The importance of choice attributes and the positions of the airlines within the South African domestic passenger airline industry as perceived by passengers at Durban International Airport

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#### ABSTRACT

This exploratory study sought to determine what customers perceive to be the most important attributes when choosing their passenger airline within the South African domestic airline industry. In line with positioning research protocol, respondents then evaluated the performance of each airline on those attributes. The attributes that respondents perceived to be important in their airline selection and that differentiated amongst competitors within the domestic passenger airline industry were *safety, punctual/reliable flights* and *low price*. However, respondents indicated that they were only prepared to sacrifice Voyager Miles, and legroom and onboard space for lower prices. The positions of the traditional as well as low-cost airlines operating in the South African domestic market are plotted on positioning maps using the determining dimensions as axes.

Key words: positioning, South African airline industry, determinant attributes

### Introduction

The South African domestic airline industry is host to several airlines including South African Airways (SAA), South African Express, South African Airlink, Itime Airways, Mango Airlines, British Airways and Kulula.com (SA Flights, 2010: para2).

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While this competitive set may be small compared to other countries, domestic travellers must still make choices in terms of the domestic airlines they wish to use. The question is then, what makes a customer choose one airline over another. According to Hutt and Speh (2004: 288), "determinant attributes are factors that customers use to differentiate among the alternatives and that are important to them in determining which brand they prefer. In short, then, determinant attributes are choice criteria that are both important and differentiating". This research therefore aimed to determine the choice criteria used by consumers in airline choice, and how the various alternatives in the industry are positioned in the minds of consumers on these choice criteria.

# **Research objectives**

The research objectives were:

- To discover the attributes that customers consider when choosing a domestic airline in South Africa
- To determine the attributes (if any) that customers are willing to sacrifice for a lower price when choosing an airline
- To explore the positions that the various airlines within the South African domestic airline industry occupy in the minds of consumers.

# **Positioning literature**

Consumers base their purchase decisions and behaviour on their own personal perceptions of a product, rather than on factual certainty (Schiffman & Kanuk 2004: 122). Therefore, marketers today believe that consumers' subjective perceptions are substantially more important than "their knowledge of objective reality" (Schiffman & Kanuk 2004: 122).

Competitive advantage for organisations comes from an organisation's ability to perform activities more distinctly or more effectively than its competitors. This gives the organisation an edge over rivals when competing (Pitts & Lei, 2006: 8). Positioning differentiates one product or offering from another in terms of attributes that are meaningful to customers and that give the offering a competitive advantage (Kotler et al. 2010: 221). Thus positioning begins by "differentiating the organisation's marketing offer so that it provides greater consumer value than competitors' offerings do" (Kotler & Armstrong, 2008: 50). Marketers must therefore select points of competitive advantage in order to differentiate their product from

those of their competitors. A company's product can then be positioned in the minds of customers based on competitive advantage. Payne (1993: 95) has pointed out that "positioning is concerned with the identification, development and communication of a differentiated advantage which makes the organisation's products and services perceived as superior and distinctive to those of its competitors in the mind of its target consumers". A product's position is thus the place that it occupies in the minds of the market on criteria important to that market and relative to competitors. Marketers must firstly understand the position that the product occupies and then, if necessary, attempt to influence that position though marketing strategies. Hooley, Saunders and Piercy (2004: 52) suggest that each of the marketing mix elements product, price, place and promotion – should be designed to add up to the positioning required. They explain that for premium positioning, for example, the organisation cannot offer a high-quality product at a low price, as these elements do not align equally with the chosen position. When elements of the marketing mix do not pull in the same direction, but rather contradict one another, the result will be confused positioning. Gilligan and Wilson (2003: 440) suggest that before an effective position can be selected and developed, the strategist must determine the current positions of competitors in the industry, which can be done through perceptual maps.

Mullins and Walker (2010: 206) break down positioning into a seven-step process:

- 1. Identify a relevant set of competitive brands
- 2. Identify determinant attributes
- 3. Determine consumers' perceptions of the brand's performance on these attributes
- 4. Determine the brand's current position
- 5. Determine consumers' most preferred combination of attributes
- 6. Examine the fit between customers' preferences and the current brand position
- 7. Select the desired position, write a positioning statement and develop the marketing strategy to achieve this position.

This research attempts to provide answers to steps 1–4 in the domestic passenger airline industry in South Africa as perceived by passengers flying into and out of Durban International Airport.

# The passenger airline industry in South Africa

Air travel in South Africa grew by about 14% per year over the three years prior to 2007 and by 70% over the period 2003 to 2007. This was due mainly to the proliferation of low-cost airlines following the deregulation of the industry in the

early 1990s. At the time, South African Airways had a near monopoly on domestic air travel. Many airlines such as Flitestar and Sun Air had attempted to challenge SAA's dominance of the domestic airline industry but had failed and subsequently gone out of business. However, "the emergence of new competitors like 1time, Kulula, Mango and Nationwide saw SAA's domestic market share cut back to around 50%" (Tourism RSA n.d.: para 1–62).

Ryanair and easyJet have made Europe the forerunner in terms of low-cost airlines, but new ones are launching throughout the world, including in Africa and particularly in South Africa "where new low-cost carrier brands have made deep cuts into the market share held by bigger, more established companies like British Airways and South African Airways" (Irwin 2007: para 11). Irwin (2007: para 20) goes on to say that this expansion is due partly to the increased amount of air travel in South Africa and partly to the Airports Company of South Africa (ACSA)'s infrastructure expansion for the FIFA World Cup, held in South Africa in 2010. ACSA operates the three international airports in South Africa as well as seven domestic airports in Bloemfontein, Port Elizabeth, East London, George, Kimberley, Upington and Pilanesberg (South Africa Info 2008: para 3).

# Positioning and choice criteria in the passenger airline industry

Wen and Yeh (2010: 7) state that while there is a large amount of research on aviation, very few studies have looked at positioning in this industry. Related research has mostly used service quality theory as the theoretical foundation, but these studies have also identified attributes and factors important to customers' choice of airline. By definition, attributes are features or characteristics of an object or product (Sekeran & Bougie 2010: 126), while factors are overall dimensions of a concept (Sekeran & Bougie 2010: 161) that may include multiple attributes. This research focuses specifically on attributes rather than factors. However, the literature often uses these terms interchangeably.

Tsaur, Chang and Yen (2002: 112), for example, found that amongst a Taiwanese sample, the most important attributes used to evaluate service quality were staff courtesy, on-board comfort and cleanliness, safety, responsiveness of the attendant, on-board entertainment and extended travel service, while Liou and Tzeng (2007: 131) found that safety and reliability were the critical factors of service quality. Wen and Yeh (2010: 11), on the basis of seven other studies of service quality in airlines, identify 18 factors as important to consumers in the airline industry. These include price, convenience and frequency of flights, convenience of booking and ticketing,

in-flight factors, staff factors, safety, complaint handling and airline image. Looking specifically at domestic airlines, Liou, Hsu, Yeh and Lin (2011: 7) found that the cabin service criterion was the most important factor affecting service quality perceptions of domestic airlines in Taiwan.

In South Africa, Surovitskikh and Lubbe's (2008: 78) study on the service quality of four Middle Eastern airlines in the South African business and leisure environment, for example, provides a list of 15 service quality attributes for airlines, which they condensed into three factors: augmented products, reliability and consistency of service.

Moving away from service quality research, Strydom, Cant and Jooste (2000: 132) developed a list of 34 attributes commonly associated with the airline industry, including what they describe as pricing factors, safety, frequency of flights, reservations, baggage handling, staff factors, on-board comfort factors and frequent flier factors. The Skytrax World Airline Awards have been operating since 1999 (Skytrax 2011b) and have earned the reputation as the "most prestigious and respected quality recognition of front-line product and service standards across the world airline industry" (Skytrax 2011a: para 5). In 2011, the Worldwide survey interviewed a total of 18.8 million airline passengers from 100 different nationalities (Skytrax 2011a: para 5). The survey measured 38 different items of airline front-line product and service (Skytrax 2011b: para 4), thus including a wide array of attributes. These include 15 ground and airport attributes, 15 on-board product attributes and 12 on-board service attributes (Skytrax 2011b: para 7–9). Most studies, however, have looked at international air travel, where the importance assigned to different attributes is likely to differ from domestic travel.

In order to investigate the domestic airline industry, Román, Espino, Martin, Betanco and Nombela (2008: 141) studied domestic routes in the archipelagos of the Azores, Madeira and the Canary Islands and found that price, flight frequency, quality/availability of food, low penalties for ticket changes, compensation for delays and legroom were the most important factors in airline choice. The only related study that could be found in South Africa was conducted by Fourie and Lubbe (2006: 100), who focused their research on business travellers and found that seat comfort was the most important attribute.

Thus, while much research has been conducted on service quality factors in the airline industry, few studies have looked at the attributes affecting domestic airline choice, particularly in South Africa, and at the positions occupied by airlines in the South African domestic airline industry according to domestic travellers. This research attempts to fill that gap.

#### Research methodology

The population for this exploratory study was defined as business and leisure passengers who had used the services of one or more of the domestic airlines operating in South Africa and who were flying into or out of Durban International Airport. Since it was not possible to obtain databases from each of the airlines, in other words a sampling frame, and thus the population elements did not have a predetermined or known chance of being selected as participants (Sekaran & Bougie 2010: 268), the sampling technique had to be a non-probability one. Convenience sampling was used. Non-probability sampling techniques have the disadvantage that the researcher cannot calculate the nature and extent of biases in the estimate nor whether any variation is due to sampling error. This therefore reduces the generalisability of the findings (Aaker, Kumar & Day 1998: 389). An acknowledged limitation of this study is that the results cannot be confidently generalised to the general flying population of South Africa due to the use of non-probability sampling.

Durban International Airport was chosen as an airport that all the domestic airlines fly into and out of. This location would maximise the potential of acquiring South African respondents with domestic airline travel experience. Domestic flights into Durban International Airport come from all major and many minor destinations across South Africa, thus ensuring a sample drawn from across the country. Permission was obtained from ACSA (Airport Companies South Africa) for data collection to take place on two separate occasions, including midweek and weekend, in a six week period. Liou et al. (2011: 4) also randomly picked one week day and one weekend day to collect data in their Taiwanese study. In the present study, data were collected from respondents in the main terminal building throughout the day and evening on both data collection days, and respondents were randomly selected to answer the questionnaire. This method is commonly used in such studies (see Fourie & Lubbe 2006). A sample of 185 usable questionnaires was achieved.

In order to reduce the number of attributes to a manageable number for a mall-intercept style survey to be done at an airport, the research studies described above were consulted, and a small focus group was conducted to identify the most important attributes from Strydom et al.'s (2000) list of 34. This listing was the most comprehensive and incorporated all the attributes identified by other similar studies. The intention was to include the top ten attributes. A focus group was conducted involving seven people including Black, White and Indian race groups, both genders and ages ranging from 21–45, all of whom had flown on domestic airlines numerous times. The attributes were discussed to ensure common understanding, and the respondents rated the attributes on a scale of 1–10, where 1 was unimportant and 10 was very important to airline choice for domestic travel in South Africa. Eleven

attributes had average scores above 7.5. These were then discussed in the focus group to ensure agreement that they were the most important attributes, and they were thus included in the final questionnaire.

#### Data analysis

Respondents rated the importance of attributes in their choice of domestic airline on a scale of 1–10, where 1 was completely unimportant and 10 was very important. Due to the fact that this was an interval scale, means were used as a measure of central tendency (Cooper & Schindler 2006: 345) for the importance scores. A similar scale was used for the measure of performance of the airlines on the attributes. On this scale, 1 represented poor performance and 10 excellent performance. Means were thus also used as measures of central tendency of the performance scores.

In order to determine whether an attribute was considered to be a differentiator within the South African domestic airline industry, the difference between the highest and lowest performance scores for each attribute was calculated. Differentiation scores could range from 0 to 9. Thus attributes where all airlines were scored the same (that is, there was little or no difference between the performance scores of the different airlines), were not used by respondents to differentiate between the airlines in the industry. Attributes with higher differentiation scores were those where the airlines in the industry were perceived to be different in their performance on that attribute, and these attributes, if also important to the customer, would thus be used as determining dimensions – ones used to differentiate between the airlines in airline selection.

The reliability of the determinant attributes as rated by the respondents was tested using Cronbach's alpha, a measure of internal/inter-item consistency reliability (Sekaran & Bougie 2010: 162). The alpha score for the factor questions was 0.738, which is an acceptable reliability coefficient (Hair, Bush & Ortinau 2003: 397).

In terms of determining whether respondents were prepared to sacrifice any attributes, a question requiring a simple 'yes/no' response was asked. Percentages are presented.

For the objective of determining the positions of airlines in the South African domestic airline industry, respondents were asked to rate the airlines they themselves had listed on each of the 11 attributes using the scale 1 = poor performance with regard to the attribute and 10 = excellent performance. Mean scores were calculated and plotted on perceptual maps. According to Gilligan and Wilson (2003: 440), "in order to select the most effective market position, the strategist needs to begin by identifying the structure of the market and the positions currently held by competitors. This can

be achieved through the process of perceptual mapping". These multidimensional maps plot consumers' perceptions of various brands in the industry on the attributes or dimensions deemed to be most important to customers (Li 2001).

# **Discussion of results**

# Sample profile

The sample of 185 respondents consisted of 53% males, with the greatest proportion of the sample (25%) earning between R10 000 and R25 000 a month, followed by 15% earning between R5 000 and R10 000. Forty-five per cent of respondents flew between two and five times a year, followed by 29% who flew once a year. The majority of respondents (54%) were leisure/holiday travellers, and 36% were business travellers. Other reasons for travel included sport and family functions such as funerals.

# Attributes respondents consider when choosing an airline

Table 1, column 3 presents the importance scores for the 11 attributes tested in this study. These scores indicate the level of importance respondents placed on the attributes in their choice of domestic airline.

Rank	Attribute	Importance score (Mean)	Differentiation score		
1	Safety	8.92	2.93		
2	Punctual/reliable flights	8.39	2.09		
3	Safely/carefully handled baggage	8.32	1.61		
4	Low price	8.29	2.16		
5	Friendliness	7.88	0.82		
6	Customer service	7.87	1.07		
7	Efficiency of employees	7.82	0.97		
8	Online booking	7.31	2.15		
9	History/reputation	6.89	3.99		
10	Space on board and legroom	6.81	1.81		
11	Voyager miles	4.42	3.15		

 Table 1: Importance and differentiation scores for the South African domestic airline industry

The most important attributes in order of importance were *safety*, *punctuality/ reliability of flights*, *safely/carefully handled baggage*, *low price*, *friendliness*, *customer service* and *efficiency of employees*, all with scores above 7.5. The highest differentiation score was 3.99 for *history/reputation*. The relative lowness of this score out of a total possible score of 9 indicates that overall, respondents did not see major differences between the domestic airlines in South Africa. However, passengers do make choices amongst airlines, and according to positioning theory, the attributes that distinguish between the airlines, albeit with a small difference score, and that are relatively important to passengers, will be the determining dimensions that airlines should be aware of. Determining dimensions have to be both important to the customer and differentiating amongst the competitive set (Hutt & Speh 2004: 288). Thus the most differentiating attributes (that is, those with the highest relative scores) were *history/ reputation, Voyager miles, safety, low price, online booking* and *punctual/reliable flights*.

If the lists of attributes that are both important and differentiating within the industry are compared, *safety*, *punctual/reliable flights* and *low price* are the main determining dimensions for the respondents in this survey.

#### Safety

When respondents were asked to score the attributes in terms of importance, *safety* scored the highest at 8.92 out of 10. Respondents seemed to put their safety first, ahead of the price of the ticket or other attributes. Safety is often listed in the literature as an important attribute (see Surovitskikh & Lubbe 2008; Tsaur et al. 2002; Wen & Yeh 2010). Strydom et al. (2000: 132) also identified "good safety record" as one of the important attributes in the airline industry. Liou and Tzeng (2007: 131), however, found that safety and reliability were the critical factors of service quality in Taiwan. It is interesting to note, however, that in the two domestic airline studies by Román et al. (2008), and Fourie and Lubbe (2006), safety did not feature at all as an important attribute. The safety attribute in the current study had the highest importance score and a differentiation score of 2.93, third highest amongst the differentiation scores.

Urde (2001: 1030) in a case study based on the car industry, however, mentions that "safety should not be a differentiator, but in fact a prerequisite for competition", in other words consumers see this attribute as a minimum requirement for any companies operating in the car industry. The same could be said for the airline industry. Therefore if an airline were to perform poorly on the attribute of *safety*, it would struggle to be competitive in the airline industry where *safety* is a necessity. The difference between the highest and lowest performance scores for this attribute across all the airlines listed by respondents was 2.93. Thus in this study *safety* was

found to be a differentiator for respondents when choosing amongst alternatives within the airline industry.

It is interesting to note that despite the data collection occurring after Nationwide Air had been liquidated "citing cashflow problems arising from increased fuel costs and decreased passenger loads" as the cause (South Africa Travel Online 2011: para 26), respondents still listed it as one of the domestic airlines in South Africa. This may be due partly to lapse of memory, but also to the fact that Nationwide had been in the media as recently as 2010 with their Competition Tribunal case against SAA (South Africa Travel Online 2010). As a brand's position is always relative to what customer's consider to be the competitive set on important attributes, Nationwide was included in the study. This may help to explain why safety was found to be a differentiator in this study, whereas other studies have not found it to be. According to Theunissen and Sguazzin (2008: para 3), Nationwide's fleet was temporarily grounded on 30 November 2007 by South Africa's Civil Aviation Authority after an engine fell off a plane as it took off from Cape Town International Airport. This is just one of Nationwide's safety woes that are likely to have contributed to its ultimate demise. For the purposes of this research, however, it illustrates that an incident such as this, and general non-performance on an important attribute, can certainly affect the general perceptions of an airline, especially when evaluating its performance on an attribute such as *safety*.

Hoyer and MacInnis (2007: 227) explain that in making a decision, consumers may evaluate one brand at a time. A consumer will therefore collect information about a product, evaluate the attributes important to him/her, and make a judgement before moving on to the next brand. If there is a tie, consumers then evaluate brands on the second most important attribute, and so on until a brand is selected. With noncompensatory brand-processing models, consumers use key attributes to evaluate brands and then eliminate those that are not adequate on any one attribute. Such models are known as non-compensatory because a negative rating on a key attribute eliminates the brand (Hoyer & MacInnis 2007: 227). Thus if many consumers are employing a similar brand-processing model and a brand is weak on the most important attribute, the company needs to improve on this feature in order even to be considered. An airline company such as Nationwide, which may be perceived by customers to be an inconsistent performer on the most important attribute, would certainly struggle to maintain its customer base. By Nationwide's own admission, customer demand, or lack thereof, was one of the reasons for their ultimate liquidation (South Africa Travel Online 2011). Customers will therefore select other airlines that can consistently fulfil their standards and expectations with respect to safety.

*Safety* was therefore an attribute that was both important and differentiating for these respondent customers within the South African domestic airline industry.

#### Punctual/reliable flights

*Punctual/reliable flights* was the second most important attribute to respondents. Punctuality is vital to those customers who cannot afford to miss important business meetings. Punctuality is also highly important to customers travelling on holiday, as many of them catch connecting flights from Johannesburg's OR Tambo International Airport. A late domestic flight could cause holiday-makers to miss their international connection.

Surovitskikh and Lubbe (2008: 78) list "on-time performance" as one of the attributes used in their positioning study and found that this loaded on to the most important factor: consistency of service. Strydom et al. (2000: 132) also indicated "punctual flights" as an important attribute. Liou and Tzeng (2007: 131) found that reliability was one of two critical factors of service quality in Taiwan.

The differentiation score for this attribute, as shown in Table 1, was 2.09. *Punctual/ reliable flights* was therefore also a differentiator within the airline industry, although to a lesser extent than *safety*. *Punctual/reliable flights* was therefore both an important and differentiating attribute and is thus classified as a determining dimension for these respondents within the South African domestic airline industry.

#### Safely/carefully handled baggage

*Safely/carefully handled baggage* scored an average of 8.32, and was the third most important attribute according to the respondents. Skytrax (2011b) lists "baggage delivery" as one of the important dimensions upon which the Skytrax World Airlines Awards are based. Strydom et al. (2000: 132) indicate "efficient luggage handling", and Surovitskikh and Lubbe (2008: 78) list "handling of luggage loss or damage; mishandled baggage" as important attributes. These attributes loaded on to their reliability factor. However, none of the other studies reported in this paper mentioned baggage handling as an important attribute.

The difference between the first placed airline and the last placed airline with respect to this attribute was 1.61. Therefore *safely/carefully handled baggage*, although very important, was not considered to be as much of a determining dimension as the attributes of *safety* or *punctual/reliable flights*.

#### Low price

*Price* was the fourth most important factor and was rated at an average of 8.29 out of 10. Strydom et al. (2000: 132) use "best/reasonable prices, most expensive prices, and good value for money" as three factors pertaining to the attribute of *price* in previous research. Various studies list low price or similar attributes as being important (see Román et al. 2008; Wen & Yeh 2010).

The difference between the highest and lowest scores for this attribute was 2.16. *Low price* therefore appeared to be both important and differentiating within the South African domestic airline industry, as the difference was greater than for *punctual/reliable flights*.

#### Friendliness

*Friendliness* scored an average of 7.88 and of the 11 attributes, was ranked fifth. *Friendliness* of employees, *customer service* and *efficiency of employees* were all rated very closely around the 7.8 mark and seemed to be particularly important to the respondents. Airline travel can often be frantic enough without the added hassle of poor service from employees. Skytrax (2011b) lists "friendliness of ground staff, friendliness of staff, and general staff attitudes" as some of the important factors upon which the Skytrax World Airlines Awards are based. Strydom et al. (2000: 132) used "friendly/helpful ground staff, and friendly/helpful cabin crew" as important attributes in airline choices, and Wen and Yeh (2010) found the broad factor "staff" to be important in their review of seven service quality studies. Tsaur et al. (2002) and Surovitskikh and Lubbe (2008) found that "courtesy of employees" was important, and the latter found that the attribute loaded on to their consistency of service factor.

The differentiation score for this attribute was 0.82. Therefore *friendliness*, although important to customers, was not as much a determining dimension as *safety*, *punctual/reliable flights*, *safely/carefully handled baggage* or *low price* for these respondents within the South African domestic airline industry.

#### Customer service

*Customer service* is an integral aspect of any company, whether they are providing the consumer with a product or a service, or both. This attribute scored an average of 7.87 and was the sixth most important attribute to the respondents. Airline companies are often faced with the ominous task of keeping thousands of customers satisfied on a daily basis. This is an important attribute in that if things go wrong (for example, if flights are cancelled or delayed), customers need to be helped in order to proceed

with alternative arrangements, and thus customer service would be expected to be important. Skytrax (2011b) lists quality of check-in service, transfer services and arrival services as important ground service attributes. Surovitskikh and Lubbe (2008: 78) found that handling of customer complaints with baggage loss or damage, or with flight delays were attributes that loaded on to the reliability factor. Interestingly, other domestic airline studies did not surface customer service attributes as being important (see Fourie & Lubbe 2006; Román et al. 2008).

The difference between the best performer in this attribute and the worst performer was only 1.07. *Customer service* was therefore found to be important to respondents, but not a determining dimension.

This does not, however, mean that *customer service* will not possibly become a determining dimension within the South African domestic airline industry in the future. Should a company become particularly competent in their delivery of *customer service*, they may well differentiate themselves from the rest of the industry based on their superior performance on this attribute. However, an airline that underperforms on their *customer service* delivery may well get left behind by other airlines that are in line with the current customer and industry standards. Qatar Airways won the Skytrax Airline of the Year award in 2011, and according to its CEO, Mr Baker (2011), this "takes into account the outstanding efforts and hard work of all our employees, as we continuously aim to exceed the expectations of our customers" thus indicating the importance of customer service to airline success.

#### Efficiency of employees

The *efficiency of employees* attribute scored an average of 7.82. This score is closely linked to *customer service*, which scored an average of 7.87. A score of 7.82 means that this attribute was deemed important by respondents. Skytrax (2011b: para 9) lists "efficiency of ground staff" and "onboard staff service attentiveness/efficiency" (Skytrax 2011: para 9) as some of the important items upon which the Skytrax World Airlines Awards is based. Strydom et al. (2000: 132) used "efficient reliable reservations, and fast, efficient check-in system" in their list of airline attributes. Surovitskikh and Lubbe (2008: 78) found that efficient check-in and baggage handling loaded on to their reliability factor, while Tsaur et al. (2002) found "responsiveness of the attendant" to be an important attribute, and Liou et al. (2011) found "cabin service" to be the most important factor.

The difference between the highest and lowest scores for this attribute was 0.97. Therefore the *efficiency of employees*, although important to customers, was not

found to be as much of a determining dimension for these respondents within the South African domestic airline industry.

The attributes of *online booking*, an airline's *reputation*, *onboard space and legroom*, and *Voyager miles* were found to be relatively less important attributes to the respondents in this survey.

# The factors respondents were willing to sacrifice for a lower price when choosing an airline carrier

It is evident from Table 2 that respondents would definitely have sacrificed Voyager miles, whereas space on board and legroom had a far more even split between 'yes' and 'no' responses.

		Whether customers would sacrifice the attribute		
Attribute	YES (%)	NO (%)		
Safety	1	99		
Punctual/reliable flights	7	93		
Safely/carefully handled baggage	9	91		
Friendliness	46	54		
Customer service	22	78		
Efficiency of employees	29	71		
Online booking	39	61		
History/reputation	32	68		
Space on board and legroom	53	47		
Voyager miles	85	15		

Table 2: Whether the customer would sacrifice the attribute

#### Voyager miles

*Voyager miles* are an added perk that rewards customers for their loyal use of a specific airline company. Strydom et al. (2000: 132) cite Louw (1996) in saying that frequent-flier programmes are important to customers in the airline industry. However, no other study reviewed for this paper found frequent-flier programmes such as Voyager miles to be an important attribute in airline choice. With a mean importance score of 4.42, it appears that frequent-flier programmes are less important to respondents than they may have been in 1996, and thus are easily substituted for a lower price. The presence of a number of low-cost airlines (ltime, Mango and Kulula.com) in the industry today may be a major contributing factor to this finding.

#### Space on board and legroom

Fifty-three per cent of the respondents would have sacrificed their personal *space* on board and legroom in order to pay the lowest price. Strydom et al. (2000) and Surovitskikh and Lubbe (2008) suggest that onboard space and legroom are important attributes in the airline industry. Tsaur et al. (2002) indicate that on-board comfort is important. Interestingly, the two domestic airline studies reported in this paper found this attribute to be important (see Román et al. 2008). In fact, the Fourie and Lubbe (2006) study of business people in South Africa found seat comfort to be the most important attribute. The mean score for this attribute was 6.81 (Table 1), which indicates the moderate importance of this attribute. For 53% of respondents, this was clearly not important enough and could be compromised for the sake of a lower price.

It therefore seemed that although there was supporting literature pertaining to the importance of both attributes, perhaps these are two attributes that can be classified as luxuries rather than imperatives, and therefore may well be sacrificed in order to gain the lowest possible price.

## Positions of the airlines in the South African airline industry on the more determining dimensions

Respondents were asked to rate the airlines on each of the 11 attributes using the scale 1 = poor performance with regard to the attribute and 10 = excellent performance. Table 3 presents the mean scores for each airline on each attribute. For the purposes of this article, the airlines have been coded as low cost airlines (LCA) and traditional airlines (TA) as follows:

- 1: Low cost airline A
- 2: Low cost airline B
- 3: Low cost airline C
- 4: Traditional airline A
- 5: Traditional airline B
- 6: Low cost airline D
- 7: Traditional airline C

Firstly looking at each of the airlines, this section provides the respondents' perceptions of the overall position of the airline, including its strengths and weaknesses. Perceptual/positioning maps based on the determining dimensions are then presented, showing the relative positions of the airlines on the most important attributes used by these respondents in choosing between airlines in the South African airline industry.

Attribute	LCA A	LCA B	LCA C	LCA D	ТАА	ТА В	TA C	Industry average
Safety	7.61	7.50	7.81	5.69	8.53	8.31	8.62	7.72
Punctual/reliable flights	6.83	7.07	7.34	5.77	7.86	7.86	6.85	7.08
Safely/carefully handled baggage	7.09	7.16	7.51	6.62	7.38	7.45	8.23	7.35
Low price	7.82	7.93	8.16	7.08	6.39	6.25	6.00	7.09
Friendliness	7.74	8.13	8.04	7.31	7.93	7.98	8.08	7.89
Customer service	6.94	7.27	7.59	6.69	7.74	7.76	7.54	7.36
Efficiency of employees	7.25	7.56	7.72	7.31	7.92	8.22	7.46	7.63
Online booking	7.54	8.04	7.97	6.23	8.02	7.55	8.38	7.68
History/reputation	6.61	7.19	6.93	4.38	8.37	8.37	7.77	7.09
Space on board and legroom	6.46	6.70	6.64	5.85	7.66	7.04	6.62	6.71
Voyager miles	4.82	5.05	4.95	3.58	6.73	6.00	5.27	5.20

Table 3: Airline comparison based on attribute means

Note: The industry average is the average of the means across the companies in the industry.

Beginning with Traditional airline A, this airline is perceived to be the best domestic airline in terms of providing *space on board and legroom*, and *Voyager miles*, the best (tied with Traditional airline B) in terms of having *punctual/reliable flights* and a strong *history or reputation*, second only to Traditional airline C in terms of *safety* and second to Traditional airline: B in terms of *customer service* and *efficiency of employees*.

Traditional airline C was perceived to be the best domestic airline in terms of *safety*, *safely/carefully handled baggage* and *online booking* systems, but was perceived to score worst in terms of *low price*. In other words, these respondents perceived it to be the most expensive of the domestic airlines. Traditional airline C was second best (to Low cost airline B) in terms of *friendliness*.

Traditional airline B was perceived to be best in terms of *customer service* and *efficiency of employees* and the best (tied with Traditional airline A) with respect to *punctual/reliable flights* and having a strong *history or reputation*. It was second to Traditional airline A in terms of providing *space onboard and legroom* and *Voyager miles*.

Low cost airline D was not perceived to be the best domestic airline on any of the attributes in this study. In fact Low cost airline D scored worst on nine of the 11 attributes. Even amongst the low-cost airlines, it was perceived to be the most expensive and moreover scored lowest on most attributes. Given that Low cost airline

D had been liquidated prior to the study, this result is not surprising. Customers may have perceived Low cost airline D to be poor on all attributes because it had been liquidated. It is also possible, however, that such perceptions existed prior to Low cost airline D's liquidation and were in fact the cause of decreasing passenger loads and ultimately the cash flow problems cited as being the cause of its liquidation. As causality could not be tested in this study, no definitive conclusion can be drawn here.

Low cost airline A was also not perceived to be the best on any of the attributes listed by respondents as important. In fact, second to Low cost airline: D, Low cost airline A was perceived to be the worst-performing airline.

Low cost airline B was perceived to be the best airline overall in terms of *friendliness*. It was also perceived to be the best of the low cost airlines in terms of *online booking* system, *history or reputation, onboard space and legroom* and *Voyager miles* and second to Low cost airline C on *safety, punctual/reliable flights, safely/carefully handled baggage, low price, customer service* and *efficiency of staff*.

Low cost airline C was perceived to be the best overall in terms of *low price* and *safely/carefully handled baggage*. Amongst the low cost airlines, Low cost airline C was perceived to be the best in terms of *safety*, *punctual/reliable flights*, *customer service*, *efficiency of staff*, *onboard space and legroom* and *Voyager miles*, and second to Low cost airline B amongst the low cost airlines on the other attributes.

The airline performance scores were plotted on positioning maps based on their perceived performance on the attributes of *safety, punctual/reliable flights* and *low price,* the three most determining on the dimensions.

As expected, Low cost airlines A, B and C were perceived to be similar in that they were all perceived to provide reasonable *safety*, and were perceived to be reasonably punctual. Of these, Low cost airline C occupies the most favourable position of the three. Low cost airline D was perceived to perform well below all competitors on both attributes. Traditional airline A and Traditional airline B were also positioned close together and were perceived to provide the most superior *safety* and *punctual/reliable flights*. Traditional airline C was perceived to perform best on the attribute of *safety*, but rated similarly to the low cost airlines on *punctual/reliable flights*.

Traditional airlines A, B, and C were positioned close together and perceived to be more highly priced, but to perform better on *safety*. Low cost airlines A, B and C were perceived to be similar in that they all provide reasonable *safety*, but were perceived to be better priced. Low cost airline D was perceived to perform competitively on *low price*, but was perceived to be inferior on the attribute of *safety*. The main reason for Low cost airline D's perceived underperformance on *safety* is most likely due to safety

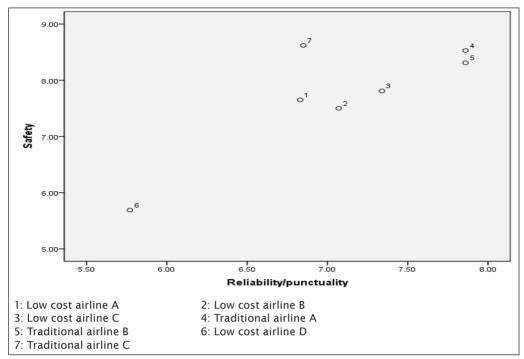


Figure 1: Positioning map: Safety compared with punctual/reliable flights

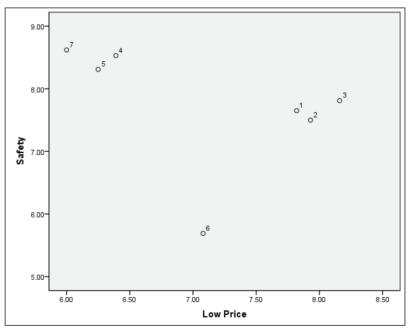


Figure 2: Positioning map: Low price compared with safety

problems in the latter years of its existence, for example the engine mishap towards the end of 2007 (Theunissen & Sguazzin 2008).

It can be said, therefore, that the best performers on the most important attributes to the respondents in this survey were those airlines that are perceived to be premium priced, namely Traditional airlines A, B, and C. Of the Low cost airlines, C appears to have the most favourable position.

## Recommendations

As this research did not focus on the actual strengths of any of the airlines, recommendations cannot be made to each specific airline. Ultimately, developing a positioning strategy involves matching an organisation's actual strengths or unique competitive advantages with what is important to the target market. By being aware of the determining dimensions customers use to choose between competitors in an industry, marketers are able to focus their positioning so as to capitalise on the organisation's capabilities in relation to what is critical to customers in that market. Thus this research indicates that respondents were most concerned about airline safety, punctuality or reliability and price.

Safety is the most important attribute to domestic airline customers in South Africa. Domestic passenger airlines in South Africa must therefore ensure an impeccable safety record, as South African domestic passengers are particularly sensitive to the safety attribute. Airlines should ensure that all safety measures are carried out thoroughly so as to minimise human error. There should be a focus on preventative maintenance so that problems can be foreseen and rectified early (planned maintenance), rather than experiencing delays from grounding an aircraft with a full load of passengers so that a problem can be fixed (unplanned maintenance). This, in turn, will have a positive effect on the airline's safety reputation. Cabin crew members should be more than adequately trained in safety routines so that customers have a sense of assurance that the cabin crew knows what they are doing and thus feel safe and comfortable. Cabin crew could make more use of automated/pre-recorded safety demonstrations to effectively deliver the safety briefing to passengers in a standard format. Airlines need to remind customers that they are, at the very least, as safe as their main competitors who are perceived to perform better in the aspect of safety. This can be done through simple visual reminders such as in the in-pocket safety guide or in-flight magazines that can provide articles relating to the airline's safety record.

All airlines in fact were perceived relatively poorly on the attribute of *punctual/ reliable flights*, with an industry mean of 7.08 (Table 1). Any of the airlines could

thus use this as an opportunity to turn this attribute into a strength. It must firstly be noted that some aspects of the airline industry are simply beyond the control of airline companies. Air traffic control, for example, can only accommodate a certain number of aircraft at a time. Shortages of air traffic control personnel reduce the expeditious flow into and out of airports. Transport to and from aircraft parked in remote parking bays not served by air corridors is also out of the hands of airline companies. Poor weather conditions can obstruct visibility, thus causing flights to divert to other airports or turn around and go back. Power outages can wreak havoc at check-in counters. Passengers with impaired mobility need specially equipped vehicles to transport them to and from the aircraft. This may cause further delays. What airlines are in control of, however, is making sure that all aspects of their daily operations are run efficiently so as to enhance the possibility of on-time performance. Ensuring adequate and properly trained staff could help to alleviate delays. Airlines could prepare and research their service blueprints to identify bottlenecks in their own operations. Areas consistently causing delays require strategies to resolve the delays. This could be done for pre- and in-flight operations. Preventative maintenance could help identify problems before they cause delays and customer dissatisfaction.

Price is already a basis for differentiation in the domestic airline industry in South Africa, with three low cost airlines in operation. Price alone is thus unlikely to be an effective basis for positioning. Ultimately, customers are looking for value (that is, price or cost relative to benefits). The research also reveals that the respondents were not prepared to sacrifice either safety or punctuality for price. Thus an airline would have to look at other ways to cut costs so as to reduce prices. Possible ways appear to be in add-ons such as Voyager miles and the choice of aircraft, which determines leg room and onboard space.

The organisation must use all aspects of the services mix – namely product, price, accessibility, promotion, physical evidence, process and people – to achieve its desired position in the industry. Failure of the mix elements to create a consistent position would most likely be detrimental to an airline's image and position.

# References

- Aaker, D., Kumar, V. & Day, G. 1998. *Marketing Research* (6<sup>th</sup> edition). Canada: John Wiley & Sons.
- Baker, A.A. 2011. Qatar Airways wins Airline of the Year title at the 2011 World Airline Awards: Press Comment, 22 June. [Online] Available at: http://www.worldairlineawards. com/Awards\_2011/Airline2011.htm. Accessed: 8 July 2011.
- Cooper, D. & Schindler, P. 2006. Marketing Research. New York: McGraw-Hill/Irwin.

- Fourie, C. & Lubbe, B. 2006. 'Determinants of selection of full-service airlines and lowcost carriers: A note on business travellers in South Africa', *Journal of Air Transport Management*, 12(2): 98–102. [Online] Available at: doi:10.1016/j.jairtraman.2005.11.008. Accessed: 8 July 2011.
- Gilligan, C. & Wilson, R.M.S. 2003. *Strategic Marketing Planning*. London: Butterworth-Heinemann Publications.
- Hair, J., Bush, R. & Ortinau, D. 2003. *Marketing Research: Within a Changing Information Environment* (2<sup>nd</sup> edition). Singapore: McGraw-Hill International.
- Hooley, G., Saunders, J. & Piercy, N. 2004. *Marketing Strategy and Competitive Positioning* (3<sup>rd</sup> edition). London: Pearson Education.
- Hoyer, W.D. & MacInnes, D.J. 2007. *Consumer Behaviour* (4<sup>th</sup> edition). Boston, MA: Houghton Mifflin Company.
- Hutt, M. & Speh, T. 2004. Business Marketing Management (8th edition). Ohio: Thomson South-Western.
- Irwin, R. 2007. Revenue Management Forum: cheap flights soar in South Africa. [Online] Available: http://rmforum.blogspot.com/2007/04/cheap-flights-soar-in-south-africa. html. Accessed: 29 March 2011.
- Kotler, P. & Armstrong, G. 2008. *Principles of Marketing* (12<sup>th</sup> edition). New Jersey: Pearson Education.
- Kotler, P., Armstrong, G., Tait, M., Bhowan, K., Botha, E., De Jager, J., George, R., Human, D., Roberts-Lombard, M., Rugimbana, R., Vigar-Ellis, D., Beneke, J., Blake, S., Cassim, S., Frey, N., Golestaneh, M., Rammile, N., Rootman, C., Van Zyl, J. & Wait, M. 2010. *Principles of Marketing: Global and Southern African Perspectives*. South Africa: Pearson Education.
- Li, S. 2001. Exploring Marketing Ideas with Perceptual Maps. [Online] Available at: http:// www.quirks.com/articles/a2001/20011107.aspx?searchID=3327257. Accessed: 7 July 2011.
- Liou, J., Hsu, C., Yeh, W. & Lin, R. 2011. 'Using a modified grey relation method for improving airline service quality', *Tourism Management*, 32(6):1381–1388, [Online] Available at: http://dx.doi.org/10.1016/j.tourman.2011.01.013. Accessed: 24 July 2012.
- Liou, J. & Tzeng, G. 2007. 'A non-additive model for evaluating airline service quality, *Journal of Air Transport Management*', 13(3): 131–138. [Online] Available at: doi:10.1016/j. jairtraman.2006.12.002. Accessed: 8 July 2011.
- Mullins, J.W. & Walker, O.C. 2010. *Marketing Management: A Strategic Decisions-Making Approach* (7<sup>th</sup> edition). New York: McGraw-Hill.
- Payne, A. 1993. The Essence of Services Marketing. London: Prentice Hall International (UK).
- Pitts, R. & Lei, D. 2006. *Strategic Management: Building and Sustaining Competitive Advantage*. Mason, OH: Thomson South-Western.
- Román, C., Espino, R., Martín, J., Betancor, O., & Nombela, G. 2008. 'Analyzing mobility in peripheral regions of the European Union: the case of Canarias-Madeira-Azores',

*Networks and Spatial Economics*, 8(2–3): 141–160. [Online] Available at: ABI/INFORM Global (Document ID: 1487931291). Accessed: 29 April 2011.

- SA Flights 2010. Domestic airlines in South Africa. [Online] Available at: http://www.saflights.co.za/. Accessed: 7 July 2010.
- Schiffman, L. & Kanuk, L. 2004. *Consumer Behaviour* (8<sup>th</sup> edition). New Jersey: Pearson Education.
- Sekaran, U. & Bougie, R. 2010. *Research Methods for Business: A Skill Building Approach* (5<sup>th</sup> edition). West Sussex, UK: John Wiley & Sons.
- Skytrax 2011a. Skytrax World Airline Awards. [Online] Available at: http://www. worldairlineawards.com/index.htm. Accessed: 6 July 2011.
- Skytrax 2011b. *World Airline Awards Survey Methodology*. [Online] Available at: http://www. worldairlineawards.com/main/mthds.htm. Accessed: 6 July 2010.
- South Africa Info. 2008. Domestic flights in South Africa. [Online] Available: http://www.southafrica.info/travel/advice/flights.htm. Accessed: 27 April 2011.
- South Africa Travel Online 2010. Nationwide & Comair v SAA. South Africa Travel Online website, 17 Feb 2010. [Online] Available at: http://www.southafrica.to/transport/ Airlines/Nationwide-flights/2010/Nationwide-Comair-v-SAA.php. Accessed: 28 June 2011.
- South Africa Travel Online 2011. Nationwide Airline Flights. South Africa Travel Online website. [Online] Available at: http://www.southafrica.to/transport/Airlines/ Nationwide-flights/Nationwide-flights.php5. Accessed: 28 June 2011.
- Strydom, J.W., Cant, M.C. & Jooste, C.J. 2000. *Marketing Management* (4<sup>th</sup> edition). Cape Town: Juta & Co.
- Surovitskikh, S. & Lubbe, B. 2008. 'Positioning of selected Middle Eastern airlines in the South African business and leisure travel environment', *Journal of Air Transport Management*, 14(2): 75–81. [Online] Available at: http://www.sciencedirect.com.ezproxy.ukzn. ac.za: 2048/science?\_ob=ArticleURL&\_udi=B6VGP-4RV7GRJ-1&\_user=2822922&\_ coverDate=03%2F31%2F2008&\_rdoc=1&\_fmt=high&\_orig=search&\_ origin=search&\_sort=d&\_docanchor=&view=c&\_acct=C000058881&\_version=1&\_ urlVersion=0&\_userid=2822922&md5=1ea7e5fb6f340e480deaa29508c984ee&searchty pe=a. Accessed: 7 July 2011.
- Theunissen, G. & Sguazzin, A. 2008. Nationwide airline halts operations on revenue slump. [Online] Available at: http://www.bloomberg.com/apps/news?pid=20601116&refer=Africa&sid=a89wqbyli5Tc. Accessed: 7 July 2011.
- Tourism RSA. n.d. South African tourism sector [Online] Available at: http://www. tourismrsa.com/?option=com\_content&view=article&id=821:south-african-to. Accessed: 24 July 2012.
- Tsaur, S., Chang, T. & Yen, C. 2002. 'The evaluation of airline service quality by fuzzy MCDM', *Tourism Management*, 23(2): 107–115. [Online] Available at: http://dx.doi. org/10.1016/S0261-5177(01)00050-4. Accessed: 8 July 2011.
- Urde, M. 2001. 'Core value-based corporate brand building', *European Journal of Marketing*, 37(7/8): 1017–1040.

- Welman, C., Kruger, F. & Mitchell, B. 2007. *Research Methodology* (3<sup>rd</sup> edition). Cape Town: Oxford University Press Southern Africa.
- Wen, C. & Yeh, W. 2010. 'Positioning of international air passenger carriers using multidimensional scaling and correspondence analysis', *Transportation Journal*, 49(1): 7–23. [Online] Available at: http://web.ebscohost.com.ezproxy.ukzn.ac.za: 2048/ehost/detail?vid=7&hid=9&sid=363c2291-8f72-4e8e-9bee-9a65ad170486%40sessionmgr10&bdata=JnNpdGU9ZWhvc3QtbG12ZQ%3d%3d#db=bth&AN=51694413. Accessed: 8 December 2010.