited in Global Aviation Associates, (2002) states that the Internet won't dictate fare structure but Internet channels will impact pricing as fares are overhauled.

## 2.7.8 Types of Products are most likely to be Purchased Online.

Levin, Levin and Weller (2005) explain that shopping differs across products. There are "high touch" products that consumers feel they need to touch, smell or try on, which are those that require an offline presence at least at the final purchase stage. These products include clothing, sporting goods, and health and grooming products, which show require

handling and inspecting before a purchase is made. These products require traditional brickand-mortar shopping locations. At the other extreme, "low touch" products like airline tickets
and computer software are products that generally favour online services because of the
special importance placed on shopping quickly. In between this spectrum are products like
books and CDs where some important attributes like large selection are better delivered
online while other important attributes like personal service are better delivered "virtually"
offline or by providing surrogate experiences through feedback provided by others. Girard et
al (2002) also found that preference for shopping online was particularly strong for search
products like Airline Tickets, books and PCs where most of the key attributes can be
determined online.

## 2.7.9 Types of Consumers which are most likely to Purchase online.

In sampling a nationwide panel of consumers who had online capabilities, Swinyard and Smith (2003) compared those who did and did not make purchases online during a preceding holiday shopping season. They found that online shoppers were: younger, wealthier, better educated, more computer literate and more likely to spend time on the computer, more likely to find online shopping to be easy and entertaining, and less fearful about financial loss resulting from online transactions. Bellman, Lohse, and Johnson (1999) have also found Internet shoppers to be younger, more educated and wealthier and to have a more "wired lifestyle," but also to be more time-constrained than non-Internet shoppers.

## 2.7.10 Online Purchasing Behaviour and Socio-Demographic Factors

According to Shwu and Burke *cited* in (Sulaiman, Ng and Mohezar, 2008), consumer purchases decision are influenced strongly by demographic, economic, social, situational and technological factors. Four relevant demographic factors; age, gender, education and income are found to be significant with the consumers' attitude towards online shopping. Schiffman and Kanuk (1997) explain that the higher the consumers' socio-economic status, (measured by education, income, and occupational status) the more positive the consumers' perceptions of online buying relative to offline buying. Furthermore, Wood (2002) finds that that younger adults, those under 25 years old are more interested in using technologies like the Internet to find out about new products,

Besides age, gender is also found to be an important variable in determining the consumers' attitudes towards online shopping. Monsuwe et al (2004) states that males express a

greater favourable attitude towards internet shopping than females. They are more positive about using the Internet as a shopping medium, whereas female shoppers prefer to use catalogues to shop at home. However recent studies have shown the increasing use of the internet by women, due to their growing economic power and their dominant influence on household shopping behaviours. This has made them a market segment to be targeted in the future O'Connor (2002).

Education is also found to affect the adoption behaviour of online purchasing (Burke, 1998). The reason for this is attributed to the fact that education is often positively correlated with an individual's level of Internet literacy (Li et al. 1999). Higher educated consumers are found to be more comfortable in using non-store channels, such as on-line consumer sites to physical shops. Finally, Monsuwe et al. (2004) also reports that consumers with higher household incomes tend to shop more online compared to lower income consumers. This finding can be explained by assuming that higher household incomes are often positively correlated with possession of computers, Internet access and higher education levels of consumers.

## 2.7.11 Online Purchasing Behaviour of Passengers.

According to Georgiades et al. (2000) business travellers are less price sensitive than tourist and leisure travellers Tourists tend to be more price sensitive and more willing to schedule their trips based on the price of tickets available. Business travellers on the other hand have a less-flexible travel schedule; hence they tend to buy tickets closer to the flight date compared to leisure travellers, and are thus less less-price sensitive to tourists. Tourist travellers are thus more prone to use the internet to search for cheaper flights, which are less flexible, but include holiday packages etc. Although business travellers are increasingly utilising the internet to purchase tickets, they purchase online for convenience sake rather searching for lower prices. They are more loyal to particular websites, and purchase only when the need for a business trip arises. Airlines must be able to come up with strategies to cater for these two different types of passengers, whilst maintaining adequate profit levels.

## 2.7.12 On-line Consumer Sales

Because of the downward pressure on fares that the adoption of e-Commerce by airlines has caused, internet based travel is projected to grow rapidly. In 2001, consumers spent \$19.4 billion on U.S. travel websites, making travel the largest segment of online consumer sales (Global Aviation Associates, 2002). Farrokh, (2009) and O'Connor, (2002) both state

that in the US, travel is the top selling online product, with approximately 41% of total consumer e-Commerce sales in 2001, and revenues are expected to grow further as the trend towards direct booking continues. Refer to figure below to view e-Commerce use in travel trend analysis.

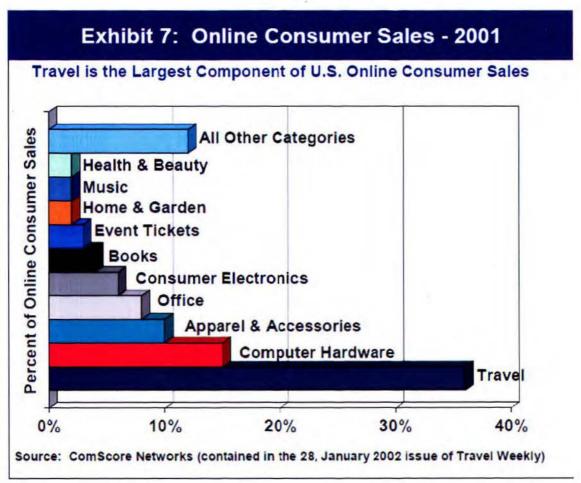


Figure 11: On-line Consumer Sales- 2001 Source: (Global Aviation Report, 2002 *Cited* in Economics of Travel Distribution in an Internet Driven Environment, 2002, p.6)

In conclusion, from the above analyses of relevant sources it is apparent that airlines have taken steps to actively reduce distribution costs as a measure to reduce operating expenses, achieve competitive advantage over their rivals and lastly regain control over their distribution from GDSs. These steps include reducing commission payments, and encouraging consumers to book directly on the airlines' own websites.

Airlines are directing consumers to their websites because it is cheaper to book them online than it is using GDSs through travel agents. Global Aviation Associates (2002) estimated that in 2002, GDS fees would constitute an estimated \$4.36 per booked segment, resulting in a total expense to the airlines of approximately \$2.2 billion. This cost would then be passed on to the consumer in the form of higher ticket prices. In 2002, for example, booking fees will be approximately 3.4 % of the average system round-trip fare. These costs are in stark contrast to booking fees over an airline own website where its estimated that the average booking fee is \$2.07, resulting in an estimated industry saving of almost \$1.0billion (Global Aviation Associates, 2002)

Thus, consumers are being tempted in a variety of ways to airline websites, to curb excessive booking fees. For example, many airlines offer special 'web-fares' – special discounts only available on their own sites. In addition, they are rewarding frequent customers for making their own bookings using higher frequent flyer miles for flights booked directly online. To a large extent, these strategies are working. According to PhoCusWright's Online Travel Marketplace 2001-2003 Cited in O'Connor (2002), airline website share will grow from 55% in 2000 to 57% in 2003.

Further evidence of airlines' commitment to manage their distribution can be seen in their treatment of the traditional travel agent. Having an alternative revenue stream from their own websites, many have started to discourage business from travel agents by reducing, or in some cases completely eliminating, commission payments (O'Connor, 2002).

Although the trend has been shifting away from GDSs use, towards airlines own websites, major network carriers cannot so easily avoid the GDSs, in part because the complexity of the product offered often requires the expertise of the travel agent (Global Aviation Associates, 2002). Yang (2001) further explains that, the reason why there has not been a complete shift from GDS usage is because of the complexity of selling airline inventory. He states that airlines sell their product at different prices. The same seat in the same airplane can fetch different prices depending on when and where it is sold. Generally speaking, the earlier a person buys a ticket, the cheaper it is. Moreover, airline seats are time-sensitive and perishable. Seats that are not sold at time of departure become "spoiled". On the other hand, seats sold too early at discount prices may dilute revenue. Internet booking technology has not advanced far enough to handle these complex scenarios, to ensure that

the airline generates the maximum yield per passenger, thus the slow shift from GDSs (Yang, 2001)

As a result, GDS earnings have remained robust. Although, according to The Forrester Report, Cited in (Global Aviation Associates, 2002) this state of events is gradually changing. The Forrester report stated that 2006, the GDS firms expect that booking fees will fall to 56% of their revenues, a 32 % decline, and that there will be a revenue loss of \$1.5 billion just for the three publicly held GDSs.

Overall, the airlines have started to actively manage their distribution channels by encouraging the most favourable while discouraging use of, but not eliminating, the less favourable. The benefits of this strategy can be substantial. This strategy is best elaborated by British Airways, which has stated that for every percentage of business that they can shift from traditional to online channels, they will generate an estimated 20% cost reduction, which translates into savings of £6m per year(Global Aviation Associates, 2002).

## 2.8 Conclusion

This literature review explains has how distribution costs, specifically booking fees have been largely unaffected by airline cost cutting initiatives over the last decade. This is largely due to the influence and dependence on global distribution system providers by airlines, for the sale of their seat inventory.

Due to economic and competition factors from efficient Low Cost Carriers, airlines, including Air Botswana, have had to re-examine their distribution strategies, including taking a closer look at booking fees per segment. This has led to a slow but assured shift from GDSs to selling directly online to reduce these fees. Airline websites not only provide savings to airlines in terms of booking fees and reduced commission expenses, but they provide their passengers with the convenience they require when making travel arrangements.

#### **CHAPTER 3**

#### 3.0 METHODOLOGY

#### 3.1 Introduction

In order to answer the above research questions in a credible manner, the researcher outlines a clear methodological path below which is followed.

#### 3.2 Research Philosophy

According to Saunders, Lewis and Thornhill (2007) research philosophy relates to the development of knowledge and the nature of knowledge. In order to give this study more credibility with regard to its contribution towards the development of new knowledge, it is important to note that the researcher has his own assumptions about the way in which he views the world. These assumptions may differ per individual researcher, as influenced by the practical realities of life and the researcher's views with regards to the relationship between knowledge and the process through which such knowledge is developed.

The assumptions in this regard, have an influence on the research strategy and the choice of research method relevant to this strategy. It is on the basis of this understanding that, the research 'onion' developed by Saunders, Lewis and Thornhill (2007) was chosen as a research framework model for this study. This research 'onion' attempts to provide a framework of the research process by analysing the six different layers of the 'onion' from exterior (philosophy) to the inner most interior (data collection and analysis) as per figure 2 below. According to Saunders, Lewis and Thornhill (2007), there are three different ways of thinking about the research philosophies; epistemology, ontology and axiology. While these may differ significantly in the manner in which they influence the research process, the researcher is well aware that, they are not necessarily a set of alternative choices for the researcher to choose from, but could also be mixed depending on different fields of activities.

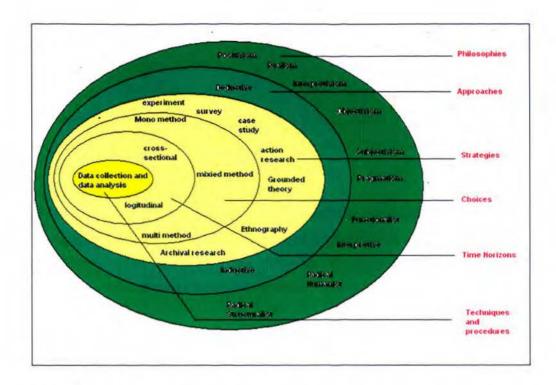


Figure 12: Saunders research 'onion'
Source: (Saunders, Lewis and Thornhill, 2007 Cited in Research Methods for Business Students (Fourth Ed, 2007, p.43)

## 3.3 Epistemology

From an epistemology philosophical perspective, the research is concerned with what constitutes the acceptable knowledge in a particular field of study. It normally follows a scientific approach of objective and quantifiable measures which eliminates the researcher's biasness through emphasis on his independence of the observable realities during the research process. According to Saunders, Lewis and Thornhill, 2007, the researcher can take the following three epistemological positions;

#### 3.4 Positivism

This entails a philosophical position, which views the research as based more on a natural scientific approach. This approach tends to focus on observable social reality which is rather quantitative than qualitative, and whose end results are law-like generalisation to serve as a cornerstone in a particular field of study. One important aspect of this position is the researcher's externality and independence of the research process, including data collection. This particular research study will therefore not take the positivist approach since 47 | Page

the researcher is not only an employee of the organization being studied, but also participate actively in the data collection process (Saunders, Lewis and Thornhill, 2007).

## 3.5 Realism

This is another epistemological stance similar to positivism which follows a scientific approach towards the development of knowledge. This however, approaches the research from natural tendencies of the perceived realities of life. This stems from two conflicting extremes of reality. Firstly, the theory of idealism, which suggests that only the mind and its contents, exists as reality. Secondly, there is the theory of realism which suggests that there is reality which exists independently from the mind. Reality therefore as used in business and management context takes two forms. Firstly, direct realism, which suggests that what we see and sense is a true representation of the real world, where as critical realism suggests that what we experience is only an image of reality and not the true reality. Critical realism therefore attempts to go beyond direct realism by seeking to further understand the underlying effects of the social world on the perceived reality as viewed from a direct realist perspective. In this regard, critical realist takes cognisance of the ever changing business world, which has an influence on the strategic positioning of any business entity. A critical realist approach will therefore be more relevant for this study in view of the constantly changing factors influencing the aviation business (Saunders, Lewis and Thornhill, 2007).

## 3.6 Interpretivism

Is that epistemology philosophical stance which is concerned with the necessity of a researcher to understand the different roles that humans play in social context. It takes cognisance of the fact that, unlike positivism, which views the humans as objects for the purposes of achieving scientific law-like generalisation, the inclusion of humans as social actors in the research process, has an effect to the extent that it will necessitate continuous adjustments to the perceived worldly view. The emphasis is on the on the social effects emanating from the human social elements. These social elements, adds to the complexity of the ever changing business and management world, thereby reducing generalisation of the research. In the aviation business, where airlines choose their preferred product distribution channels based a number of factors, human factors play a significant role in determining the end product. These include passengers who utilise the airlines services and management who have to produce a competitive service in order to sustain and grow the business. Whatever may be perceived by the researcher as in the best interest of the airline as a service provider may not necessarily be the same as when viewed from either 48 | P a g e

the passenger or airline management's perspectives. Unless the researcher changes his position to view the situation from these different positions, the research will obviously not depict a total view of the situation, as it may overlook certain social aspects of these positions (Saunders, Lewis and Thornhill, 2007).

The human social aspect is therefore important for this study as it influences not only the overall operating costs of the organisation but specifically in this regard, the strategic choice product distribution channel. A typical example is the fact that there is generally lack of Product Distribution experience among Air Botswana staff, since the airline has always been protected from competition, preventing staff from seeking innovative and creative ways of reducing operating costs in order to be competitive, Additionally, Air Botswana has also traditionally used Global Distribution Systems as a key channel for selling its seat inventory, Staff do not have experience working with other cost effective sales channels(Air Botswana Marketing and Sales Report, Anon., 2010). This has a negative influence on airlines strategic decision making process of distribution channel selection, because of the anticipated risks and uncertainties emanating from lack of experience and knowledge. Koch (2001) argues that experience is of vital importance in a company's strategic direction (Saunders, Lewis and Thornhill, 2007).

The above three philosophical branches of epistemology are more centred on the extent of acceptability of knowledge in a research field. In the case of this particular study, epistemology seeks to establish the extent to which the acceptable knowledge established through the study of natural sciences, is applicable to the social world including business and management. To a large extent, this depends on the nature of reality of the social world as described below from a different philosophical stance (Saunders, Lewis and Thornhill, 2007).

## 3.7 Research Approach

According to Saunders, the second layer of the 'onion' is the research approaches. This comprises of two alternatives which may also be combined in the research. The first approach is the deductive method, where the researcher develops a theory and hypothesis, and then designs a research strategy to test this hypothesis. The second approach is the inductive method which involves a collection and analysis of data from which then a theory is developed. While the deduction method is desirable for the purposes of this study, the researcher is of the view that its application is practically unrealistic in light of its scientific nature coupled with the unknown factors around the envisaged new distribution strategy for

Air Botswana. The researcher therefore, is of the view that the induction method is more appropriate since it attempts to give an insight of the envisaged new approach, based on the current available data (Saunders, Lewis and Thornhill, 2007).

## 3.8 Research Strategy

In designing this research, the researcher links his choice of research approach made above to the purpose of the research through exploratory studies based on relevant literature necessary for giving insights into Air Botswana's situation. Having passed through the first two outer layers of the 'onion' (philosophies and approaches), Saunders, Lewis and Thornhill, (2007). 'Onion' reveals the next set of three inner layers which he collectively calls 'research designs'. The research design comprises of the following layers in their order going further in to the heart of the 'onion'; research strategies, research choices and time horizon. According to Saunders, the following research strategies could be adopted depending on the research questions and objectives.

These strategies include experiment, survey, case study, action research, grounded theory, ethnography and archival research. The researcher however, notes that these strategies are not mutually exclusive and therefore this research could encompass one or more strategies. Drawing from the research questions and objectives, it is obvious that, a research of this magnitude would require the use of more than one strategy in order to account for the different spheres of this project. The grounded theory is more appealing to the researcher as a means of generating a theory from what emerges from data analysis. This study is particularly based on Air Botswana with the view to reducing operational costs by adopting a direct distribution strategy. In this regard, this is clear case study research strategy focusing just on Air Botswana's operations (Saunders, Lewis and Thornhill, 2007).

#### 3.9 Research Choices

As stated above, these strategies are not mutually exclusive and therefore both the grounded theory and archival strategy are adopted as key strategies for this research. This choice of mixed methods enables the researcher to effectively apply both qualitative and quantitative data analysis techniques for the purposes of developing new knowledge about Air Botswana's situation.

#### 3.10 Time horizon

According to Saunders, Lewis and Thornhill, (2007) the study could either be based on a 'snapshot' taken at a particular time which he calls 'cross-sectional' study, or over a long period of time; 'longitudinal study'. Due to annual seasonal variations among other factors influencing aviation traffic volumes worldwide, this research is based on archival research data of the last three years as retrieved from Air Botswana's internal financial systems and other relevant external sources such International Airline Transport Association. Such data will eliminate the possible error of seasonal traffic variation which could affect channel cost patterns, commonly associated with the cross-sectional studies.

#### 3.11 Data Generation Methods

The last and inner most layer of the 'onion' is that of data collection and data analysis methods. The researcher has formally requested for authorization to use the company's available records for this study and was subsequently authorized by the Director of Finance of Air Botswana.

## 3.12 Data Analysis

To answer the first research question, the researcher will, review the Airline's Act and internal policies and strategies. The first set of data, operating expenses from Air Botswana Finance Accounting System, comprises of all the airlines costs, fixed and variable for the past three financial years. The purpose of this report is to identify a trend with Ticket, Sales and promotion costs (which comprises of product distribution costs), to ascertain if they are reducing as in line with industry trends or not. The Third set of data, Flown Sales by Ticketing Office Report shows all revenue collected from all ticketing offices, including Air Botswana Sales Offices, Travel Agents (GDSs) and the airlines website, for year- ending March, 2011. This data also includes GDS expenses for the year under review. The third data set, Customer Satisfaction Data, comprises of customer feedback regarding usage of the airline website etc. By collecting ticketing office sales and cost data, the researcher will be able to determine these offices are profitable or not and recommend interventions to reverse losses. The fourth set of data comprises Passenger Name records processed by the e-Commerce booking website. The researcher will use this data to calculate the booking costs incurred by this office

In terms of customer satisfaction data, a questionnaire was developed as a tool for the collecting data. The questionnaire was selected as it allows the same types of information to

be collected from a large number of people in the same way and for data to be analysed quantitatively and systematically.

The questionnaire was distributed to and collected from 100 passengers on-board Air Botswana's selected flights over a period of 4 weeks. A total of five passengers (one per flight) a week were handed the survey on random days of the week. The routes used were the Gaborone —Johannesburg and Maun-Gaborone, in order to get as wide of a demographic as possible; from business to leisure travellers. Self-administered questionnaires were given to the respondents with the expectation that each person would be able to read and understand the questions, possess the knowledge and willingness to answer them, and would take the time to do so. Self-administered questionnaires were completed by individuals and handed back at the end of each flight.

## 3.13 Reliability, Generalizability and validity

Since this is a case study research specifically based on one organisation, the data used here is largely influenced by many factors which may only be peculiar to the current Air Botswana's business operation. The findings will therefore be only indicative as the researcher cannot fully claim its validity and reliability for the purposes of its applicability in general context.

## 3.14 Ethics

In order to conduct this study in a more credible manner, the research shall be guided by the University's research code of ethics, which shall be observed at all times.

## 3.15 Limitations

While data collected is sufficient to show a representation the organisations cost structure and more importantly reservations and cost of sale of the airline, this research is limited to only that data which is available to the airline through its network operation.

#### 3.16 Conclusion

This chapter focused on the design of the research and its methodology. A quantitative and qualitative approach was used during this study. Data was collected from a number of systems and articles within the corporation. A questionnaire was selected as the most ideal instrument for data capture on customer satisfaction. It was distributed to passenger's on-board Air Botswana flights and data analysis was based on the input from these sources.

#### CHAPTER 4

#### 4.0 DATA ANALYSIS INTRODUCTION

#### 4.1 INTRODUCTION

Following from the literature review and methodology chapters above, secondary data was collected from three main sources. The data comprises of the most current data, dating as far back as three years. The first set of data was collected from the airline's act and internal policies and strategies. The second set of data was the historical data extracted from the internal financial accounting system. The purpose of the data from the this system is to determine the total operating expenses of airline, segment them into direct and indirect operating expenses, locate ticketing, sales and distribution costs; and finally determine if these costs are in line with industry trends. It is important for this researcher to determine if Air Botswana is increasing or reducing its distribution costs, in-line with industry trends. From this data, the researcher will be able to ascertain whether or not the airline is and /or will be competitive, given its cost structure.

Revenue data was obtained from the revenue accounting system, to determine the sales of all ticketing offices. Cost data was also obtained from both the revenue accounting system and SITA Reservations system to determine the cost of sales for these offices and ascertain their profitability. Website user data was also collected to determine current visitor numbers and from which territory these visitors come from. The researcher will then cross-check current website visitor- by territory data, against ticketing office profitability data to determine which offices can be converted to the on-line sales channel. Finally customer feedback data will be collected to determine current and future customer preferences for the airline website.

## This chapter will address the following research questions;

- What competitive, political and social environment is Air Botswana operating and competing in?
- Are Air Botswana's Direct and Indirect Costs in-line with industry standards i.e.?
   What is the trend of the distribution costs at Air Botswana?
- Determine the booking fees of each selling office(Online, Travel Agents, Air Botswana Sales Offices)

- Are Air Botswana's sales offices (Online, Travel Agents, Air Botswana Sales Offices)
   financially healthy i.e. are booking fees higher or lower than revenues generated.
- Would consumers rather buy tickets online or in physical sales channels? What are their concerns regarding buying online?

## 4.2 Air Botswana Operating Environment.

Air Botswana operates in a regulated environment. It is also owned and operated by a government appointed board. Before it can alter domestic fares, it must notify its owner (The Air Botswana Act, 1988). It also utilises cost-plus pricing in order to receive a minimum return on its investments and also receives government subsidies in the form of equity financing. The airline ultimately has high domestic fares due to the utilisation of cost-plus pricing which has resulted in low passenger loads (Air Botswana Marketing and Sales Report, 2010).

Air Botswana does not operate under a clearly defined business model. Its operating model encompasses elements of the Hub and Spoke network model and the Low cost carrier model. The airline operates point to point routes from a majority of its destinations in Botswana to OR Tambo International Airport and Sir Seretse Khama Airport. Because it currently does not have connecting international operations from either Hub airport, it can thus be argued that it operates a majority of its routes under the point-to-point low cost carrier model. But the airline operations and costs are more compatible to a hub-and spoke business model based on the following,

- The airline sells significant portion of its seat inventory through agents via subscription to costly distribution systems. Based on the theory, the Hub and Spoke model following carriers, mostly use third parties such as Travel agents to sell their inventory.
- The airline offers free lounges, meals, frequent flier bonus miles and other frills as a
  part of its fare class strategy. This strategy is also utilised by carriers who utilise the
  Hub and Spoke model.
- Low average utilization of aircraft due to long waiting times for transfer passengers, which translates into higher cost per seat miles as the aircraft and crew productivity are sub-optimal. This operating environment in prevalent in carriers which utilise the Hub and Spoke model as indicated in the theory.

- High transaction costs due to complexity of capacity planning, crew roistering, flight scheduling and ground-handling
- Complex fare structure with significant cross-subsidization among passenger classes.
- Subsidization of loss making routes by profit making routes.

## 4.3 Summary Findings

Based on the theory, because the airline does do have a clearly defined business model, it cannot compete with its rivals adequately. Its rivals can afford to operate point-point routes at a loss, in knowledge that their long-haul connecting routes will cover the losses. Its rivals thus use the point-point routes to drive traffic to their Hubs, regardless of the losses incurred, because from the Hub they are able to make profit transporting passengers on long-haul routes. On the other hand, Air Botswana does not have any long-haul routes; it must make profits on its point-to-point routes. It can either start operating long-haul routes or adopt the low-cost carrier model if it intends to compete on point-point routes. This will include cutting out costly value-add services like advance seat reservation, frequent flyer lounges or inter-lining agreements with other carriers and discontinuing loss making routes.

## 4.4 Financial Accounting Data

The data used for analysis was retrieved from Management Information Reports from the following periods, April 2008-March 2009, April 2009-March 2010 and April 2010-Jan 2011. Financial data up to the year ended, March 2011, were not finalised by the time this research was being completed. The data is very current and therefore reflects the operating expenses structure of the airline.

#### 4.5 OPERATING COST SUMMARY

#### 4.5.1 Direct Operating Expenses

This report indicates that for the 10 Months period from April 2010 to January 2010, Direct Operating Costs were recorded at P140, 722,000.00, with the biggest contributor to this costs being Aircraft Wet Lease Charges at 22%. The second biggest contributors are Direct Maintenance (11%) and Fuel and Oil (11%). Agent and GSA commissions contribute 7% to Direct Operating costs. Figure 10 is an extract of the report. Refer to Figure 14 below for direct operating expenses of Air Botswana.

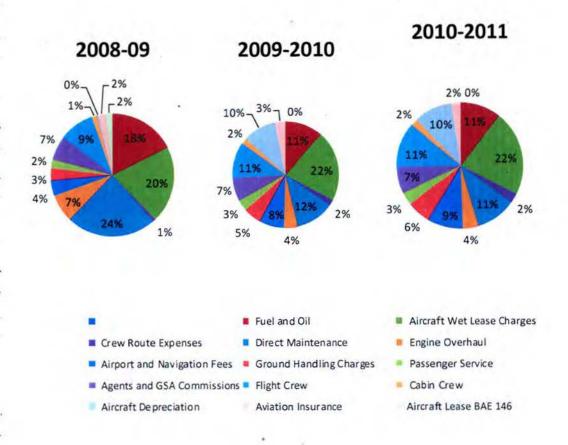


Figure 13: Air Botswana Direct Operating Expenses
Source: (Air Botswana, 2011 *Cited* in Air Botswana Management Information Report, 2011)

## 4.5.2 Indirect Operating Expenses

This report indicates that for the 10 Months period from April 2010 to January 2010, Indirect Operating Costs were recorded at P83, 308,000.00, with the biggest contributor to these costs being staff salaries at 52%. Communications costs are the second largest cost contributor at 15%. Communications costs include Ticket, sales and Promotion expenses although they don't include commission and GSA costs, and advertising expense which are included as direct costs at Air Botswana. Refer to Figure 15 below for indirect operating expenses of Air Botswana.

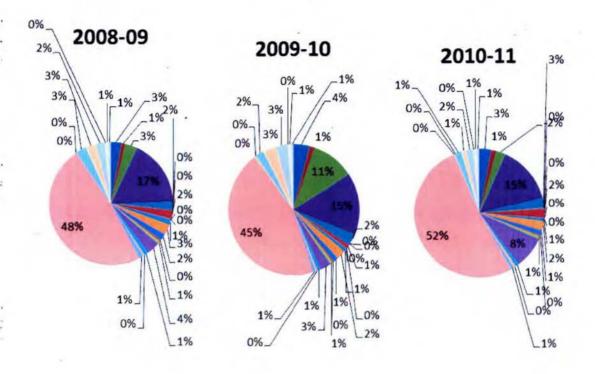




Figure 14: Air Botswana Indirect Operating Expenses
Source: (Air Botswana, 2011 Cited in Air Botswana Management Information Report, 2011)

Staff (52%) and wet lease charges (22%) are above industry averages, indicating that the airline is saddled with large operating costs.

# 2010-2011

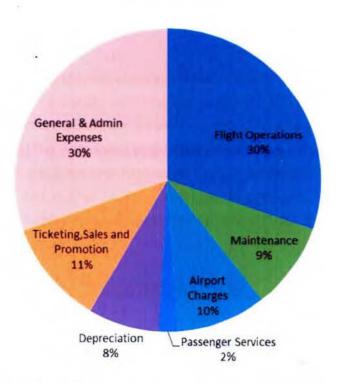


Figure 15: Air Botswana Total Operating Expenses

Source: (Air Botswana, 2011 Cited in Air Botswana Management Information Report, 2011)

When Direct and Indirect expenses are added together, it can be observed that the largest airline expenses are Flight Operations costs(which include Fuel &Oil and Aircraft Lease expenses) and General and Administration expenses (which include staff salaries(52%)). Ticketing, Sales and Distribution (Product Distribution) fees have also been reduced 11.94%, which is in-line with industry trends of 11.2% of Total Operating expenses (Association of European Airlines Report, 2007).

It is evident from this analysis that Air Botswana largest expenses come from the leasing of aircraft and general and administration expenses, which include staff salaries. The wet lease costs are borne from equipment constraints the airliner has been suffering from due to its aircraft being grounded for various reasons including scheduled and non-scheduled maintenance. In terms of high staff salaries, the organisation is currently going through a

restructuring exercise which will review organizational structures; determine manning levels and staff numbers amongst its mandate.

#### 4.6 Net Commissions

Agent and GSA commission expenses which contribute 4.32% to total operating costs, have reduced by over 30% over the years under review, reaching their lowest level in the year-ended January 2011. This reduction mirrors that of the airline industry which also fell by over 30% from 2005 to 2006 (The Association of European Airlines Report 2007). The reduction in net commissions over the three year financial period can be attributed to the introduction of e-commerce in the first quarter of 2010, reduction in commission expenses paid to agents, and passenger number reduction in the same period. Refer to Figure 16 below for net commission expense trend.

# **Agent and GSA Commissions**



Figure 16: Air Botswana Commission expenses
Source: (Air Botswana, 2011 *Cited* in Air Botswana Management Information Report, 2011)

#### 4.7 Distribution Costs

Distribution Costs (Ticketing, Sales and Promotion) which include Agent and Commission costs, Advertising & Promotion and Communication costs, booking fees (GDS) fees, and passenger service fees contribute 11.94% to total operating costs. Air Botswana has reduced distribution expenses by over 22% over the past three years to a level on par with the industry average of 11.2% of Total Operating expenses. The reduction in distribution fees cannot be attributed to the adoption of product distribution strategy, as there is none, but can be attributed to a number of factors which affect distribution fees the airline incurs.

These factors include the reduction of advertising expenses by 53% over the same period. This reduction was as a result of action taken by the corporation to reduce expenses in inlight of the economic recession that was affecting global passenger travel. Refer to Figure 17 below for distribution costs trend of Air Botswana.

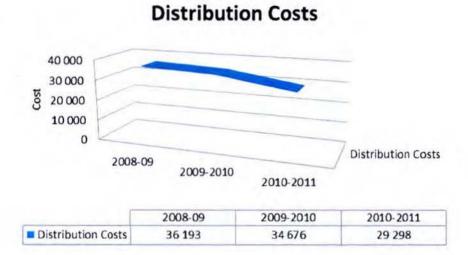


Figure 17: Air Botswana Product Distribution Costs 2008-11

Source: (Air Botswana, 2011 *Cited* in Air Botswana Management Information Report, 2011)

Another factor contributing to the overall reduction in distribution charges incurred by the airline can be attributed to the introduction of e-Commerce operations in the first quarter of 2010 which has diverted passengers from booking through travel agents to booking on-line. This has resulted in a 10% reduction in global GDS booking fees for passenger volumes in Asia and the western hemisphere from June 2010 to June 2011. Refer to Figure 18 below for Air Botswana Distribution Profile Trend.

AIR BOTSWANA	JUN YTO 20	09	JUN YTO	2010	JUN YTO 20	11	YoY C	hange
Amadeus Value Split	Volume	Mix	Volume	Mix	Volume	Mix	09 vs 10	10 vs 11
Local	3,116	21.2%	6.233	29.4%	7,451	25.0%	2	7
Regional	2.979	20.2%	3,963	18 586	4,876	22.9%	28	71
Global	8,627	58,5%	11,197	52 0%	8,983	42.2%	25	34
Total	14,722	100%	21,513	100%	21,310	100%		

Figure 18: Air Botswana Product Distribution Profile 2009-11
Source: (Air Botswana, 2011 *Cited* in Air Botswana Distribution Profile Report, 2011)

The set of data will shed light on Air Botswana's booking fee charges (GDS fees) which also form part of Product Distribution fees and determine which is the best channel of sale based total booking fees incurred. Ideally, the lower the booking fees, the greater the profitability gained per selling channel. The report will display the booking fees the airline incurs from travel agents who utilize GDSs to sell Air Botswana's inventory and the Airlines own selling offices(including the e-Commerce channel) and compare these figures with flown revenue from the said offices to determine if they are making an which is the most cost effective sales channel.

## 4.8 FLOWN REVENUE AND BOOKING EXPENSES

The below analysis takes a closer look between booking fee charges and revenues generated by Travel Agents, Air Botswana Offices, and the Airlines E-Commerce website. The analysis will reveal the extent to which booking fees play a role in sales channel profitability. The data collected spanned a period over one financial year 2009-2011.

The below figure shows that although (Distribution Charges) Ticketing, Sales and Promotion Costs have reduced over the past three financial years (reduced by 16% between 2009 and 2011); booking fees (which form part of an airline distribution cost bundle) on the other hand have remained largely stable. This trend is consistent with airline industry trends, were it has been difficult to reduce these fees as a result of the power and over reliance on GDSs. Refer to Figure 19 below for Air Botswana Booking fee trend in relation to Total Revenues.

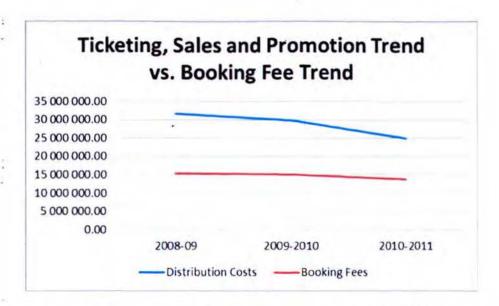


Figure 19: Ticket, Sales and Promotion Expense trend (2008-2011) and Booking fee trend (April 2010-March 2011)

Source: (Air Botswana, 2011 Cited in Air Botswana Management Information Report, 2011)

Revenues between the three primary sales channels indicate that Air Botswana Sales offices contribute 46% of total revenues, followed by GDSs which include travel agents. Booking fees per sales channel indicate that Air Botswana Offices and the e-Commerce channel offer the lowest booking fees as compared to the GDS channel, which contribute 81% of total booking fees the airline incurs. This data is consistent with airline trends, which have spurred airlines to move away from selling via global distribution systems to selling directly including online, where booking fees are significantly cheaper. Refer to Figure 20 below for Air Botswana Revenues per Sales Channel.

Revenues per sales Channel	% of Total Sales	Sales Revenue	Booking fees per Sales Channel	% Booking fee per channel
BP Online	6.91%	11 732 090.52	1 041 596.00	9.32%
GDS	46.90%	79 570 208.33	9 095 900.20	81.36%
BP Offices	46.17%	78 320 877.28	1 041 596.00	9.32%
TOTAL	100%	169 623 176.13	11 179 092.20	100.00%

Figure 20: Air Botswana Revenues and booking fees per Sales Channel (April 2010-March 2011)

Source: (Air Botswana, 2011 Cited in Air Botswana Management Information Report, 2011)

## 4.9 Travel Agent Revenue vs. Booking Fees

From the below figure, it is evident that Travel Agent revenues, contribute the largest share of total airline Flown Revenue (47%). These revenues are higher than Booking expenses for most of the year under review; however there are periods when booking fees exceed the revenue collected for this channel i.e. between July and September, September and November. The airline thus incurs booking fees of P760 000.00 per month on average. These figures indicate that booking fees play significant factor in travel agent profitability. Travel Agencies, which use GDSs' to sell Air Botswana inventory, contribute the largest share (81%) of booking fees the airline incurs. This trend is in in line with airline industry trends, which has prompted airlines to consider moving from this sales channel to more cost effective direct channels. Refer to Figure 21 below for Air Botswana Revenues per Sales Channel.



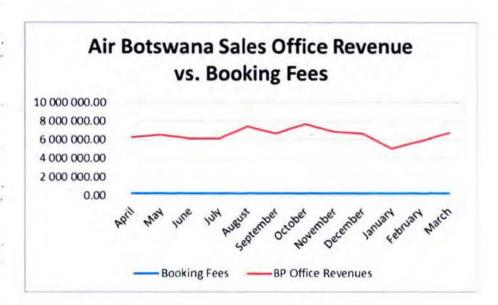
Sales Channel	Total Revenue	Total Booking Fees
Travel Agents	79,570,208.3	9 095 900.20

Figure 21: Travel Agent Revenue vs. Booking Expenses

Source: (Air Botswana, 2011 Cited in Air Botswana Management Information Report, 2011)

## 4.10 BP Office Revenue vs. Booking Expenses

Air Botswana's own selling offices contribute the second largest share of total flown revenues (46%). Revenues from these offices far outweigh booking fees, resulting in the offices being largely viable. This is because Air Botswana does not incur excessive booking fees from GDSs when booking passengers from its own sales offices. It incurs booking fees of P86, 799.00 per month on average. Sales offices thus contribute only 9.32% to the airlines booking fee charges. Although this figure in minimal for a direct selling channel, Sales offices have other costs which make them an unviable selling channels, these including rental, staff salaries, utilities, communications and advertising expenses, which affect the profitability of these channels. Thus airlines are considering more cost effective direct selling channels including e-Commerce. Refer to Figure 22 below for Air Botswana Sales Office Revenues vs. Booking Expenses.



Sales Channel	Total Revenue	Total Booking Fees
Sales Offices	78 320 877.28	1 041 596.00

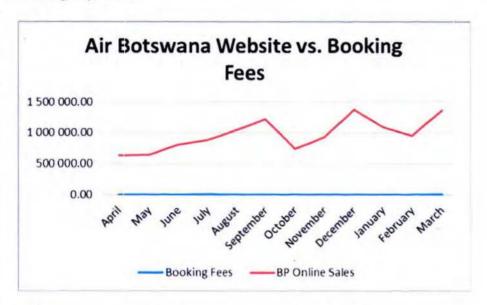
Figure 22: Air Botswana Sales Office Revenue vs. Booking Expenses

Source: (Air Botswana, 2011 Cited in Air Botswana Management Information Report, 2011)

#### 4.11 Air Botswana Online Revenue vs. Booking Fees

Air Botswana's online selling channel contributes the lowest share of total flown revenues (6.91%). Revenues from this channel also far outweigh booking fees, resulting in the channel being viable. This is because the airline incurs minimal selling costs, including 64 | Page

booking fee charges, when utilising this channel. It incurs booking fees of P86, 799.00 per month on average. It thus contributes only 9.32% to the airlines booking fee charges. The online booking channel is the most viable selling channel, of the three channels, not only due to minimal booking fees, but because it does not incur other expenses that a conventional selling office incurs such as staff salaries, office rental and utilities etc. Airlines are thus switching to this more cost-effective sales channel due to the above mentioned benefits and savings. Refer to Figure 23 below for Air Botswana Online Revenues vs. Booking Expenses.



Sales Channel	Total Revenue	Total Booking Fees
E-commerce	11 732 090.52	1 041 596.00

Figure 23: Air Botswana Online Revenue vs. Booking Expenses

Source: (Air Botswana, 2011 Cited in Air Botswana Management Information Report, 2011)

## 4.12 Summary of Findings

From the analysis of the data above, it is evident that booking fees play a significant role in the profitability Air Botswana's sales channels, whether it is Online, Sales Offices and Travel Agents. Hence the airline must develop strategies that will minimise these fees because they cannot completely eliminate them due to customer purchasing preferences. The most cost effective selling channel is the Online where the airline can minimise booking expenses including other selling costs to effectively derive more profits from the revenues generated. Because it is highly impossible to move all customers to this channel, the airline will have to

develop a strategy that will drive a certain percentage of customers, in a phased approach, to the e-Commerce channel. To move customers to the e-Commerce, the airline could do so by offering incentives for buying online, and penalties for buying in physical channels. To further minimise GDS fees, the airline could also compel Travel Agents to sell its inventory on its own systems, that it uses in its selling offices, thus further reducing booking expenses occurred by utilising GDS systems.

## 4.13 Customer Satisfaction Survey

The third report focuses on the analysis of data derived from respondents' views. The data was arranged into frequency tables and bar graphs. This section presents the views gathered from passengers regarding the usage of Air Botswana's website to purchase tickets.

The data was analysed and interpreted bearing in mind the research objectives and questions. This chapter is divided into two sections. The first section covers the demographic information from respondents. This is followed by results on two main study areas as divided in the questionnaire. The last section provides a summary overview and analysis of the findings.

#### 4.14 DEMOGRAPHICS IN THE SURVEY

The following section captured and analysed some of the demographic information from respondents.

#### a) Age Group of respondents

Figure 24: shows that from the sample group, 40% of the respondents are over the age of 40 but less than 50, 25% are between 25 years and below 40 years, 25% are also 50 years and above and only 10% are less than 25 years. As the sample group represents Air Botswana's flying customers, it is apparent that a majority of the airlines passengers are over the age of 40 and less than 50 years old. Based on the theory, a majority of internet users are between the ages of 25 to 40 years. The reason behind this phenomenon could be due to the fact that 25-40 years old age groups maybe the group that is employed and possess credit card. In addition, the fact that this segment of consumers has busy lifestyles and are constrained by time may also contribute to the phenomenon. Thus the airline must endeavour to drive this age group to the cost effective e-Commerce channel. Refer to Figure 24 below for Age Group of Respondents.

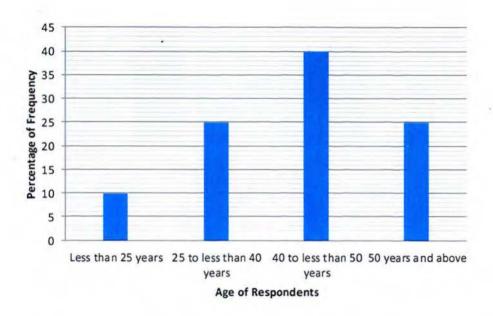


Figure 24: Age of Respondents

Source: (Air Botswana, 2011 Cited in Air Botswana Customer Satisfaction Survey, 2011)

# b) Gender of Respondents

The figure below depicts that 63% of respondents are male while 37% are females. The theory suggests states that males are more inclined to use the internet for shopping than females. But the airline will also have to develop strategies to drive females to use internet technology as recent studies have shown the increasing use of the internet by women, due to their growing economic power and their dominant influence on household shopping behaviours. Refer to Figure 25 below for Gender of Respondents.

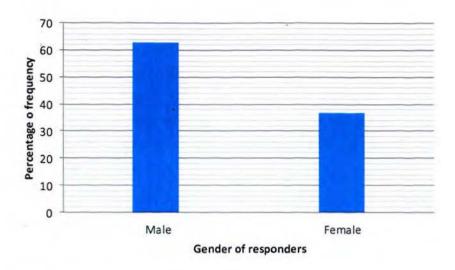


Figure 25: Gender of Respondents Source: (Air Botswana, 2011 *Cited* in Air Botswana Customer Satisfaction Survey, 2011)

## c) Profession of Respondents

The figure below depicts that 35% of respondents are Middle level Managers, whilst 30% of other Top Level Manager. Professionals make up only 20% etc. This data indicates that a majority of passengers are high income earning individuals, which falls in line with the profile of people who are more inclined to shop on online. Refer to Figure 26 below for Profession of Respondents.

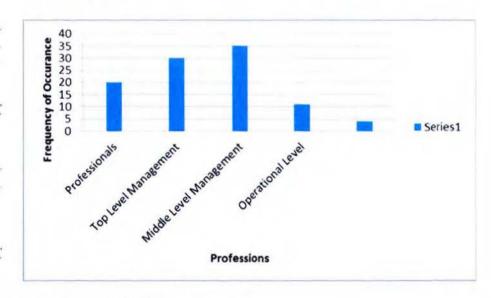


Figure 26: Profession of Respondents

Source: (Air Botswana, 2011 Cited in Air Botswana Customer Satisfaction Survey, 2011)

## d) Education Level

The figure below clearly shows that a majority of respondents are degree holders, followed by post-graduate degree holders. This clearly indicates that a majority of the airlines travellers are educated. The theory suggests that consumers who use the internet to purchase items are more educated. Thus the airline has greater advantage in driving these passengers to purchase on-line. Refer to Figure 27 below for Education Level of respondents.

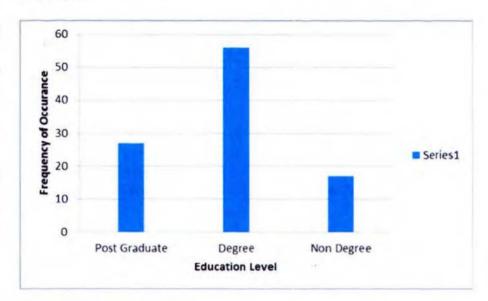


Figure 27: Education Level

Source: (Air Botswana, 2011 Cited in Air Botswana Customer Satisfaction Survey, 2011)

#### e) Purpose of Travel

The figure below shows that 53% of respondents are on business; whilst 39% are tourist travellers and the rest (8%) are on other business. The airlines biggest client is the Government of Botswana, which purchases tickets via Government Order which take 30 days to pay (Air Botswana Management Information Report, 2011). Most business travellers fall under this category. The airline has significant debt collection problems trying to recover these amounts after passengers have flown. Thus the airline has been developing new strategies to convert the government account to an online purchasing service in order for it to pay its fares quickly. Encouraging the government to utilise e-Commerce to purchase tickets and pay via internet banking, can thus be used to migrate a majority of the 53% of respondents to e-Commerce, saving the airline from booking fees and debt collection expenses. Refer to Figure 28 below for Purpose of Travel.

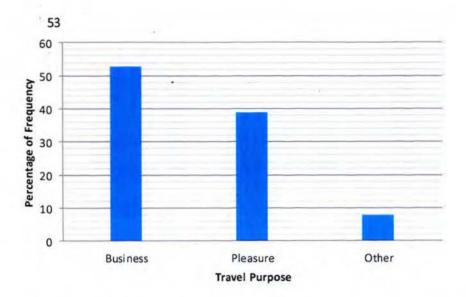


Figure 28: Purpose of Travel
Source: (Air Botswana, 2011 Cited in Air Botswana Customer Satisfaction Survey, 2011)

# 4.15 Survey Results

# a) Payment Method

Figure 29 below reveals that 45% of respondents purchased tickets through the use of a Government Purchase order. The aim of the airline should be to divert a majority of the 45% respondents who use government purchase orders to buy tickets to utilise the e-Commerce channel. These respondents, including those who use cheques are business travellers, who would benefit from the convenience the internet provides in booking and purchasing tickets online. And because the funds for purchasing tickets on-line are debited quicker than the physical channel of receiving payments from debtors, the airline will benefit from realisation and accrual of Flown Revenue which will be much faster, increasing cash flows for the airline. Refer to Figure 29 below for Payment Method used to purchase tickets.

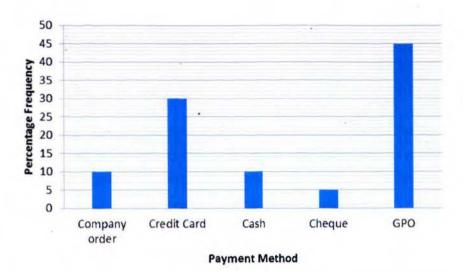


Figure 29: Payment Method Source: (Air Botswana, 2011 *Cited* in Air Botswana Customer Satisfaction Survey, 2011)

## b) Purchase Point

Figure 30 revels that 52% of passengers purchase their tickets at Travel Agencies, 16% at Airport Ticket counters, 21% at Sales offices (Reservation Offices), whilst only 11% get them online. Because e-Commerce was only implemented in January 2010, the uptake of this channel will be lower than the rest of the channels; however it is imperative for the airline to increase this number by migrating traffic from the less cost effective channels. Refer to Figure 30 below for Purchase Point.

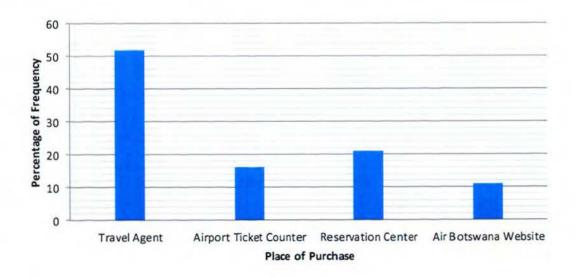


Figure 30: Purchase Point

Source: (Air Botswana, 2011 Cited in Air Botswana Customer Satisfaction Survey, 2011)

# c) Type of User on Website

Figure 31 reveals that of the 11% of respondents that use the Air Botswana website to book and purchase tickets, 57% are tourist travellers. Based on the theory, tourist travellers search for and purchase tickets online because they believe fares are cheaper online than through physical channel. In order to attract customers to the online channel, cheap tickets are available online, but they are very restrictive, meaning they cannot be refunded and their travel dates cannot be changed. Tourist travellers are willing to accept these conditions as opposed to business travellers. Of the respondents, business travellers are also restricted from using the website to purchase tickets because currently, the only payment method available is credit cards. Business travellers, tend to use Government purchase orders and cheques to purchase tickets, thus they utilise physical channels to purchase tickets (Air Botswana Marketing and Sales Report, 2010). Refer to Figure 31 below Type of User on Website

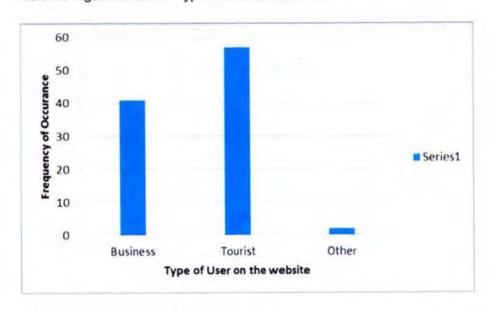


Figure 31: Type of User on Website Source: (Air Botswana, 2011 Cited in Air Botswana Customer Satisfaction Survey, 2011)

## d) Reasons for online purchase

Figure 32 reveals that of the 11% of respondents that use the Air Botswana website to book and purchase tickets, 35% of them purchase online because they believe website convenient to use as opposed to travelling to a physical sales or travel agent, whilst 30% of the respondents use it because they believe fares are cheaper online than through physical channel. In order to attract business travellers, who are less price sensitive, than tourist travellers, the airline must improve website's usability, by implementing features that will enable them to purchase tickets using other means of facilitating payment including bank transfer and internet banking etc. This will enable business travellers including the Government of Botswana, to migrate to this channel, enabling the airline to save booking expense fees. In order to attract tourist travellers, the airline must provide competitive fares including holiday packages that will enable its website to compete with other holiday package selling mediums for this category of passengers. Refer to Figure 31 below for Reasons for online purchase.

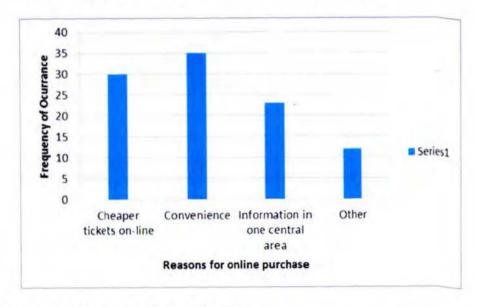


Figure 32: Reasons for Ticket Purchase Source: (Air Botswana, 2011 *Cited* in Air Botswana Customer Satisfaction Survey, 2011)

## e) Technology Improvements

Of the 11% of respondents who book and purchase tickets online, the below figure reveals that passengers would like the Air Botswana website to have features that allow passengers to be able to check-in on-line (52%). Whilst 33% would like to be able to book and pay for other products and services, over and above the purchase of tickets

including car rentals, hotel and other travel packages. These requirements are in-line with the theory that business travellers require convenience; thus by adding on-line check in features on the website, this would negate the need to physically check-in at airports, saving them time and undue stress of queuing. By including other ancillary revenue products and services on the website such as car rentals, hotels etc., the airline not only increases the convenience factor for its main clients(business travellers) but also caters to tourist travellers who search for best deals on all travel related items. Refer to Figure 33 below for Future technology improvements.

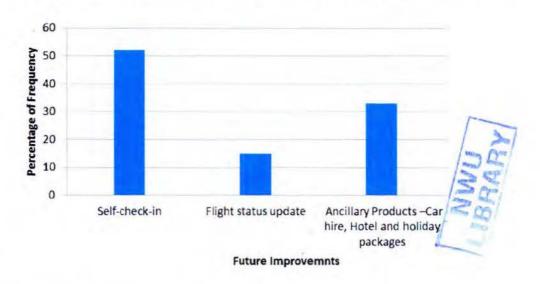


Figure 33: Future Improvements
Source: (Air Botswana, 2011 *Cited* in Air Botswana Customer Satisfaction Survey, 2011)

## 4.16 Summary of Findings.

The above analysis has revealed that the largest group of respondents from the survey are business and tourist travellers respectively. These two types of travellers display different preferences regarding air travel. Business travellers are less price sensitive than tourist and leisure travellers. They are willing to pay a premium to travel on the day they wish to travel, regardless of the price of the tickets. Because the online website is generally associated with cheaper, more restrictive tickets, and the use of credit cards; the data reflects that business travellers have tended to use more traditional ticket selling channels. This occurrence can be attributed to the fact that a majority work for government which purchases tickets through the use of Government Purchase Orders and others use cheques. Tourists tend to be more price-sensitive and more willing to schedule their trips based on the price of tickets available. Hence they represent the majority of users on the

online website channel. However, the website is still used by only 11% of the respondents, thus in order to increase usage of this cost effective channel, the airline will have make technology improvements that will entice more business and tourist traveller as evidenced by the data. For business travellers, who value convenience the most, the website must offer alternative payment methods, must have self-check-in functionalities and other features that make it more beneficial to book through it than the physical channels. For tourist customers, airline will have to include cheaper tickets, and holiday packages to entice this type of travellers to include the Air Botswana website on their search for cheap fares and holidays.

#### CHAPTER 5

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 INTRODUCTION

This chapter is set to conclude the entire research project. It focuses on highlighting the whole study providing a research based conclusion and suggesting recommendations.

#### 5.2 CONCLUSIONS

With the deregulation of local-skies imminent, which will increase competition, coupled with government's reluctance to subsidise the airline's losses, it is imperative that the airline develop strategies to improve competitiveness in terms of the fares it charges and service delivery. Included in this initiative to achieve competitiveness, the airline must also seek ways of reducing its cost of conducting business(Barrowclough, 2008:83).

It has been observed that Air Botswana operates in a regulated environment where it cannot adjust fares without the express consent of government; it is therefore forced to employ effective strategies in order to remain competitive in the market, where rivals are competing on price. Included in this situation is the increased pressure for the airline to prepare for Open-Skies (local skies) and deregulation of the entire local and international skies, where rivals in its traditional markets will increase, and government protection will cease. Thus the airline must rationalise and manage its cost structure to enable it to effectively compete in the future (Kaboyakgosi, 2003).

The theory clearly suggests that because of deregulation, Air Botswana is going to face competition from airlines that have adapted the low carrier model, if it remains operating short-haul point to point routes. It will not be able to compete profitably. This is because the airline has the operating expenses of a traditional long-haul carrier, whilst it only flies short-haul routes with some even subsidizing others. The airline should there clearly decide which business model to adopt in order to remain competitive in a new environment.

Competition from new low cost carriers will also see a growing demand by passengers to reduce airfares caused in part by the evolution of the Internet as a vehicle for travel distribution. In the mid- to late-1990s, air carriers began developing alternative travel distribution vehicles in order to bypass rising GDS fees and travel agent commissions. As profits have deteriorated in recent years, this challenge is being treated with increased

urgency (Knorr 2004.) This urgency is also prevails at Air Botswana, with the need being to leverage technology in reducing the cost of sales amongst other initiatives. Although e-Commerce has been introduced by the airline, its benefits have not been adequately understood and appreciated in the context of the environment with which the airline will operate in, when the skies are deregulated. The office has become an additional sales office, not causing a paradigm shift in the airlines business model, specifically on how it avails its seat inventory to the market for sale. Thus the purpose of this study was to determine the impact of e-Commerce on operating expenses in order to reduce costs, achieve competitive advantage and improve the customer travel experience in a future market where competition will be intense from new low cost rivals. A reduction in indirect operating costs, with an emphasis on distribution costs, was the main focus of this study.

From the research it is evident that Air Botswana has managed to reduce distribution costs in line with industry performance to 11.2% by reducing net commissions by 30% and other distribution related expenses. This reduction, however, cannot be attributed to any strategic intent to reduce these expenses. It can be attributed to the Airline's loss of market share over the last three years, resulting from the arrival of new competition Kenya Airways and South African Airways in its traditional market.

The research has revealed that booking fees from traditional travel agents, which account for 47% of total revenues, account for 81% of total booking fee expenses compared to Air Sales Offices and the airline's website which both contribute 9.32%. At no point during the year under review did booking fees go higher than revenues for Air Botswana Sales offices and the online channel. Thus the researcher can make a fair assumption, all other variables constant, that these channels offer the healthiest means of doing business for the airline.

In order for the airline to benefit from reduced booking fees it must make a concerted attempt to attract its clients to the online channel as its fees decrease as the number of passengers booked on this channel increases. The researcher conducted a survey to solicit feedback from passengers on amongst other things, booking preferences, preferred payment methods etc., in order to illicit information that can help the airline make informed decisions regarding customer ticket purchasing preferences. Upon analysis of the data collected, it can be observed that reveals that a majority of passengers still purchase tickets from travel agencies, with only 11% of respondents having purchased from the online sales channel. Although, only implemented in January 2010, the percentage of respondents who

purchase online is still relatively low, indicating that the airline has not adequately marketed the website to its clients. This also indicates that the airline does not fully understand the benefits of selling online as opposed to selling through physical channels. The research also indicates that a majority of the Airline's passengers are business travellers, followed closely by tourist passengers (both categories make up a total of 92% of travellers). The theory indicates that business travellers prefer convenience over price whilst tourist travellers prefer cheaper prices over convenience. A majority of business travellers purchase their tickets via the use of Government purchase orders. This means of payment is inefficient, as government bureaucracy often results in funds taking a longer, than credit terms permit, to be remitted into the airlines account, whilst passengers have already been flown. This has resulted in the airline having cash flow problems including a significant Government debtor account. Not only will the airline website reduce booking fees as indicated in the theory, but by facilitating for the purchasing of fares online by the government, and other credit customers, the airline can reduce the inefficiencies that are associated with giving customers credit. By migrating credit customers to the online channel, the airline will not only reduce operating expenses, but it will improve customer satisfaction by catering for business travellers who value convenience. This will be achieved implementing other features such as online check-in, that negate the need for these travellers to physically stand in queues at the airport, freeing up valuable time they can use on other business matters. Tourist travellers use the internet to search for cheap air tickets and holiday packages. As indicated by the research, of the 11% of website users, 57% are tourist travellers. To increase the number of tourist travellers to the website, the airline will have to include cheaper fares and holiday packages to be competitive with other websites that offer cheap travel to travellers.

The researcher thus concludes that based on the theory and data collected, it is wholly evident that e-Commerce is the distribution channel of choice for the airline industry in reducing ticketing, sales and promotion expenses. It is therefore recommended that Air Botswana adopt e-Commerce as its main distribution channel. The Airline cannot do away with GDSs entirely; some passengers will always prefer to use travel agencies and the airlines sales offices, but because of the costs associated with operating these channels, the airline must formulate strategies that will in effect penalise or charge customers more to book and pay for air tickets through traditional channels than through online channels.

## 5. 3 RECOMMENDATIONS

- The lack of a clearly defined business model prevents Air Botswana from maximising the benefits of either the hub and spoke or LCC network model to improve competitiveness by reducing costs and maximising revenues. The airline must decide whether it is a low cost carrier or legacy carrier. By deciding what it is, it will be able to identify in which competitive environment it operates in and can thus effectively leverage on technologies reduce and manage operating costs to help it achieve competitiveness in the market.
- It is recommended that the Airline to develop a Cost Management Strategy that
  encompasses all areas of the business, in order to identify, and mitigate cost pressures
  by utilizing the latest in innovative technologies.
- The airline must develop a comprehensive product distribution strategy that ensures promotes e-Commerce as the primary sales channel of Air Botswana, because it is the most cost-effective. It has the lowest booking fee of all the sales channels. Thus the airline must devise strategies of diverting passenger traffic to the online channel by implementing incentives drive traffic and penalties for using physical sales channels. This also includes addition features and products that will drive the airline's consumers to the website, including cheap fares, holiday packages and self-services features such as online check-in.
- The e-Commerce channel is not where cheaper tickets are sold; it provides for a
  cheaper cost of sales than traditional/physical sales channels. Thus the airline must
  develop a comprehensive sales and promotion strategy to drive traffic to this channel in
  order to reduce operating costs, specifically ticketing, sales and promotion expenses.
- Although the cost of sales for the airline's sales offices in comparatively the same as the
  online sales channel, staffing costs, rental and other office operating costs are
  significantly lower, giving it an advantage over these offices.
- The airline must encourage travel agencies to use the airlines website when booking its passengers to benefit from lower booking fees. The technology exists.

# 5. 3 LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FURTHER RESEARCH

The main limitation of this study was time, and limited data. The lack of correct passenger numbers for each sales channel also prevented the researcher in determining the exact cost of sales for each selling channel. Furthermore, the airline hosts most of its data at third parties, mostly in Germany and the USA. In order to get this data, the airline had to pay for subscription, which was costly. The survey conducted was also limited to only a 100 passengers, due to time and financial constraints; hence the researcher believes that the number adequately represents passengers as a whole to solicit an unbiased feedback. The researcher recommends further research in the line of e-Commerce adoption by African carriers. This is largely due to difficulties that African airlines face in adopting new technologies due financial, political, regulatory and capacity constraints.

It is also worth noting that, the research was largely based on data which happened to be currently available to the airline, either through its internal data sources or the survey data. Attempts to get more valuable data from the airlines data vendors and GDSs could not be made possible due to time constraints. This information could have been valuable in giving the researcher booking fee per PNR and Sales data for each Travel agency selling Air Botswana inventory, in order for the researcher to make a determination on viability for selling channel.

#### REFERENCE LIST

Air Botswana Act 1988. (c.74), Gaborone: Government Gazette.

Air Botswana, 2010. Air Botswana Sales and Marketing Report [Report] August 2010: Air Botswana.

Air Botswana, 2011. Air Botswana Corporate Strategy 2011-2014[Report] May 2011: Air Botswana

Air Botswana, 2008. Air Botswana Management Information Report 2008-2009[Report] April 2011: Air Botswana

Air Botswana, 2009. Air Botswana Management Information Report 2009-2010[Report] April 2009: Air Botswana

Air Botswana, 2011. Air Botswana Distribution Profile Report 2009-2011[Report] September 2011: Air Botswana

Air Transport Association of America (ATA), 2007 Economic Report, and www.airlines.org.

Airline Industry Consortium, 2005. Economic Report. January 2011: Airline Consortium Association of European Airlines, 2004. Operating Economy of Airlines-Summary Report 2004.

Association of European Airlines, 2007. Operating Economy of Airlines-Summary Report 2007.

Barrowclough, d., 2008. FDI and Tourism: The development dimension. In: United Nations Publication, United Nations Conference on Trade and Development. New York and Geneva May 2008. New York: United Nations.

Belobaba, P., 2005. Impacts of 9/11 on US Airline Performance. MIT Global Airline Industry Program .International Centre for Air Transportation

Bellman, S, G. L. Lohse, and E. J. Johnson, "Predictors of Online Buying Behaviour," Communications of the ACM, Vol. 42, No. 12: 32-38, 1999.

Bopa, P., 2009.AB Management Contract in April. Daily News, 3RD March.p4-5
Buhalis D., (2002), eAirlines: Strategic and tactical use of ICTs in the airline industry,
School of Management University of Surrey, UK.

Burke, R.R. 2002. "Technology and the customer interface: "what consumers want in the physical and virtual store?" Journal of the Academy of Marketing Science, 30(4): 411-432.

Business Times Reporter, 2010.Private sector is biggest employer. The Botswana Gazette, 10 Nov 3. p.4b.

Business and Economic Advisory Council on A strategy for Economic Diversification and sustainable growth, 2008. Gaborone: BEAC.

Doganis R., (1989), The Economics of International Airlines, 4th ed., Routledge, London.

Doganis, S., 2001. The Airline Business in the twenty First Century. London, Routledge.

Doganis, R. (2006) The Airline Business, Second Edition, Routledge.

Farrokh, M., 2009. Impact of E-Commerce on Travel and Tourism: An Historical Analysis. International Journal of Management, 42(6), pp.564-78.

Georgiades, P. et al., 2000 B. Attitudes toward On-line Purchase Behaviour: Comparing Academics, Students and Others: European Business Management School Press.

Girard, T., R. Silverblatt, and P. Korgaonkar, "Influence of Product Class on Preference for Shopping on the Internet," Journal of Computer-Mediated Communication, Vol. 8: 1-22, 2002.

Global Associates, 2002. The Economics of Travel Distribution in an Internet Driven Environment.2002 Holloway, S. (2003) Straight and Level: Practical Airline Economics, Ashgate.

Horder, P. 2003. Airline Operating Costs. In: SH & E International Air Transport Consultancy, Managing Aircraft Maintenance Costs. Brussels 22<sup>nd</sup> January 2003, Belgium: SH & E International Air Transport Consultancy

Kaboyakgosi G, (2003). Air and Road Transport in Botswana. Botswana Institute for Development Policy Analysis. Gaborone: SATRN.

Kgotla communications, 2004, Airline of First Choice, Annual Report 2003-2004, Botswana: Kgotla Communications

Kgotla communications, 2009, Airline of First Choice, Annual Report 2009-2010, Botswana: Kgotla Communications

Kgotla communications, 2010, Airline of First Choice, Annual Report 2010-2011, Botswana: Kgotla Communications

Knorr, A, 2004. Competitive Advantage through Innovative Pricing Strategies: The Case of the Airline Industry. University Of Bremen.

Koch, A. (2001). Factors influencing market and entry mode selection. Marketing Intelligence and Planning, 19 (5), 351-361.

Kons, A., 2003. Understanding the Chaos of Airline Pricing. The Park Place Economist Vol 3 pp.63-64.

LaCroix, Sumner. "Airline Coupons and Pricing Adjustments." Journal of Transport Economics and Policy 18.3 (1984): 253-262.

Levin, A. Levin, I. and Weller, J., 2005. A Multi-Attribute analysis of preferences for online and offline shopping: Differences across products, consumers and shopping stages. [E-journal] VOL 6, NO.4, 2005. Available through: Journal of Electronic Commerce Research [Accessed 15 June 2011].

Li., H., C. Kuo and M. G. Russell. 1999. "The impact of perceived channel utilities, shopping orientations, and demographics on the consumers' online buying behaviour." Journal of Computer-Mediated Communication, 5(2): 2-25.

O'Connor P., (2002), The Changing face of Airline Distribution: London.

Massachusetts Institute of Technology, 2001. Airline Industry Overview [online] USA: Massachusetts institute of Technology Available at: http://web.mit.edu/airlines/analysis/analysis\_airline\_industry.html [Accessed 18 April 2011].

Mguni, M., 2010. Air Botswana dolls up for suitors. Mmegi Newspaper, 3 Sep. p.2b. McIvor, R. O'Reilly, D. and Ponsobys. 2003. The impact of Internet technologies on the airline industry: current strategies and future developments. United Kingdom: School of International Business, University of Ulster.

Monsuwe, T. P, B. G. C. Dellaert and K. D. Ruyter. 2004. "What drives consumer to shop online? A literature review." International Journal of Service Industry Management, 15(1): 102-121.

Ricover, A., and Ndhlovu, D.2009. Assessment of Potential Impact of Implementation of the Yamoussoukro Decision on Open Skies Policy in the SADC Region In: USAID SOUTHERN AFRICA, Southern African Competiveness Hub. Johannesburg, Republic of South Africa 10 February 2009. Johannesburg: USAID SOUTHERN AFRICA.

Saunders, M., Lewis, P., & Thornhill, A. (2007). Research Methods for Business Students (Fourth ed.). (P. E. Limited, Ed.) Harlow: Pearson Education Limited.

Schiffman, L. G. and L. L. Kanuk. 1997. Consumer Behaviour. Englewood Cliffs, N.J.: Prentice Hall.

Ssamula, B and Del Mistro, R., 2004. Developing a Cost Model for running an Airline Service, 23rd Southern African Transport Conference. Pretoria, Republic of South Africa 12-15 July 2004. Pretoria: Document Transformation Technologies cc.

Sulaiman, A., NG, J. and Mohezar, S., 2008. E-Ticketing as a New Way of Buying Tickets: Social Science Quarterly [e-journal] 17(2): 149-157: [Accessed 12 June 2011].

Swinyard, W.R. and S. M. Smith, "Why People (Don't) Shop Online: A Lifestyle Study of the Internet Consumer," Psychology and Marketing, Vol. 20: 567-597, June 2003.

The skies Newsletter. 2010. ICAO Counsel President visits, (Cmnd. 20), Gaborone: CAAB

The Editor, 2010. Air Botswana ticket online. The Gazette, 10 Jan. p.4b.

Williams, D., 2002. Airline Competition: Deregulation's Mixed Legacy. England. Ashgate Publishing Company.

Wood, S. L. 2002. "Future fantasies: a social change perspective of retailing in the 21st century." Journal of Retailing, 78(1): 77

Yang, S., 2001. E-Commerce in Airline Business. In: Revenue Management SA (United Nations Department of Economic and Social Affairs), the International Symposium on Government in E-Commerce Development. Ningbo, Republic of China April 23-24, 2001. Ningbo: China

United States Government Accounting Office, 2003. Airline Ticketing: Impact of Changes in the Airline Ticket Distribution Industry 2003. GAO