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GORDON INSTITUTE  
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University of Pretoria

# **Willingness to pay for airline services and product attributes in South Africa**

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

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## **Abstract**

The primary objective of this research was to understand airline services and product attributes that customers value and to estimate their willingness to pay for these attributes. The research also aimed to understand the consumer decision making and buying process particularly with reference to rules used in the buying process. Would the ranking of a service or product attribute influence customers' willingness to pay for that attribute? The research was based in South Africa.

This research used a structured survey design, asking customers to rank their preferred product attributes and went on to enquire about their willingness to pay for those attributes.

The main findings regarding the preferred attributes mirrored those that were uncovered in the literature review. For business travellers, Frequency, Comfort and Business Lounge were found to be predictors of willingness to pay. Only the Business Lounge was found to be a predictor of willingness to pay for non-business travellers.

Willingness to pay responses from the two groups were similar; however the results showed that non-business travellers were significantly more willing to pay for Flight Frequency while business travellers were significantly more willing to pay for access to the Business Lounge.

With regards to the use of decision making rules, there did not seem to be any clarity on the use of any decision rules for business and non-business travellers.

## Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorization and consent to carry out this research.

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Shiluva Khanyisa Hlekane

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# **Chapter 1: Introduction to the study**

## **1.1 Introduction**

One of the consequences of airline deregulation in South Africa, in 1990, was the increase in air traffic. The increase in air traffic was supported by the emergence of multiple airlines competing on the same routes and for the same customers. This left consumers with more choices at different prices, frequencies, availabilities, times and other important services and product attributes. The increased services and product attributes offered, as a result of the increased competition, means that airlines have to re-examine their costs versus the services and product attributes they offer in order attract customers and be profitable.

This research aims to understand airline services and product attributes that customers value and to estimate their willingness to pay for these attributes. Coupled with this is understanding the consumer buying process particularly with reference to rules used in the buying process. How do attributes considered as important affect consumers' willingness to pay for those attributes?

## **1.2 Background to the study**

Since deregulation the airline landscape was changed by the emergence of multiple airlines. Amongst these emerging airlines were low cost, no frills carriers. Low cost carriers offer a simple product at aggressive prices. Full service carriers on the other hand offer a number of services and product attributes and recover their costs of providing these attributes in the ticket price.

In South Africa, the local airline industry has seen more competition with the entrance of low cost carriers such as Nationwide Airlines (which has since been discontinued and liquidated), Kulula (operated by Comair Limited), 1Time and Mango. British Airways (operated by Comair Limited) and South African Airways are the only domestic full service carriers. South African Express and Airlink are also full service carriers, active in the domestic market; however their focus is on small towns, cities and regional destinations.

The increased competition following deregulation has not only been witnessed in South Africa, but also in other markets. Following deregulation in Europe and the United States of America, increased competition usually came from low-cost carriers on short-haul markets and from other conventional airlines offering indirect tickets on long haul markets (Pels, 2008).

“The advent of “low-cost no frills” airlines changed the shape of the airline industry” (Mosala, 2008). Airlines, especially full service carriers have had to re-look at the cost and benefits of their product offering in the face of fierce price competition. Airlines need to have a better understanding of their customers’ services and product needs, especially the services and product attributes customers are willing to pay for. There are a number of fundamental requirements for mainline airlines if they are to produce the level of returns that make them attractive to providers of capital over the medium and longer term (Tarry 2003). It is against this backdrop that this research aims to understand airline services and product attributes that customers value and to estimate their willingness to pay for these attributes.

### 1.3 Problem statement

Little research has been done to understand airline services and product attributes that customers value and to estimate their willingness to pay for these services and attributes in South Africa and Africa.

Airlines have made improvements in airline services and product attributes including punctuality, frequencies, ticket flexibility, price, frequent flyer programmes, business lounges and comfort. It is important to understand how these changes affect customers' choice of airlines and ultimately profitability. Airline managers need to know how travellers make airline choices, as this information generally influences the pricing and management policy of airlines (Proussaloglou and Koppelman, 1995). Hence the ability to understand services and product attributes that customers value and the ability to determine the price that consumers are willing to pay for those attributes has become a business imperative.

The goal of a business is to be profitable and sustainable. Profitability is dependent on maintaining a level of cost lower than revenues (price of a ticket \* traffic). In the airline industry "a large proportion of an airline's costs are outside the control of its management" (Tarry 2003, p80). Airlines do however have control over the mix of services and product attributes that they can offer and the price (airfare) that they can charge for those services and attributes. However, "traffic overall remains particularly price elastic" (Tarry 2003, p80). Thus understanding how service quality, product attributes and price affect an airline's profit is an important issue in the airline industry.

## 1.4 Objectives of the study

The primary objective of this research is to understand airline services and product attributes that customer's value and to estimate their willingness to pay for these attributes.

The secondary objective of this research is to assess the impact of attributes ranked as important on consumers' willingness to pay for those attributes. The main focus here is to establish how these independent services and product attributes affect consumers' willingness to pay for these attributes.

Finally, this research aims to understand the consumer decision making and buying process particularly with reference to rules used in the buying process. It also seeks to establish whether the ranking of a service or product attribute influence customers' willingness to pay for that attribute.

In order to unpack these objectives, the following questions have been raised and will be addressed throughout this paper;

1. Which services and product attributes are important to airline consumers?
2. How do important services and product attributes influence customers' willingness to pay for those services?
3. Are passengers really willing to pay a premium for "important" services and product attributes offered? If so, how much?
4. What decision rules do customers use when making purchase and spending decisions?

5. Is there evidence of the use of decision rules in purchase decisions of airlines customers?

## **1.5 Methodology**

The research approach and methodology to allow the researcher to unpack the objectives mentioned in section 1.4 above is outlined below. The methodology is detailed in Chapter 4.

### **1.5.1 Type of research**

This research was quantitative and descriptive.

### **1.5.2 Sampling framework and scope**

A non-probability convenience sample was used for this study. Respondents were classified into two groups: those travelling for business purposes and those travelling for non business purposes.

The researcher solicited responses from a minimum of 30 travellers from each group. A minimum of thirty travellers from each group was decided to ensure that the results were statistically significant and reliable.

A sample survey was used to obtain responses from travellers using different carriers. Travellers were going from OR Tambo International Airport (Johannesburg) to Cape Town International Airport. This route is the busiest local route ([www.travelwithinsouthafrica.co.za](http://www.travelwithinsouthafrica.co.za), 2009).



The fieldwork was conducted on a number of different flights from OR Tambo International Airport (Johannesburg) to Cape Town International Airport.

### **1.5.3 Instrument used**

A structured questionnaire was used to solicit responses from travellers. Travellers were assisted to complete the questionnaire.

A screening question asked travellers to state whether they were flying to Cape Town or not. This enabled the researcher to eliminate all passengers not flying to the defined destination.

Questionnaires were pre-tested to ensure that the content was sufficient for the task.

### **1.5.4 Methods of analysis**

Descriptive analysis was used to describe, summarise and transform the responses to make them easy to understand. Relationships between various services and product attributes were tested using regression. T-tests were used to assess differences in responses from the two defined groups of travellers.

### **1.5.5 Limitations and errors**

As a non-probability sampling method was used, it was expected that there were certain limitations and errors in terms of generalisation to the broader population.

Random sampling errors were expected and were minimised by soliciting an acceptable number of responses.

Systemic errors were mitigated by assisting the customer to complete the survey.

There were also possibilities of respondent errors especially with acquiescence (agreeableness) bias due to possible sensitivities related to asking people about their willingness to pay for services and product attributes. To mitigate this risk, the researcher solicited more responses from travellers than the required minimum of thirty.

### **1.5.6 Ethical issues**

A number of ethical considerations were addressed in the study. The purpose and nature of the study was explained to participants before the questionnaire was completed. Respondents had the option to participate in the study or withdraw at any point. The study was completely confidential and participants were not asked for their personal details at any point.

## **1.6 Summary of Chapter 1**

This chapter provided the background, motivations and objectives of the study. It also provided a brief overview of the research method and approach that was followed. In the following chapters, existing literature is reviewed to give the researcher deeper insight into previous studies related to the topic and objectives as well as the outcome of those studies. Chapter 3 follows with the research hypotheses that are addressed in the study. Chapter 4 describes, in detail, the research methodology used and the techniques employed to analyze the data.

Chapter 5 presents the research findings which are then analyzed and discussed in Chapter 6. Chapter 7 concludes with a summary of the study, the findings, recommendations and suggestions for future research.

## Chapter 2: Literature review

### 2.1 Introduction

The aim of this chapter is to look at the available literature to guide the researcher to understand airline services and product attributes that customers value and to estimate their willingness to pay for attributes. The theory reviewed deals with three aspects of this research;

- Firstly, the theory on the consumer buying process with reference to the rules used in the buying process will be explored.
- Secondly, the identification, through literature review, of important services and product attributes that have been mentioned as important by airline customers in numerous past researches.
- Finally, the researcher will look at willingness to pay for airline services and product attributes at a conceptual level. In this section the researcher will attempt to understand, how do attributes regarded as important by customers impact willingness to pay.

## 2.2 Consumer decision making and buying process

### 2.2.1 Introduction

The theory reviewed in this section examined the consumer decision making and buying process. A particular focus was placed on decision rules that consumers use to select options when faced with many alternatives. Airline managers need to know how travellers make airline choices, as this information generally influences the pricing and management policies of airlines (Prousaloglou and Koppelman, 1995). It is of interest to this research to understand how these decision rules ultimately affect consumers' willingness to pay for airline services and product attributes.

### 2.2.2 A background on the consumer decision making and buying process

Consumers engage in decision making processes because they need to make choices when faced with many alternatives. These alternatives must be satisfied with limited resources. Sometimes consumers can go through the entire decision making process without even realising it, while at other times the process is complex (Cant, Brink and Brijball, 2006). Figure 1 illustrates a simple five stage model of the consumer buying process.

**Figure 1:** Five stage model of consumer buying process (Source: Kotler and Keller, 2007, pg 92).



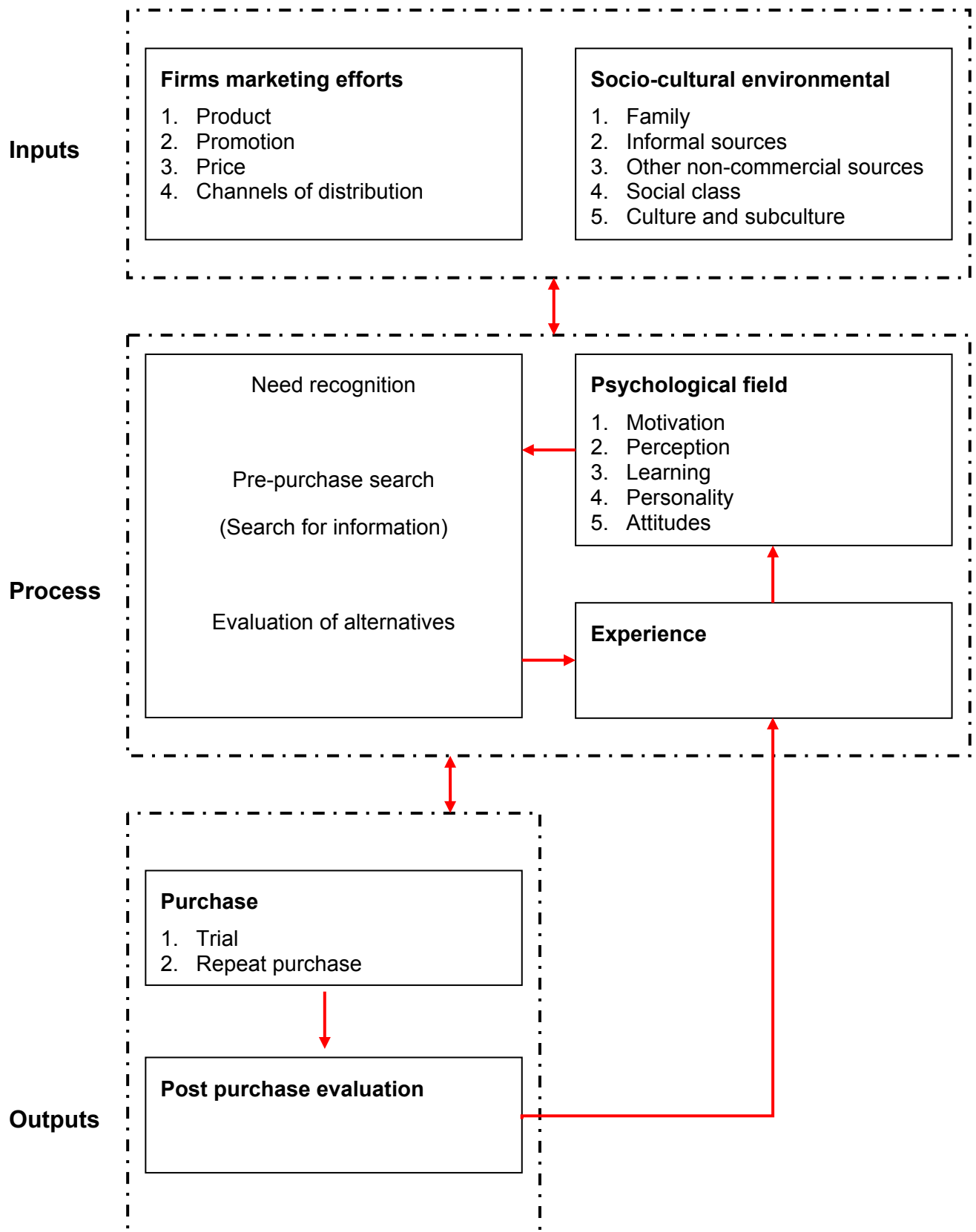
### 2.2.3 Levels of consumer decision making

There are three levels of consumer decision making; extensive, limited and routine problem solving (Schiffman and Kanuk, 1997). Depending on the problem solving required, consumers draw on various internal and external information sources to assist in making the final purchase decision. Figure 2 expands the consumer decision making process model to include various sources of inputs and outputs which assist consumers in their decision making process. Whereas the simple model in Figure 1 implies that consumers pass sequentially through the five stages; it can be seen in Figure 2 that consumers may skip, repeat or reverse some stages depending on information availability and their requirements. This view is also supported by Kotler and Keller (2007).

The more extensive the decision to be made or problem solved, the more involved the information search and evaluation of alternatives. Consumers often develop and use rules to evaluate alternatives. This leads to not all decisions receiving or requiring the same level of problem solving. There are therefore variations in the amount of time spent in each stage of the decision making process (Schiffman and Kanuk, 1997).

It is important to note that “the buying process starts long before the actual purchase and has consequences long afterward” (Kotler and Keller, 2007, p 92). Understanding factors that influence the ultimate purchase decision will not only help airline managers to understand what customers are willing to pay for, but also how they can influence the purchasing decision and willingness to pay.

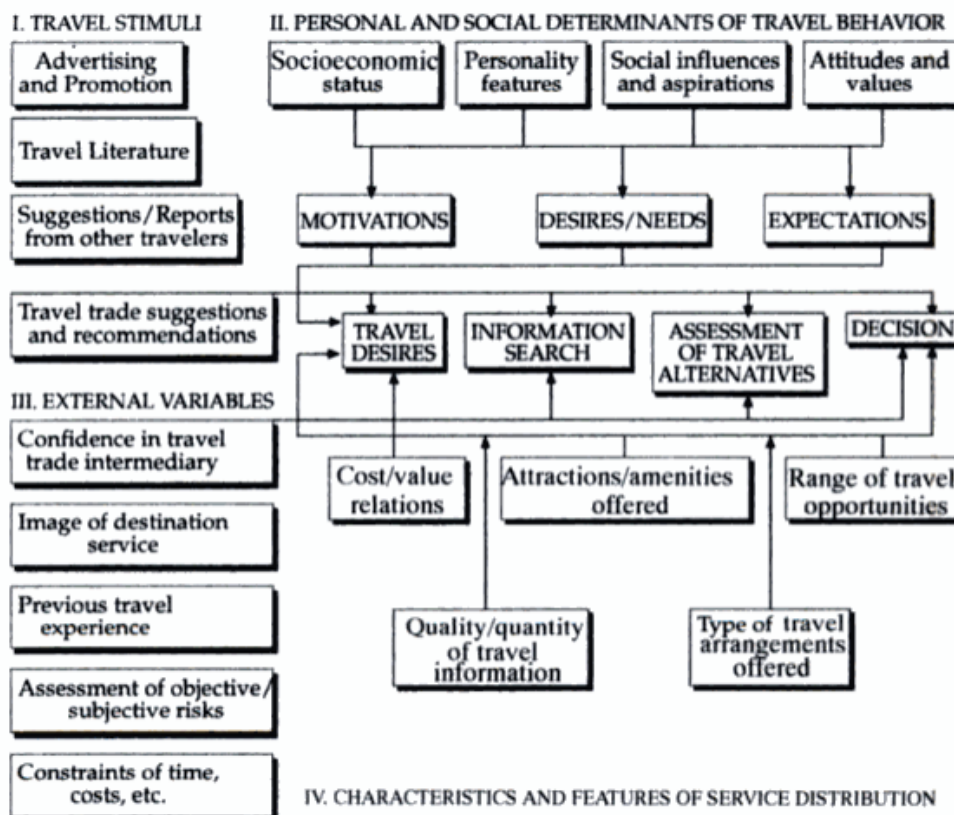
**Figure 2:** The expanded five stage model of consumer decision making (Source Schiffman and Kanuk, 1997, pg 565).



Schmoll (1977) studied the relationship between information sources and the actual selection in tourism (Molina & Esteban, 2006). From his studies he developed a model based on Howard and Sheth's (1969) work on consumer behaviour. In his model, Schmoll (1977) "related theoretical concepts to real world, specified the relationships between various components, and showed which factors had influence on choice decisions" (Molina & Esteban, 2006).

Schmoll (1977) used the expanded five stage model of consumer decision making to show some of the inputs and information sources that travellers use in the decision making process.

**Figure 3:** A model of the travel decision process (based on Schmoll 1977, cited in Pizam and Mansfeld, 1999, pg 20).





“Schmoll’s model is descriptive – its purpose is to show the relevant variables and their interrelationships – but it cannot be quantified” (Pizam and Mansfeld, 1999). Pizam and Mansfeld (1999) go on to state that the model is not a tool for prediction and cannot serve as a basis for forecasting demand for a given destination or service. The model can however be used in the following areas;

- It indicates where marketing action can be used to influence the decision process.
- It shows which factors have a bearing on travel decisions.

#### **2.2.4 Consumer decision rules in the decision making process**

Understanding how consumers weigh different options and the factors that influence their purchase decisions is critical to consumer behaviour research. Consumers often develop and use rules to evaluate alternatives, so this understanding should ideally be in context of these decision rules. The aim of the following section is to identify and discuss consumer decision rules, particularly with reference to how the value placed on a service or product attribute affects willingness to pay for that service or product attribute.

Schiffman and Kanuk (1997, p570) say that consumers tend to use two types of information when evaluating potential alternatives:

- I. A “list” of brands from which they plan to make their selection (evoked set).

*The criteria consumers use to evaluate the brands that usually constitute their evoked sets are usually expressed in terms of important product attributes;*

***and***

II. The criteria they use to evaluate each brand.

*In evaluating potential alternatives consumers often use decision rules to simplify the decision making process. These rules are classified into two broad categories; compensatory and non-compensatory decision rules.*

Compensatory decision rules are those in which consumers allocate weighted scores to each attribute (these can be positive or negative), depending on the merit of the attribute. They then add and subtract positive attributes from negative ones. The alternative with the highest final score is chosen.

This rule implies that consumers are able and willing to make trade-offs between attributes in order to determine the most preferred alternative (Arana and Leon, 2009). Previous research in the sciences of decision making has shown that people often avoid making trade-offs among attributes [(Kahneman and Frederick, 2002), Gowda and Fox, 2002) and (Payne, Bettman and Johnson, 1993)] cited in Arana and Leon, 2009). In these cases they would use non-compensatory decision rules to make a decision.

“Non-compensatory decision rules are rules in which consumers establish a minimally acceptable cut-off point for each attribute evaluated” (Schiffman and Kanuk 2007). Non-compensatory decision rules do not allow consumers to balance positive valuations of one alternative against negative valuations of another alternative.

Schiffman and Kanuk (2007) state four non-compensatory decision rules listed below;

## **I. Conjunctive decision rule**

The consumer establishes a separate, minimally acceptable level as a cut-off point for each attribute. If any particular brand or model falls below the cut-off point on any one attribute, the option is eliminated from further consideration. The conjunctive rule can result in several consumers applying an additional decision rule to arrive at a final selection.

## **II. Disjunctive decision rule**

The disjunctive rule is the 'mirror' image of the conjunctive rule. In applying this decision rule, the consumer establishes a separate, minimally acceptable cut-off level for each attribute (which may be higher than the one normally established for a conjunctive rule).

## **III. Lexicographic decision rule**

A lexicographic decision rule, the consumer first ranks the attributes in terms of perceived relevance or importance. The consumer then compares the various alternatives in terms of the single attribute that is considered most important.

## **IV. Affect referral decision rule**

This is a simplified decision rule where consumers make a product choice based on their previously established overall ratings of the brands considered, rather than on specific attributes.

Although many rules can be used together, for the airline manager, the question is do travellers rely on these decision rules when making decisions? Does the decision

making process and rules applied impact travellers' willingness to pay for airline services and product attributes?

### **2.2.5 Summary of the consumer decision making and buying process**

The theory reviewed in this section examined the consumer decision making and buying process. A particular focus was on decision rules that consumers use to select options when faced with many alternatives. Consumers may use compensatory and non-compensatory rules when making decisions. Understanding how consumers weigh different options and factors that influence their purchase decisions is critical. Understanding how these decision rules ultimately affect consumer's willingness to pay for airline services and product attributes is of importance to this research.

## **2.3 Service and product attribute selection by airline customers**

### **2.3.1 Introduction**

While, in the past, the airline industry was characterized by government regulated protectionism, the liberalization of the airline industry has led to the development of a highly competitive market (Rose, Hensher and Greene, 2005; van der Westhuizen 2008; Balcombe, Fraser and Harris, 2009, in press). The most obvious evidence of the increased competition was the entrance of low-cost carriers who generally touted a simplified fare structure with lower ticket prices, thus capturing significant market shares (Teichert, Shehu and von Wartburg, 2008, p228). “The entry of low cost airlines has thrown out a challenge to all airlines to find ways of attracting passengers, through a mix of fare discounting, greater frequency, improved flight times and no-frill’s levels of on-board service” (Rose, Hensher and Greene, 2005, p 400). South Africa has seen a similar picture emerging with the entrance of low cost carriers such as Nationwide Airlines, Kulula, 1Time and Mango.

Tarry (2003) suggests that there are a number of fundamental requirements for mainline airlines if they are to produce the level of returns that make them attractive to providers of capital over the medium and longer term. These changes include differentiating increasingly commoditised products in the marketplace.

Differentiating by changing the mix of services and product attributes could allow airlines to increase their revenues. This could be by offering services and product attributes that are valued by consumers while eliminating those that are not valued. However, services and product attributes offered affect passengers’ choice and the price that customers are willing to pay for travel. “Most air passengers are sensitive

to airline travel cost” (Martin, Roman and Espino, 2008). The mix of services and product attributes ultimately impacts how much customers are willing to pay for airline travel. Airlines need to be careful about their mix of services and product attributes offered as this not only impacts customer choices but also has an impact on airline costs.

When changing the mix of services and product attributes, knowing customer preferences and preferred attributes is an important issue in the airline industry. This will help them to offer relevant services to customers and to be profitable.

### **2.3.2 Definition of service and product attributes**

For this research, services and product attributes refer to the main features, functions and benefits that are offered by airlines to consumers while using the airline (Superaff, 2009). Attributes may be tangible and may also be abstract (Superaff, 2009). Examples of tangible attributes would be those that can be quantified and are measurable such as reliability, punctuality, frequency, availability and ticket flexibility. Abstract attributes are those that are not quantifiable and are subjective such as comfort and the quality of food and drinks.

The terms “services and product attributes” are used interchangeably.

### **2.3.3 Important airline attributes**

The mix of services and product attributes impacts how much customers are willing to pay for airline travel. Mason (2000) states that to differentiate business class products from leisure oriented economy tickets, traditional scheduled airlines have

provided a number of additional benefits to holders of business class tickets; these include loyalty schemes, dedicated business class check-in, greater leg room than is offered in standard class, free newspapers, access to airport business lounges and ticket flexibility.

It is therefore important to understand services and attributes that customers value and would be willing to pay for. This will enable airlines to spend money on the critical attributes and not invest money in the less important attributes. Literature review was conducted to extract a list of important attributes from previous studies.

### 2.3.3.1 Important attributes for business travellers

Alamdari (1999) conducted a survey in which passengers were surveyed by means of postal questionnaires and interviews. The questionnaire was designed to establish the passengers' travel behaviour and their experience with in flight entertainment products and services, amongst other things. He found that the most influential factors or services and product attributes affecting business passengers were reliability, punctuality, seating comfort and schedules, see Table 1 below.

**Table 1:** Product attributes affecting business passengers (Alamdari, 1999).

Reliability
Punctuality
Seating comfort
Schedules

Mason (2000) studied 448 European business travellers to assess the propensity for business travellers to use short haul low cost airlines. His research was conducted in

the United Kingdom. The study assessed the utility placed by travellers on price, reward schemes, flight frequency and in-flight comfort service attributes. He used stated preference methods to force respondents to trade fares with product features common in business class products.

Mason's study (2000) revealed price to be the most important purchase factor followed by in-flight comfort and then flight frequency. He also found that a significant number of short haul business travellers are now also using low cost carriers. He goes on to say that consumption of low-cost airline services contradicts traditional perceptions of business travellers as placing high value on frequency, flexibility, frequent flier programme awards and in-flight comfort. It is important to note that he only explicitly assessed the utility placed by travellers on limited service attributes namely price, airline reward schemes, flight frequency and in-flight comfort. The view that business travellers are not placing high value on frequency, flexibility, frequent flier programme awards and in-flight comfort was based on deductive reasoning.

In 2001, Mason sought to establish whether business travellers using low-cost airlines represented a distinct market segment than those business travellers using traditional network carriers. He studied the importance of a number of short-haul service attributes given by these two groups of business passengers. Data was collected at London's Heathrow (LHR) and Luton (LTN) airports. Passengers at Heathrow were customers of various full service network carriers while at Luton passengers of the low-cost airline EasyJet were exclusively sampled.

In his study Mason (2001) found that punctuality, frequency, ticket flexibility and in-flight service were viewed with the highest importance by users of full cost carriers..



For users of low-cost airlines punctuality, frequency and fare level were the most important service attributes followed by ticket flexibility.

Table 2 below shows the deference in “means” or “averages” between the importance placed on a number of short haul product variables between the two groups. A scale from 1 to 10 was used where 10 was most important. The ANOVA significance level of the deference between the two means is also shown.

**Table 2:** Importance placed on product elements. Source Mason (2001, p 108).

Product element	LHR mean	LTN mean	Significance
Punctuality	8.96	9.22	0.331
Frequency	8.45	8.64	0.483
Price	6.90	8.38	0.000
Ticket flexibility	7.49	7.90	0.180
In-flight service	6.93	6.10	0.019
Frequent flier scheme	5.96	5.03	0.040
Business Lounge	5.64	4.50	0.000

Evangelho, Huse, and Linhares (2005) conducted similar research to that conducted by Mason (2001) to establish whether business travellers using low-cost airlines represented a distinct market segment than those business travellers using traditional network carriers. Their research was conducted in Rio de Janeiro, Brazil. Their results indicated that full service carrier travellers tend to give greater emphasis to punctuality, frequency, ticket flexibility, price, mileage programmes, in-flight service, and VIP lounges, in that order of importance. On the other hand, low-cost carriers assign more importance to punctuality, price, ticket flexibility, frequency, mileage programmes, in-flight service, and the existence of VIP lounges (also in

order of importance). Table 3 below shows the deference between the importance placed on a number of short haul product variables between business travellers using low-cost airlines and business travellers using traditional network carriers. Their results differ slightly to those of Mason (2001); however it is clear that punctuality, frequency, ticket flexibility and price are important to business travellers.

**Table 3:** Importance placed on short haul product variables between business travellers using full service carriers and those using low cost carriers. Source Evangelho, Huse, and Linhares (2005).

<b>Attributes in order of importance for full service carrier passengers</b>	<b>Attributes in order of importance for low cost carrier passengers</b>
Punctuality	Punctuality
Frequency	Price
Flexibility	Flexibility
Price	Frequency
Frequent flier programs	Frequent flier programs
In-flight service	In-flight service
VIP lounges	VIP lounges

In South Africa, Fourie and Lubbe (2006) used a structured questionnaire to solicit responses in face-to-face interviews with business travellers. They relied mainly on the revealed preference approach to assess the importance business travellers placed on independent service elements in selecting an airline. This involved asking business travellers to rate service elements based on an importance scale. The services and product attributes that travellers were asked about were seat comfort, schedule/frequency of flights, price, pre-seating options, cancellation charges, airport lounge facilities, frequent flyer programmes, business class option, in-flight meals

and drinks, method of payment and in-flight entertainment. Like Mason (2001) and Evangelho, Huse, and Linhares (2005) they also separated their sample into business travellers using full service carriers and those using low cost carriers.

Their (Fourie and Lubbe, 2006) results show that for both categories of travellers, business travellers using low cost carriers and business travellers using full-service airlines, the three most important service factors were seat comfort; schedule/frequency of trips and the price of the air ticket, whilst in-flight entertainment was regarded as the least important. Their results (Table 4) are similar to the results achieved by Mason (2000) and Evangelho, Huse, and Linhares (2005).

**Table 4:** Important product attributes for business passengers using low cost carriers and business travellers using full-service airlines. Source Fourie and Lubbe (2006), p 100.

	Low-cost category		Full-service category		<i>p</i> -value	Both categories	
	Mean	<i>n</i>	Mean	<i>n</i>		Mean	<i>n</i>
Seat comfort	4.54	50	4.68	50	0.352		100
Schedule/frequency of flights	3.74	50	4.58	50	0.000	4.16	100
Price	3.98	50	4.04	50	0.692	4.01	100
Pre-seating options	3.46	50	4.29	49	0.000	3.87	99
High cancellation charges	3.70	50	3.88	50	0.522	3.79	100
Airport lounge facilities	2.56	50	4.24	50	0.000	3.40	100
Frequent flyer programmes	2.58	50	4.08	50	0.000	3.33	100
Business class option	2.52	50	3.60	50	0.000	3.06	100
In-flight meals and drinks	2.62	50	3.40	50	0.003	3.01	100
Method of payment	2.92	50	2.84	50	0.838	2.88	100
In-flight entertainment	2.08	49	2.48	50	0.117	2.28	99

Koetting & Widener (2008) conducted a survey of their global clients and suppliers to look at how the business travel industry was likely to evolve over the next few years. In their view, the company travel policies could become less restrictive as companies step up their efforts to attract and retain talent. They believe that “more emphasis would be placed on employees’ work life balance and driving productivity, and less on achieving savings at the expense of traveller comfort and wellbeing” .

Chen and Wu (2009) explored passengers’ preferences in service attributes in a hypothetical case of direct flights between Taiwan and China. Their study was conducted using stated preference methods to assess the value placed on the meal, flight change, booking channel and on board services by business and non-business travellers. For business travellers the in-flight meal was perceived to have the highest value followed by flight change (see Table 5).

**Table 5:** Important product attributes for business and non business passengers.

Source Chen and Wu (2009), p 53.

Attribute	Total sample		Business travelers		Non-business travelers	
	Coefficient	t-Value	Coefficient	t-Value	Coefficient	t-Value
FARE	-0.00031	-11.52**	-0.00038	-10.34**	-0.00022	-5.51**
MEAL	0.45	10.42**	0.41	7.16**	0.51	7.67**
ENTERTAIN	0.16	4.08**	0.15	2.75**	0.18	3.10**
BOOKING	0.24	6.07**	0.25	4.62**	0.23	3.87**
CHANGE	0.27	6.51**	0.28	5.15**	0.24	4.00**
Constant-A	4.17	13.39**	4.97	11.64**	3.16	6.88**
Constant-B	4.81	20.71**	5.32	10.46**	4.207	12.49**
LL ( $\beta$ )	-1426.06		-805.79		-613.40	
Sample size	2205		1232		973	

\*\* $p < 0.001$ .

### **2.3.3.2 Important attributes for non business travellers**

Alamdari (1999, cited in Martin, Roman and Espino, 2008) conducted a survey and found that the most influential factor affecting leisure passengers was price.

Martin, Roman and Espino (2008) conducted a study in Spain to estimate the values of some service-quality attributes in an airline choice context using stated preferences methods. They used an assisted questionnaire to solicit responses from travellers. They did not isolate business and non-business travellers, but did exclude travellers who were “travelling with tourist packages, namely packages with a combination of hotel, air travel, rent a car, etc as they do not have a clear idea of the exact cost of the air travel portion of their travel package”.

They found that the more valued attributes were reliability, penalty for changes and comfort (more leg room), and the less valued were those associated with food and frequency.

In their 2009 study, Chen and Wu found that for non-business travellers in-flight meal was perceived to have the highest value followed by flight change and booking channel (see table 5 above). In addition, “their results indicate that non-business travellers are more likely to trade-off service attributes with airfare than business travellers” Chen and Wu (2009, p53).

### **2.3.4 Summary of important attributes**

This section discussed the important attributes for both business and non-business travellers.

For business travellers, studies by Alamdari (1999), Mason (2000, 2001), Evangelho, Huse, Linhares (2005) and Fourie and Lubbe (2006) indicated that the three most important service factors were seat comfort, the schedule/frequency of trips and the price of the air ticket. Alamdari (1999) did find reliability to be very important; however some may view this attribute in the same light as punctuality as they both address the need for traveller to be at a certain place at a given time.

For non business travellers price is important. Chen and Wu (2009) also found that non-business travellers are more likely to trade-off service attributes with airfare than business travellers.

## **2.4 Willingness to pay for airline service and product attributes**

### **2.4.1 Introduction**

A few studies to estimate willingness to pay for services and product in the airline industry were found around the world. Studies to estimate willingness to pay were found in Europe, America and Asia. These studies considered willingness to pay for various attributes such as food and comfort. The researcher was not able to find any studies in South Africa and Africa. For this section of the literature review, the researcher is more interested in the concept of willingness to pay than the absolute value that travellers are willing to pay for various services and product attributes. This is because the absolute value is dependant on many factors such as social circumstances, income of respondents, timing and location of respondents.

### **2.4.2 Willingness to pay**

“Most air passengers are sensitive to airline travel cost; however service quality also affects passengers’ choices, but is in many ways subjective” (Martin, Roman and Espino 2008). It can therefore be expected that customers would have varying degrees of willingness to pay for services and product attributes.

Lee and Luengo-Prado (2004) conducted a study in the United States of America to assess how legroom impacted the price paid by consumers. They focused on travellers using full service carriers, United Airlines and American Airlines. Their study was conducted after these two airlines reconfigured their aircraft resulting in additional seat pitch (more legroom) in their economy class cabins. “American Airline's program increased the seat pitch for all coach class seats across their entire

aircraft fleet to between 33 and 35 inches while, United Airline's increased seat pitch to an industry-leading 36 inches, but the increased pitch was limited to the first 6 to 11 rows of the coach (economy) class cabin depending on aircraft type" (Lee and Luengo-Prado 2004). All American Airline's passengers on economy class experienced more leg room, while only a limited number of passengers on United Airlines received extra leg room.

Lee and Luengo-Prado's (2004) results revealed that for passengers flying on American Airlines, no evidence could be found that passengers were willing to pay a premium for more leg room. The contrary was true for United Airlines. "United Airline's Premium Economy program was effective in attracting passengers willing to pay higher fares for greater seat pitch when offered a choice of otherwise comparable service among competing full service carriers" (Lee and Luengo-Prado 2004). Lee and Luengo-Prado (2004) go on to say that, the United Airline program was targeted at the business traveller market, and that the better performance "may be a reflection of the importance of business travellers to the full service carriers". "Business travellers tend to be less price-elastic, and since United Airline's Economy Plus seats offer the greatest coach class seat pitch of the major carriers, those passengers who value the extra space the most, may be willing to pay a fare premium for United Airline's service" (Lee and Luengo-Prado 2004).

For non-business travellers price is important. Chen and Wu (2009) found that non-business travellers are more likely to trade-off service attributes with airfare than business travellers. This suggests that non-business travellers are likely to choose the lowest-priced carrier, regardless of service quality.



In their 2008 study, Espino, Martin and Roman examined different model specifications to detect the presence of preference heterogeneity in an airline choice context. They used a stated preference experiment to analyze individual's preference for the main attributes defining the service offered by the airlines. In addition, they looked at willingness to pay for different service quality attributes namely, price, penalty for changes in the ticket, free food on board, comfort, frequency and reliability. Their sample consisted of the following groups: business travellers versus non-business travellers and business class travellers versus economy class travellers. Their study was conducted in Spain, Europe.

In analyzing their (Espino, Martin and Roman, 2008) results, they used two different models to measure willingness to pay. They used a prediction model for variables, and then a model to measure socio-economic factors (i.e. personal wealth in affording the attributes). Their (Espino, Martin and Roman, 2008) findings show that “the willingness to pay measures for service quality could not be properly estimated if the existence of taste variation of passengers’ preferences is not addressed”. Simply put, you cannot fully account for individual preferences with regards to the attributes. They found that socio-economic factors don't play a role in determining individual preferences for attributes, but that travelling class and reason for travelling do.

Balcombe, Fraser and Harris (2009, in press) examined how charter airlines might differentiate their products. They considered which attributes of in-flight cabin comfort and service may be valuable to consumers by analyzing consumer willingness to pay for in-flight attributes. Their study was conducted using an internet delivered choice experiment, for a flight of between 4 and 5 hours. Their results revealed that in principle passengers are willing to pay a relatively large amount for

enhanced service quality. The length of flight in their study is longer than that of this study and their target market differs from that in this research. Their study and results have been included in this research because they highlight that there are definitely comfort attributes that customers are willing to pay for.

Chen and Wu (2009) explored passengers' preferences in service attributes in a hypothetical case of direct flights between Taiwan and China. Their study employed stated preference analysis. In their study meal service appeared to have the highest perceived value followed by flight change, booking channel and onboard entertainment. The importance of meal service price for the non-business traveller model is much higher than that for the business traveller model while the importance of flight change availability for the business traveller model is reversely much higher than that for non-business traveller model.

### **2.4.3 Summary of willingness to pay**

This section examined the concept of willingness to pay for a few airline services and product attributes. The focus was not on the absolute value that travellers are willing to pay for various attributes, but on the concept of willingness to pay. In the few studies examined, travellers seem to be willing to pay for some product attributes. It seems that socio-economic factors don't play a role in determining individual preferences for attributes, but that travelling class and reason for travelling do. This suggests that an understanding of customers can help airline managers differentiate their product offers and charge for those differences.

## 2.5 Summary of literature review

This chapter looked at the available literature to guide the researcher to understand airline services and product attributes that customer's value. The theory reviewed dealt with three aspects of this research;

- Firstly, the theory on the consumer buying process with reference to the rules used in the buying process.
- Secondly, the identification of important services and product attributes that have been mentioned as important by airline customers in past research.
- Finally, the willingness to pay for airline services and product attributes at a conceptual level.

From the theory, it was clear that for business travellers, the most important airline services and product attributes were seat comfort, the schedule/frequency of trips, reliability and the price of the air ticket. For non business travellers price is very important and that these travellers would be more likely to trade-off service attributes with airfare than business travellers.

In terms of willingness to pay, it seems that socio-economic factors don't play a role in determining individual preferences for attributes, but that travelling class and reason for travelling do.

## **Chapter 3: Research questions and hypotheses**

### **3.1 Introduction**

Competition has driven airlines to make improvements in airline services and product attributes. In this new era of competition in the market, all airlines are subject to find ways of attracting passengers through a mix of fare discounting, greater frequency, improved flight times and no-frill's levels of on-board service (Martin, Roman and Espino, 2008). It is in light of this that there is a need to understand customers' willingness to pay for airline service quality attributes. This will ensure that airlines can offer relevant services to the market and more importantly, services that will offer a positive return on capital.

### **3.2 Research questions and hypotheses**

The primary objective of this research was to understand airline service and product attributes that customer's value and to estimate their willingness to pay for these attributes. How do independent services and product attributes account for variances in willingness to pay? The research also aimed to understand the consumer decision making and buying process particularly with reference to rules used in the buying process. Would the ranking of a service or product attribute influence customers' willingness to pay for that attribute?

The hypotheses below were developed to address the research objectives and to confirm the important services and product attributes found in other studies.

The attributes tested in the hypotheses were chosen as a result of those extracted from the literature review. In addition to seat comfort, the schedule/frequency of trips and reliability mentioned in the literature review, the researcher added the following attributes to explore in the study.

- Availability
- Flexibility
- Rewards programs
- Food, and
- Business lounge

The researcher assumed that availability, flexibility and business lounge would be considered as important attributes by business travellers.

Food and business lounge can be considered comfort attributes. Comfort was found to be an important attribute in the literature reviewed and the researcher wanted to see if these other comfort variables would be considered important by travellers.

## **The Hypotheses**

### **H01:**

For business travellers willingness to pay is independent of Reliability/Punctuality.

### **Ha1:**

For business travellers willingness to pay is dependent on Reliability/Punctuality.

**H02:**

For business travellers willingness to pay is independent of Frequency.

**Ha2:**

For business travellers willingness to pay is dependent on Frequency.

**H03:**

For business travellers willingness to pay is independent of Comfort.

**Ha3:**

For business travellers willingness to pay is dependent on Comfort.

In addition to the hypotheses listed above the following hypothesis on Business Lounge was added. This was due to the assumption that many full service carriers offer Business Lounge facilities to business travellers because business travellers value these facilities. It was therefore of interest to this research if willingness to pay was dependant on Business Lounge facilities or not.

**H04:**

For business travellers willingness to pay is independent of Business Lounge.

**Ha4:**

For business travellers willingness to pay is dependent on Business Lounge.

To test the differences in business travellers' and non-business travellers' responses, the following additional hypotheses were added.

**H05:**

There is no difference in the means between business travellers and non-business travellers in their willingness to pay for Reliability/Punctuality.

**Ha5:**

There is a difference in the means between business travellers and non-business travellers in their willingness to pay for Reliability/Punctuality.

**H06:**

There is no difference in the means between business travellers and non-business travellers in their willingness to pay for Frequency.

**Ha6:**

There is a difference in the means between business travellers and non-business travellers in their willingness to pay for Frequency.

**H07:**

There is no difference in the means between business travellers and non-business travellers in their willingness to pay for Business Lounge.

**Ha7:**

There is a difference in the means between business travellers and non-business travellers in their willingness to pay for Business Lounge.

Finally, this research aimed to understand the consumer decision making and buying process particularly with reference to rules used in the buying process. Does the ranking of a service or product attribute influence customers' willingness to pay for that attribute?

The main questions to be addressed in this research:

- I. How do customers make purchase and spending decisions?
- II. Is there evidence of the use of decision rules in making purchase decisions?
- III. How do important services and product attributes influence customer's willingness to pay for those services?

These questions will be discussed along with the other findings of the study when the results are discussed.

### **3.3 Summary**

In this chapter, the research hypotheses were developed to enable the researcher to investigate the research objective. These hypotheses will be tested in the study.



## **Chapter 4: Research methodology**

### **4.1 Introduction**

This chapter will discuss the research methodology that was employed to address the research objectives, questions and hypotheses of this study.

The research design and type of research will be discussed followed by a discussion on the population, sample size and sampling methodology, including the unit of analysis. Data collection tools, methods and the data analysis approach will be discussed. Research errors, limitations and ethical issues will be highlighted before concluding the chapter.

### **4.2 Research design**

A research design is a master plan specifying the methods and procedures for collecting and analyzing the needed information (Zikmund, 2003). The research process was conducted as follows;

- Literature was reviewed to identify services and product attributes to be considered in the research.
- Construction of the questionnaire was done. This was dependent on the research questions formulated in the literature review.
- The questionnaire was pre-tested.
- The population of relevance and sample were determined.

- Data was collected.
- Data analysis was completed and the results were discussed

This research used a structured survey design. Customers were asked to rank their preferred services and product attributes. The survey then went on to enquire about customer's willingness to pay for those attributes. The product attributes namely Punctuality/Reliability, Frequencies, Ticket Flexibility, Reward Programs, Business Lounges, Food and Drinks and Comfort were identified as independent variables. Willingness to Pay was the dependant variable. The attributes were chosen as a result of attributes extracted from the literature review.

Mason (2000) suggests that in a market of change the revealed preference methodology may not be a good predictor of future behaviour and prefers a stated-preference methodology where a hypothetical scenario is provided, giving respondents a choice in a very structured hypothetical environment, enabling service elements to be evaluated against one another. In South Africa low cost carriers have established themselves as strong competitors to full service carriers since deregulation in 1990. These low cost carriers are an alternative used by both business and leisure travellers. In the face of competition from these low cost carriers, prices charged by full service carriers often compete with those offered by low cost carriers. Thus, creating a hypothetical scenario in which respondents do trade-offs between attributes may possibly not provide an adequate distinction between the two types of airlines (Fourie and Lubbe, 2006).

### **4.3 Type of research**

This research was quantitative. It was established from the literature review that a number of studies to understand preferred airline services and product attributes have been conducted. Due to this, exploratory research was not ideal. Zikmund (2003) suggests that when management is aware of the problem, but is not completely knowledgeable of the situation, descriptive research should be conducted.

A combination of descriptive and causal research was used.

Descriptive analysis was used to describe, summarise and transform the responses to make them easy to understand. The descriptive analysis was used to verify the order of preferred services and product attributes. The aim was to see if these attributes were similar to those already discovered in the literature review.

The causal research was used to investigate whether the attributes said to be important explained any variance in willingness to pay for those attributes.

### **4.4 Population of relevance and unit of analysis**

The population of relevance was all people travelling from Johannesburg (Oliver Tambo International Airport) to Cape Town International Airport. The study was conducted on both economy and business class travellers.

There were two units of analysis. The first unit of analysis was individuals travelling for business purposes. The second unit of analysis was individuals travelling for non-business purposes.

#### **4.5 Sampling method and size**

A non-probability convenience sample was used. Respondents were classified into two groups: those travelling for business purposes and those travelling for non-business purposes.

The researcher solicited responses from a minimum of 30 travellers from each group. A minimum of thirty travellers in each group was decided upon to ensure that the results are statistically significant and reliable. Unless one has a sufficiently large sample, statistical procedures are not successful, for simple analysis this translates into a sample size of at least 30 units (Diamantopoulos and Schlegelmilch 1997, cited in Tustin, Martins, Van Wyk and Ligthelm 2005).

Responses were solicited from both business and economy class travellers for the two groups. Passengers using business class were interviewed in the business class lounge as it was assumed that these travellers were more inclined to use this service. Travellers using economy class were interviewed after they checked in, while waiting for their flights.

The fieldwork was conducted on a number of flights, on different days over a period of one week in September. Responses were collected from people using South African Airways, British Airways, Mango, Kulula and 1Time. The fieldwork was conducted at the Johannesburg International Airport.

Responses were obtained from airline users flying from OR Tambo International Airport (Johannesburg) to Cape Town International Airport. This route was chosen because Johannesburg and Cape Town are major business centres in South Africa. This route is also the busiest local route ([www.travelwithinsouthafrica.co.za](http://www.travelwithinsouthafrica.co.za), 2009). In addition, this route is the longest domestic route implying that services such as food and comfort during the flight would be given more consideration than on the shorter trips.

#### **4.6 Research instrument**

A structured questionnaire was used to solicit responses from travellers. Travellers were assisted to complete the questionnaire.

The questionnaire was preceded by a screening question to ascertain if the respondent was travelling to Cape Town. The questionnaire was divided into three sections.

The first section looked at demographic details, such as the age, gender and race of the traveller. This section also asked travellers questions to determine the reason for their trip, their class of travel and if the respondent was paying for their flight or not.

The second section looked at travellers' preferred services and/or product attributes. Travellers were asked to rank the services or product attributes in order of preference with 1 being the most preferred airline service or product attribute and 8 being the least preferred attribute. The attributes were Reliability/Punctuality, Frequency, Availability, Ticket Flexibility, Reward Programs, in flight Comfort, Food and Business Lounges. The explanation and meaning of each of the attributes is

detailed below; these explanations were also included in the questionnaire to assist respondents to interpret the question as intended.

- Reliability/Punctuality looked at travellers' willingness to pay extra on their original ticket price to be guaranteed that the airline was reliable and punctual at all times.
- Frequency looked at travellers' willingness to pay extra on their original ticket price to airlines which offer more flights to any one destination compared to other airlines.
- Availability looked at looked at travellers' willingness to pay extra on their original ticket price to be assured of the flight availability at their preferred time.
- Ticket flexibility looked at travellers' willingness to pay extra on their original ticket price to enable them to make changes to their ticket without incurring any penalties.
- Rewards Program looked at travellers' willingness to pay extra on their original ticket price to be able to participate on rewards programs that may be offered by an airline.
- Comfort looked at travellers' willingness to pay extra on their original ticket price to for improved comfort on the flight.
- The Food and Drinks attribute looked at travellers' willingness to pay extra on their original ticket price for improved food quality and more drinks on the flight.

- The Business Lounge attribute looked at travellers' willingness to pay extra on their original ticket price to enable them to make use of business lounge facilities at the airport.

The third and final section of the questionnaire looked at travellers' willingness to pay for each preferred airline services and/or product attribute. Willingness to pay was measured on a 5 point likert scale.

#### **4.7 Pre-testing the questionnaire**

A sample of 6 people from different language groups and occupations were randomly selected and asked to test the questionnaire. The objective of the pre-testing was to establish;

- Whether the questions were concise and easy to understand.
- Whether the questions were appropriate.
- Whether the questions were ambiguous.
- Whether the instructions were confusing.

The pre-test was also used to gauge the length of time it would take to complete the questionnaire.

Respondents were asked to provide comments and evaluate the statements, instructions and layout of the questionnaire. Their feedback was incorporated into the questionnaire. A sample of the questionnaire can be found in appendix A.

## 4.8 Data collection process

Data collection was preceded by a screening question to eliminate travellers not going to Cape Town.

Travellers were assisted to complete the questionnaire. This was to ensure that they fully understood the content of the questionnaire and to minimise non-response errors. In addition, the assistant ensured that the questionnaire was fully completed and with minimal error.

Responses to the questionnaire were recorded immediately, in the presence of the respondent to minimise researcher error.

All travellers flying to Cape Town were asked to complete the survey regardless of whether they were flying in business or economy class. Passengers using business class were interviewed in the business class lounge as it was assumed that these travellers were more inclined to use this service. Travellers using economy class were interviewed while waiting for their flights.

The fieldwork was conducted on a number of flights to the destination, on different days over a period of one week in September 2009. The fieldwork was conducted at the Johannesburg International Airport.

Travellers were not requested to furnish their personal details, including their names to ensure that respondents remain anonymous.



## 4.9 Data analysis approach

Descriptive analysis was used to describe, summarise and transform the responses and make them easy to understand. Responses to the demographic section were reported qualitatively and presented in tables to showcase the frequency with which responses were given to particular questions.

Responses to the second section, which looked at traveller's preferred airline services and/or product attributes, were also reported qualitatively. In this section, respondents were asked to rank services and product attributes such that 1 was the most preferred airline service or product attributes and 8 was the least preferred attribute. No numbers were to be repeated in the rankings. The preferred attributes were calculated by taking the average ranking for each attribute. The attribute with the lowest average was the preferred attribute.

Responses to the third section of the questionnaire were analysed using quantitative methods. Regressions were used to establish relationships between the various variables. T-tests were used to assess the differences in responses from the two groups.

The last part of section three asks customers to estimate their willingness to pay values for each service and/or product attribute. A summary of responses in this section was derived by calculating the group average and assigning it to the relevant amount indicated by the monetary frequency scale. These responses were presented in a table based on the frequency of responses per category.

The hypotheses formulated and discussed in Chapter 3 were tested using regressions and t-tests.

Statistical Package for Social Sciences (SPSS) version 17.2 was used to perform the statistical analysis.

#### **4.10 Research errors and limitations**

As a non-probability sampling method was used, it was expected that there were certain limitations and errors in terms of generalisation to the broader population.

Random sampling errors were mitigated by assisting the respondent complete the questionnaire and by making sure that the researcher was well prepared and understood the objectives of the study and the survey content.

The researcher was also aware that there could be respondent errors especially with acquiescence (agreeableness) bias due to possible sensitivities related to asking people about their willingness to pay for services.

Resistance was expected to be a barrier to collecting the data required. To deal with this the researcher solicited responses from a large number of people.

Language barriers may have limited the randomness of the survey, however as respondents were assisted to complete the survey, this was minimised.

#### **4.11 Ethical issues**

In a study involving human participants, a number of ethical considerations need to be addressed. In this study, the issues of consent and confidentiality were addressed.

The nature of this study was explained to participants before the questionnaire was completed. This was done in a consent form attached to the research questionnaires. Respondents also had the option to withdraw from completing the questionnaire at any point. Participation in this research was therefore completely voluntary.

On the issue of confidentiality, respondents were not asked for their names and/or other personal details at any point in time.

#### **4.12 Conclusion**

This chapter discussed the research methodology that was employed to address the research questions and hypotheses of this study. Included in this was a discussion on the research design and type of research. The population, sample size and sampling, including the unit of analysis were discussed. Data collection tools and methods were also presented. The questionnaire used in this research was also discussed. Statistical analyses tools that are used were mentioned. In the next chapter, the results of the study are presented.

## **Chapter 5: Analysis of results**

### **5.1 Introduction**

This chapter presents results from the study. The chapter starts with a general overview of the participants and then describes the sample and demographics. The method of statistical analysis and measuring instruments are then discussed, followed by a discussion on the reliability of the responses. The results are then arranged and reported according to the preferred attributes and impact of attributes on willingness to pay. The differences in responses from the two samples are then presented, followed by a presentation on the willingness to pay amounts for each product attribute. This chapter then concludes with a general statement of trends observed in the results.

### **5.2 Participants**

The sample consisted of 136 travellers. Participants were obtained by means of random convenience sampling. 131 (96.3%) of the responses were usable while 5 (3.7%) were damaged or incomplete and could not be used.

### **5.3 Sample description**

The participant's demographics are presented below. The demographics are presented for each group of participants; i.e. business travellers versus non-business travellers.

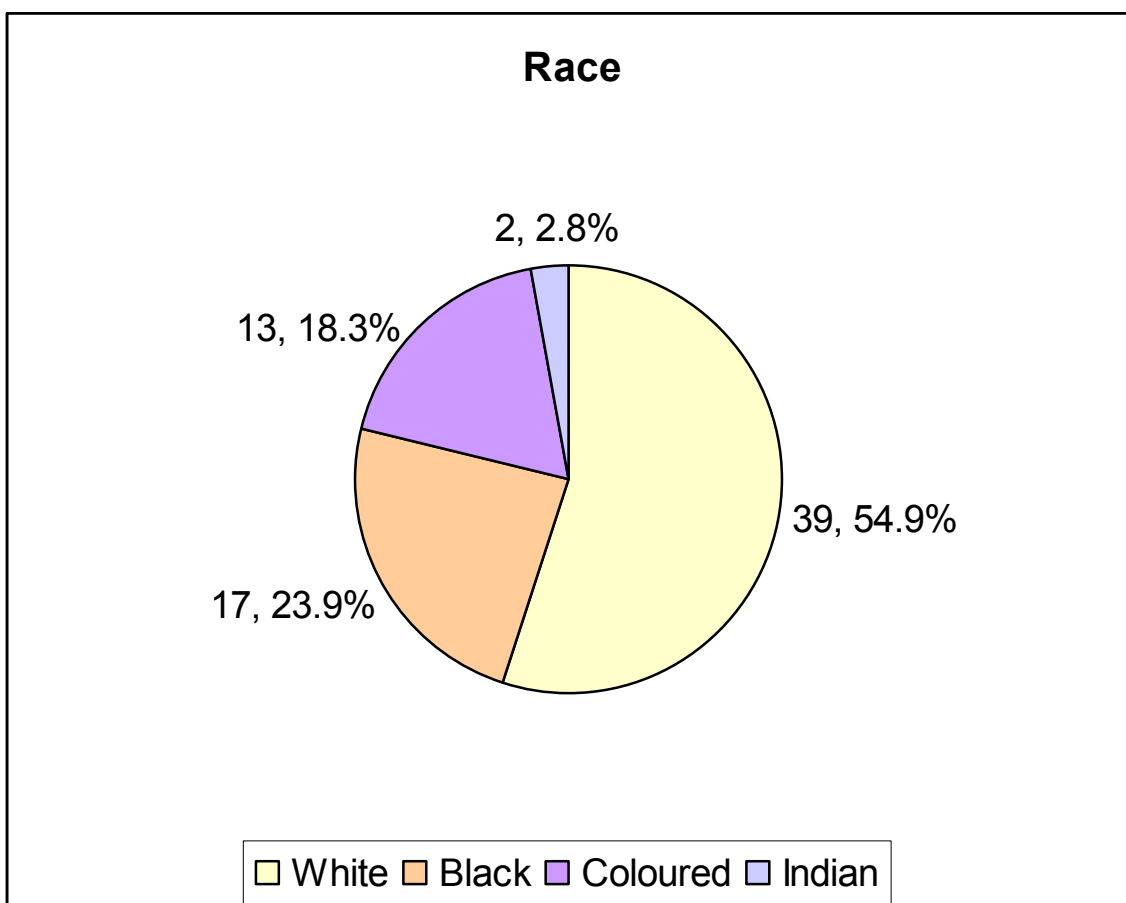
## Business travellers

Of the 131 responses, 71(54.2%) respondents were travelling for business purposes while 60 (45.8%) respondents were travelling for non business purposes.

Of the 71 respondents travelling for business purposes, 36 (50.7%) were male while 35 (49.3%) were female.

54.9% of the respondents were White, 23.9% were Black, 18.3% were Coloured and 2.0% were Indian as per Figure 4 below.

**Figure 4:** Race composition of business travellers

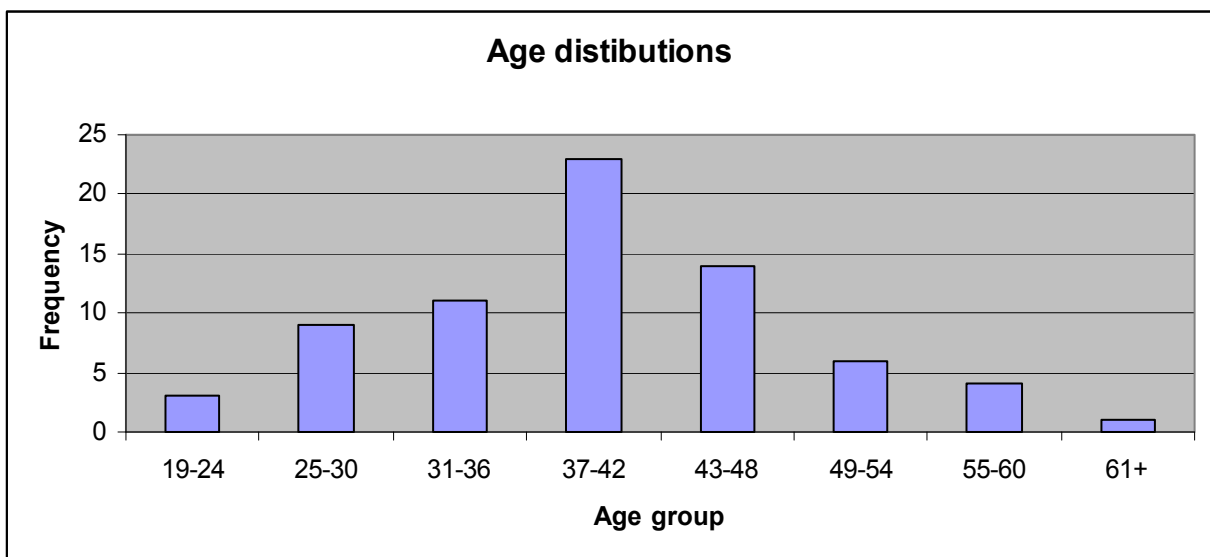


The age distribution of the business travellers was normally distributed with most travellers' ages falling between 31 and 48. Table 6 and Figure 5 below give the detail and illustration of the age breakdown of business traveller respondents.

**Table 6:** Age distributions of business travellers.

Age Group	Frequency	Percent
19-24	3	4.2
25-30	9	12.7
31-36	11	15.5
37-42	23	32.4
43-48	14	19.7
49-54	6	8.5
55-60	4	5.6
61+	1	1.4
Total	71	100.0

**Figure 5:** Illustration of age distributions of business travellers.



22 (31%) of respondents were travelling in business class while 49 (69%) were travelling in economy class.

29 (40.8%) of respondents had access business lounge facilities while 42 (59.2%) did not have access to business lounge facilities.

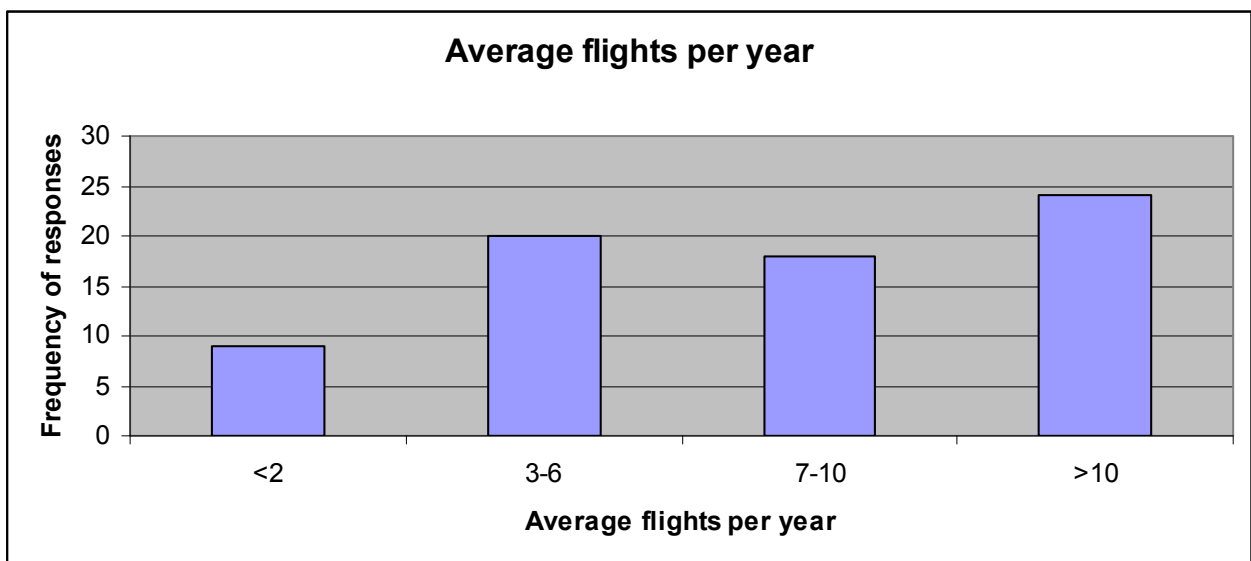
29 (40.8%) paid for their flights while 42 (59.2%) did not pay for their flights.

Most respondents made multiple flights per year. Table 7 and Figure 6 below summarise and illustrate the average number of flights undertaken per year.

**Table 7:** Average flights per year for business travellers.

Average flights per year	Frequency	Percent
<2	9	12.7
3-6	20	28.2
7-10	18	25.4
>10	24	33.8
Total	71	100.0

**Figure 6:** Average flights per year for business travellers.



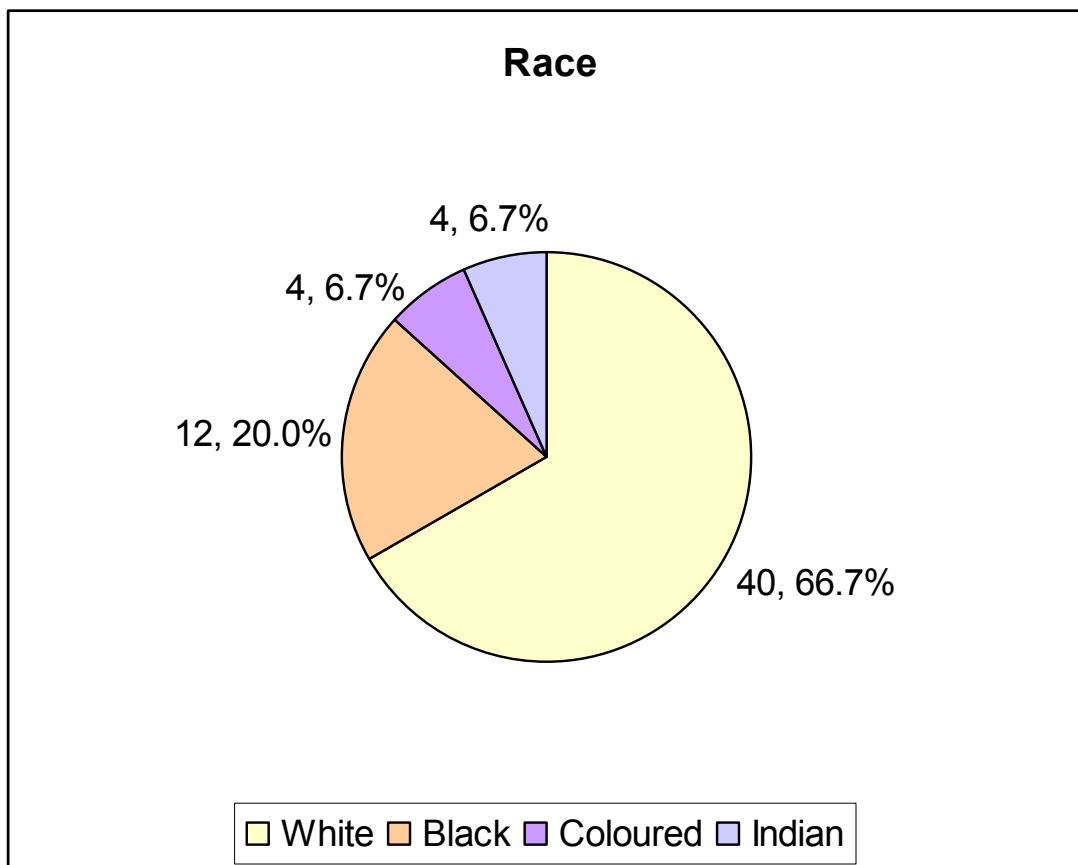
### Non-business travellers

Of the 131 responses, 60 (45.8%) respondents were travelling for non-business purposes while 71 (54.2%) respondents were travelling for business purposes.

Of the 60 respondents not travelling for business purposes, 19 (31.7%) were male while 41 (68.3%) were female.

66.7% of the respondents were White, 20.0% were Black, 6.7% were Coloured and 6.7% were Indian as per Figure 7 below.

**Figure 7:** Race composition of non-business travellers.



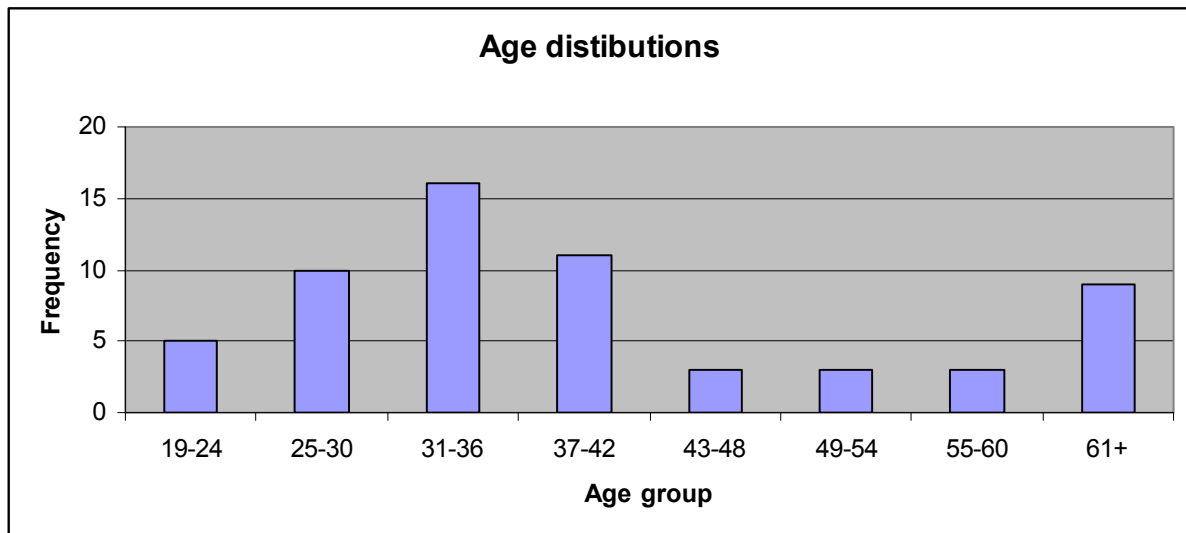


The ages of most non-business travellers were distributed between 25 and 42. Table 8 and Figure 8 below give the age breakdown in more detail.

**Table 8:** Age distributions of non-business travellers

Age Group	Frequency	Percent
19-24	5	8.3
25-30	10	16.7
31-36	16	26.7
37-42	11	18.3
43-48	3	5.0
49-54	3	5.0
55-60	3	5.0
61+	9	15.0
Total	60	100.0

**Figure 8:** Illustration of age distributions of non-business travellers.



9 (15.0%) of respondents were travelling in business class while 51 (85%) were travelling in economy class.

14 (23.3%) of respondents had access business lounges facilities while 46 (76.7%) did not have access to business lounges facilities.

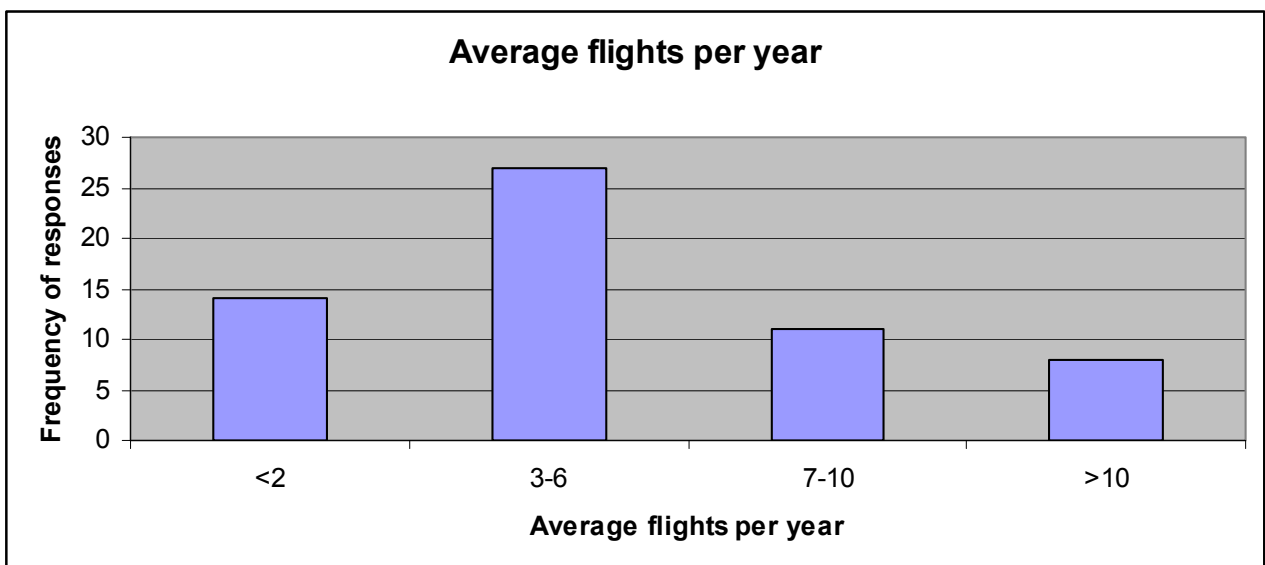
47 (78.3%) paid for their flights while 13 (21.7%) did not pay for their flights.

As with the group travelling for business purposes, most respondents made multiple flights per year; however the frequency of people making fewer trips compared to the business traveller's was higher. Table 9 and Figure 9 below summarise and illustrate the average flights undertaken per year.

**Table 9:** Average flights per year for non-business travellers

Average flights per year	Frequency	Percent
<2	14	23.3
3-6	27	45.0
7-10	11	18.3
>10	8	13.3
Total	60	100.0

**Figure 9:** Average flights per year for non-business travellers



## 5.4 Statistical analyses

The statistical analyses of the data were undertaken using the Statistical Package for the Social Sciences (SPSS) Version 17.2. Frequencies and descriptive statistics were aimed at describing the sample. Cronbach alpha coefficients were used to determine the internal consistencies and reliabilities of the measuring instruments (Clark & Watson, 1995).

## 5.5 Reliability

Cronbach alpha coefficients were used to determine the internal consistency reliabilities of the measuring instruments. The services and product attribute scales showed high internal consistency reliability with acceptable Cronbach alpha coefficients. The Cronbach alpha's coefficients are above 0.70 with values ranging from 0.753 to 0.966. This shows that the scales are measuring what they were intended to measure. The responses are an accurate reflection of how people felt.

Table 10 shows the services and product attribute scales used for this research and summarizes the Cronbach alpha coefficients per attribute. The business lounge scale yielded the highest reliability ( $\alpha = 0.966$ ) and the comfort scale the lowest ( $\alpha = 0.753$ ).

**Table 10:** Cronbach alpha coefficients for the services and product attributes scales

Product attribute	Cronbach alpha ( $\alpha$ )
Business lounge	0.966
Reliability and punctuality	0.930
Rewards program	0.882
Penalties	0.864
Frequency	0.860
Food	0.818
Availability	0.816
Comfort	0.753

## 5.6 Preferred services and product attributes

Respondents were asked to rank their preferred airline services and product attributes from the list provided. The list contained the following services and product attributes; Reliability/Punctuality, Ticket Flexibility, Comfort, Availability, Frequency, Food and drinks, Rewards program and Business Lounge facilities. This list was guided by important attributes learnt from the literature.

The ranking was such that 1 was the most preferred airline service or product attributes and 8 was the least preferred attribute. No numbers could be repeated in the rankings.

When business travellers were asked to rank their attributes in order of preference, they ranked Reliability/Punctuality, Ticket Flexibility and Comfort as the most

important attributes and in that order. For non-business travellers, the most important attributes were Reliability/Punctuality, Comfort and Frequency in that order.

The preferred attributes were calculated by taking the average ranking for each attribute. The attribute with the lowest average was the most preferred attribute, while the attribute with the highest average was the least preferred attribute. Table 11 summarises the preferred attributes for both business and non-business travellers.

**Table 11:** Preferred services and product attributes for business and non-business travellers.

<b>Service and product attribute</b>	<b>Business travellers' (attribute ranking)</b>	<b>Business travellers (preference average)</b>	<b>Non-business travellers (attribute ranking)</b>	<b>Non-business travellers (preference average)</b>
Reliability and punctuality	<b>1</b>	2.34	<b>1</b>	2.47
Ticket flexibility	<b>2</b>	3.47	<b>4</b>	4.27
Comfort	<b>3</b>	3.56	<b>2</b>	3.59
Availability	<b>4</b>	4.44	<b>6</b>	4.76
Frequency	<b>5</b>	4.51	<b>3</b>	4.25
Food and drinks	<b>6</b>	4.97	<b>5</b>	4.73
Rewards programme	<b>7</b>	5.29	<b>7</b>	5.85
Business lounge facilities	<b>8</b>	6.37	<b>8</b>	6.58

With an understanding of preferred airline services and product attributes, the next step was to assess the impact of attributes ranked as important on the consumers' willingness to pay for those attributes. How would these independent services and product attributes account for variances in customers' willingness to pay?

## 5.7 Impact of attributes on willingness to pay

### Business travellers

Table 12 presents the predictive effects of various airline services and product attributes on business traveller's willingness to pay, using a linear regression model. A close inspection of Table 12 shows that variance in willingness to pay can be accounted for by Business Lounge ( $R^2 = 0.092$ ,  $p < 0.05$ ), Comfort ( $R^2 = 0.091$ ,  $p < 0.05$ ) and Frequency ( $R^2 = 0.07$ ,  $p < 0.05$ ). With willingness to pay as the dependent variable, Business Lounge and Comfort accounted for approximately 9.2% and 9.1% of the variance in willingness to pay respectively, while Frequency accounted for 7.0% of the variance in willingness to pay. It could be assumed from the data that Business Lounge, Comfort and Frequency are predictors of a traveller's willingness to pay for airline services and product attributes. With regards to the remaining services and product attributes of Reliability/Punctuality, Availability, Ticket Flexibility, Reward Programs and Food, the results show that these attributes may not be important individual predictors of willingness to pay.

**Table 12:** Predictive effect of services and product attributes on willingness to pay for business travellers.

Model	Model Summary				Change Statistics		
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
Predictors: (Constant), ReliabilityPunctualityScale	.236	.056	.041	8.05823	.056	3.767	.057
Predictors: (Constant), FrequencyScale	.264	.070	.055	7.99854	.070	4.783	.032
Predictors: (Constant), AvailabilityScale	.206	.042	.027	8.11430	.042	2.834	.097
Predictors: (Constant), TicketFlexScale	.178	.032	.017	8.15953	.032	2.095	.153
Predictors: (Constant), RewardsScale	.159	.025	.010	8.18633	.025	1.663	.202
Predictors: (Constant), ComfortScale	.302	.091	.077	7.90590	.091	6.404	.014
Predictors: (Constant), FoodScale	.081	.007	-.009	8.26455	.007	.426	.516
Predictors: (Constant), BusLoungeScale	.304	.092	.078	7.90064	.092	6.498	.013

### Non-business travellers

Table 13 below presents the predictive effects of various airline services and product attributes on non-business travellers' willingness to pay. The table shows that Business Lounge explains 7.5% ( $R^2 = 0.075$ ,  $p < 0.05$ ) of variance in willingness to pay. The other attributes tested were, Reliability/Punctuality, Frequency, Availability, Ticket Flexibility, Reward Programs, Comfort and Food, may not be important predictors of willingness to pay among non-business travellers.

This finding is in line with the finding that non-business travellers may only concerned with price.

**Table 13:** Predictive effect of services and product attributes on willingness to pay for non-business travellers

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
Predictors: (Constant), ReliabilityPunctualityScale	.145	.021	.003	8.76139	.021	1.175	.283
Predictors: (Constant), FrequencyScale	.164	.027	.009	8.73531	.027	1.511	.224
Predictors: (Constant), AvailabilityScale	.137	.019	.001	8.77139	.019	1.048	.311
Predictors: (Constant), TicketFlexScale	.068	.005	-.013	8.83375	.005	.259	.613
Predictors: (Constant), RewardsScale	.174	.030	.013	8.71980	.030	1.713	.196
Predictors: (Constant), ComfortScale	.067	.004	-.014	8.83472	.004	.247	.621
Predictors: (Constant), FoodScale	.036	.001	-.017	8.84864	.001	.073	.788
Predictors: (Constant), BusLoungeScale	.274	.075	.058	8.51640	.075	4.454	.039

## 5.8 Differences in responses from the two samples

When looking at the impact of attributes on the willingness to pay, only Business Lounge ( $R^2 = 0.092$ ,  $p < 0.05$ ), Comfort ( $R^2 = 0.091$ ,  $p < 0.05$ ) and Frequency ( $R^2 = 0.07$ ,  $p < 0.05$ ) are predictors of willingness to pay in the business traveller sample.

The only predictor of willingness to pay in the non-business traveller sample was the Business Lounge ( $R^2 = 0.075$ ,  $p < 0.05$ ).

An Independent Samples t-test was used to further assess the differences in responses from the two samples. Mean scores and significant differences between the two groups were analyzed. Tables 14 and 15 show summaries of the t-test results.



**Table 14:** Mean scores and significant differences between business travellers and non-business travellers

Service and Product Attribute	Business Travellers Mean	Non-Business Travellers Mean	Significance
Reliability/Punctuality	9.0	10.4	.347
Frequency	8.1	10.8	.028
Availability	9.6	11.3	.198
Ticket Flexibility	9.5	11.6	.110
Reward programs	7.8	8.2	.752
Comfort	31.0	28.7	.641
Food	84.3	108.8	.278
Business Lounge	10.6	7.4	.021

**Table 15:** Independent sample test results for t-tests between business travellers and non-business travellers.

Independent Samples Test									
Service and/or Product Attribute	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
ReliabilityPunctualityScale	.183	.670	-.943	128	.347	-1.41667	1.50209	-4.38881	1.55548
FrequencyScale	3.427	.066	-2.216	128	.028	-2.77619	1.25295	-5.25537	-.29701
AvailabilityScale	1.102	.296	-1.294	127	.198	-1.67651	1.29577	-4.24061	.88758
TicketFlexScale	.470	.494	-1.608	127	.110	-2.11017	1.31243	-4.70723	.48690
RewardsScale	.032	.859	-.317	128	.752	-.42619	1.34418	-3.08587	2.23349
ComfortScale	.682	.410	.467	128	.641	2.30000	4.92103	-7.43709	12.03709
FoodScale	5.117	.025	-1.088	129	.278	-24.49014	22.50033	-69.00758	20.02730
BusLoungeScale	1.707	.194	2.345	129	.021	3.16080	1.34811	.49353	5.82806

Results from the t-tests show that with regards to business and non-business travellers, there were significant differences between the groups on Frequency and Business Lounge. These results show that non-business travellers are significantly more willing to pay for higher flight frequencies ( $p = 0.028$ ) compared to business travellers. Business travellers on the other hand are significantly more willing to pay for access to the business lounge and its facilities ( $p = 0.21$ ) compared to non-business travellers.

## **5.9 Willingness to pay**

Travellers were asked to choose how much extra they would be willing to pay over and above their original ticket price for various services and product attributes. Their responses were summarised by calculating the group average and assigning it to the relevant amount indicated by the monetary frequency scale. Table 16 below summarises their responses. The responses between the two groups are similar. The only difference that was observed was for Reliability and Punctuality. Business travellers indicated that they would be willing to pay between R101 and R200 for reliability and punctuality while non-business travellers were only willing to pay between R51 and R100.

**Table 16:** Willingness to pay for services and product attributes

<b>Service and product attribute</b>	<b>Business travellers</b>	<b>Non-business travellers</b>	<b>Both groups</b>
Reliability and punctuality	R101-R200	R51-R100	R51-R100
Frequency	R51-R100	R51-R100	R51-R100
Availability	R101-R200	R101-R200	R101-R200
Ticket flexibility	R101-R200	R101-R200	R101-R200
Rewards programme	R51-R100	R51-R100	R51-R100
Comfort	R101-R200	R101-R200	R101-R200
Food and drinks	R51-R100	R51-R100	R51-R100
Business lounge facilities	R51-R100	R51-R100	R51-R100

## 5.10 Summary

This chapter presented the results from the study. The preferred attributes results mirrored those that were uncovered in the literature review. For business travellers, Frequency, Comfort and Business Lounge were found to be predictors of willingness to pay, while only the Business Lounge was found to be a predictor of willingness to pay for non-business travellers.

Willingness to pay responses from the two groups were similar; however the results did show that non-business travellers were significantly more willing to pay for more frequent flights while business travellers were significantly more willing to pay for access to the business lounge.

## **Chapter 6: Discussion of results**

### **6.1 Introduction**

In this chapter, the research findings are discussed and interpreted. The results obtained are discussed and explained in terms of the research objectives, literature reviewed and hypotheses posited.

The discussion of the results will be structured in the following sequence;

- The aims and objectives of this research will be revisited.
- The results will be discussed according to the preferred attributes.
- The results will be discussed according to the hypotheses.
- Evidence of the use of any decision rules which could affect the consumer decision making and buying process will then be discussed.

### **6.2 Aims and objective of the research revisited**

The primary objective of this research was to understand airline service and product attributes that customers' value and to estimate their willingness to pay for these attributes.

The secondary objective of this research was to assess the impact of attributes ranked as important on consumers' willingness to pay for those attributes. How

would these independent services and product attributes affect consumers' willingness to pay for these attributes?

Finally, this research aimed to understand the consumer decision making and buying process particularly with reference to rules used in the buying process. Does the ranking of a service or product attribute influence on customers' willingness to pay for that attribute?

### **6.3 Discussion of results according to preferred attributes**

#### **Business travellers**

When business travellers were asked to rank their attributes in order of preference, they ranked the 8 attributes in the following order;

- reliability and punctuality
- ticket flexibility
- comfort
- availability
- frequency of flights
- food and drinks
- rewards program; and
- business lounge facilities

It is not surprising that reliability/punctuality and ticket flexibility are the most preferred attributes as business travellers often need to attend meetings and appointments. They are usually required to be at certain places at certain times. Being late for meetings and appointments is often seen as unprofessional and can at times destroy business relationships.

When looking at ticket flexibility, business travel is dictated by business need. In a fast changing environment, business travellers often need to make last minute changes to their schedules thus it would be expected that ticket flexibility would be regarded as important. These results are similar to the results found by Mason (2000), Evangelho, Huse, and Linhares (2005) and Fourie and Lubbe (2006).

Another important attribute that was found in the study and literature was that of comfort. One can expect that, for business travellers, the act of travelling is for the purpose of “making ends meet” and not necessarily pleasure, hence the choice of comfort as one of the important attributes. In addition, when business people travel, they often hop from the plane to the boardroom and are still required to be sharp and agile in the boardroom. This is especially true on the shorter trips where travellers may be in and out of cities or towns on the same day.

Intuitively, it was surprising that for business travellers the use of business lounge facilities is the least preferred attribute, however, these results also mirror the results of Mason (2000), Evangelho, Huse, and Linhares (2005) and Fourie and Lubbe (2006). Fourie and Lubbe (2006) continue to say that “a significant number of short haul business travellers are now also using LCCs”. This change also supports the finding that business travellers value other attributes more so than business lounge facilities. Indeed "studies by Mason (2000, 2001) and Evangelho et al. (2005)

indicated that the additional benefits provided by full-service airlines may not be as important to the domestic business travel market as the main benefit of quick reliable service" Fourie and Lubbe (2006).

### **Non-business travellers**

When non-business travellers were asked to rank their attributes in order of preference, they ranked the 8 attributes in the following order;

- reliability and punctuality
- comfort
- frequency of flights
- ticket flexibility
- food and drinks
- availability
- rewards program; and
- business lounge facilities

The literature reviewed indicated that for non-business travellers price is the most important attribute.

When non-business travellers were asked to rank attributes from the list of 8 attributes provided in order of importance, they like business travellers ranked reliability/punctuality as the most important attribute. This result is the same as that found by Evangelho, Huse, and Linhares (2005).

The second most important attribute for non-business travellers is comfort.

Business lounge is the least preferred attribute for non-business travellers. This result could be expected as literature revealed that price is very important to this group and one would expect that they would not want to pay extra money for the use of business lounge facilities.

## **6.4 Discussion of results according to Hypotheses**

H01:

For business travellers willingness to pay is independent of Reliability/Punctuality

Ha1:

For business travellers willingness to pay is dependent on Reliability/Punctuality

As the p-value is  $> 0.05$  (Sig. F Change = 0.057), the null hypothesis could not be rejected. The variance in willingness to pay could not be explained by Reliability/Punctuality. This is surprising as Reliability/Punctuality was found to be the most preferred attribute from the 8 attributes that were presented. In addition being late for appointments could be seen as unprofessional and can at times destroy business relationships. One would have expected the variance on willingness to pay is to be somewhat explained by Reliability/Punctuality.



**H02:**

For business travellers willingness to pay is independent of Frequency

**Ha2:**

For business travellers willingness to pay is dependent on Frequency

The p-value is  $< 0.05$  (Sig. F Change = 0.032), the null hypothesis was rejected. Furthermore 7.0% of the variance in willingness to pay could be explained by Frequency ( $R^2 = 0.07$ ,  $p > 0.05$ ). This means that willingness to pay is dependent on the frequency of flights. There is a relationship between Frequency and willingness to pay. Most business travellers' schedules often change many times and at the last minute due to pressing business needs and emergencies. Because of this, one would expect business travellers to want the convenience of getting a flight at their preferred time. This is possible if an airline offers more frequent flights.

**H03:**

For business travellers willingness to pay is independent of Comfort

**Ha3:**

For business travellers willingness to pay is dependent on Comfort

The p-value is  $< 0.05$  (Sig. F Change = 0.014), the null hypothesis was rejected. Furthermore 9.1% of the variance in willingness to pay could be explained by in flight Comfort ( $R^2 = 0.091$ ,  $p > 0.05$ ). Most business travellers are expected to hop between flights and business meetings seamlessly. At these business engagements

they are expected to be fresh and sharp. It was expected that comfort would be an important attribute for which they are willing to pay for. Comfort was also ranked as the third most important attribute from the list of 8 given.

In addition to the hypotheses listed above the following hypothesis on Business Lounge was added. This was due to the assumption that many full service carriers offer Business Lounge facilities to business travellers because they value these facilities. It was therefore of interest to this research if willingness to pay was dependant on Business Lounge facilities or not.

**H04:**

For business travellers willingness to pay is independent of Business Lounge

**Ha4:**

For business travellers willingness to pay is dependent on Business Lounge

The p-value is  $< 0.05$  (Sig. F Change = 0.013), the null hypothesis is rejected. Furthermore 9.2% of the variance in willingness to pay can be explained by Business Lounge facilities ( $R^2 = 0.092$ ,  $p > 0.05$ ). Business lounges can be places where business travellers rest, relax and network with other business travellers. These factors could explain the reasons for business travellers' willingness to pay for use of business lounge facilities. It was interesting to note that the Business Lounge attribute was the least preferred of the 8 attributes from the rankings, yet this was the attribute that explained the greatest variance in willingness to pay. It could be that this attribute may not be very important, compared to the others, but when it comes

to making payment tradeoffs, this is the attribute that business travellers will "invest" in.

It was also interesting to note that for non-business travellers 7.5% of the variance in willingness to pay could be explained by Business Lounge facilities ( $R^2 = 0.075$ ,  $p > 0.05$ ). It may be that the non-business travellers would really like access to the business lounge amenities but they are not willing to pay too much extra for this privilege. It might also be due to a misunderstanding in answering the questionnaire due to the fact that there is no evidence to support this finding further. If the finding that, 7.5% of the variance in non-business traveller willingness to pay can be explained by Business Lounge facilities is true, it could mean that there are opportunities for Airports and Airlines to offer business lounge type facilities to non-business travellers even if they are using economy class cabins.

To test the differences in business travellers' responses and non-business travellers' responses, the following additional hypotheses were added. The results of these hypotheses are discussed below.

**H05:**

There is no difference in the means between business travellers and non-business travellers in their willingness to pay for Reliability/Punctuality

**Ha5:**

There is a difference in the means between business travellers and non-business travellers in their willingness to pay for Reliability/Punctuality

Zero fell between the 95% confidence interval and the p-value is  $> 0.05$  (Sig. 2 tailed = 0.347), therefore the null hypothesis could not be rejected. This suggests that no difference in willingness to pay for Reliability/Punctuality could be found in the responses given by business and non-business travellers. Both groups of travellers ranked Reliability/Punctuality as the most preferred attribute.

**H06:**

There is no difference in the means between business travellers and non-business travellers in their willingness to pay for Frequency

**Ha6:**

There is a difference in the means between business travellers and non-business travellers in their willingness to pay for Frequency

Because the 95% confidence interval did not contain a zero value and the p-value is  $< 0.05$  (Sig. 2 tailed = 0.028), the null hypothesis was rejected. Therefore, it could be concluded that there was a difference in the means of the two groups in terms of the Frequency scale. The results showed that non-business travellers were significantly more willing to pay for higher flight frequencies. When looking at this result with the preferred attributes, one sees that for business travellers, Frequency is the 5th preferred attribute, while for non-business travellers Frequency is the 3rd preferred attribute from the list of 8 attributes that they had to choose from.

**H07:**

There is no difference in the means between business travellers and non-business travellers in their willingness to pay for Business Lounge

**Ha7:**

There is a difference in the means between business travellers and non-business travellers in their willingness to pay for Business Lounge.

Because the 95% confidence interval did not contain a zero value and the p-value is  $< 0.05$  (Sig. 2 tailed = 0.021), the null hypothesis was rejected. Therefore, it could be concluded that there was a difference in the means of the two groups in terms of the Business Lounge scale. Business travellers were significantly more willing to pay for access to the Business Lounge. This suggests that Business Lounge facilities are more valuable to business travellers than non-business travellers. As mentioned earlier, Business Lounge facilities allow business travellers an opportunity to relax and network with other business travellers. Hence their willingness to pay for these facilities.

Finally, this research aimed to understand the consumer decision making and buying process particularly with reference to rules used in the buying process. Does the ranking of a service or product attribute influence on customers' willingness to pay for that attribute?

The main questions to be addressed in this research:

- IV. How do customers make purchase and spending decisions?

- V. Is there evidence of the use of and decision rules in making purchase decisions?
- VI. How do important services and product attributes influence customer's willingness to pay for those services?

To test whether there was any evidence of decision rules applied by travellers, the researcher examined the attribute rankings along with the willingness to pay amounts and the variance in willingness to pay that could be explained by that attribute. This was done for business and non-business travellers.

### **Business travellers**

Table 17 shows the attribute rankings, willingness to pay amounts and the impact of attributes on willingness to pay for business travellers. When one takes a closer look at the attribute ranking and the amount that business travellers say they are prepared to pay, business travellers seem to be willing to pay more on the attributes that they rank highly. The average willingness to pay amount is between R101 and R200 for the top four attributes, while the average is between R51 and R100 for the bottom four attributes. This suggests that business travellers may be using lexicographic decision rules in their willingness to pay decision making processes. However, when one looks deeper into this by examining the variance on willingness to pay that is explained by each of the attributes, the picture is less clear. Only Comfort (ranked 3rd), Frequency (ranked 5th) and Business Lounge (ranked 8th) explain the variance in willingness to pay. This suggests that perhaps the preferred attribute and or willingness to pay choice is based on some other, previously

established rating rather than the specific attribute. This would thus suggest the use of affect referral decision rules.

**Table 17:** Business travellers' attribute rankings, willingness to pay amounts and impact of attributes on willingness to pay.

<b>Service and product attribute</b>	<b>Business travellers' (attribute ranking)</b>	<b>Business travellers' willingness to pay amount</b>	<b>Business travellers' R-squared</b>
Reliability and punctuality	1	R101-R200	0.056
Ticket flexibility	2	R101-R200	0.032
Comfort	3	R101-R200	0.091
Availability	4	R101-R200	0.042
Frequency	5	R51-R100	0.070
Food and drinks	6	R51-R100	0.007
Rewards programme	7	R51-R100	0.025
Business lounge facilities	8	R51-R100	0.092

### **Non-business travellers**

Table 18 below shows the attribute rankings, willingness to pay amounts and the impact of attributes on willingness to pay for non-business travellers. When one takes a closer look at the attribute ranking and the amount that non-business travellers say they are prepared to pay, non-business travellers, in general, seem to be willing to pay more on attributes that they rank highly. The willingness to pay amount is generally higher for the top attributes and lower for the bottom attributes. This excludes Reliability/Punctuality where willingness to pay is between R51 and R100, which is the same amount as the bottom four attributes.

When one looks deeper into this by examining the variance on willingness to pay explained by each of the attributes, the picture is not clear. Only Business Lounge

(ranked 8th) explains the variance in willingness to pay. There does not seem to be any clarity on the use of any decision rules for this group of travellers.

**Table 18:** Non-business travellers' attribute rankings, willingness to pay amounts and impact of attributes on willingness to pay.

Service and product attribute	Non-business travellers' (attribute ranking)	Non-business travellers' willingness to pay amount	Non-business travellers' R-squared
Reliability and punctuality	1	R51-R100	0.021
Comfort	2	R101-R200	0.004
Frequency	3	R51-R100	0.027
Ticket flexibility	4	R101-R200	0.005
Food and drinks	5	R51-R100	0.001
Availability	6	R101-R200	0.019
Rewards programme	7	R51-R100	0.030
Business lounge facilities	8	R51-R100	0.075

## 6.5 Summary of discussions

The main findings on preferred attributes mirrored those that were uncovered in the literature review. For business travellers, Frequency, Comfort and Business Lounge were found to be predictors of willingness to pay, while only the Business Lounge was found to be a predictor of willingness to pay for non-business travellers.

Willingness to pay responses from the two groups were similar; however the results showed that non-business travellers were significantly more willing to pay for higher flight frequencies while business travellers were significantly more willing to pay for access to the business lounge.

With regards to the use of business rules, there did not seem to be any clarity on the use of any decision rules for business and non-business travellers.



## **Chapter 7: Conclusion and recommendations**

### **7.1 Introduction**

This chapter reviews the findings in terms of the main objectives and questions raised in Chapter 1. It closes the loop in terms of the hypotheses that were raised in Chapter 3. The chapter starts with a summary of the entire study followed by recommendations for airlines and airports based on the results obtained in the study. The chapter concludes with recommendations and possible direction for future research.

### **7.2 Summary of findings and conclusion**

The primary objective of this research was to understand airline service and product attributes that customers' value and to estimate their willingness to pay for these attributes.

The secondary objective of this research was to assess the impact of attributes ranked as important on consumers' willingness to pay for those attributes. How would these independent services and product attributes affect consumers' willingness to pay for these attributes?

Finally, this research aimed to understand the consumer decision making and buying process particularly with reference to rules used in the buying process. Does the ranking of a service or product attribute influence on customers' willingness to pay for that attribute?

The study was undertaken on different days on a number of different flights from OR Tambo International Airport (Johannesburg) to Cape Town International Airport. A non-probability convenience sample was used for this study. A questionnaire was used to solicit responses from travellers. Respondents were classified into two groups: those travelling for business purposes and those travelling for non business purposes.

In terms of the findings from the study, the preferred attributes results mirrored those that were uncovered in the literature review.

For business travellers, these attributes were Reliability/Punctuality, Ticket Flexibility, Comfort, Availability, Frequency, Food and Drinks, Reward Programs and Business Lounge facilities.

For non-business travellers, these attributes were Reliability/Punctuality, Comfort, Frequency, Ticket Flexibility, Food and Drinks, Availability, Reward Programs and Business Lounge facilities.

Looking at attributes that explain variances in willingness to pay, Frequency, Comfort and Business Lounge were found to be predictors of willingness to pay for the business traveller sample. Only the Business Lounge was found to be a predictor of willingness to pay for non-business travellers.

Willingness to pay responses from the two groups were similar; however the results did show that non-business travellers were significantly more willing to pay for more frequent flights while business travellers were significantly more willing to pay for access to the business lounge.

To close the loop on decision rules, when one compares the preferred attribute rankings with the willingness to pay amount of business travellers, one could be tempted into thinking that business travellers may be using lexicographic decision rules in their willingness to pay decisions. However, when one looks deeper into this by examining the variance on willingness to pay that is explained by each of the attributes, the picture is less clear. This suggests that perhaps the preferred attribute and or willingness to pay choice is based on some other, previously established rating rather than the specific attribute. This would thus suggest the use of affect referral decision rules. Similarly, there did not seem to be any clarity on the use of any decision rules for non-business travellers.

### **7.3 Recommendations**

The recommendations below are for airlines and airports as they stand to benefit from findings from this research.

#### **7.3.1 Airlines**

Tarry (2003) suggests that there are a number of fundamental requirements for the mainline airlines if they are to produce the level of returns that make them attractive to providers of capital over the medium and longer term. These changes include differentiating increasingly commoditised products in the marketplace.

The results of this research show that there is scope to differentiate airline's product offerings and charge different prices for the services and product attributes offered. Comfort is clearly a factor that airlines could use to differentiate their product offering. More research will be required to isolate other services and product attributes which can have a meaningful impact on willingness to pay.

With reference to the consumer decision making and buying process and rules used in the buying process, the ranking of a service or product attribute did not seem to influence customers' willingness to pay for that attribute. This means that airlines need to test customers on important attributes individually if these services and product attributes explain variances in willingness to pay. It seems that the mere stating of an attribute as important does not predict if customers would be willing to pay for that attribute.

### **7.3.2 Airports**

In flight comfort was sighted to be an important attribute for travellers. In addition business lounge, which is also a comfort factor, was also shown to be important to travellers. Travellers showed a willingness to pay for these attributes. It may be a valuable exercise for airports to explore the possibility of having universal business lounge facilities, which could be used by travellers from multiple airlines while they are waiting for their flights. This service could be offered at a fee. This could be a revenue avenue for airports.

Other comfort factors could also be explored and offered to travellers while they are waiting for their flights.

## 7.4 Direction for futures research

It is suggested that further research should be conducted to gain a deeper understanding of the components of attributes that explain variances in willingness to pay. In the case of business travellers these are Frequency, Comfort and Business Lounge and Business Lounge for non-business travellers. What components of these attributes explain the variance? Knowing the answer to these questions will allow airlines and airport to spend money only on the components of attributes that matter. The components that customers will be willing to pay for.

In addition, an understanding of the decision rules that determine a customers' choice of airline and willingness to pay for attributes is also recommended. There was no clarity on the use of any decision rules used to choose an airline for business and non-business travellers. Understanding this could help airline and airports managers influence the customer at important stages of their decision making.

## References

- Air travel. [http://www.travelwithinsouthafrica.co.za/travel\\_air.html](http://www.travelwithinsouthafrica.co.za/travel_air.html) (accessed 08/11/2009).
- Alamdari, F. (1999) Airline in-flight entertainment: the passengers' perspective, *Journal of Air Transport Management*, 5, 203–209.
- Arana, J.E. & Leon, C.J. (2009) Understanding the use of non-compensatory decision rules in discrete choice experiments: The role of emotions. *Ecological Economics*, 68 (8-9) 2316-2326.
- Balcombe, K. Fraser, I. Harris, L. (2009) Consumer willingness to pay for in-flight service and comfort levels: A choice experiment. *Journal of Air Transport Management*. 15, 221–226.
- Cant, M.C. & Brink, A. & Brijball, S. (2006) *Consumer behaviour*. Juta and Company LTD.
- Chen, C.F. & Wu, T.F. (2009) Exploring passenger preferences in airline service attributes: A note. *Journal of Air Transport Management* 15, 52–53.
- Clark, L.A. & Watson, D. (1995) Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7, 309-319.
- Diamantopoulos, A. & Schlegelmilch, B.B. (1997) *Taking the fear out of data analysis*. London: The Dryden Press.

Espino, R. & Martin, J.C. & Roman, C. (2008) Analyzing the effect of preference heterogeneity on willingness to pay for improving service quality in an airline choice context. *Transportation Research E* 44, 593–606.

Evangelho, F. & Huse, C. & Linhares, A. (2005) Market entry of a low cost airline and impacts on the Brazilian business travellers. *Journal of Air Transport Management* 11, 99–105.

Fourie, C. & Lubbe, B. (2006) Determinants of selection of full-service airlines and low-cost carriers - A note on business travellers in South Africa. *Journal of Air Transport Management* 12, p98–102

Gowda, R. & Fox, J.C. (2002) *Judgments, decisions, and public policy*, Cambridge Series on Judgment and Decision Making, Cambridge: Cambridge University Press.

Howard, J & Sheth, J. (1969) *The Theory of Buyer Behavior*, Wiley, New York.

Kahneman, D. & Frederick, S. (2002) Representativeness revisited: attribute substitution in intuitive judgment. In: Gilovich, T. & Griffin, D. & Kahneman, D. *Heuristics and Biases: The Psychology of Intuitive Judgment*, New York: Cambridge University Press.

Koetting, M. & Widener, F. (2008) ten business travel trends for 2010. Carlson wagonlit ttravel (cwt) vision issue 3. [Http://www.docstoc.com/docs/5383039/cwt-vision-issue-january-ten-business-travel-trends-for](http://www.docstoc.com/docs/5383039/cwt-vision-issue-january-ten-business-travel-trends-for) (accessed 16/07/2009).

Kotler, P. & Keller, K.L. (2007) *A framework for marketing management*, 3<sup>rd</sup> ed. Pearson Prentice Hall.

Lee, D. & Luengo-Prado, M.J. (2004) Are passengers willing to pay more for additional legroom? *Journal of Air Transport Management* 10, 377–383.

Martin, J.C. & Roman, C. & Espino, R. (2008) Willingness to Pay for Airline Service Quality. *Transport Reviews*, Vol. 28, No. 2, 199–217

Mason, K.J. (2000) The propensity of business travellers to use low cost airlines. *Journal of Transport Geography* 8, p107–113.

Mason, K.J. (2001) Marketing low-cost airline services to business travellers. *Journal of Air Transport Management* 7, p103–109.

Molina, A. & Esteban, Á. (2006) Tourism Brochures: Usefulness and Image, *Annals of Tourism Research*, 33 (4), pg 1036-1056.

Mosala, T. (2008) Airline learns to change its spots. *Africa Aviation*, quoting Business Day. <http://www.flyafrica.info/forums/showthread.php?t=9844> (accessed 18/08/2009).

Payne, J.W. & Bettman, J.R. & Johnson, E. (1993) *The Adaptive Decision Maker*, Cambridge: Cambridge University Press.

Pels, E. (2008) Network competition in the open aviation area. *Journal of Air Transport Management* xxx (2008) 1–7 (Article in press).



Pizam, A. Mansfeld, Y. (1999) *Consumer behaviour in travel and tourism*. Haworth Press Inc.

*Proussaloglou, K. & Koppelman, F. (1995) Air carrier demand: an analysis of market share determinants, Transportation, 22, 371–388.*

Rose, J.M. & Hensher, D.A. & Greene W.H. (2005) Recovering costs through price and service differentiation: Accounting for exogenous information on attribute processing strategies in airline choice. *Journal of Air Transport Management* 11 p400–407.

Schiffman, L.G. & Kanuk, L.L. (1997) *Consumer Behavior*. 6th ed. Prentice Hall International, Inc.

Schmoll, G. (1977) *Tourism Promotion*, Tourism International Press, London.

Superaff (2009). Product attributes vs. product benefits – work sheet. <http://superaff.com/archives/2006/10/31/product-attributes-vs-product-benefits-work-sheet/> (accessed 09/11/2009)

Tarry, C. (2003) The difficult part is yet to come: Profit rather than traffic alone remains the key to airline prosperity. *Tourism and Hospitality Research* 5(1).

Teichert, T. & Shehu, E. & von Wartburg, I. (2008) Customer segmentation revisited: the case of the airline industry, *Transportation Research A* 42, 227–242.

Tustin, D.H. & Martins, J.H. & Van Wyk, H de J. & Ligthelm, A.A. (2005) *Marketing research in practice*. Unisa Press

van der Westhuizen, A., 2008. Research report on Air Transport. SICCODE: 73000  
[www.whoownswhoms.co.za](http://www.whoownswhoms.co.za) (accessed 18/08/2009).

Zikmund, W.G. (2003) *Business Research Methods*. 7th ed. Thomson South-Western.

## Appendix A - Questionnaire

Good Day

My name is Khanyisa Hlekane and I am doing academic research to understand customers' **willingness to pay** for various airline services or product attributes. This research is undertaken for the completion my Masters of Business Administration (MBA) degree at the University of Pretoria (Gordon School of Business Science, Illovo campus).

The primary objective of this research is to understand airline services or product attributes that customers' value and to estimate their willingness to pay for these attributes. The ability to understand this is important for airlines to enable them to offer services that are meaningful and valuable to customers.

You are asked to answer the following questionnaire as honestly as possible. There are no right or wrong answers. The Survey should take no more than 7 minutes of your time. Your participation is voluntary and you can withdraw at any time without penalty. All data will be kept confidential.

By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please let me know or contact my supervisor. Our details are provided below.

Thanking you in advance

Researcher name: Khanyisa Hlekane  
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Researcher Supervisor name: Ricardo Machado  
Email: machar@unisa.ac.za  
Phone: 012 429 4020

QU No:

**Willingness to Pay For Airline Attributes Questionnaire**

Thank you for agreeing to answer this questionnaire. All questionnaires are anonymous and will be treated with the strictest of confidentiality. Please answer all questions as honestly as possible. There are no right or wrong answers to these questions.

**Please answer all questions**

**Screening Question:**

Are you flying to Cape Town? 

Yes	No
-----	----

**1. Demographics:** *(Place an X over the relevant answer)*

1.1. Gender	<i>Male</i>					<i>Female</i>				
1.2. Race	<i>White</i>		<i>Black</i>			<i>Coloured</i>		<i>Indian</i>		
1.3. Age group	<i>&lt; 18</i>	<i>19-24</i>	<i>25-30</i>	<i>31-36</i>	<i>37-42</i>	<i>43-48</i>	<i>49-54</i>	<i>55-60</i>	<i>61+</i>	
1.4. Airline class	<i>Business Class</i>					<i>Economy Class</i>				
1.5. Do you have access to business lounge facilities?	<i>Yes</i>					<i>No</i>				
1.6. Are you paying for your flight?	<i>Yes</i>					<i>No</i>				
1.7. Are you travelling for business purposes?	<i>Yes</i>					<i>No</i>				
1.8 Average flights per year	<i>&lt;2</i>		<i>3-6</i>			<i>7-10</i>		<i>&gt;10</i>		

**2. Preferred airline services/product attributes:**

This section looks at your preferred airline services/product attributes. **Please rank the following airline services or product attributes in order of preference with 1 being the most preferred airline service or product attribute and 8 being the least preferred attribute.** Please note that no numbers should be repeated in your rankings.

<b>2.1</b>	<i>It is important to me that an airline is reliable and punctual</i>	
<b>2.2</b>	<i>It is important to me that an airline offers many flights (frequency) to a destination</i>	
<b>2.3</b>	<i>It is important to me that an airline is always available at my preferred time whenever I book a flight</i>	
<b>2.4</b>	<i>It is important for me to be able to change the date, time and destination of my flight without incurring any penalties</i>	
<b>2.5</b>	<i>It is important to me that an airline has a rewards program</i>	
<b>2.6</b>	<i>It is important to me that I am comfortable during the flight</i>	
<b>2.7</b>	<i>The quality of food on the flight is important to me</i>	
<b>2.8</b>	<i>It is important to me that an airline has business lounge facilities</i>	

### 3. Willingness to pay:

This section looks at your willingness to pay for each preferred airline services/product attribute. **Your willingness to pay estimates must be based on a one way trip.**

#### Likert scale interpretation:

1	2	3	4	5
<i>Definitely not willing to pay</i>	<i>Not willing to pay</i>	<i>Neutral</i>	<i>Willing to pay</i>	<i>Definitely willing to pay</i>

#### 3.1. Reliability/Punctuality

This attribute looks at your willingness to pay extra on your original ticket price to be guaranteed that the airline is reliable and punctual at all times.

##### Would you be willing to pay...

3.1.1 ...to know that your flight will take off at the said times	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>		
3.1.2 ...to <b>not</b> experience any delays in arriving at your destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>		
3.1.3 How much would you be willing to pay for overall reliability and punctuality?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201 - R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

#### 3.2. Frequency

This attribute looks at your willingness to pay extra on your original ticket price to airlines which offer more flights to any one destination compared to other airlines.

##### Would you be willing to pay...

3.2.1 ...to have more frequent and convenient flights to your destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>		
3.2.2 ...to know that you have several options for flights to your destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>		
3.2.3 How much would you be willing to pay to have more flights to your destination?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201 - R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

#### 3.3. Availability

This attribute looks at your willingness to pay extra on your original ticket price to be assured of the flight availability at your preferred time.

##### Would you be willing to pay...

3.3.1 ...to be assured of the flight availability at your preferred time	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>		
3.3.2 ...to be able to find and book flights at the last minute	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>		
3.3.3 How much would you be willing to pay to be assured of flight availability at your preferred time?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201 - R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

### 3.4. Ticket Flexibility

This attribute looks at your willingness to pay extra on your original ticket price to enable you to make changes to your ticket without incurring any penalties.

**Would you be willing to pay...**

3.4.1 ...to change the original flight date and time on your ticket to another date or time		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.4.2 ...to change the original destination on your ticket to another destination		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.4.3 How much would you be willing to pay to make changes to your ticket without incurring penalties?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201 - R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

### 3.5. Rewards Program

This attribute looks at your willingness to pay extra on your original ticket price to be able to participate on rewards programs that may be offered by an airline.

**Would you be willing to pay...**

3.5.1 ...to participate on rewards programs that may be offered by the airline		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.5.2 ...to have the airline give you freebies from traveling with them		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.5.3 How much would you be willing to pay to participate in reward programs offered?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201 - R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

### 3.6. Comfort

This attribute looks at your willingness to pay extra on your original ticket price for improved comfort on the flight.

**Would you be willing to pay...**

3.6.1 ...to have more leg room around your in-flight seat		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.6.2 ...to travel with only a few well-spaced passengers on the flight		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.6.3.... to have more in flight entertainment		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.6.4 How much would you be willing to pay for improved comfort on the flight?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201 - R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

### 3.7. Food and drinks

This attribute looks at your willingness to pay extra on your original ticket price for improved food quality on the flight.

**Would you be willing to pay...**

3.7.1 ...to have a hot, high quality in-flight meal		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.7.2 ...to have cold, high quality sandwiches in flight		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.7.3 ...to get an unlimited amount of food and drinks during the flight		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.7.4... to get an unlimited amount of alcohol during the flight		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.7.5 How much would you be willing to pay for overall improved food and drinks quality on the flight?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201- R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

### 3.8. Business Lounge

This attribute looks at your willingness to pay extra on your original ticket price to enable you to make use of business lounge facilities at the airport.

**Would you be willing to pay...**

3.8.1 ...to use the business lounge facilities before and after flights		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.8.2 ...to have full access to the amenities in the business lounge		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	
3.8.3 How much would you be willing to pay to make use of business lounge facilities at the airport?	R0 -R50 <input type="checkbox"/>	R51 - R100 <input type="checkbox"/>	R101- R200 <input type="checkbox"/>	R201 - R500 <input type="checkbox"/>	R501- R750 <input type="checkbox"/>	R751- R1000 <input type="checkbox"/>	R1001+ <input type="checkbox"/>

**Thank you very much for taking the time to answer this questionnaire!**