

**POSITIONING OF SELECTED MIDDLE EASTERN AIRLINES IN
THE SOUTH AFRICAN BUSINESS AND LEISURE TRAVEL
ENVIRONMENT**

by

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ABSTRACT

The airline product is a standardized product and positioning in today's highly competitive and constantly changing environment is one of the most important elements in an airline's marketing strategy. Airlines are constantly trying to apply and implement various marketing positioning strategies in order to achieve success and growth. The overall purpose of this study was to examine the positioning strategies of the four selected Middle Eastern airlines in the South African business and leisure travel environment, based on airline performance in terms of service quality attributes that are perceived as important by passengers.

The results of the study will contribute towards the air transport literature by confirming the validity of grouping a large number of service quality attributes and adding value to the role players' understanding of their particular airlines' influence and importance of service quality for positioning. The study also addresses the need for reliable information on attributes of service quality that are perceived by South African business and leisure passenger as crucial factors impacting on the selection of their airline.

A literature review as well as empirical research was conducted to achieve the purpose of this study: the former provided a demarcation of the broad concepts of service quality and positioning. These concepts were specifically linked to the airline industry, providing a clear indication of the positioning strategies used by the selected airlines as reflected through the media and the airlines' websites. The literature review also helped to identify the service quality attributes that were important to passengers of different airlines. These attributes were used to determine the positioning of the selected airlines as perceived by their passengers. The positioning of airlines was graphically represented using 3D Centroid plots.

The data was analyzed using factor analysis, analysis of variance and multivariate analysis of variance. Factor analysis was used to group identified attributes of service quality important to passengers of selected Middle Eastern airlines. Analysis of variance was used to test the relationships between variables, while multivariate analysis of variance was used to test the effect of variables on each other.

Databases were not available for this study: therefore non-probability sampling methods, namely convenience and quota sampling, were used.

A limitation of the study within which the data analysis occurred is that the data collected was not normally distributed. The data had to be transformed and then tested for normality. The transformed data was normally distributed.

The results of the research suggest that passengers are mostly concerned with the responsiveness of the airline and reliability of service, followed by consistency in the quality of service, and are less concerned about the added efforts of the airline as its main positioning component. The findings suggest the direction to be taken for the purpose of service improvement. Airlines should focus more on security measures and well-trained employees, as this will give passengers more confidence. Being responsive and prompt and willing to help, with a courteous attitude, should be a priority objective for employees as part of the service culture. The findings also suggest that more resources should be invested in customization, such as loyalty and frequent flyer programmes. The recommendations of this study could be used to improve the current process of service delivery.

Keywords: service quality, positioning, airline industry, business travel, leisure travel, South Africa

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GLOSSARY

Air carriers – the commercial system of air transportation, consisting of domestic and international certificated and charter carriers (Wells, 1994:556).

Bilateral agreement – an agreement or treaty between two nations contracting for reciprocal international air service, such service to be operated by designated air carriers of each nation. The agreement may include provisions for the type of aircraft used, intermediate stops en route, aircraft airworthiness, taxation-free fuel, and arbitration procedures. It is usually a standardized agreement used in negotiations for air transport between one nation and many others allowing for the inclusion of different points and routes (Wells, 1994:561).

Code-sharing – marketing partnerships between regional carriers and major carriers that create and integrated service linking small communities and the national air transportation system. Both carriers in such partnership share the same identification codes on airline schedules (Wells, 1994:563).

Hub-and-spoke-system – a system that feeds air traffic from small communities through larger communities to the traveler's destination via connections at the larger community (Wells, 1994:572).

National air carrier – a class of certificated air carriers whose annual gross revenues are between \$100 million and \$1 billion (Wells, 1994:576).

Passenger – a person receiving air transportation from the air carrier for which remuneration is received by the air carrier. Air carrier employees or others receiving air transportation against whom token charges are levied are considered non-revenue passengers. Infants for whom a token fare is charged are not counted as revenue passengers (Wells, 1994:580).

Route network – a system of points to be served by an air carrier, as indicated in its certificate of public convenience and necessity. A route may include all points on a carrier's system or may represent only a systematic portion of all of the points within a carrier's total system (Wells, 1994:583).

Seat factor or passenger load factor – the proportion of aircraft seating capacity that is actually sold and utilized. Revenue passenger miles divided by available seat miles (Wells, 1994:574).

Yield – the air transport revenue per unit of traffic carried in air transportation. May be calculated and presented in several ways, such as passenger revenue per passenger mile, per aircraft mile, per passenger ton-mile, or per passenger (Wells, 1994:590).

CHAPTER 1

1 BACKGROUND TO THE STUDY

1.1 INTRODUCTION

The airline business is a vibrant and dynamic industry since it plays a key role in the development of the world economy, tourism and related activities, by facilitating international trade and economic relations between countries and by stimulating exchange of people and ideas (Oum & Yu, 1999:1). The state of the global economy directly impacts on the industry's economic well-being. Increasing demands for mobility, further globalization of society and changing consumer behaviour lead to growth in traffic flow and segmentation of the air transport industry. However, economic downturns and changes in the external environment, for example, September 11, the SARS virus, the US-led invasion in Iraq and the Tsunami disaster, bring about financial difficulties for airlines (Aksoy, Atilgan & Akinci, 2003:343).

In South Africa, as is the case internationally, the air travel market on both domestic and international routes has been experiencing greater competition in recent years. The deregulation of the airline industry and increasing customer awareness of service quality has added to the competitive nature of the environment. Under these circumstances airlines not only attempt to establish more convenient routes, but also introduce more promotional incentives, including mileage rewards, frequent flyer membership programmes and other benefits so as to grow the numbers of customers and retain them. However, the marginal benefits of marketing strategies gradually decrease because most airlines act similarly. Recognizing this, some air carriers now tend to position themselves based on a commitment to improve the quality of customer service (Tsaur, Chang & Yen, 2002:107).

The airline product is a standardized one and positioning in today's highly competitive environment is one of the most important elements in any airline's marketing strategy. Airlines must be able to differentiate themselves in the eyes of consumers by focusing on service quality attributes because their long-term success

depends on how well they are positioned in the market place (Gursoy, Chen & Kim, 2005:57).

After the September 11 terrorist attack, the positioning concept became even more critical for airline companies. Capacity has substantially exceeded demand because of the economic downturn and the general public caution regarding air travel, and airlines reported net losses of over \$10 billion in 2003 (Air Transport Association, 2003).

In terms of the finding by Gursoy *et al.* (2005:59), where all airlines have comparable fares and matching frequent flier programmes, a differentiated position based on attributes of service quality is a key to success. Fisher (1991:19-20) stated that: "... a differentiated position generates high returns on profits...". Gilbert and Wong (2003:519) found that the selection of a positioning strategy correlates significantly with a company's financial performance. For example, carriers employing a high-quality high-price positioning strategy earned higher profits than those with a low-quality low-price strategy. Despite the recognized importance of the positioning strategy in the airline industry, relatively few studies have appeared which address this issue.

The dilemma facing management is to formulate a positioning strategy that will allow for successful differentiation within a highly competitive environment.

1.2 RESEARCH PROBLEM

Positioning of any product or company is based on the consumer's perceptions (Brooksbank, 1994:10). Airline marketers enjoy little control over the positioning of their products because of the nature of the services business. Services provided by airlines are not as complex as high technology products, but they are made up of a very complex mix of intangibles (Mazanec, 1995). Airline products are not physical objects, but performances and experiences. The latter may differ substantially from one service provider to another and also from one customer to another (Sirakaya, Mclelland & Uysal, 1996). They might also differ from one experience to another with the same customer. Every interaction between customers and the airline is likely to

influence customers' perceptions of airlines and the positioning of the airlines in their minds.

A vital component of a feasible and successful positioning strategy is that of gaining a better understanding of customers' perceptions of the quality of the services provided by the airlines (Gursoy *et al.*, 2005:57).

The primary **purpose** of this study is to examine the positioning strategy of four leading Middle Eastern air companies in the South African business and leisure travel environment, based on airline performance in terms of service quality attributes that are important to consumers.

Empirical studies of the demand for airline services demonstrate that service quality is central to the choice of airlines for both business and leisure travellers (Chang & Yeh, 2002:167). Several studies have been undertaken on attributes of service quality that are important to airline customers.

For instance, Truitt and Haynes (1994:21) evaluated service quality and productivity in the regional airline industry of the USA. According to Truitt and Haynes (1994), quality of airline service is one of the most critical factors that is likely to influence travellers' decisions in selecting an airline, and significant relationships exist among reputation, service and retained preference. The authors developed a service model designed to measure the impact of newer aircraft on regional airlines' productivity and service quality. The findings of the study revealed that customers do have perceptions of service quality and generally believe that larger aircraft offer increased levels of satisfaction (Truitt & Haynes, 1994:29). These authors suggested that further study is required in order to establish more precise passenger perceptions of the quality attributes of the new aircraft.

Aksoy *et al.* (2003:343) presented a paper, based on a survey of passengers of five European airlines which attempted to establish differences between passengers on Turkish domestic airlines and those on four foreign airlines, to the same flight destinations, with respect to demographic profiles, behavioural characteristics, understanding of the dimensions of airline service and satisfaction levels. Aksoy *et al.* (2003:346) used a seven-point Likert scale to rate the importance of service

attributes. The findings, based on data collected from the five European airlines, demonstrate that significant differences exist between foreign and domestic airline passenger groups in these respects. Compared with those on domestic airlines, foreign airline passengers were found to be more highly educated, to travel more frequently and to be more internationally oriented (Aksoy *et al.*, 2003:350). It was found that the dimensions of service expectations varied between the two groups, although there was some overlapping in the results. Food and beverage services, personnel, cabin features, Internet services, in-flight activities, country of origin and promotion, punctuality, and the speed of aircraft were found to constitute the nine underlying service dimensions of airline services for foreign airline passengers. Although there was a resemblance between the expectations of foreign and domestic airline passengers, the latter group expected a more loosely defined service package with a clear emphasis on price (Aksoy *et al.*, 2003:351).

Gursoy *et al.* (2005) examined the relative positioning of 10 major US airlines based on 15 attributes that measure actual airline performance in terms of critical quality criteria that are important to customers. Correspondence analysis was used to represent findings graphically, using positioning maps. The study identified three groups of airlines that exhibited similar quality profiles and four airlines that possessed unique quality profiles. Gursoy *et al.* (2005:64) concluded that airlines should recognize what their target customers want in order to maximize customer satisfaction. The findings of the study also suggest that airlines that do not use a hub-and-spoke system are more likely to provide better service and address customers' time concerns. Gursoy *et al.* (2005:65) recommended training frontline personnel in order to maximize their operational efficiency with fewer numbers of employees. The study concluded that quality service depends on both parties' efforts – the employees and the company.

Tsaur, Chang and Yen (2002:108) applied the Parasuraman, Zeithaml and Berry (1985) SERVQUAL model and found that the following are essential service aspects: comfort of seat (tangibility), safety (reliability), courtesy of attendants (responsiveness), certainty that the airline provides for customers (assurance) and the way in which the airline deals with customer complaints (empathy). Tsaur *et al.* (2002:114) established that customers are mainly concerned about the physical aspect of the service and less with the aspect of empathy. The most important

service attributes, according to their study, are “courtesy of attendants”, “safety”, “comfort and cleanness of seat” and “responsiveness of attendants”. These results suggest directions for service improvement. The limitation of this study is that respondents to the survey were chosen from people who were tour guides owing to limitations of sample size and considerations of response quality. This may raise questions regarding its representativeness of the preferences of a general traveller.

Chang and Yeh (2002) evaluated the service quality of Taiwan’s domestic airlines market, based on data gathered by customer surveys. These authors used the fuzzy multicriteria analysis (MA) method based on multi-attribute utility theory to do so. Data was gathered from survey questionnaires, which were designed to measure the existing levels of service quality perceived by passengers of four airlines. The evaluation criteria are represented by five categories: on-board comfort, airline employees, reliability of service, convenience of service and handling of abnormal conditions. The results of this empirical study offer a guideline for airlines in providing appropriate levels of service in response to customers’ needs (Chang & Yeh, 2002:175).

These studies on service quality, briefly summarized, conclude that service quality plays an important role in the airline environment. Airlines in different countries are adopting different positioning strategies to ensure that they are differentiated and positively perceived by their potential and current customers. Studies on service quality within the airline industry have been carried out in countries such as Turkey, Taiwan, the United States and Europe. Consequently, there is a need for reliable information on the attributes of service quality that are perceived by South African consumers as crucial factors impacting on their airline selection.

The research problem that flows from this purpose is to determine how selected airlines operating to and from South Africa are perceived by customers to differ in terms of their positioning, based on attributes of service quality.

From this research problem, the following hypotheses can be formulated:

- **H1.** The relative positioning of the selected airlines will differ based on consumer perceptions and expectations of service quality attributes.
- **H2.** If passengers' needs for travelling are different, then there will be a significant difference in their perceptions and expectations of service quality.
- **H3.** Passengers' perceptions and expectations of selected airlines will differ based on their demographic characteristics.

For the purpose of this study a customer in the airline industry is also a consumer and the two terms will be used interchangeably. The customer in the airline industry in the current study is defined as the passenger using the airline product.

1.3 RESEARCH OBJECTIVES

The focus of the study falls on customer perceptions and expectations of airline performance. Determining these perceptions and expectations enables airlines to differentiate their positioning in the light of the attributes of service quality. For this study the following research objectives are identified:

- To identify, from established theory, attributes of service quality in the airline environment
- To establish the importance of service quality attributes for positioning
- To determine the levels of importance of various service attributes
- To measure customers' perceptions and expectations of the service attributes of selected airlines
- To assess the selected airlines' positioning in terms of their performance with respect to the identified attributes of service quality

1.4 PROPOSED METHODOLOGY

The main objective of the study is to identify airlines' positioning from the viewpoints of customers based on various attributes of service quality. Since it is a formal study, it begins with the research question and involves precise procedures and

specification of the sources of data. The goal of a formal research design is to answer the research questions posed (Cooper & Schindler, 2003:146).

While positioning strategy has received less attention, quite a few conceptual and empirical studies have been devoted to investigating the service quality issues in the passenger airline industry. Most of these studies are presented as measures for examining relationships between service quality and related issues such as choice of airline (Ritchie, Johnston & Jones, 1980; Etherington & Var, 1984), customer loyalty (Ostrowski, O'Brien & Gordon, 1993; Young, Lawrence & Lee, 1994), airline type (Jones & Sasser, 1995), productivity (Ozment & Morash, 1998), assessment group (Gourdin & Kloppenberg, 1991) and attribute dependency (Elliot & Roach, 1993).

The results of existing studies into service quality suggest that the definitions and perceptions of airline service quality are quite diverse, and do not seem to fit any single existing quality model (Chang & Yeh, 2002:167). The most widely used customer-perceived service quality model is the Gap Analysis and SERVQUAL model devised by Parasuraman *et al.* (1985, 1988). However, Chang and Yeh (2002:168) state that the SERVQUAL model may contain inherent problems in actually measuring customer expectations of service quality.

Gronroos (1993) suggests that measuring customer experiences of service quality, as providing a close approximation, is a theoretically valid way of measuring perceived quality. In practice, this simplifies the process of data collection and analysis via survey questionnaires. Service experiences are perceptions of reality, in which prior expectations are inherent. This concept is in line with the research into consumer behaviour that views a customer's attitude as a global evaluation of the product or service.

Since no single model appears to be suitable for the measurement of service quality in the airline industry, consideration will be given to the approaches taken by Tsaor *et al.* (2002), Gursoy *et al.* (2005) and Chang and Yeh (2002) to measure this quality in the airline industry. These approaches were selected because they combine different methodologies that measure attributes of service quality; a comprehensive summary of attributes of service quality determined from these three studies will be presented in Chapter 5. Attributes of service quality will be used in the questionnaire

employed in this study. Tsaur *et al.* (2002) and Gursoy *et al.* (2005) both used canonical analysis to graphically represent the positioning maps, which are necessary to compare airlines. This is in line with the study's research problem.

Tsaur's *et al.* (2002) study incorporates the revised five-aspects representation of service quality proposed by Parasuraman, Zeithaml and Berry (1985 a, b). These include tangibility, reliability, responsiveness, assurance and empathy. Tangibility means the physical presentation of service, such as on-board equipment, quality of food; reliability stands for the credibility of the airline is in terms of safety and pilot navigation skills; responsiveness describes how ground or on-board crew interact with customers; the assurance aspect represents the certainty that the airline provides for customers and empathy describes how airlines deal with the customer complaints and provide thoughtful services (Tsaur *et al.*, 2002:108).

These authors, based on a synthesis of other literature, established that the evaluation criteria regarding service quality within the airline industry include five aspects and 15 service quality evaluation criteria. The questionnaire establishing service quality used by Tsaur *et al.* (2002:112) comprised two parts: questions for evaluating the relative importance criteria and airlines' performance corresponding to each criterion. An Analytical Hierarchy Process (AHP) was used in obtaining the relative weight of criteria. From the latter, the performance of the alternatives corresponding to each evaluation criterion was measured as fuzzy numbers, which explicitly attempt to accurately capture the real preference of the assessors. The authors applied the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) as the main tool for ranking the service quality of three air carriers.

Chang and Yeh's paper (2002) used the fuzzy multicriteria analysis (MA) model as its fundamental methodological approach to analyze the service quality of Taiwanese airlines. These authors selected 15 service attributes, embodied by five categories, for evaluating the performance as regards service quality. The evaluation criteria reflected the major concerns of passengers travelling on short-haul routes between the two cities in a Taiwanese context (Chang & Yeh, 2002:168). They also represented the service attributes over which Taiwan's domestic airlines have control and by which they can differentiate themselves from other competitors. They correspond to the expressive performance of airline services, known as the

functional quality, which is concerned with the service delivery process, thus reflecting customers' experiences of service quality.

The primary purpose of Gursoy's *et al.* (2005:58) article was to examine the relative positioning of 10 major US carriers based on 15 attributes that measure actual airline performance in terms of quality criteria that are important to consumers. Fifteen service quality attributes were obtained from the US Department of Transportation's (DOT) Air Travel Consumer Report. The data regarding each of the 15 attributes was analyzed using a correspondence analysis technique (Gursoy *et al.*, 2005:60). Such an analysis was used to compare the major 10 US airlines' positioning based on 15 attributes. A positioning map of 10 airlines was generated by means of a correspondence analysis. This map revealed airlines, which were closely competitive, attributes that are important to customers, how those attributes cluster together, the competitive strengths and weaknesses of each airline and the most important attributes for improving an airline's competitive position (Gursoy *et al.*, 2005:65).

A large number and variety of attributes appear to make up the construct of service quality in the airline industry and factor analysis was used to group these attributes. The objective of this type of analysis is to summarize and minimize data and to assist the researcher to present findings in a more meaningful way. Quite a few conceptual and empirical studies have employed factor analysis as the means to group variables into factors such as computer anxiety (Mohamad & El-Ragal, 2007), psychological contract (Edwards & Karau, 2007), types of consumers in the airline industry (Huse & Evangelho, 2007), evaluating the criteria considered by consumers when selecting an air carrier (Gordon, 1991) and the use of guidebooks by Japanese tourists (Nishimura, Waryszhak & King, 2007).

Huse and Evangelho (2007:261-263) applied factor analysis to determine the type of travellers by grouping preferred attributes. The results of this analysis indicated that passengers tend to value the attributes in the same group in a very similar manner: for example, if a traveller highly values one of the attributes in a group, she would also do so for the other attributes in the same group.

Gordon (1991:6) used the SERVQUAL model and factor analysis to determine the major variables that are inherent in the consumer profile and to establish the extent to which any known variables influence an air traveller to choose one airline over the other. Five aspects were identified by means of factor analysis: tangibles, reliability, responsiveness, assurance and empathy. Tangibles, empathy and reliability were found to be the most important service quality dimensions in predicting overall quality (Gordon, 1991:207).

Following the studies by Tsaur *et al.* (2002), Gursoy *et al.* (2005), Chang and Yeh (2002) and Gordon (1991) the present research will attempt to examine the relative positioning of four major Middle Eastern airlines based on those attributes of service quality (that measure airline performance) which are important to South African business and leisure consumers.

The perceptual maps will reveal the service quality attributes that are perceived as important by passengers of the selected airlines, as well as indicating how these four selected airlines are positioned against each other based on such attributes.

The latest trends and developments in the South African economy and the air transportation market as an integral part of it, have made it possible for new participants to enter and grow in the established passenger aviation market, shared between and strongly dominated mostly by European carriers such as Lufthansa, KLM, British Airways, Air France, and others. The scope of their success was mainly based on meeting and maintaining a number of the service quality attributes which were valued by their customers. An important component influencing customers' perceptions of air carriers is the ability of rival carriers to situate themselves in the market using different positioning strategies, which are vital to gain and retain air passengers (Goldstein, 2001:240).

The focus of the study is directed to the selected Middle Eastern airlines. Currently they could be seen as one of the brightest and most vibrant examples of successful entry to the established South African market. Their appeal lies in offering customers a new look at service, convenience and the variety of products orientated to business and leisure travellers, thus offering customers an experience they did not enjoy with their preferred airlines, used by them for many years. These airlines have

entered the South African market at a time when demand for air travel has dramatically increased due to globalization and when there was a major need for additional air carriers to cater for travellers going to the Middle East or using it as their transit point. Dubai, for example, has become a global shopping Mecca and many South African businesses base their head offices in Dubai. Qatar, following the example of Dubai, is busy expanding its airport facilities to accommodate the growing number of passengers. These factors have attracted many business and leisure travellers. Several airlines had left this competitive environment, such as Sabena, US Airways, United Airlines, Delta Airlines and others, owing to immense pressure from other airlines.

The findings of the study should significantly help airlines to identify their closest competitors, their strengths and weaknesses and the areas that need improvement in order to better position themselves in the market place. Data will be collected from business and leisure passengers of each airline using convenience sampling method. The respondents will be selected based on the representation of the market share of the selected airlines. According to a very reliable source from the airline industry, which cannot be disclosed, the market share of the four airlines in 2006 was as follows: Emirates – 55%, Qatar Airways – 20%, Gulf Air – 13% and Etihad Airways with 12% of the market share. The objective was to select the respondents in this approximate ratio to ensure that each airline is represented according to its share in the market.

1.5 LAYOUT OF THE STUDY

In view of the problem statement mentioned in the previous section, the chapters in the study are arranged as follows:

Chapter 1 discusses the research and management problem: it also highlights the research objectives and the proposed methodology.

Chapter 2 focuses on positioning, providing various definitions of positioning, and considering the importance of a positioning strategy and its interlinking with attributes of service quality, with particular reference to the airline industry.

Chapter 3 discusses service quality aspects with specific reference to other empirical studies. This chapter also highlights service as the major source of differentiation in the airline industry, which is characterized by highly standardized product offerings.

Chapter 4 contains a discussion on the airline industry and its development in South Africa, highlighting the opportunities and challenges facing air carriers that are part of this industry. Chapter 4 also furnishes the background of four major Middle Eastern airlines, namely: Etihad, Emirates, Qatar Airlines and Gulf Air.

Chapter 5 describes the research methodology used to answer the research question: how do airlines differ in customers' perceptions in terms of airline's positioning based on attributes of service quality?

In Chapter 6 the procedure and the results of the empirical study are discussed.

The final results as well as the researcher's recommendations, the limitations of the study and directions for further research are presented in Chapter 7.

CHAPTER 2

2 POSITIONING

2.1 INTRODUCTION

Increasing competition, constantly growing airline differentiation, as well as newly negative circumstances induced by a common political and socio-economic environment, have led to the increasing importance of positioning strategies as one of the main tools of fair competition. No universal typology of positioning exists which could satisfy the needs and wants of all role players in the market. Consequently a wide variety of classifications of positioning strategies is to be found, focusing on certain fields of production, sales and service offering.

A rapid growth in passenger traffic has been experienced in the deregulated commercial airline market worldwide. Competition is ever increasing as airlines try to acquire and retain customers. Price was initially wielded as the primary competitive weapon. However, airlines soon realized that competition on price alone represents a no-win situation in the long-term. This is due mainly to the fact that airlines are relatively efficient in responding to competitors' price changes. In addition, the regulators of the airline system may interfere in price competition as it often results in declining service quality and may affect flight safety. This implies that an airline's competitive advantage based on price alone is not sustainable. In a highly competitive environment, where all airlines offer comparable fares and matching frequent flyer programmes (such as in Taiwan's domestic airline market), their competitive advantages lie in the service quality perceived by customers (Chang & Yeh, 2002:166).

This chapter will discuss several positioning strategies, evaluate them and draw conclusions as to which strategy best meets the study objectives of this particular research project.

2.2 POSITIONING

In today's highly competitive marketing environment, the positioning concept is one of the most important elements of marketing management (Gursoy *et al.*, 2005:57). The long-term growth and success of companies and their products depend on how well they are positioned and perceived in the marketplace (Brooksbank, 1994:10). At the same time Brooksbank's research has revealed that many marketing managers are unfamiliar with either the term or the concept of positioning strategy.

Understanding, creating, communicating and delivering value and satisfaction are at the very heart of modern marketing practice. The customer, rather than the marketing, is at the centre of modern business philosophy, and customer satisfaction regarding service is the primary aim. In service industries, such as the airline industry, the distinctive features of service require that managers understand customers' needs and expectations and keep promises (Aksoy *et al.*, 2003:343). However, most companies do not recognize the importance of this approach until driven to it by circumstances

After the September 11 terrorist attack, the positioning concept became even more critical for airline companies. Operational efficiency and effective marketing through understanding their consumers have already been identified as key factors in the survival and competitive success of air carriers, and the events of 11 September 2001 have emphasized the importance of these factors (Aksoy *et al.*, 2003:343).

Passengers' expectations and perceptions are among the factors influencing the service decisions of airlines. Empirical evidence has indicated that success in customer-focused service development requires a deep understanding of customer needs, expectations and preferences (Gustaffson, Ekdahl & Edvardsson, 1999) and that marketing strategies implemented by airlines in order to expand internationally must take into consideration the different expectations and perceptions of passengers (Sultan & Simpson, 2000). Airlines that are positioned well in the market and in the traveller's mind have a better chance of survival in their strongly competitive environment than those that are not.

Competition is intensifying in the service sector and it is therefore becoming more important for service organizations, such as airlines, to differentiate their service

products in the most meaningful way. This differentiation is achieved through service positioning, which is an activity concerned with the identification, development and communication of a differentiated advantage which leads to a perception of the organization's products and services as being superior to and distinct from those of its competitor in the mind of target consumers (Jordaan & Prinsloo, 2001:118). The benefits that airline companies achieve if their product is successfully positioned are, among others, the company's long-term survival and financial success (McAlexander, Becker & Kaldernberg, 1993). Positioning provides customers with the reason for buying a company's service or product and it helps customers to see why one organization's services are different from the other (Jordaan & Prinsloo, 2001:118).

Positioning strategy can be defined as: "the choice of target market segment which describes the customers a business will seek to serve and the choice of differential advantage which defines how it will compete with rivals in the segment" (Brooksbank, 1994:10). This definition shows that a positioning strategy only applies to the level of a particular product and/or service operating within a particular market and that it should not be confused with the broader concept of "corporate" strategy or with the more specific concepts of strategy since it relates to an individual element of the marketing mix, such as "promotional" or "pricing" strategy.

The above definition also shows that a positioning strategy may be broken down into three interrelated sub-components:

- 1) Customer targets;
- 2) Competitor targets; and
- 3) Competitive advantage.

In addition, this process of formulating a positioning strategy demands the ability to build-up a picture of the marketplace and to think creatively about the interrelationships between these three sub-components (Brooksbank, 1994:10).

According to Dibb, Simkin, Pride and Ferrell (1997:228), positioning is based on consumers' perceptions and is therefore only partly under the control of marketers: "...in-depth market research is required if customer motivations and expectations in

a particular market are to be fully understood...management's intuition is not always sufficient...". Positioning is also concerned with how the product compares, in the customer's mind, with competing offerings. Positioning is not confined to tangible products; it can be related to a service, organization, individual or institution. Fundamentally a brand's positioning is established in the minds of targeted customers by marketing communications and promotional activity. The position that a product occupies is shaped by existing brands in the market. It is widely accepted that customers first assign a position to the best-known or market-leading brand. This position is usually the standard against which other brands are compared (Dibb, Simkin, Pride & Ferrell, 2000:401-402).

2.3 POSITIONING METHODS

The purpose of this section is to present an overview of various authors' findings concerning which positioning methods can be used to guide an organization's choice of positioning strategy. The discussion will begin with a summary of constructs related to the concept of positioning. This is provided in Table 2.1.

Thereafter particular attention will be given to studies that can be used in the context of the airline industry. Two particular studies undertaken a number of years ago (Crawford, 1985 and Wind, 1982) will be presented because they form the foundations upon which further studies were conducted that are of particular relevance to airlines. The section is concluded by a summary of the main factors that could be used in the airline industry for positioning.

Table 2.1: Summary of positioning typologies according to Blankson and Kalafatis (2001)

Author	Positioning Constructs
Buskirk (1975)	Features, Price, Advertising, Distribution.
Brown and Sims (1976)	Problems solved, Usage situation, Users, Competitors.
Berry (1982)	Value (warehouse, off-pricing), Time efficiency, High contact (specialty, facilitating, added value, resource usage), Sensory (sounds, smells, visuals).
Wind (1982)	Product features, Benefits, Problem solutions or need, Usage occasions, User, Against another product, Product class dissociation.
Crawford (1985)	Features, Benefits: direct/indirect, Surrogates: nonpareil, parentage (brand, company, person), manufacture (process, ingredients, design), target (end use, demographic, psychographic, behavioural), rank, experience (other market, bandwagon,

Author	Positioning Constructs
	years/time), predecessor, competitor.
Ries and Trout (1986)	Market leader, Follower, Repositioning the competition, Use the name, Line extension (use of the house name).
Easingwood and Mahajan (1989)	Reputation/capabilities of organisation: expertise, reliability, innovativeness, performance, Augmentation of product offering: product augmentation, extra service, People advantage, More attractive package offering, A superior product through technology, Accessibility, Extra attention given to individual requirements through customization, Satisfaction of more user needs within the sector.
Arnott (1992, 1994)	Empathy, Solvency, Promotions, Administrative time, Helpfulness, Reliability, Attentiveness, Staff competence, Flexible products, Access to people, Reputation, Customization, Incentives, Social awareness, Security, Technology.
Kalra <i>et al.</i> (1998)	Value – orientation, Comparisons with a premium player, Unique attribute positioning, Meaningless attribute positioning, Endorsement by product-relevant celebrities, Premium versus premium brand comparisons.
Aaker and Shanby (2001)	Positioning by (1) attribute, (2) price-quality, (3) use or applications, (4) product-user, (5) the product-class and the (6) competitor.
Kalafatis and Blankson (2001)	Top of the range, service, value for money, reliability, attractive, country of origin, the name and social class.

Source: Blankson and Kalafatis, 2001.

After reviewing advertisements for products and services in magazines, Crawford (1985:243) suggested that by advertising, companies attempt to position their products and/or their brand names using one of the three positioning strategies: positioning based on product features, benefits and surrogates. According to Crawford (1985) surrogate positioning permits a seller to communicate product attributes without having to describe them and at the same time allows the description to be tailor-made to each individual who reads the advertisement.

Crawford (1985:244) documented the positions of a large number of products and services by examining various examples of print advertising. He found that 74% of print advertisements delivered positions. Crawford's article, firstly, focused on a mix of goods and services and, secondly, the methodology and positions identified were based on empirical evidence. Crawford (1985:247) has developed a typology of product positioning alternatives. His typology includes three major categories: features, benefits and surrogates.

1. **The features classification** follows a traditional definition: a feature is some aspect of the product itself – a characteristic, evident or hidden, usually

tangible though it need not be, and not translated into how it benefits a user. The benefit of the feature may be implied, but the difference that is claimed is clearly a feature difference. This classification is clearly applicable to products only and is not helpful to the current study.

2. **The benefit category** is also very common; a benefit is some means by which a user gains from the product. Benefits are vaguer and they may or may not be directly related to product features. Crawford (1985:247) also found advertisers differentiating between direct benefits that result directly from product use and indirect benefits, which are a consequence of a direct benefit.

Direct benefits are such as “we save you time”, and “we cut your costs”: Emirates, for example, has introduced a special for business travellers – buy one business ticket and receive the second one free.

Indirect benefits comprise benefits such as one’s eventual popularity or sex appeal, stemming from using the products. Crawford’s research revealed (1985:247) that only 10% of the benefit positionings were indirect. A comparison could be drawn with passengers using first class airline facilities, feeling more special and better looked after than those passengers using less reliable carriers.

3. **The surrogate/substitute category.** Surrogate means substitute – where something substitutes for something else. This occurs a great deal in terms of positioning. The marketer does not describe the features or benefits, but instead says something about the product that permits the reader or listener to reach her individual conclusions (Crawford, 1985:247). Qatar Airways do not have to devote advertising space to their product features to explain what they offer – air travel – as long as customers know what other airlines provide. Crawford has identified nine surrogate methods in use today:

3.1 Nonpareil surrogates - these are unique or incomparable surrogates. They represent the top quality and there are no equals in their class. Currently, Emirates is the only Middle Eastern airline in South Africa that makes use of an excellent hub-and-spoke system. Emirates is also the only Middle Eastern airline

flying to South Africa that is part of the Star Alliance group. This factor is crucial for travellers sensitive to a worthwhile mileage programme.

3.2 Parentage surrogates – these are based on where they come from, who makes them, who sells them, who performs them and so on. There are three subcategories of parentage positioning: the specific brand, the company and a specific person.

3.3 Manufacture surrogates – known in this way because of how the product was made. Three alternatives exist: process, ingredients and design.

3.4 Target surrogates - a product that was made especially for organizations or people. There are four ways of defining targets: end-use (first class, business and economy class travellers), demographic (Kulula.com is designed for South African travellers, as reflected in their advertising), psychographic and behavioural. The basic idea is that the product must have whatever attributes customers want, since it was prepared especially for customers.

3.5 Rank surrogates – this is the best-selling product. According to Pegg (2006), the managing director of Sure Viva Travel, Emirates is the only Middle Eastern airline flying to South Africa that offers its passengers a convenient flight frequency.

3.6 Endorsement surrogates – when people whom customers respect assert that the product is worthwhile. The endorser may be an expert or a person to be emulated, for example, BAA is the official sponsor of the Springbok team.

3.7 Experience surrogates - frequent use by its customers over many years attests to its desirable attributes. There are three modes here: other markets, bandwagon and years. Emirates, since its entry into South Africa, has been and is currently the most well-established Middle Eastern airline in the South African market.

3.8 Competitor surrogates – the product is just or almost like another product that customers know and like, for example different and reliable airlines. The Qatar and Etihad offer similar products with similar flight frequencies.

3.9 Predecessor surrogates – the product is comparable, in some way, to an earlier product the customer liked. The business class in Etihad is similar to the business class facility in Gulf Air.

Crawford's study (1985:249) has revealed that in comparing between products and services, service marketers are more likely to use positioning (80% versus 72%), but they make less use of surrogate positioning and more use of features. The typology discussed above is mainly applicable to products and product-related services and does not necessarily meet the objectives of the current study.

According to Wind (1982:79-81) there are six generic scales along which all products can be positioned. The focus of Wind's scales falls only on products: the author particularly used the example of consumer goods. These generic scales could easily be applied to services such as airlines. These are examined below in the context of the positioning opportunities of the air travel product:

- **By benefits or needs satisfied:** Qatar Airways flies to over 70 destinations (this airline offers a multitude of destinations worldwide)
- **By specific product features:** Emirates has introduced a new spacious Airbus 380-800 super-jumbo
- **By usage occasions:** Emirates positions itself towards both the business and the leisure markets, for both recreational and business purposes
- **By user categories:** Emirates offers corporate discounts, and was the official airline of the Soccer World Cup 2006 in Germany
- **By positioning against another product:** Emirates offers full stop-over tickets, from buying the ticket to booking a hotel to taking care of visa formalities
- **By positioning in terms of product class:** Services offered by Gulf Air include unique Sky Chefs and Sky Nannies that form part of Gulf Air's boutique airline vision.

Taking the work of Crawford (1985) and Wind (1982) further, Aaker and Shanby (2001:57) discussed six positioning strategies in their studies: positioning by attributes, price-quality, use or applications, product-user, the product-class and the competitors. Five of these strategies were identified by Wind (1982) and Crawford (1985) namely: positioning by attribute, by product-user, positioning with respect to use or application, positioning with respect to a product-class and positioning with respect to a competitor. The remaining positioning strategy, the price-quality positioning strategy is presented below.

The price/quality attribute dimension is useful and pervasive. In many product categories, some brands offer more in terms of service, features or performance and a higher price serves to signal the higher quality to the customer. Conversely, other brands emphasize price and value (Aaker & Shanby, 2001:57). Emirates, for example, states that it offers exceptional service quality to its customers for the best value for money.

Wind (1982) describes six bases for positioning development: product features, benefits, usage occasions, type of user, comparison with another product and different product class. Easingwood and Mahajan (1989) devised a number of alternative positions specifically for the financial services sector. Examination of their eight basic positions reveals that they are largely amplifications of Wind's benefits basis (reliability, accessibility, extra service), although product augmentation is the same as Wind's product features basis and customization is based partly on benefits and partly on user type (Easingwood & Mahajan, 1989:216).

The belief that services possess a number of special characteristics and that each of these characteristics leads to special marketing implications is well established. For instance, services are intangible compared to the clearly tangible quality of a good owing to its physical presence. Services too can be heterogeneous in the sense that, being produced by people, they can vary in quality, depending on the quality of the provider. Also, service production often involves the presence and even participation of the customer, that is, simultaneous production and consumption. Finally, many services such as accommodation, consulting and travel cannot be placed in an inventory when there is no demand, which means that they are perishable (Easingwood & Mahajah, 1989:208).

Easingwood and Mahajan (1989:208) attempted to describe positioning with the focus falling on services only, specifically financial ones. The methodology and positions identified are based on deductions made from the theory of services. Positioning strategies were developed from a consideration of the marketing implications of the special services attributes of intangibility, heterogeneity, perishability and simultaneity. The following positioning strategies have been identified by Easingwood and Mahajan (1989:208), based on service characteristics:

1. Offer a tangible representation – position the organisation:

- **Expertise position:** all passenger airlines must comply strictly with the unifying IATA¹ and ICAO² requirements and regulations, which make it complicated for airlines to position themselves as experts.
- **Reliability/safety position:** all four Middle Eastern airlines (Emirates, Etihad, Qatar and Gulf Air) position themselves as the very safest airlines. This is presupposed by compulsory compliance with safety regulations: the differentiation in this category is the safety record kept by the airline.
- **Innovativeness position:** Gulf Air launched a Sky Nanny programme on its routes from London to Bahrain and Abu Dhabi and between Sydney and Bahrain (Gulf Air, 2006). Emirates Airlines introduced ICE (Information, Communication and Entertainment) – a business and recreation facility as part of the service features offered on board (Emirates, 2006).
- **Performance position:** In 2006, Emirates won the Inflight Entertainment Excellence Award, highlighting its focus on customer service (Emirates, 2006a).

¹ The International Air Transport Association (IATA) is an international group of airlines headquartered in Montreal, Quebec, Canada.

² The International Civil Aviation Organization (ICAO) is an agency of the United Nations, which codifies the principles and techniques of international air navigation and fosters the planning and development of international air transport to ensure safety and orderly growth.

2. Augmentation of product offering:

- **Product augmentation:** this is what differentiates a particular product from its competitors. The augmented level of a product tends to include intangible features of service such as pre-sales and after-sales services, guarantees, credit facilities, speed of delivery, brand name and so on (Palmer, 1998:224). Airlines, as part of their augmented service, send newsletters to loyalty club members, with additional information on current and new benefits and specials.
- **Provision of extra service:** Emirates offers its first class passengers a chauffeur-driven limousine service from the airport (Emirates, 2006b).

3. **“People advantage” position:** ensuring that relevant people service the customers – employing better staff, making sure they are more thoroughly trained and motivated (Easingwood & Mahajah, 1989:213). Emirates offers a multilingual flight crew to passengers of all classes (Emirates, 2006b).

4. **Package the service offering:** Close co-operation with major chain hotels, car rental companies and migration services enables Emirates to offer its passengers a “one-stop” leisure and business travel facility.

5. **A superior product through technology:** Emirates provides an ICE onboard entertainment and business facility that allows its all-class passengers to access the Internet, send e-mails, sms and make telephone calls via satellite (Emirates, 2006b).

6. **Better accessibility:** Airlines offer a wide spectrum of services, which improve their accessibility to the end-user: call-centres, central reservations, website pages with 24-hour easy access, and convenient airline office location at major business centers.

7. **Customization:** A clear example of customization within the airline industry is the ability of passengers to choose among dietary requirements.

8. Offer a complete products line: an example of a product line could be the spectrum of services offered to loyalty club members, such as a certain amount of excess luggage per ticket, access to business lounge and airport business centres, priority check-in and so on.

Among all the strategies mentioned above, Easingwood and Mahajan (1989) appear to have devised the most suitable typology for airlines – their positioning based on attributes of service quality.

From the above studies, with particular reference to strategies presented by Easingwood and Mahajan (1989), it has become clear that the quality of service will dictate the positioning strategy followed by the airlines. The focus on service quality among full-service carriers, such as Etihad, Emirates, Qatar and Gulf Air, differentiates them from other competitors such as Egypt Air. The variety of service quality features among competing airlines such as the four mentioned could be the key reason why passengers prefer one airline to another. The key factor that influences the positioning strategies of four Middle Eastern airlines (Etihad, Emirates, Qatar and Gulf Air) is their focus on service quality.

2.4 PERCEPTUAL MAPS

Perceptual or positioning mapping is a tool that helps marketers to understand customers' perceptions of different products or brands in the market. The approach combines a range of statistical and psychological techniques to generate visual maps that illustrate these perceptions. Positioning maps provide useful guidance for marketers involved in developing products and marketing programmes. The market image that they reveal can assist with positioning decisions for new products or with repositioning existing brands. Both the number and nature of the dimensions used in the positioning map will vary. In their simplest format, positioning maps possess two dimensions. A statistical technique called multi-dimensional scaling can be used to generate perceptual maps with many dimensions (Dibb, *et al.*, 2000:402).

In the current study perceptual maps were produced from data revealed in the empirical research as shown in section 6.2.7. They graphically represent the airline's current position in the market, identify the airline's main competitors and also serve

as a tool that assists one to identify the most suitable positioning strategy that the airline should follow in order to successfully differentiate itself from potential and current competitors. The positioning maps will be presented in the form of 3D centroid plots.

2.5 CONCLUSION

Brooksbank (1994:10) pointed out that for companies to be successful over the long term, their products and services must be well “positioned” in the marketplace. A number of alternative positions for products and services have consequently been presented. Positioning strategies for services took into consideration the special characteristics of the intangibility, heterogeneity and simultaneity of services. One should also take into consideration that positioning strategies evolve over time, for instance, in the search for competitive advantage (Easingwood & Mahajan, 1989:216).

In conclusion it can be remarked that in practice, even the most reliable positioning strategy may not meet the desired objectives if the company is unable to satisfy the needs and wants of potential and current customers. It is a fact that the majority of customers link their expectations with the quality of services received and, most of the time, are willing to pay leading companies that focus on the attributes of service quality as part of their positioning. An airline’s position in relation to competitors depends on the perceptions held by users of the service, which are measured through the quality of service rendered.

In the next chapter the concept of service quality is discussed as a determinant of positioning. The following questions are answered:

What is service quality? Is it realistic to incorporate service quality as an integral part of positioning strategies? Definitions of service quality, its classifications and ways in which the unique characteristics of such a quality can influence the choice of positioning strategies are considered in the next chapter.

CHAPTER 3

3 THE CONCEPT OF SERVICE QUALITY AND AS APPLIED IN THE AIRLINE INDUSTRY

3.1 INTRODUCTION

The previous chapter the writer showed that in order to differentiate themselves airlines must position themselves well in the market place. Service quality is an integral part of the positioning strategy since services in the airline industry are dependent on customers' perceptions and expectations of the airline product. Although service quality is one of the key factors in attracting and retaining loyal employees, airlines are falling far short of the standard (Gursoy *et al.*, 2005:59). Therefore, it is imperative for air carriers to establish a favourable image in the consumers' minds regarding their service attributes as viewed by consumers.

The most complex and diverse criterion for the evaluation of airlines from the viewpoint of the end-consumer is the quality of services delivered. The variety of definitions of service quality implies a multitude of aspects, which determine general perceptions of quality. In this chapter, service quality is discussed as a determinant of positioning and it is indicated that the concepts of service quality and positioning strategy are interlinked and interrelated.

3.2 POSITIONING AND SERVICE QUALITY

Delivering high-quality service to passengers is essential for the survival of airlines. The conditions of service quality influence a company's competitive advantage by retaining customer patronage, which leads to increased market share and profitability (Park & Robinson, 2004:435).

Empirical studies of the demand for airline services demonstrate that service quality is central to the choice of airlines for both business and leisure travellers. Such a study by Ostrowski *et al.* (1993) shows that continuing to provide perceived high quality services should help airlines to acquire and retain customer loyalty. An airline

will lead the market if it offers superior quality services relative to its competitors. It is therefore of strategic importance for airlines to understand their relative competitive advantages in this respect (Chang & Yeh, 2002:167).

To deliver better service to passengers, airlines need to understand their needs and expectations (Aksoy *et al.*, 2003:246). In the passenger airline industry, only the customers can truly define service quality (Butler & Keller, 1992). This is difficult to define and measure due to its heterogeneity, intangibility and inseparability. The results of existing studies into service quality suggest that definitions and perceptions of airline service are quite diverse and do not seem to fit any single existing quality model (Haynes & Percy, 1994). This implies that service quality attributes are context-dependent and should be selected to reflect the service environment investigated.

The definition of service quality and its influential characteristics continue to be important research issues, because the understanding of the service quality levels being offered relative to their competitors is of significant importance to the strategic management of airlines. This study therefore attempts to address the given research problem.

3.3 SERVICE QUALITY AS A DETERMINANT OF POSITIONING

For many years, service quality was associated with courtesy. However, through the years, new definitions have been introduced. Definitions with specific reference to service quality are summarized in Table 3.1.

Table 3.1: Definitions of service quality

Crosby (1983)	Quality is “the conformance to requirements”
Juran (1974)	Quality is “fitness for use, the extent to which the product successfully serves the purpose of the user during usage”
Parasuraman, Zeithaml and Berry (1985)	Quality is “zero defect – doing it right the first time”
Zeithaml, Berry and Parasuraman (1993)	Quality is “exceeding what the customers expect from service”
ISO 8402	Quality is “the totality of features and characteristics of a product or service that bears on its ability to satisfy stated or implied need”

Jordaan & Prinsloo (2001)	Service quality is “the ability of the organization to correctly determine customers expectations and to deliver the service at a quality level that will at least equal those customer expectations”
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Source: Adapted from Jordan and Prinsloo (2001:69).

Following Jordaan and Prinsloo (2001) and for the purpose of this research, service quality in the airline industry is defined as, “the ability of the organization to correctly determine customers’ expectations and to deliver the service at a quality level that will at least equal those customer expectations”. Service quality can be regarded as a composite of various attributes, both tangible and intangible, such as safety or comfort, which are difficult to measure accurately. Different individuals usually exhibit a wide range of perceptions regarding the quality of service, depending on their preference structures and roles in the process: service providers or receivers (Tsaur, *et al.*, 2002:107).

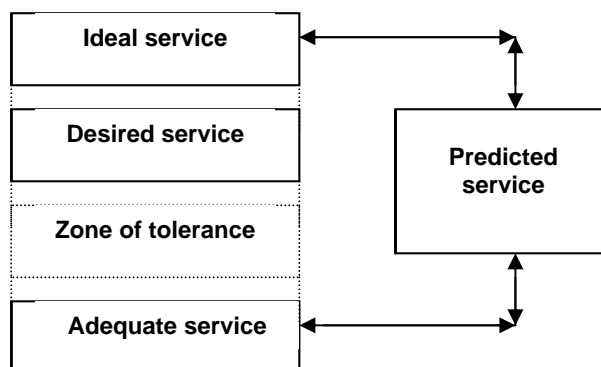
Understanding how to manage service quality requires an understanding of its constructs: customers’ expectations and perceptions. These are used to evaluate the quality of the service offering (Jordaan & Prinsloo, 2001:71).

3.3.1 Customer expectations

Customer expectations can be defined as “pre-trial beliefs a customer has about the performance of a service that are used as the standard or reference against which the service performance is judged” (Kurtz & Clow, 1998:66). The two most popular theories concerning the levels of customer expectations are: the SERVQUAL model of customer expectations and the Kano model which are presented below.

3.3.1.1 SERVQUAL model of customer expectations

Figure 3.1: SERVQUAL model of customer expectations



Source: Adapted from Zeithaml, Berry and Parasuraman, 1993.

According to Zeithaml, Berry and Parasuraman's model of customer expectations, shown in Figure 3.1, five levels can be distinguished:

1. **The ideal service level.** This is the level of service that customers wish for; it is represented by a situation where everything happens exactly according to plan.
2. **The desired service level.** This is the level of service that the customer wants or hopes to receive from the service. It is a blend of what the customer thinks can be and what should be.
3. **The adequate level.** This level represents the minimum service level that the customer will tolerate and accept without being dissatisfied.
4. **Zone of tolerance.** This zone divides the adequate and desired levels of service and represents a range of service performances that the customer will consider acceptable. Services performed below the adequate level and outside the tolerance zone will not be accepted. This means that simply meeting passengers' expectations of adequate service may not be good enough for airlines to survive the rivalry (Gilbert & Wong, 2003:520).
5. **The predicted service level.** This is the service level that the customer thinks will be experienced, which is the customer's actual service expectation. This level can range from the ideal service level to the adequate service level (Jordaan & Prinsloo, 2001:72-73).

Factors that could influence customer's levels of expectation and cause changes in their tolerance zones include personal needs, service promises, word-of-mouth communication and past experience (Jordaan & Prinsloo, 2001:73). It is therefore crucial to ensure that an airline's promises to its customers reflect reality.

3.3.1.2 The Kano model

The Kano model was developed by a Japanese quality engineer, Noriaki Kano. He proposed that services fall into three categories based on how they are perceived by the customer and by their effect on customer satisfaction. These categories are the expected level, the desired level and the surprising level (Jordaan & Prinsloo, 2001:73–74). The Kano model is an indication of a clear relationship between performance and satisfaction. His three levels of expectation are:

- 1. Expected level.** This is the basic satisfactory level of service and represents the minimum requirements of the customer. Customers regard the attributes they expect as important and are very dissatisfied when they are not present.
- 2. Desired level.** Customers are able to identify which desired attributes are important and comment on unsatisfactory performance.
- 3. Surprising level.** Customers will not consciously consider these aspects as important (they have low expectations), but they will lead to high levels of customers' satisfaction if present.

According to Gilbert and Wong (2003:520), expectations in the airline industry context serve as standards or reference points for customers. In evaluating service quality passengers compare what they perceive they receive in a service encounter with their expectations of the encounter. Assessing passenger expectations is not a static exercise since passengers are becoming increasingly sensitive to service quality. Some differences in service expectations are derived from different customer cultures. Values and attitudes help customers determine what members of their culture think is desirable. Consumer behaviour flows from values and attitudes adopted across cultures and airline marketers must understand these differences (Gilbert & Wong, 2003:520).

3.3.2 Customer perceptions

The second construct of service quality is that of customer perceptions. Perception can be defined as the process by which an individual selects, organizes and interprets stimuli into a meaningful and coherent picture of the world (Jordaan & Prinsloo, 2001:75). From this definition it is clear that customer perceptions are subjective in nature and overall attitudes about a particular service provider, such as the airline, will change over time.

Perceptions are formed with regard to three quality components: technical and functional quality and corporate image (Jordaan & Prinsloo, 2001:75).

- 1. Technical quality.** This refers to whether or not the service was performed correctly; for example, in the airline industry this would refer to waiting time and reliability.

- 2. Functional quality.** This refers to how well the customer thinks the service was performed, for example in terms of an in-flight service questionnaire given to airline customers. Research has shown that functional quality plays the most critical role in a customer's overall quality perception and successful service management means the continuous improvement of the functional quality of service (Chang & Yeh, 2002:169).
- 3. Corporate image.** This refers to the surroundings in which service is offered and the overall image conveyed by the service providers, for example, Qatar Airways has been nominated as the five-star service airline by Skytrax (Al Shawa, 2005).

Due to the intangible nature of airline services, customers may find it difficult to precisely assess their perceptions of service quality based on their experiences relative to expectations. Chang & Yeh (2002:167) used a fuzzy multi-criteria analysis (MA) approach to rank airlines, based on customers' assessments with respect to multiple service attributes. The evaluations help airlines to better understand how the customers view their services relative to their competitors, thus motivating airlines to provide appropriate levels of service.

From the above discussion, it is clear that in cases where the organization has correctly identified the customer's expectations and has set its service standards to perform accordingly, the customer will perceive the quality of service to be satisfactory. Clearly the ultimate goal of service quality is customer satisfaction.

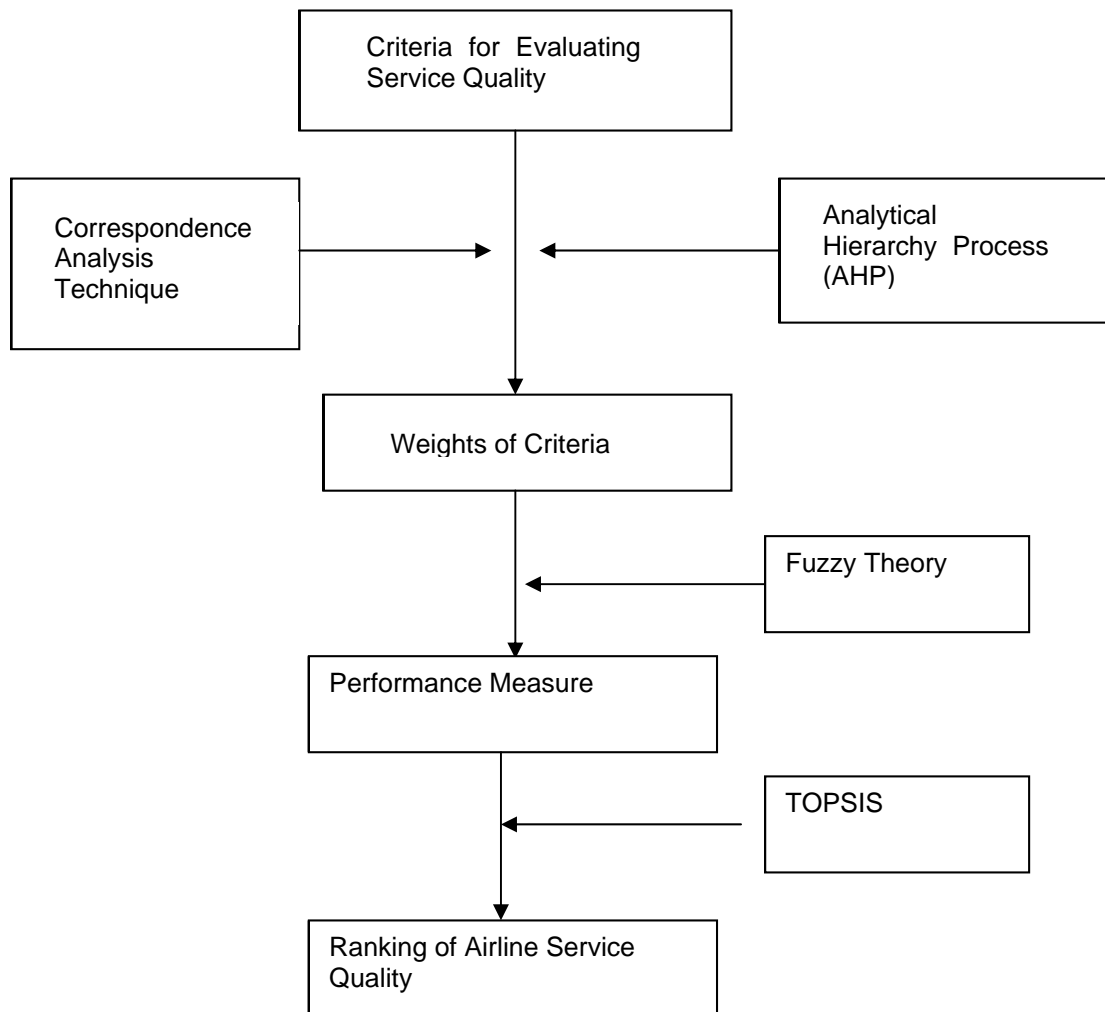
3.4 A CONCEPTUAL FRAMEWORK FOR AIRLINE SERVICE QUALITY

Several conceptual and empirical studies, as mentioned earlier in the literature review, have been devoted to investigating the service quality issues in the passenger airline industry. These include Tsaur *et al.* (2002), Chang and Yeh (2002), Gordon (1991) and Gursoy *et al.* (2005). The main focus of these four studies fell on service quality and its characteristics within the airline industry. Various schemes for defining its dimensions or attributes have been proposed from the perspective of passengers.

Tsaur *et al.* (2002) in their study of service quality in the airline industry used fuzzy set theory to measure the airline performance. The rationale of using fuzzy theory is

that it reflects the subjectiveness and imprecision involved in the survey process due to the characteristics of airline services. Modelling using fuzzy set theory has proven to be an effective way of formulating decision-making where information available is subjective and imprecise (Zimmermann, 1996). Figure 3.2 outlines the steps used by authors to evaluate airline service quality.

Figure 3.2: Evaluation framework of airline service quality



Source: Tsaur *et al.* (2002:108)

Following Figure 3.2, the study first identifies the service quality aspects and attributes that airline customers consider the most important. The attributes are grouped into the five-aspect representation of service quality as proposed by Parasuraman, Zeithaml and Berry (1985 a, b), namely: tangibility, reliability, responsiveness, assurance and empathy.

Tsaur *et al.* (2002) used this structure as the framework for establishing evaluation criteria with five service quality aspects and 15 service quality evaluation criteria, the details of which can be found in Table 3.2.

Table 3.2: The evaluation criteria for airline service quality

Aspect	Attribute
Tangibility	Comfort and cleanness of seat
	Food
	On-board entertainment
	Appearance of crew
Reliability	Professional skills of crew
	Timeliness
	Safety
Responsiveness	Responsiveness of crew
	Courtesy of crew
Assurance	Actively providing service
	Convenient departure and arrival time
	Language skill crew
Empathy	Convenient ticketing process
	Customer complaints handling
	Extended travel service

Source: Tsaur *et al.* (2002:109)

After identifying the service quality attributes the authors calculated the criteria weights by applying the Analytical Hierarchy Process (AHP) method, which integrates the opinions and evaluations of experts and devises the complex decision-making system into a simple hierarchical system (Tsaur *et al.*, 2002:109). Fuzzy theory is applied to measure the performance of each service quality criterion. Finally, the authors conduct the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) to achieve the final ranking results. TOPSIS is applied to generate a matrix of performance, which is necessary to evaluate the quality of service of selected airlines. Tsaur *et al.* (2002) have compiled a very detailed research framework, making it easy to apply to other research.

Chang and Yeh (2002) applied the fuzzy multi-criteria theory to evaluate the service quality of Taiwan's domestic airlines. Due to the intangible nature of airline services, customers may find it difficult to precisely assess their perceptions of service quality based on their experiences relative to expectations. This was the main reason why Chang and Yeh (2002:167) used fuzzy theory to rank airlines based on customers'

assessments with respect to multiple service quality attributes. A comprehensive investigation was conducted by consulting airline managers, government officials, expert academics and travel agents in Taiwan (Chang & Yeh, 2002:168). The service attributes presented in Table 3.3 reflect the major concerns of passengers travelling on short-haul routes in a Taiwanese context, as well as the aspects over which Taiwan's domestic airlines have control and by which they can differentiate themselves from competitors.

Table 3.3 Criteria used for service quality evaluation of Taiwan's domestic airlines

Criteria category	Evaluation Criteria
On-board comfort	Cleanliness and noise level on aircraft
	On-board facilities including seat comfort and spaciousness
	On-board services including meals, drinks and newspaper
Airline employees	Helpful attitudes and courtesy of check-in personnel
	Attention by stewardesses
	Appearance and courtesy of airline personnel
	Service efficiency of airline personnel
Reliability of service	Security-related accidents
	Airline flight safety and security measures
	On-time performance
Convenience of service	Service frequency and schedule convenience
	Convenience of pre-flight and post-flight services
Handling of abnormal conditions	Handling of customer complaints or under-performance liability
	Handling of flight delays
	Handling of luggage loss

Source: Chang and Yeh (2002:169)

Gordon (1991) examined the evaluation criteria considered by passengers when selecting an air carrier, using the SERVQUAL model and factor analysis for this purpose. Data was collected pertaining to the service quality of eight international air carriers operating into South Africa. These eight carriers were: Alitalia, British Airways, KLM, Lufthansa, Sabena, South African Airways, SWISSAIR and UTA – French Airlines. The SERVQUAL model revealed that criteria used by consumers in assessing service quality fit 10 potentially overlapping characteristics: tangibles, intangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding or knowing the customers. Factor analysis was then applied to the variables falling under these dimensions. Ten dimensions

were grouped into five factors, namely: tangibles, reliability, responsiveness, assurance and empathy.

Gursoy *et al.* (2005) examined the relative positioning of the ten major US airlines based on 15 attributes that measure actual airline performance on service quality criteria important to consumers. The data regarding all these attributes were obtained from the US Department of Transportation's Air Travel Consumer report. Table 3.4 provides a summary of the service attributes used by Gursoy *et al.* (2005).

Table 3.4 Service quality criteria that measure airline performance

Variable	Description
On-time performance	On-time performance
Mishandled baggage	Lost, damaged, delayed or pilfered baggage
Involuntarily-denied boarding	The flight is oversold
Flight problem complaints	Cancellations, delays or any other deviations from the schedule
Oversales complaints	Oversales
Reservations, ticketing and boarding complaints	Airlines or travel agent mistakes in reservations, ticketing, problems in making reservations and obtaining tickets due to busy telephone lines or waiting in line, delays in mailing tickets and problems in boarding the aircraft
Fares complaints	Problems in obtaining refunds for unused or lost tickets, fare adjustments or bankruptcies
Baggage complaints	Lost, damaged or delayed baggage, charges for excess baggage, carry-on problems and difficulties with airline claim procedure
Customer service complaints	Rude or unhelpful employees, inadequate meals or cabin service, treatment of delayed passengers
Disability complaints	Civil rights complaints by air travellers with disabilities
Advertising complaints	Advertising is unfair, misleading or offensive to consumers
Tour complaints	Problems with scheduled or charter tour packages
Animal complaints	Loss, injury or death of an animal during air transport
Other complaints	Frequent flyer miles, smoking, credit, cargo problems, security, airport facilities, claims of bodily injury

Source: Gursoy *et al.* (2005:60)

From Table 3.4 it can be seen that the attributes mentioned by Gursoy *et al.* (2005) can be grouped into four main categories: on-time performance, mishandled baggage, involuntarily-denied boarding and customer complaints.

The authors made use of canonical correspondence analysis to analyze the positioning of the major 10 airlines in the USA based on the said attributes. This type of analysis was selected as the result of the categorizable nature of the data and the

advantages of utilizing multivariate categories. Such analysis is a powerful statistical tool that was used by Gursoy *et al.* (2005:61) to graphically represent the positioning of the airlines. Positioning maps were generated using it, and revealed closely competitive airlines, attributes that are important to customers and how those attributes cluster together, as well as the competitive strengths and weaknesses of each airline. One of the biggest challenges that airlines are facing today, as identified by Gursoy *et al.* (2005:65), is to establish which strategies are most likely to help them to better position themselves in the market. The findings of their study aid airlines in this respect.

The conceptual framework to be used in the present study, as noted earlier, is based on the SERVQUAL Model as used by Tsaur *et al.* (2002) and Gordon (1991) and is supported by the Kano model. The attributes identified as important by passengers of selected airlines will be grouped according to factor analysis. This conceptual framework is particularly relevant to the airlines being researched because the attributes identified reflect the positions that these airlines are attempting to portray to the South African market, which will be discussed in the ensuing chapter.

The conceptual framework consists of four steps:

1. **Establishing criteria for evaluating service quality** and grouping these attributes according to the SERVQUAL model, reinforced by the Kano model. Service quality attributes will be determined by combining and grouping all the attributes used by Chang and Yeh (2002), Gordon (1991), Tsaur *et al.* (2002) and Gursoy *et al.* (2005).
2. **Data analysis.** Following Gordon (1991) factor analysis will be used to group the attributes of service quality that are considered important by passengers of the four selected Middle Eastern airlines. The current study will also employ 3D graphs to graphically represent the positioning of selected airlines as perceived by their passengers.
3. **Results.** The statistically significant results generated from the data analyzed through factor analysis will be discussed.
4. **Plot results on positioning maps.** Positioning or perceptual maps will portray airlines' positioning strategies based on service attributes as perceived by their passengers.

Table 3.5 furnishes a list of all the service attributes that will mainly be used in the current study.

Table 3.5: Service quality attributes for Middle Eastern airlines in South African markets

Attribute	SERVQUAL	KANO Model
1. Cleanliness and noise level of aircraft	Tangibility	Expected level/Desired level
2. On-board facilities: seat comfort, cleanliness and spaciousness	Tangibility	Desired level
3. On-board services: meals, drinks and newspaper	Tangibility	Expected level
4. Helpful attitudes and courtesy of check-in personnel	Responsiveness	Expected level
5. Attention of stewardesses and responsiveness of crew	Responsiveness	Expected level/Desired level
6. Appearance and courtesy of airline personnel	Tangibility and responsiveness	Expected/Desired level
7. Service efficiency of airline personnel; professional skills of crew; language skills of crew	Reliability and assurance	Surprising level
8. Security-related accidents	Assurance	Desired level
9. Airline flight safety and security measures	Reliability	Expected level
10. On-time performance	Reliability	Desired level
11. Service frequency and convenience of schedule; convenience of departure and arrival times	Assurance	Desired level
12. Convenience of pre-flight and post-flight services; convenient ticketing process and extended travel service	Empathy	Surprising level
13. Handling of customer complaints and under-performance liability	Empathy	Desired level
14. Handling of flight delays: flight problem complaint	Empathy	Desired level
15. Handling of luggage loss or damage; mishandled baggage	Empathy	Desired level

3.5 CONCLUSION

In South Africa, the air travel markets, both domestic and international, have been experiencing greater competition in recent years owing to deregulation and increasing customer awareness of service quality. Under the circumstances, the airlines not only attempt to establish more convenient routes, but also introduce more promotional incentives, including mileage rewards, frequent flyer membership programmes and other incentives. Airlines also aim to consolidate their market share and increase profitability. However, the marginal benefits of marketing strategies

tend to be gradually reduced because most of the airlines act similarly. Recognizing this limitation, some air carriers have shifted their focus onto a commitment to improve the quality of customer service (Tsaur *et al.*, 2002:107).

The airlines provide a range of services to customers including ticket reservations, their purchase, airport ground service, on-board service and service at the destination. Airline service also consists of the assistance associated with disruptions such as lost-baggage handling and service offered to delayed passengers.

In the airline industry context the problem is whether management can perceive correctly what passengers want and expect. In addition, expectations serve as standards or reference points for customers. In evaluating the airline's positioning based on service quality aspects, passengers compare what they perceive they are given in a service encounter with their expectations of that encounter (Gilbert & Wong, 2003:520).

The next chapter covers the developments and changes in the airline industry with specific reference to the South African air travel market. Chapter four also focuses on each of the selected Middle Eastern airlines and attempts to identify their current positioning strategy, based on the information found in the media.

CHAPTER 4

4 THE BACKGROUND OF THE AIRLINE INDUSTRY

4.1 INTRODUCTION

The preceding chapters provided an overview of positioning and service quality and considered how these concepts are interrelated and linked in the airline industry. In this chapter the focus falls on the background of this industry as well as on trends and developments in this competitive environment.

The modern role of air carriers should not be undermined in the world economy, especially in the era of globalization. Technological progress has led to the concept of the global village, where people are not bound to their places of residence and can satisfy their need to travel worldwide within a relatively short time span.

Along with the development of technology, the rhythm of life is increasing and therefore the demand for airline services, as the fastest and safest transport mode, is growing even more strongly. Currently, almost every economically active individual cannot imagine personal and business life without using the services offered by airlines to satisfy her modern lifestyle.

High demand, as presented by Adam Smith in his theory of classical economics, induces supply. Currently, a multitude of local and international airlines offer their services to any type of customer within any air travel market niche. In this competitive environment, some airlines go bankrupt, while those that follow correct positioning strategies manage to grow their market share quite significantly.

Among a wide range of all role-players within the air transportation market, a few air companies can be singled out, whose successes in penetrating the developing markets are widely noted by marketers. A suitable representation of such air carriers would encompass the established Middle Eastern airlines, such as Etihad, Emirates, Gulf Air and Qatar Airways, which are relatively new entrants into the South African air travel market. Their successful positioning strategies based on the attributes of high levels of service and augmented aspects of services have seriously affected the

well-established European airlines' market share, which previously dominated the air transportation industry. The market share of the four respected airlines at the time of research in 2006 was as follows: Emirates with 55% of the market share, Qatar Airways with 20%, Gulf Air with 13% and Etihad Airways with 12% of the market share.

4.2 BACKGROUND OF THE AIRLINE INDUSTRY

Since US deregulation of its domestic airline markets, many countries, including the United Kingdom, New Zealand, Chile, Canada and South Africa, have deregulated or substantially liberalized their domestic markets (Oum & Yu, 1999:1).

From 1963 to 1990 in Africa, airlines, airports and airspace became part of a political strategy to bring down the governments of the last minority white-ruled states, notably South Africa (Pirie, 1990:4). In the mid-1980s, Australia and the United States of America revoked SAA's landing rights and forbade airlines registered in their countries from flying to South Africa. Other carriers, for example, Air Canada, closed their offices and terminated any representation in South Africa (Pirie, 1992:341). Many countries refused to trade with South Africa and this affected SAA. The majority of African countries, except South Africa's neighbours, refused SAA permission to use their airspace (Wikipedia, 2007).

Airline sanctions against the Republic started to ease in 1990 when the country's last minority government abolished statutory apartheid (Wikipedia, 2007). This step ended South Africa's political isolation and its status as a globally-rejected country. This step meant that the structure and geographical expression of air transport in South Africa would subsequently reflect economic forces and that the use of air transport, as a political weapon, would come to an end. International diplomatic, commercial, cultural and sporting links resumed between South Africa and the rest of the world. SAA was able to restore flights to old destinations, introduce services to new ones and expand into the rest of Africa and Asia. In 1990, SAA was chosen as the Best Airline to Africa by London magazine Executive travel (Wikipedia, 2007), representing an important transition in the airline's history.

The 1990-1994 period of political transition was characterized by the withdrawing of bans on cross-border aviation between South Africa and its neighbours as well as between this country and numerous overseas countries. Several African and international carriers landed in the Republic for the first time or after a very long absence (Pirie, 2006:4).

The route network of SAA was extended considerably and by mid-1991, the airline was flying to eleven cities in nine African countries and to four Indian Ocean islands. In addition to this, by the end of 1991 SAA was permitted to fly over every African country except Tanzania. The penetration of the African continent by SAA was complemented by several African airlines that began flying to Johannesburg: Air Zaire (April 1991), Egyptair (June 1991), and Kenya Airways (December 1991). Namibia's infant national airline, Air Namibia, was among the new carriers seen at South African airports (Pirie, 1992:341-342).

In 1993 the airline began services to Manchester and Hamburg and a codesharing agreement was reached with Brazil's Varig (Wikipedia, 2007). Airline sales offices were reopened beyond the country's borders; re-equipment and maintenance of the national flag carrier's aircraft became less problematic (Pirie, 2006:4).

The restructuring of air links in South Africa occurred as a result both of international political strategizing and of short-term commercial airline manoeuvring and opportunism. After the election of the ANC government in April 1994, international commercial airline activity settled down and in the 1990s all overseas airlines operating in South Africa confronted deregulation, privatisation, mergers and alliances, technological shifts and route reconfiguration (Goldstein, 2001:240). The realignment of SAA's international routes presented it with major timesavings, partly because the distances were shortened by a minimum of 1400 kilometers, and partly because non-stop flights could be resumed. The more direct course taken by northbound and southbound flights between Johannesburg and Europe meant that SAA became more competitive with its nine rivals (Alitalia, British Airways, El AL, KLM, Lufthansa, Luxavia, Sabena, Swissair and UTA), none of which had ever been barred from black Africa (Pirie, 1992:342).

In addition to giving SAA greater access to African destinations, the ending of sanctions enabled the airline to resume service to the overseas destinations from which it had been excluded since the mid-1980s as part of the apartheid boycott. At the beginning of the new decade South Africa enjoyed other breakthroughs in aviation. Apart from various flights carrying government officials and ministers on diplomatic missions into Africa, a South African chartered aircraft landed for the first time in India in November 1991, carrying the South African cricket team. Within weeks a SAA plane landed in Moscow for the first time to pick up a circus troupe (Pirie, 1992: 343).

While the South African national carrier was stretching its wings in the market place, several overseas airlines took up their reciprocal rights to fly to the Republic for the first time: Australian Airlines and Cathay Pacific (July 1991), Air Seychelles (August 1991), China Airlines (September 1991), Qantas (January 1992) and Singapore Airlines (March 1992).

The transition to democracy opened up new trade and tourism opportunities, leading to a large increase in the number of airlines servicing the country, from 21 in 1990 to 59 in 1998. The lifting of the Commonwealth's "people-to-people" sanctions allowed the resumption of flights to and from Australia in 1992 (Goldstein, 2001). Geo-political restrictions on air transport to and from Southern Africa disappeared on the demise of apartheid policies, which allowed the national carrier to compete on the national and international level (Pirie, 2006:5).

South African aviation policy has been extensively revised over the last five to six years. The current policy was accepted in 1992 and has been implemented since that date. The International Air Services Act, 1993, which incorporates South African international policy, came into operation in April 1994. The current policy has as its main objective the liberalization of the skies. This does not entail an "open skies" policy but rather a policy with particular purposes:

- Encouraging competition in the market;
- Safeguarding national interests; and
- Encouraging South Africa's participation in the international air transport market.

South Africa, which is part of the Yamassoukro³ agreement, has currently adopted a policy of liberalizing access to the country, but without going as far as offering completely open skies. Most other African national airlines have obtained rights to fly into South Africa but these are normally limited to reciprocating as regards rights that have been granted to South Africa (D'Angelo, 2007).

South Africa has currently entered 85 bilateral air services agreements with foreign countries, in terms of which 55 foreign airlines are currently providing scheduled international air transport services to South Africa. At the moment, approximately 9,5 million passengers per year are transported on scheduled domestic air services. Internationally, the number of passengers amounts to approximately 3,5 million passengers per year. The market has grown at an average of 4% per year over the past 20 years (Civil Aviation, 2006:8).

This environment has facilitated the entrance of certain Middle Eastern full-service airlines, specifically Emirates, Qatar Airways, Gulf Air and newly-born Etihad to the South African market. Since 1994, when Dubai only ranked 22nd in the list of overseas airports linked to South Africa, Dubai's ranking has jumped to second place in 2004 (Emirates, 2006b). Expatriate South African workers, as well as visiting friends and family members and tourists using Gulf Air's generous airfares and stops between Europe and South Africa, have comprised the main influences on this growth in traffic (Gulf Air, 2006).

In order to survive and prosper in this competitive environment, these full-service carriers decided to follow and sustain service quality strategies. Successful strategies of this kind are generally characterized by customer segmentation, customized service, guarantees, and continuous customer feedback and comprehensive measurement of company performance (Sultan & Simpson, 2000:189).

A brief overview of the airlines selected for this study follows. The current positioning strategies and service quality elements of these airlines will be highlighted in the discussion.

³ The Yamassoukro agreement is the agreement under which all sub-Saharan countries agreed to open their skies to each other so as to stimulate trade and tourism.

4.3 ETIHAD

4.3.1 Background

Etihad, Abu Dhabi's own airline, was launched in July 2003 (Penton Media, 2005:18). Etihad was nominated as the UAE's national carrier after gaining \$75 million in start-up funding by the UAE government (CMP Information Ltd, 2004:6). In 2005, the government of Abu Dhabi withdrew as a major stakeholder of Gulf Air in order to concentrate on Etihad (MEED, 2005:20). The airline was founded with the twin objectives of creating an airline that would bear the UAE flag and extending true Arabian hospitality to its guests (Etihad Airways, 2006a).

The core of Etihad's philosophy is the firm belief that the people who fly with them are their guests and are not mere passengers. According to Etihad, this is reflected in the airline's exceptional service, both on the ground and onboard (Etihad Airways, 2006c).

The airline is planning to be flying 70-80 planes carrying about 8 million passengers within five years. Abu Dhabi International Airport is also undergoing a \$6 800 million expansion, which will see its capacity increase to 20 million passengers by 2010 from current levels of about 5 million (MEED, 2005:49:37:20). In 2007, Etihad is planning to add more destinations to its network as well as improving its services, constantly upgrading facilities and providing a unique flying experience. By 2010, Etihad plans to fly to 70 destinations (Etihad Airways, 2006b).

Etihad currently flies to 20 destinations worldwide, including London; by the end of 2006 the airline will serve 30 destinations. Etihad plans that 50 aircraft will serve 70 countries by 2010 (Haymarket Business Publications Ltd, 2005:13). Etihad joined other regional carriers in servicing passenger and cargo business to Johannesburg on 3 December 2005. It should be noted that South Africa enjoys strong and growing economic relations with the UAE. The total number of business and holiday travellers who spend a minimum of 48 hours in the UAE has surpassed the 40 000 persons mark annually. There are currently more than 5 000 economically active South African nationals in the UAE (*Financial Times Ltd*, 2005:pna). Etihad Airways is

hoping to obtain permission for more flights to and from South Africa (D Angelo, 2005a:pna).

At the beginning the airline employed 300 staff, operating two Airbus A330s and one A340: the number of aircraft increased to nine long-haul models in June 2004. In 2005 Etihad Airways placed a substantial order worth \$8 billion for new aircraft, including 24 Airbus aircraft (four A340-500s, four A340-600s, 12 A330-200s, four A380s) and five Boeing 777-300ERs. The backbone of the airline's fleet is the Airbus A330, which is widely recognized for its wide-bodied comfort and cost-efficiency. The airline also operates the Boeing 767-300, making its fleet one of the most modern in the global airline industry. Etihad's first Boeing 777-300 ER aircraft joined the fleet in February 2006. By the end of 2006, Etihad's fleet will grow to 23 aircraft, including five Boeing 777-300 ERs, seven Airbus A330-200s and an A340-500. In 2007, Etihad will become one of the first airlines in the world to boast an A380 in its fleet (Etihad Airways, 2006b).

Etihad is currently operating two flights per week between Abu Dhabi and Johannesburg. The number of flights per week will be increased between both cities so as to offer tourists and businessmen on both sides ample tourism and investment opportunities (Comtex, 2005: pna).

Etihad joined the UATP (Universal Air Travel Plan) network as a new merchant airline, which means that it now accepts all UATP corporate cards issued by 14 airlines worldwide, which are accepted as a form of payment by travel agencies and over 220 airlines worldwide (Ingram Investment Ltd, 2006b:pna).

Etihad's seat load is currently 75%. It carried 1.5 million passengers in 2005; by the end of 2006 the airline will be carrying 3.5 million passengers per annum. The airline's passenger portfolio is mixed, with a fair share of business and leisure travellers (Rahman, 2005:pna).

The advantage of Etihad is that its main hub is in Abu Dhabi; therefore, when Dubai is full, Abu Dhabi takes the overspill. Increased competition among Middle Eastern airlines leads to a better service for the business and leisure traveller and better route deals for procurement directors in return for volume. Fares on Middle Eastern

carriers are very low and the leisure market is extremely price-sensitive. Travelling by way of the Middle Eastern hub airports, with the chance of a stopover, gives a holidaymaker an opportunity to see something new (D'Angelo, 2006: pna).

4.3.2 Assessment Of Service Quality And Positioning

The airline's advertising focuses on communicating Etihad's positioning in terms of a high standard of customer service (Haymarket Business Publications Ltd, 2005:5).

Services: Etihad offers a three-class service: Diamond Zone business class; Pearl Zone, the region's first premium economy class and Coral Zone, a superior economy class (Travel Trade Gazette UK and Ireland, 2004:6). Etihad won an award for its catering, praised by the readers of PAX International magazine. PAX International handed Etihad the "Outstanding Food Service by Carrier" award, crediting the Abu Dhabi world-class standards of style and hospitality. Each class on Etihad boasts an extensive and imaginative menu prepared by award-winning chefs (Al-Bawaba, 2005:pna). Etihad has re-launched its website, www.etihadairways.com, in its quest to set higher benchmarks of quality and services. The highlight of the website is the online booking facility and the ability of the website to stay in touch with guests at all times.

Awards: World's Leading New Airline in 2004 and 2005 (two consecutive years)

For the purposes of this study, Easingwood's and Mahajan's (1989:208) positioning typology is made use of, as the most accurate one to cover positioning strategies based on attributes of service quality provided by the airlines.

Etihad is using a combination of positioning strategies, which is evident from analyzing its web pages and various media. **Reliability/safety** positioning is clearly seen in all services provided by the airline and the customer feels that the airline is safe simply by browsing through Etihad's website. Etihad also focuses on **augmentation of its product offering**, particularly as regards the provision to Diamond, Pearl and Coral guests of extra services, such as meal and dietary requirements, religious and medical needs, chauffeur-driven cars and luxury coaches, lounge facilities with laptop connections, high-speed Internet access, fax

and telephone facilities for Diamond and Pearl guests, “meet and greet” services to unaccompanied minors, expectant mothers, women travelling with infants and the hearing- or visually-impaired.

4.4 EMIRATES

4.4.1 Background

Emirates is a government-owned Dubai-based airline, which was launched in 1985. It has received more than 200 international awards for excellence since its launch in 1985. Emirates’ vision states that it intends: “to be a medium-sized airline with a global network by the turn of the century”.

Emirates introduced its service to Johannesburg in June 1995, stimulating the market growth on this route. The carrier began offering a non-stop service on the Dubai-Johannesburg route in January 1996, as a result of its initial success. The growing number of South African companies setting up regional head offices in the United Arab Emirates comprised one of the main drivers behind the carrier’s decision to launch services. It also started promoting Dubai as a shopping destination for wealthy South Africans (Odell, 1996:29). Emirates, which offers connecting flights to all five continents from its home airport in Dubai, obtained the support of the Cape provincial parliament and the regional chamber of commerce and industry for its attempts to obtain more air traffic rights to start a non-stop service to Cape Town (D’Angelo, 2005c:pna). Currently Emirates is flying to more than 70 destinations in Europe, the Middle East, the Far East, Africa, Asia, Australasia and North America (The Emirates Group, 2006).

Emirates, in 2003, celebrated the delivery of an ultra-long range Airbus, first of the eight A340-500s the carrier has on order. The size of the aircraft positively affected duty-free sales, as a result of the bigger space available for in-flight sales. Emirates is one of the several carriers in the Middle East that has increased its capacity and therefore the number of potential customers by expanding its fleet and adding new routes to its network. Emirates announced the largest order in aviation history during 2003 at the Paris Air Show when it added 71 new Airbus and Boeing aircraft, bringing its number of aircraft to 107. By 2012 the airline expects to have 125 aircraft

in service, including a substantial number of the new-generation Airbus 380-800 super-jumbos, which can carry more than 550 passengers (Dunning, 2003:24).

Emirates' average monthly load factor rose from 63% to 81%: this led the carrier to request a third weekly frequency, which was granted under the condition that it was operated as a joint flight with SAA (Odell, 1996:30). The airline is responsible for more than 50% of all flight movements in and out of Dubai International Airport and aims to increase this proportion to 70% by 2010 (Centaur Publishing Ltd, 2005:21).

The advantage of Emirates is that its hub airport is based in Dubai, but it is currently facing competition from Muscat, Bahrain and Abu Dhabi. Doha is also looming as another new hub, with a massive airport set to open in 2009.

4.4.2 Assessment Of Service Quality And Positioning

Following the typology suggested by Easingwood and Mahajan (1989:208), Emirates makes use of a number of positioning strategies via its website and written media. **Reliability/safety** is presented in the company's corporate image and in the brand itself. **Innovativeness** is represented by the following services: an online booking facility, the 24-hour self-check-in facility available in the First and Business Class check-in lounge and in the Economy Class check-in area, business lounges equipped with workstations and wireless network facilities with internet connections for emailing, web browsing and printing. Emirates' ICE (Information, Communications and Entertainment) system offers the ultimate inflight experience, while the airline also offers an in-seat telephone, facsimile, e-mail and messaging service onboard as part of its exceptional service offering. **Performance positioning** can be perceived in the numerous awards received by the airline. Emirates also employed a hugely successful and award winning "Keep discovering campaign". This was widely accepted by passengers sharing the passion for football in a truly international and global context. Emirates' sponsorship of the 2006 FIFA World Cup is a major part of the airline's ongoing marketing focus on using sports sponsorship as a way to reach its passengers and to connect directly with them and to maximize the exposure of Emirates as a truly global brand and this campaign perfectly reflects that strategy (Emirates, 2006b). **Augmentation of product offering**, specifically in terms of **extra services provided**, is evident in the following offerings: Skyward

members enjoy the benefits of pre-assigned seating, Dubai visa services, special meals booking, chauffeur-driven service, a Fast Track facility that ensures a seamless immigration process and stop-over services.

Furthermore, in terms of **customization** Emirates believes that its size enables it to offer a more personal, higher-quality product. Highlighting its focus on customer service, Emirates installed personal videos in every seat in all three classes on every aircraft of its fleet (Phelan, 1996:28). Emirates offers three ways of making travelling arrangements to its passengers: online, a call centre and local travel agents. The airline offers care services for different passenger groups: unaccompanied minors, young passengers, passengers with special needs. As regards its **people advantage**, the crew members are highly qualified and are represented by more than 60 nationalities. Better **accessibility** is evident in the aforementioned provision of three options to book its services. Emirates' airline communications campaign won the prestigious Official Airline Guide (OAG) Best Marketing Campaign.

Awards: 2006 – Inflight Entertainment Excellence and Skywards – Best Customer loyalty programme; 2005 – CAPA Airline of the Year, Best Middle East/African Airlines, Best Middle Eastern Airline, Favourite Airline for Business Travel, Best Economy Class, Air Cargo Carrier of the Year (Emirates, 2006a).

4.5 GULF AIR

4.5.1 Background

Gulf Air is an international, government-owned airline established in 1950 as the first regional airline to service the Gulf. The airline was taken over by Abu Dhabi, Bahrain, Oman and Qatar in 1973 and became the flag carrier of all four states. This set the scene for Gulf Air's golden era and by the end of the 1970s, the airline was regarded as the Middle East's premier carrier (Gulf Air, 2006). Problems set in as a result of the Middle East recession in the mid-1980s, exacerbating tensions among its shareholders concerning the airline's priorities. The turning point came in 1985 when Dubai set up Emirates, in response to passengers' frustration with the limited direct services to Dubai. Emirates has entered the record books as being one of the most successful airlines ever launched. The creation of Qatar Airways and Oman Air

were further blows to Gulf Air. The lowest point occurred in August 2000, when an A320 Airbus crashed into the sea as it was approaching the Bahrain airport, killing all its passengers. On 29 May 2002, the board announced that Qatar would withdraw as a shareholder. The three remaining partners agreed to pump \$27 million each into the airline. Project Falcon, the name of the turnaround strategy proposed by Hogan, CEO of Gulf Air, was accepted. Action was well under way by the time Gulf Air shareholders eventually approved the three-year recovery plan and a total cash injection of \$345 million on 18 December 2002, but by that time the airline was losing over \$100 million a year (O'Sullivan, 2004:31). The company managed to cut down its losses, reduce its costs by 80% and its debt by over 40% and has increased its aircraft fleet (Ferguson, 2004:pna). The Abu Dhabi government withdrew in 2005 as a shareholder, and Gulf Air is now owned equally by the governments of Bahrain and Oman (MEED, 2006b:20).

Gulf Air's vision states that it is "aiming to build a regional network, become a regional operator that is well connected to the international network" (Thompson, 2005:47).

Gulf Air relaunched its services into Johannesburg in December 2005, after eight years of absence. The decision to return was based on the fact of rapidly growing contact between South Africa and the Gulf for the purposes of business and tourism (*Financial Times Ltd*, 2005:pna).

Gulf Air's network stretches from Europe to Asia and covers 44 cities in 30 countries. The fleet currently comprises 34 aircraft (*Financial Times Ltd*, 2005:pna). The expansion of this fleet is a vital part of the airline's restructuring strategy, which aims to double the fleet to 60 aircraft by 2009 (Dunning, 2003:25). In April 2003, the carrier's schedule included services to Frankfurt, formerly divided between Abu Dhabi and Bahrain, operating from Bahrain only. Similarly, all flights to Trivandrum, India, took off from Abu Dhabi while all services to Delhi originated in Muscat. This ensured route profitability – using the right capacity for the right market and using the strength of each airport to help the airline (Pinkham, 2003:39).

Gulf Air is planning to replace its Boeing 767 fleet as part of a wider strategic plan to renew its fleet and invest in aircraft refurbishment and product upgrades. The

withdrawal of the Abu Dhabi government in 2005 forced Gulf Air to respond by introducing a two-hub strategy that focuses its operations on Bahrain and Muscat, which resulted in static passenger numbers (Reed Business Information Ltd, 2006:pna). The said withdrawal altered the network, route, fleet and allocation of resources (MEED, 2006a:27). Gulf Air is to turn its attention to privatisation in order to raise capital after succeeding in returning itself to profit during 2004 and is considering adding freighters to its fleet (Reed Business Information Ltd, 2005:pna).

Currently, Gulf Air's load factor is 70% across the system (Pinkman, 2003:38). The airline reported a 72% seat capacity in 2005, when the industry average was about 73% (Thompson, 2005:47).

4.5.2 Assessment Of Service Quality And Positioning

Hogan, CEO of Gulf Air, believes that brand differentiation stems from customer service (Pinkman, 2003:39).

The main elements of the "Smart Business, Successful Business" plan include the recapitalisation of the airline, re-equipment of the fleet, product upgrades and refurbishment of present aircraft and investment in a range of areas across the operation. Hogan's vision states: "With the support of shareholders that are 100% committed to the success of our business, this airline will reinforce its position as a world class service brand with the strongest regional network in the Middle East." A key part of the plan is the development of a two-hub strategy, now that Abu Dhabi has largely been taken over by Etihad Airways.

Project Falcon, the three-year strategic recovery plan in its first year (2003) delivered Gulf Air's strongest performance in four years, with revenues up 12.1% and losses cut 51.1% to \$52.8 million. Passenger numbers rose 10.4%. Contributing to the results were network and service enhancements, competitive pricing in all markets and the successful launch of Gulf Traveler, the company's all-economy subsidiary (Penton Media, 2004:50).

Superior product through technology: Gulf Air has launched the region's first electronic check-in kiosks plus worldwide traveller notification regarding flights via a

short message service. The first centralized reservation system was established in June 2003 with a call centre in Oman.

Combinations of **customization** and **augmentation of product offering** are represented in Gulf's repositioning of service: Hogan in 2004 decided to reposition the service proposition: improving meal service across all three classes, Gulf Air has introduced a "five-star chef-on-board" concept for first-class travel between Europe and both Abu Dhabi and Bahrain. His idea of improving service included retooling service in all classes, upgrading and making it uniform across the fleet, with the focus on Arabian hospitality. As per Hogan: "I don't like the word passenger. They are our guests and I want us to be helping them, not processing them. That is the style I want to bring to Gulf Air." Hogan launched two programmes for the home markets of Abu Dhabi, Bahrain and Muscat, the capital of Oman. Hogan ensured that the quality of Gulf Air's three-class service to the core of Europe and Middle Eastern destinations has been strengthened and is constantly monitored. For local business passengers, Gulf Air introduced regional jets into its fleet to provide the necessary frequencies (Pinkham, 2003:38).

In the winter of 2003, Gulf Air became the first carrier in the Middle East to introduce in flight chefs to serve first-class passengers. New menus were introduced in first, business and economy class. The Gulf Air Holiday Arabian Experience leisure programme was launched in the same year. Thirty-nine different nationalities are represented among the airline's 402 pilots and there are 53 nationalities among the cabin crew (Dunning, 2003:27). This move is an example of the **people advantage position** made use of by Gulf Air. Innovative products and services of Gulf Air include unique Sky Chefs and Sky Nannies that form part of Gulf Air's boutique airline vision. Gulf Air launched a Sky Nanny programme on its routes from London to Bahrain and Abu Dhabi and between Sydney and Bahrain. The all-female group was trained in a nanny school in England, which supplies nannies to royals (NorthStar Travel Media, 2004:6).

Performance is reflected in the numerous awards received by the airline: the Centre for Asia Pacific Aviation (CAPA) presented the airline with the prestigious Airline Turnaround of the Year Award for 2003. Gulf Air was also the recipient of the 2003 Platinum Award for the Best Airline in the Middle East and North Africa, which

recognized the airline's commitment to service excellence. Other awards include: Winner – Middle East and North African Platinum Best Airline Travel Award 2004, Winner – Skytrax Most Improved Airline Award 2004, Winner – Skytrax Best First Class Onboard Food Category 2004, Winner – Skytrax Best Business Class Check-in Category in 2004 and 2005 (*Financial Times Ltd*, 2005:pna).

Success factors: Hogan sees connectivity as a key revenue driver. Improving connectivity improves the seat factor, although this will be more difficult with only two hubs (Thompson, 2005:47). In the past two years, Gulf Air has developed a strong management team; this has led to a large improvement in the quotient, which is a product of seat factor and yield. Currently, Gulf Air benchmarks itself against Emirates.

The carrier faces competition from Emirates and to some degree from Oman Air and also from rapidly expanding Qatar Airways. Gulf Air is registered legally in Oman and is the national carrier of the sultanate, although Oman has its own small airlines (Dunning, 2003:26). Gulf Air's competitors possess a strong network. The airline consequently upgraded the frequent flyer programme to make it more competitive. According to Hogan, the focus on premium service will be an on-going process for the airline (O'Sullivan, 2004:32).

Alliances: Gulf Air and Middle East Airlines have concluded a codeshare agreement, which was signed on 25 April 2005. The agreement makes provision for codeshare flights between Abu Dhabi, United Arab Emirates and Beirut, Lebanon, to be operated by Middle East Airlines. Gulf Air and Thai Airways have signed a code-sharing agreement, which means that travelers in the Middle East and Thailand will enjoy an increased choice of destinations in Thailand, China, Oman and Bahrain (Ingram Investment Ltd, 2006:pna). New commercial agreements were signed with KLM, Garuda, Royal Jordanian and Egypt Air. Attention was also paid to strengthening existing bilateral alliances to complement and add value to Gulf Air's own network. In 2004 alliances with bmi, American Airlines, Saudi Airlines and Oman Air were enhanced and extended (Gulf Air, 2006).

Gulf Air is working closely with Arab airlines to improve connectivity in terms of regional networking and is continually developing strong code-sharing relationships.

For example, Gulf Air shares codes in South Africa with Nationwide to allow passengers to connect to destinations in South Africa, while in Dublin Gulf Air links with Continental Airlines to provide connections to the US (Thompson, 2005:47).

Gulf Air and Egyptair have agreed on a strategic alliance that will see the carriers operating joint services to leading tourist destinations in Egypt and codesharing on services between Bahrain, Abu Dhabi, Oman, Cairo and Alexandria. This codesharing will include joint marketing and sales, flight scheduling, cargo, airport leasing and frequent flyer programmes (Reed Business Information Ltd, 2004:11).

4.6 QATAR AIRWAYS

4.6.1 Background

Qatar Airways, launched on 20 January 1994, is the national carrier of the State of Qatar in the Arabian Gulf (Qatar Airways, 2006). The airline is equally owned by the Government of Qatar (50%) and private stakeholders (50%).

Qatar does not have such an extensive network as Emirates but carried 2.6 million passengers in 2003. Its strong fleet includes a freighter and a corporate jetliner, but its order book includes six A320s, 14 A330-220s (with the option of a further six) and two A380s, with another two on option (Dunning, 2003:24). Qatar Airways became the first airline customer of the Airbus Corporate Jetliner, ordering two (Penton Media, 2000:124). The airline operates a fleet of 42 all-Airbus aircraft, which will increase to 110 aircraft by 2015. Qatar Airways has recently signed a letter of intent to acquire up to 60 of the new generation Airbus A350s. The airline also plans to acquire 20 Boeing 777s with the total value for both orders set to be \$15.2 billion (Centaur Publishing, 2005:19). The airline possesses a modern fleet of 40 Airbus aircraft. It plans to double in size over the next few years and is one of the launch customers of the recently unveiled twin-deck A380 super-jumbos with four orders scheduled for delivery beginning in 2009. The current fleet of Qatar Airways consists of 42 aircraft while 20 aircraft are currently on order (Qatar Airways, 2006).

Qatar Airways currently operates scheduled flights from Doha to 70 destinations worldwide. In comparison, at the end of 2003 Qatar Airways was flying to 49

destinations across Europe, the Middle East, North Africa, the Indian subcontinent and the Far East. The airline flies to 66 business and leisure destinations in Europe, Middle East, Africa, Indian subcontinent and the Far East. The airline operates four flights a week between Doha and Johannesburg and Cape Town (Qatar Airways, 2006). Qatar Airways launched services in Osaka, Athens, Tunis and Algiers and was serving 70 destinations worldwide at the end of 2006. The airline has temporary permission to fly daily but hopes to retain the daily service.

An advantage to be enjoyed by Qatar Airways will be the opening of the new Doha International Airport in 2009, which will be used as the hub airport. The airline will manage and operate the airport, of which 40% will be built on land reclaimed from the Arabian Gulf (D'Angelo, 2005b:pna).

4.6.2 Assessment Of Service Quality And Positioning

Qatar Airways, one of the fastest growing airlines in the world, has taken South Africa by storm, unveiling the world's largest moving billboard to officially announce the arrival of the airline in the country in 2005. Five helicopters were used in Johannesburg, Durban and Cape Town to fly the starry lights to highlight Qatar Airways' award-winning Five Star Service (Al Shawa, 2005:pna).

The **people advantage position** is represented by a multinational crew: Qatar Airways cabin crew were voted by Skytrax as the best in the Middle East for the second year running in 2004 and fifth best overall worldwide (Al Shawa, 2005:pna). **Customization** is reflected in the services offered to satisfy meal, medical and dietary requirements, and to assist specific types of passengers, such as children, young passengers, and mothers travelling with children. **Augmentation of product offering** by means of **extra services** is seen in: the frequent flier programme started in May 2000, chauffeur-driven service, priority check-in, business lounges with the latest technology, extra leg space in business and first class with a massage option. The airline was the first Middle Eastern carrier to introduce first class seat-cum-flat beds and features a new state-of-the art audio- and video-on-demand system for passengers travelling in first, business and economy class in its long-haul Airbus A330 fleet.

Alliances: An agreement has been signed between Qatar Airlines and Saudi Airlines, which will encourage commercial cooperation between these two countries, including an increase in the number of flights between the King Fahd International Airport and Doha International Airport (Info-Prod Ltd, 2006:pna). Qatar Airways' codeshare partners are: Lufthansa, Malaysian, Alitalia, Garuda Indonesia, Thai Airways, All Nippon Airways, Philippine Airlines, Middle East Airlines, Yemen, bmi (British Midland), Air China, SNCF French Railways and Saudi Arabian Airlines (Qatar Airways, 2006).

4.7 BRIEF SUMMARY OF POSITIONING STRATEGY OF EACH AIRLINE

Based on information communicated by the selected airlines in the media and through their websites, the airlines seem to be implementing the following positioning strategies.

Reliability/safety positioning and augmentation of the product offering are the two main positioning strategies followed by Etihad. This is seen in all the services provided by the airline to ensure that the passenger feels safe and reassured. Their website is excellent at mentioning all safety and assurance features. Etihad focuses on the provision of extra services, such as religious and medical needs, to all its passengers irrespective of the class selected.

The main focus of Emirates in terms of its positioning is on innovativeness, performance and customization. Emirates offers its customers an online booking facility, the 24-hour self check-in facility available to business and first class as well as the ICE system offered to all its passengers. The numerous awards received by the airline and its award winning "Keep discovering campaign" reflect the performance positioning of Emirates. The airline believes, as reflected in the vision statement, that its size will enable Emirates to offer more a personal and high-quality product. This is a very good example of positioning in terms of customization.

Gulf Air follows three main positioning strategies: superior product through technology, customization and performance. The airline launched the region's first electronic check-in kiosks and worldwide traveler notification via short message service. Customization is evident in the airline's service proposition: improvement of

meal service across three classes, while performance is seen in the numerous awards received by Gulf Air.

Qatar Airways' main focus is on its "people" advantage and augmentation of product offering. The airline's cabin crew were voted by Skytrax as the best in the Middle East for two consecutive years. Qatar Airways was the first Middle Eastern carrier to introduce a first class seat-cum-flat bed, reflecting its augmentation of product offering.

4.8 CONCLUSION

The first part of this chapter provided an overview of the background of the airline industry globally and subsequently considered its developments and trends in South Africa. The most important matters addressed are the deregulation of the international airline industry and its effects on the South African air travel market as well as on the restructuring of air links in South Africa.

The changes in the South African air travel industry have facilitated the entrance of new international and local air carriers. For the purposes of this study, specific reference was made to the four Middle Eastern airlines flying to and from South Africa, who successfully entered and penetrated the South African air travel market. Particular attention was given to the service attributes and positioning aspects used by these airlines to differentiate themselves in the market place. Brooksbank (1994:10) stated that for companies to be successful over the long term, their products and services must be well positioned in the market place. Successful service quality strategies are generally characterized by customer segmentation, customized services, guarantees, customer feedback and continuous measurement of company performance (Sultan & Simpson, 2000:189).

The second part of this chapter illustrated the finding that Middle Eastern airlines differentiated themselves in the South African environment by focusing on the aspects of service quality that are important to their consumers. It is important for airlines to recognize what their target customers want in order to maximize customer satisfaction.

The research problem of this study that flows from the above discussion is to determine how selected airlines in South Africa are perceived by customers to differ in terms of their positioning based on various attributes of service quality. In line with the research problem, the following hypotheses will be tested:

H1: The relative positioning of the selected airlines will differ based on consumer perceptions and expectations of service quality attributes.

H2: If passengers' needs for travelling are different, then there will be a significant difference in their perceptions and expectations of service quality.

H3: Passengers' perceptions and expectations of selected airlines will differ based on their demographic characteristics.

The next chapter discusses the methodology that was used to explore the research objectives of the study.

CHAPTER 5

5 RESEARCH METHODOLOGY

5.1 INTRODUCTION

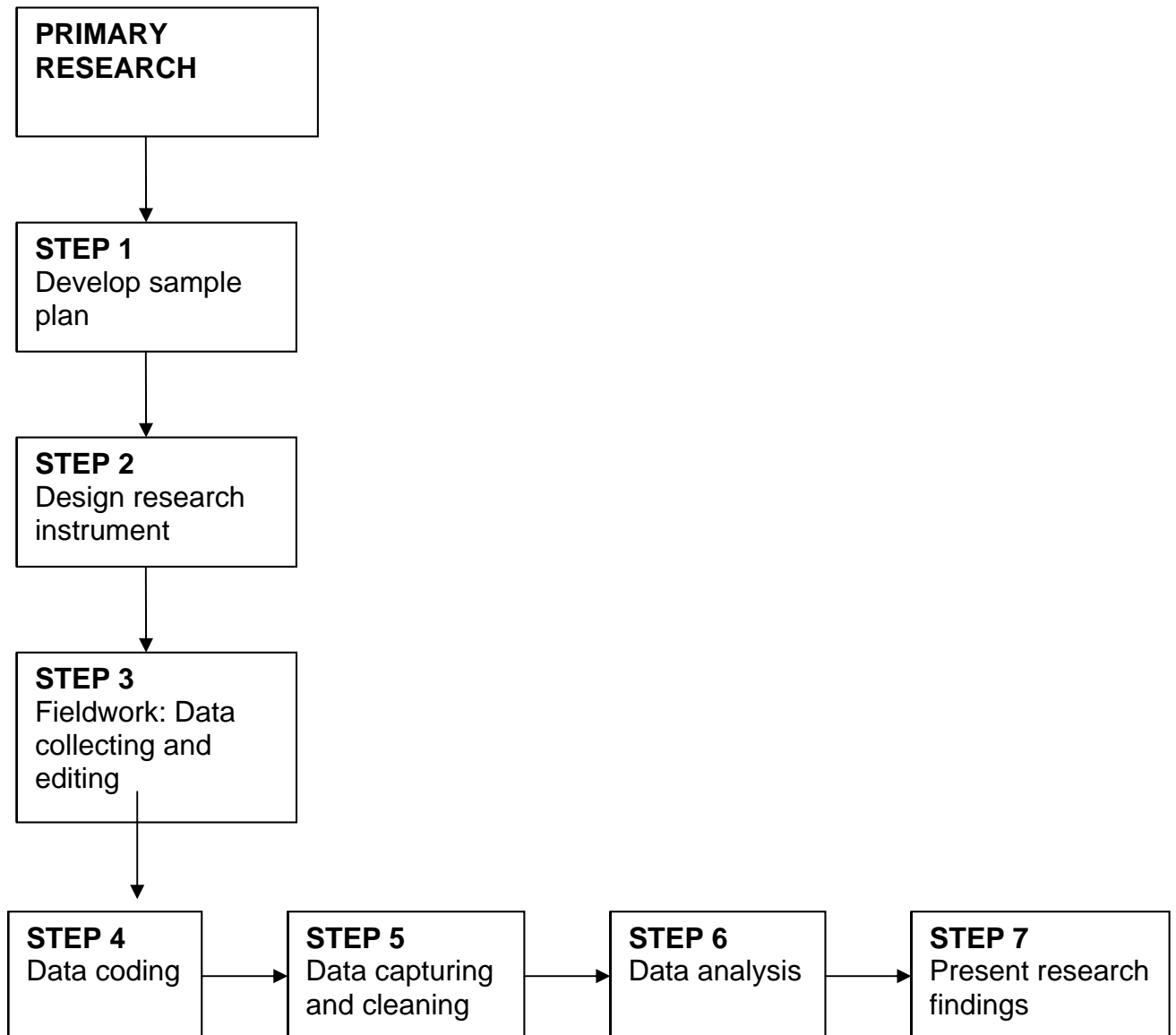
The earlier chapters provide some of the key theoretical background associated with the issues of positioning, service quality and the airline industry as well as showing how these three concepts are interlinked and interrelated. The focus of this chapter falls on the research methodology used in this study.

The study focuses on customer perceptions and expectations of airline performance. Determining these perceptions and expectations enables airlines to differentiate their positioning in the light of the attributes of service quality. The following research objectives have been identified for the current study:

- To identify, from established theory, attributes of service quality in the airline environment
- To establish the importance of service quality attributes for positioning
- To determine the levels of importance of various service attributes
- To measure customers' perceptions and expectations of the service attributes of selected airlines
- To assess the selected airlines' positioning in terms of their performance with respect to the identified attributes of service quality

The assessment of identified objectives should add value to and contribute to the body of knowledge concerning the airline industry in South Africa.

Figure 5.1: Primary research in a research process



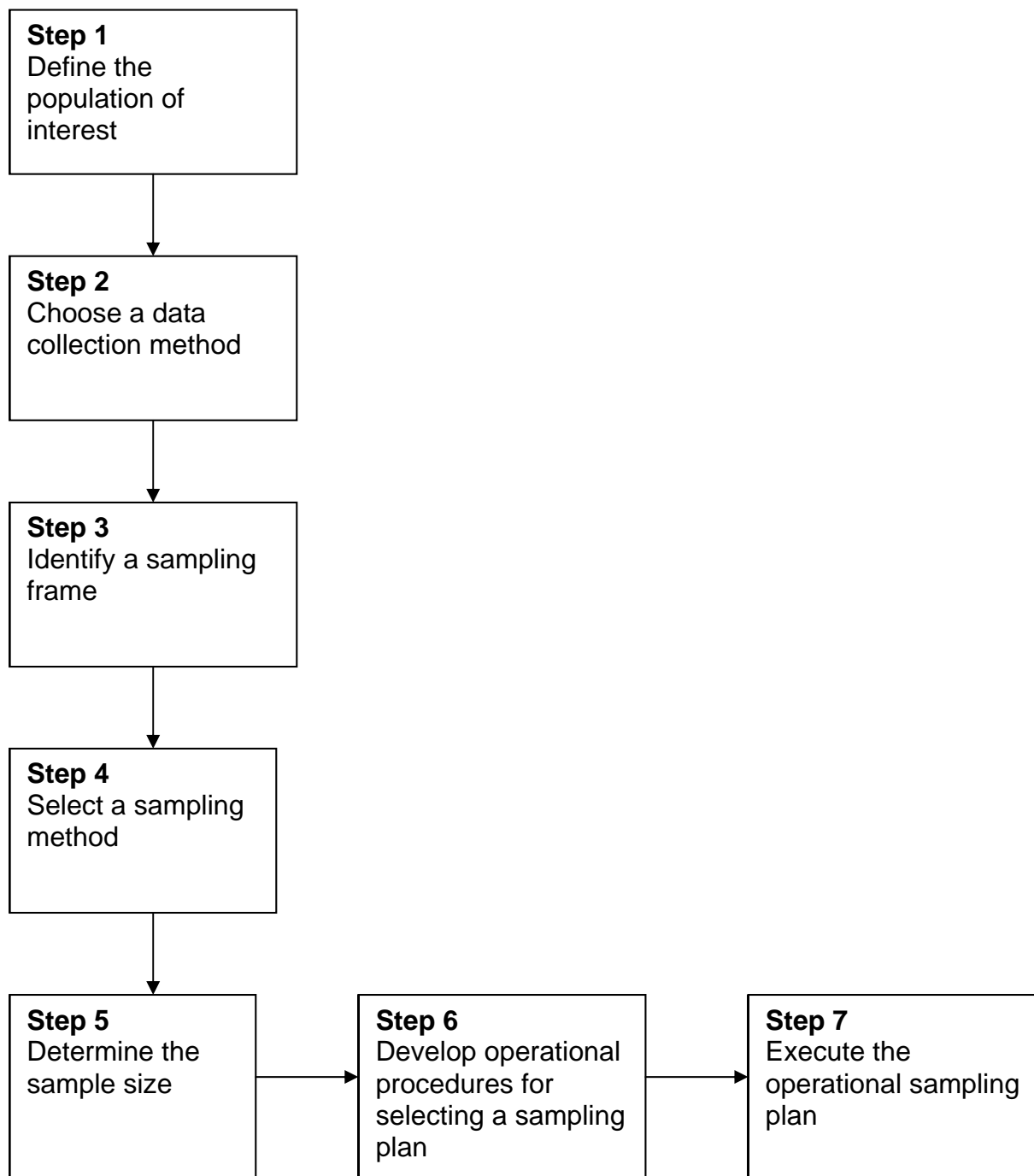
Source: adapted from Tustin, Ligthelm, Martins & Van Wyk, 2005

As indicated in Figure 5.1, certain steps need to be followed in any research project. The first six steps of this process are discussed in this chapter since these are applied in this study while the seventh step is discussed in Chapter 6. The first step in primary research is to develop a sample plan.

5.2 DEVELOPING A SAMPLE PLAN

The plan for drawing the sample used in the present study is discussed below. It follows the approach suggested by McDaniel and Gates (2004:272) and is illustrated in Figure 5.2.

Figure 5.2: Design of plan for drawing the sample



Source: McDaniel & Gates, (2004:272)

Each of these steps is now discussed in more detail.

5.2.1 Step 1: Define The Population Of Interest

A **population** is the total collection of elements about which one wishes to make inferences (Cooper & Schindler, 2003:179). McDaniel and Gates (2004:270) define

the survey population as the total group of individuals from whom the information is required. The survey population for the present study can be defined as business and leisure passengers who have used the service of one or more of the four Middle Eastern airlines.

5.2.2 Step 2: Choose A Data Collection Method

The gathering of data may range from a simple observation at one location to a grandiose survey of multinational corporations at sites in different parts of the world. The method selected will largely determine how the data are collected. Questionnaires, standardized tests, observational forms, laboratory notes and instrument calibration logs are among the devices used to record raw data (Cooper & Schindler, 2003:87).

The choice of a survey method always implies a trade-off between potential advantages and disadvantages, as well as time and costs. The survey method used in this study is a self-administered questionnaire, with the field-worker on hand. The choice of the survey method took into account its advantages and disadvantages as well as its ability to collect high-quality data within an acceptable time frame and budget. The advantages of a self-administered questionnaire are as follows (Cooper & Schindler, 2003:324):

- It allows contact with otherwise inaccessible respondents.
- It involves low cost, without jeopardizing the quality of the methodology.
- The interviewer does not influence the respondents and the interviewer is only available to clarify certain concepts.
- Self-administered questionnaire can accommodate longer questions than, for example, a telephone interview.
- The response rate is normally high; in this study respondents are personally approached by the researcher.
- This survey method requires a limited number of field-workers in this particular case.

- Self-administered questionnaires are perceived to be more anonymous than alternative survey methods; this method does not require respondents' full credentials to successfully complete the study.
- It provides fast data collection: the questionnaires can be collected on the same day from respondents.

However, such a questionnaire also exhibits disadvantages (Cooper & Schindler, 2003:324):

- Low response rate in some instances, which could result from a number of reasons: respondents are not interested in the study, they do not have the time or they do not possess the necessary information to complete the questionnaire. A higher response rate requires that the fieldworker tries to motivate respondents to answer the questionnaire.
- A self-administered questionnaire cannot be long and complex otherwise the respondents will lose interest and willingness to complete it. In the questionnaire for this study only the information necessary to achieve the objectives of the study was included.
- There may be anxiety among some respondents with regards to the correctness of their answers as well as the anonymity of information provided by them. Respondents therefore need to be assured that the questionnaire is anonymous and that there are no incorrect answers.
- A self-administered questionnaire needs to be conducted in an environment with few distractions.
- Response errors and missing responses may constitute problems with this survey method if the respondents are not focused.
- This survey method is characterized by three survey errors: a social desirability bias, response error and missing responses, or a non-response bias among some respondents.

The initial questionnaire was pre-tested with a sample of 10 passengers covering each of the four Middle Eastern airlines.

5.2.3 Step 3: Identify A Sampling Frame

The **sampling frame** is closely related to the population. It is the list of elements from which the sample is actually drawn. Ideally, it is a complete and correct list of population members only (Cooper & Schindler, 2003:188). Unfortunately, no such list of population units/elements was available for selecting the sample units/elements of the present study. Databases of all business and leisure travellers using Etihad, Emirates, Qatar and Gulf Air as one of their preferred airlines were not available. Thus the decision was made to elicit responses from departing passengers at the airport as well as from passengers who had booked through Sure Viva Travel and Bophelo Tours and Safaris and from guests using Middle Eastern airlines who were staying at the High Performance Centre (hpc).

5.2.4 Step 4: Select A Sampling Method

The sampling method or approach selected depends on the objectives of the study, the financial resources available, time limits and the nature of the research problem being investigated (McDaniel & Gates, 2004:276). The major sampling methods in research are grouped into two broad categories of probability and non-probability sampling. The **probability sampling** is based on the concept of random selection - a controlled procedure that assures that each population element is given a known non-zero chance of selection. In contrast, **non-probability sampling** is nonrandom and subjective; each member does not have a known nonzero chance of being included (Cooper & Schindler, 2003:183). Each type offers several alternatives or a wide range of alternatives to suit all sampling designs as shown in Table 5.1

Table 5.1: Types of probability and non-probability sampling methods

Probability sampling methods	Non-probability sampling methods
Simple random sampling	Convenience sampling
Systematic random sampling	Judgment sampling
Cluster random sampling	Quota sampling
Stratified random sampling	Snowball sampling
Double random sampling	

Source: Cooper & Schindler (2003:184)

Non-probability sampling method, namely convenience sampling, was used for collecting data from business and leisure passengers. Non-probability sampling

methods should satisfactorily meet the sampling objectives and they are cost-effective and time-friendly (Cooper & Schindler, 2003:200). Such methods also yield good estimates of the population's characteristics (Malhotra, 2004:322). A non-probability sample that conforms to certain criteria is called purposive sampling. Two major types may be distinguished – judgment sampling and quota sampling. A non-probability sample that is unrestricted is called convenience sampling.

Convenience sampling is a non-probability method, where researchers or fieldworkers possess the freedom to choose whomever they find, the most “convenient” respondent (Cooper & Schindler, 2003:200). The respondents were selected based on the representation of the market share of the selected airlines. According to a very reliable source from the airline industry, which cannot be disclosed, the market share of the four airlines in 2006 was as follows: Emirates – 55%, Qatar Airways – 20%, Gulf Air – 13% and Etihad Airways with 12% of the market share. The objective was to select the respondents in this approximate ratio to ensure that each airline is represented according to its share in the market.

The researcher used convenience sampling when electronic versions of the questionnaire were e-mailed to the customer list provided by Sure Viva Travel and Bophelo Tours and Safaris. Respondents were selected on the basis of their availability: using the customer list. The respondents could choose to complete the questionnaire or not.

The next step is to determine the sample size.

5.2.5 Step 5: Determine The Sample Size

A sample size can never really reflect the population completely, but it is up to the researcher to determine the size of the sample that will fit in with the requirements of the study.

Self-completion questionnaires were handed to business and leisure passengers at the Etihad check-in counter at O.R. Tambo International Airport and to guests at the hpc (University of Pretoria). Self-completion questionnaires were also distributed to Sure Viva Travel and Bophelo Tours and Safari's customers: questionnaires were e-

mailed to an existing customer list and a hard copy was given to walk-in customers of Sure Viva Travel. In total, 410 questionnaires were collected. The aim was to collect a large enough sample to ensure that sufficient data was available for business and leisure passengers from the four respective Middle Eastern airlines.

5.2.6 Step 6: Develop Operational Procedures For Selecting A Sampling Plan

This step outlines the actual procedures used for contacting each of the respondents. The type of sample used determines the instructions that respondents should follow (McDaniel & Gates, 2004:278). In this study, as already mentioned, convenience sampling was used, which offered the interviewer clear guidelines so she would know what to do and how to handle any problems when contacting respondents.

Since failing to develop a proper operational plan for selecting the sample elements could jeopardize the entire sampling process, the researcher took care in this respect.

5.2.7 Step 7: Execute The Operational Sampling Plan

The last step in the sampling process is to carry out the sampling plan as discussed in step 6 in Figure 5.2. It is important for this step to be controlled adequately to ensure that data collectors follow the correct procedures (McDaniel & Gates, 2004:279). After the plan for sampling has been developed according to the seven steps outlined in Figure 5.2, the research instrument or questionnaire should be designed, as discussed in Paragraph 5.3 below.

5.3 DESIGN THE RESEARCH INSTRUMENT

The next step in primary research is to design the research instrument (a self-completed questionnaire). In this study the instrument was designed to explore the objectives of the study and was based on research by Gilbert and Wong (2003:526-527) and Chang and Yeh (2002:175-176).

The questionnaire used in the interviews appears in Appendix A of the current study. Table 5.2 indicates the types of questions used in the questionnaire.

Table 5.2: Types of questions used in the research questionnaire

Type of question	Question number
Multiple Choice Multiple-Response Scale	Question 3, 4, 6, 9, 11, 12
Multiple Choice Single-Response Scale	Question 1, 2, 5, 7, 8, 10
Likert Scale Summated Rating	Question 13

Section 1 of the questionnaire contained questions relating to passengers' background. This was necessary to obtain a demographic profile of passengers, who had used any of the four Middle Eastern airlines, so as to enable testing of hypothesis **H3**.

Section 2 consisted of questions related to the traveller's profile. This gave an indication of the type of traveller, the purpose of travel, the airline of choice, his or her frequency of travel as well as of the reasons and influences in choosing a specific airline, in order to enable testing of hypothesis **H2**.

Section 3 of the questionnaire comprised questions relating to the importance of service attributes. This was mainly to gather information, which was vital to answer the research objectives and to assess the importance of service attributes to different types of passengers using one of the four airlines. Thirty-five service attributes were used in the questionnaire, based on previous research (Gursoy *et al.*, 2005; Tsaur *et al.*, 2002; Chang & Yeh, 2002 and Gordon, 1991). The information was necessary to enable testing of hypothesis **H1**.

The questionnaire was pre-tested on 10 passengers covering each of the four Middle Eastern airlines to identify and eliminate potential problems. No problems were reported and respondents understood the questionnaire well.

The following three steps in the primary research process are concerned with the data as discussed in the next three sections (see Figure 5.1).

5.4 FIELDWORK: DATA COLLECTION AND EDITING

After developing a research instrument, one of the first steps is to carry out the fieldwork. All fieldwork involves the selection, training and supervision of the people who collect the data (Malhotra, 2004:388). The researcher was the only person collecting data for this study.

Data for this study was collected over a period of two months, which included weekdays and weekends, in order to ensure that different types of passengers were included in the survey. Each interview took 5-10 minutes. The questionnaires were distributed as previously described. No incentives were provided to respondents for completing them.

5.5 DATA CODING

The next step is data coding, a technical procedure for converting raw data into symbols. Coding involves assigning numbers or other symbols to an answer so that the responses can be grouped into a limited number of classes or categories. The classifying of data into limited categories sacrifices some detail but it is necessary for efficient analysis (Cooper & Schindler, 2003:456).

A questionnaire is coded to make it possible for a computer to aggregate the responses (Clark, Riley, Wilkie & Wood, 2000:98). Codes can be assigned to various questions either before the respondent completes the questionnaire (pre-coding) or after the respondent has completed the questionnaire (post-coding).

In this study, the coding was undertaken using numerical codes to combine the pre-coding and post-coding. This allowed the data received to be entered quickly and with few errors.

5.6 DATA CAPTURING AND CLEANING

The next step is the capturing and cleaning of the data. Data entry converts information gathered by secondary or primary methods to a medium for viewing and manipulation (Cooper & Schindler, 2003:466). Data capturing in this study was done

by making use of numerical codes to connect the data with the respondents in the study.

The responses were coded according to the coding template and variable names were given; the responses were coded numerically such as 1 for Male and 2 for Female and time was spent on detecting and correcting errors.

The Department of Statistics of the University of Pretoria, South Africa, captured the data using the statistical computer package SAS. Questionnaires were adjusted for “over counter” and “e-mail” use. The answers of all respondents were transferred to the blocks on the right hand side of the questionnaire. Data gathered from respondents was checked for errors using proc print and proc frequency methods. Errors identified by means of these methods were corrected. Certain questions were regrouped based on a common pattern found in frequency table documents. Questions two, three, four, five, six and seven were regrouped into categories. Question two (the age of respondents) contained 54 age subgroups, which were transformed into three age categories: below 30 years, between 30 and 45 years and over 45 years. Question three (the nationality of respondents) contained 55 subgroups of nationality, which were transformed into three categories: Middle East, South Africa and other. Question four (home language) contained 44 subgroups, which were transformed into five categories: Arabic, Afrikaans, English, African and other. Question five (income group) led to four subgroups, which were transformed into three: below R 250 000, between R250 000 and R 500 000 and over R500 000. Question six (the frequency of flights for each of the four respective carriers) contained 27 subgroups for Qatar Airways for 2005 and 2006, which were regrouped into three categories: once, twice, more than two times; 25 subgroups for Emirates, which were regrouped into three categories: once, twice, more than two times; 21 for Gulf Air for 2005 and 2006, which were regrouped into three categories: once, twice and more than two times; and 21 subgroups for Etihad, which were regrouped into three categories: once, twice and more than two times. Question seven (the purpose of travel) contained eight subgroups, which were regrouped into three categories: business, tourism and other.

Once the data had been captured, the output file was converted to Excel Spreadsheets, which are a specialized type of database and a convenient and

flexible means for entering and viewing data. Entering data on spreadsheets uses numbered rows and alphabetic columns (Cooper & Schindler, 2003:471). Excel Spreadsheets were also used to present data graphically using pie charts and histograms. The data analysis is discussed in the next section.

5.7 DATA ANALYSIS

The sixth step shown in Figure 5.1 is the analysis of data. The process used in this study consisted of three techniques, namely factor analysis, analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA). The ANOVA technique was used to graphically plot the effect of variables on factors while MANOVA was employed to assess whether the interrelation between these variables has a statistical effect. The analysis of the data was performed by the Department of Statistics at the University of Pretoria. Dr. Mike van der Linde advised on the various techniques in response to the guidelines provided by the researcher, taking into account the nature of the data collected and certain limitations. Due to the complex nature of the techniques used in the study, they are described comprehensively, following guidelines from two main literature sources: Cooper and Schindler (2003) as well as Hair, Anderson, Tatham and Black (1995).

5.7.1 Factor Analysis

Factor analysis is a general term used for several specific computational techniques. These techniques are all intended to reduce to a manageable number many variables that belong together and possess overlapping measurement characteristics (Cooper & Schindler, 2003:635). Factor analysis addresses the problem of analyzing the structure of the interrelationships (correlations) among a large number of variables by defining a set of common underlying dimensions, known as **factors**. Deploying factor analysis, the analyst can first identify the separate dimensions of the structure and then determine the extent to which each variable is explained by each dimension.

The two primary uses of factor analysis are summarization and data reduction. In summarizing the data, factor analysis derives underlying dimensions that, when interpreted and understood, describe the data in terms of a much smaller number of

items than the original individual variables (Hair, Anderson, Tatham & Black, 1995:367).

A basic assumption of factor analysis is that some kind of underlying structure does exist in the set of selected variables. It is the responsibility of the factor analyst to ensure that the observed patterns are conceptually valid and appropriate to a study making use of factor analysis, because the technique possesses no means to determine appropriateness other than the correlations among variables (Hair *et al.*, 1995:375). Previous studies into the quality of service provided by airlines have all shown that an underlying structure does exist (Gursoy *et al.*, 2005; Tsaur *et al.*, 2002; Chang & Yeh, 2002; Gordon, 1991).

The origin of factor analysis is generally ascribed to Charles Spearman. His work in developing a psychological theory involving a single general factor and a number of specific factors goes back to 1904 when his paper “General Intelligence, Objectively Determined and Measured” was published in the *American Journal of Psychology*. Spearman devoted forty years of his life to the development of factor analysis and is regarded as the father of the subject (Harry, 1976:3).

Factor analysis is an interdependence technique, in which all variables are simultaneously considered, each related to all the others. Factor analytic techniques can achieve their purposes in terms of either an exploratory or confirmatory perspective. Debate continues concerning the role, which is appropriate for factor analysis. Many researchers consider it only exploratory, useful in searching for structure among a set of variables or as a data reduction method. In terms of this perspective, factor analytic techniques “take what the data give you” and do not set any constraints on the estimation of the components or the number of components to be extracted. In other situations, the analyst arrives at preconceived thoughts on the actual structure of the data, based on theoretical support or prior research. The analyst may wish to test hypotheses involving such issues as which variables should be grouped together on a factor, or the precise number of factors. In these instances, the analyst requires that factor analysis take a confirmatory approach – to assess the degree to which the data meet the structure expected by the analyst (Hair *et al.*, 1995:367).

5.7.2 Types Of Factor Analysis

Factor analysis begins with the construction of a new set of variables based on the relationships in the correlation matrix. The most frequently used approaches are the **principal factor** analysis and the **common factor** analysis. The selection of one model instead of the other is based on two criteria: the purpose of the researcher conducting the factor analysis and the amount of prior knowledge concerning the variance in the variables (Hair *et al.*, 1995:376).

Principal factor analysis is applied when the objective is to summarize most of the original information (variance) in a minimum number of factors for the purposes of prediction. In contrast, common factor analysis is used primarily to identify underlying factors or dimensions reflecting what the variables share in common (Hair *et al.*, 1995:375).

The principal factor model is appropriate when the analyst is primarily concerned about prediction or the minimum number of factors needed to account for the maximum portion of variance represented in the original set of variables, and when the factor analyst possesses prior knowledge suggesting that specific and error variance represent a relatively small proportion of the total variance. Specific variance is that variance associated with a specific variable only, while error variance is that due to unreliability in the data-gathering process, measurement error or a random component in the measured phenomenon. In contrast, when the primary objective is to identify the latent dimensions or constructs represented in the original variables and the researcher knows little about the amount of unique error variance and therefore wishes to eliminate this variance, the common factor method is the appropriate model (Hair *et al.*, 1995:375-376).

Common factor analysis leads to several difficulties. First, such analysis suffers from factor indeterminacy, which means that several different factor scores can be calculated from the factor model results for any individual respondents. The second issue involves the calculation of the estimated communalities used to represent the shared variance. Communalities are estimates of the shared or common factor analysis based on common variance, which is the variance in a variable that is shared with all other variables in the analysis. These complications of common factor

analysis have contributed to the widespread use of principal factor analysis (Hair *et al.*, 1995:377).

The present researcher consequently made use of principal factor analysis with the objective of grouping 35 variables, which represent passengers' perceptions and expectations of service quality, into a minimum number of factors for prediction purposes.

Principal factor analysis was fully developed by Harold Hotelling in 1933 (Harry, 1976:14). This method transforms a set of variables into a new set of composite variables or principal components that are not correlated with each other. These linear combinations of variables, called factors, account for the variance in the data as a whole. The best combination makes up the first principal component and constitutes the first factor. The second principal component is defined as the best linear combination of variables not accounted for by the previous factors. This process continues until all the variance is accounted for, but as a practical matter it is usually stopped after a small number of factors has been extracted (Cooper & Schindler, 2003:635).

5.7.3 Basic Steps In Factor Analysis

The basic steps followed in any application of factor analysis are shown in Figure 5.3. Each of the steps shown in Figure 5.3 (as applied in the study) is discussed next:

Step 1: Determine objectives of factor analysis

The starting point in factor analysis is the research problem. Factor analysis techniques can meet any of the following three objectives:

- Identify the structural relationships among either variables or respondents. Factor analysis can examine either the correlations between the variables or the correlations between the respondents. Three types of factor analysis examine these correlations: R factor analysis, Q factor analysis and cluster analysis. The objective of Question 11 of the questionnaire was to summarize the characteristics

of 35 variables and therefore factor analysis was applied to a correlation matrix of variables. This most common type of factor analysis is known as **R factor analysis**, which analyzes a set of variables to identify the dimensions of variables that are latent (not easily observed). **Q factor analysis** is a method of combining large numbers of people into distinctly different groups within a larger population (Hair *et al.*, 1995:371). **Cluster analysis** is used to classify objects into relatively homogeneous groups based on the set of variables considered (Hair *et al.*, 1995:594).

- Identify representative variables from a much larger set of variables for use in subsequent multivariate analysis.
- Create an entirely new set of variables, much smaller in number, to partially or completely replace the original set of variables for inclusion in subsequent techniques, ranging from the dependence methods of regression, correlation or discriminant analysis to cluster analysis, another interdependence technique.

Step 2: Research design of factor analysis

The design of a factor analysis involves three basic decisions: (1) calculation of the input data (a correlation matrix) to meet the specified objectives of grouping variables or respondents, (2) the design of the study in terms of number of variables, measurement properties of variables and the types of allowable variables, and (3) the sample size necessary (Hair *et al.*, 1995:372).

Correlation among variables or respondents

The first decision in the design of a factor analysis focuses on the approach used in calculating the correlation matrix to be employed in either R-type or Q-type factor analysis. This study made use of R-type factor analysis, which demonstrated the relationships between the variables. The correlation matrix was also derived from the correlation between individual respondents.

Variable selection and measurement issues

The analyst also needs to answer two specific questions at this point: How are variables measured? How many variables should be included? Variables for factor analysis are generally assumed to be in metric measurements. The researcher should also attempt to minimize the number of variables included but still maintain a reasonable number of variables per factor (Hair *et al.*, 1995:373).

The strength of factor analysis lies in finding patterns among groups of variables, and therefore it is of little use in identifying factors comprising only a single factor. This study has 35 variables that were used in the factor analysis. These variables, which are part of Question 13, represent the perceptions and expectations of passengers using any of the four respective Middle Eastern airlines of service quality.

Sample size

The researcher generally would not factor analyze a sample of fewer than 50 observations, and preferably the sample size should be 100 or larger. As a general rule, the minimum is to have at least five times as many observations as there are variables to be analyzed (Hair *et al.*, 1995:373). This study considered 410 respondents, which is a large enough sample to perform the factor analysis.

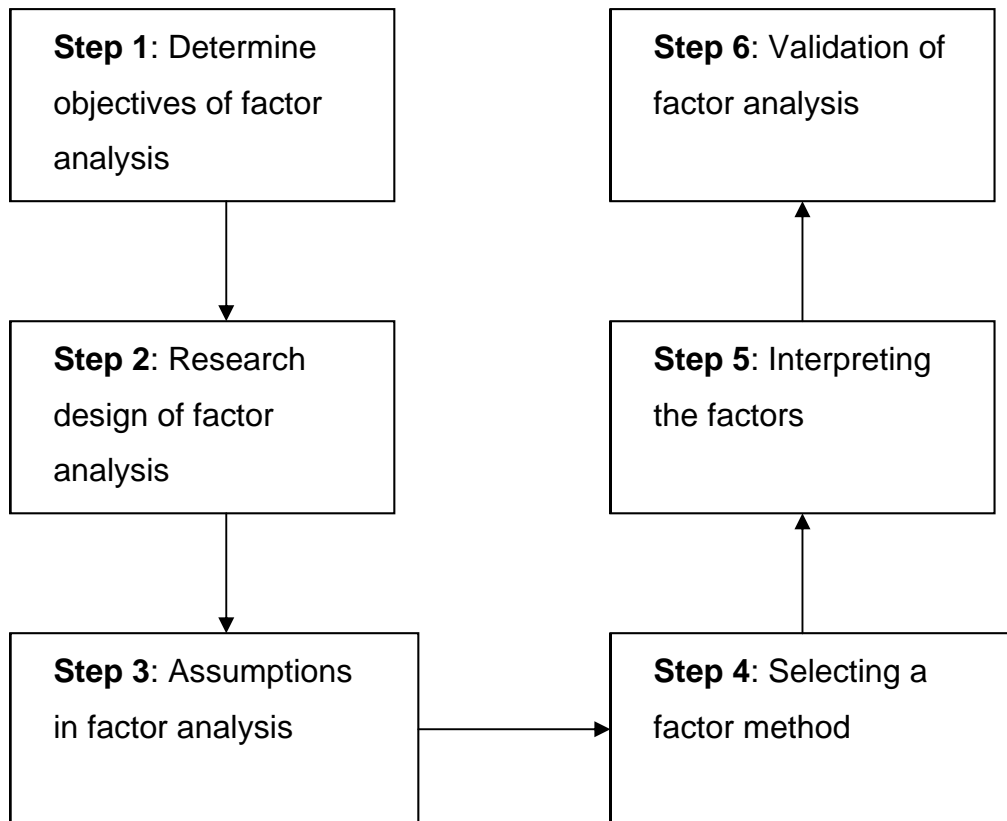
Step 3: Assumptions in factor analysis

The critical assumptions underlying factor analysis are more conceptual than statistical. The factor analyst must ensure that the data matrix contains sufficient correlations to justify the application of factor analysis. If visual inspection reveals no substantial number of correlation greater than 0.30, then factor analysis is probably inappropriate (Hair *et al.*, 1995:374). All 35 variables in Question 13 evidenced factor loadings greater than 0.30, which caused such an analysis to be valid.

A basic assumption of factor analysis is that a type of underlying structure does exist in the set of selected variables. Thus, whenever differing groups are expected in the sample, separate factor analyses should be performed and the results should be

compared in order to identify differences not reflected in the results of the combined sample (Hair *et al.*, 1995:375).

Figure 5.3: Steps in application of factor analysis



Source: Hair *et al.* (1995:369-370)

Step 4: Selecting a factor method

Once the variables are specified and the correlation matrix prepared, the researcher is ready to apply factor analysis in an attempt to identify the underlying structure of the relationships. Decisions must be made concerning the method of extracting the factors (common factor analysis versus principal components analysis) and the number of factors selected to represent the underlying structure of relationships. The selection of the extraction method depends upon the analyst's objective. This study applied principal factor analysis because the objective of the factor analysis was to summarize most of the original information (variance) in a minimum number of factors for predictive purposes (Hair *et al.*, 1995:375).

Once the type of extraction method has been selected, one needs to decide on the number of factors to be extracted. When a large set of variables is factored, the analysis first extracts the largest and the best combinations of variables and then proceeds to smaller, less understandable combinations. In deciding when to stop factoring (deciding how many factors to extract), the analyst begins with a predetermined criterion, such as heterogeneity of respondents, the latent root, *a priori*, percentage of variance or scree test criteria, to arrive at the specific number of factors to extract.

This study made use of latent root, *a priori* and scree test criteria to determine the number of factors to be extracted.

Latent root criterion

This is the most commonly used technique because it is simple to apply to either principal component or common factor analysis. Only the factors having latent root or eigenvalues greater than 1 are considered significant; all factors with eigenvalues less than 1 are considered insignificant and are disregarded. The rationale for eigenvalues is that any individual factor should account for the variance of at least a single variable if it is to be retained for interpretation. Using the eigenvalues for establishing a cutoff is probably most reliable when the number of variables is between 20 and 50 (35 variables were used in this study). In instances where the number of variables is less than 20, there is a tendency for this method to extract too few factors. When more than 50 variables are involved, it is not uncommon for too many factors to be extracted (Hair *et al.*, 1995:377). The output of eigenvalues for Question 13 of this study, which contains 35 variables, clearly indicated ten factors with eigenvalues greater than one. This output is presented in Table 6.2.

***A priori* criterion**

When applying this criterion, the analyst already knows how many factors to extract before undertaking the analysis, and simply instructs the computer to stop the analysis when the desired number of factors has been extracted. This approach is useful if the analyst is testing a theory or a hypothesis about the number of factors to be extracted. It can also be justified where the analyst is attempting to replicate

another researcher's work and extract the same number of factors that was previously found (Hair, *et al.*, 1995:377-378).

Although the eigenvalues and the scree test criterion in this study originally indicated ten factors, variables were grouped into three factors, based on previous literature and common sense. The analyst then forced three factors into the computer. Table 5.3 below indicates how 35 variables were grouped into three factors, based on factor loadings.

Table 5.3: Factors representing service attributes

Factor 1	Factor 2	Factor 3
<i>Consistency of the quality of services</i>	<i>Responsiveness and reliability of services</i>	<i>Added effort as a positioning component</i>
V 59	V 63	V 70
V 60	V 65	V 71
V 61	V 68	V 72
V 62	V 69	V 76
V 64	V 83	V 78
V 66	V 84	V 79
V 67	V 85	V 80
V 73	V 86	V 81
V 74	V 87	V 82
V 75	V 88	V 93
V 77	V 89	
	V 90	
	V 91	
	V 92	

“Consistency of the quality of services” (Factor one) indicates the ability of the airline and its employees to deliver quality services consistently. “Responsiveness and reliability of services” (Factor two) indicates the willingness and readiness of airline employees and the airline to attend to customers’ needs and wants. It is also the assurance that the airline and its employees will perform services correctly from the start, from booking to arrival. Factor three, “added effort as a positioning component”, consists of all the extra benefits and services that the airline and its employees offer to their customers to make their experience as pleasant and smooth as possible.

Percentage of variance criterion

This method represents an approach in which the cumulative percentage of the variance extracted by successive factors is the criterion. The purpose is to ensure practical significance for the derived factors. No absolute threshold has been adopted for all applications. In the natural sciences the factoring procedure usually should not be stopped until the factors extracted account for at least 95 percent of variance or until the last factor accounts for only a small portion, which is less than 5 percent. However, in the social sciences, it is not uncommon for the analyst to consider a solution that accounts for 60 percent of the total variance as a satisfactory solution (Hair *et al.*, 1995:378).

Scree test criterion

The scree test is used to identify the optimum number of factors that can be extracted before the amount of unique variance begins to dominate the common variance structure. The scree test is derived by plotting the eigenvalues against the number of factors in their order of extraction, and the shape of the resulting curve is used to evaluate the cutoff point. The point at which the curve first begins to straighten out is considered to indicate the maximum number of factors to extract (Hair *et al.*, 1995:378). The scree plot produced by factor analysis in this study indicated that 10 factors would qualify. It was decided to group variables into three factors and this information was forced into the SAS program. The scree plot of eigenvalues is represented in Figure 6.18.

Heterogeneity of respondents

Shared variance among variables forms the basis of both the common and the principal component factor models. An underlying assumption is that shared variance extends across the entire sample. If the sample is heterogeneous with regard to at least one set of variables, then the first factors will be those that are more homogeneous across the entire sample.

Factors for the study were selected taking the number of aspects into consideration. If too few factors are used, then the correct structure is not revealed and the

important dimensions may be omitted. If too many factors are retained, then the interpretation becomes harder when the results are rotated (Hair, *et al.*, 1995:379).

The Cronbach alpha coefficient was employed to measure the reliability of variables within factors. The coefficient determined for three groups of variables was the most acceptable indicating that it would be best to stay with three factors and their components. This coefficient for factor one equals 0.843, indicating a good match among variables within a factor; for factor two it equals 0.873, indicating a really good match among variables within a factor, while for factor three it equals 0.792, indicating quite an acceptable match.

Step 5: Interpreting the factors

Three steps are involved in the derivation of a final factor solution. First, the initial unrotated factor matrix is computed to assist in obtaining a preliminary indication of the number of factors to extract. In computing this matrix, the analyst is simply interested in the best linear combination of variables – the particular combination of variables, which would account for more of the variance in the data as a whole than any other linear combination of variables.

Unrotated factor solutions achieve the objective of data reduction, but the analyst must ask if such a solution will provide information that offers the most adequate interpretation of the variables under examination. The factor loading is the means of interpreting the role each variable plays in defining each factor (Hair *et al.*, 1995:380). Numerical results gathered from a factor study indicate the correlation coefficients between the factor and the variables. These correlation coefficients are called factor loadings, which measure the degree of generalizability found between each variable and each factor. They reflect quantitative relationships. The farther the factor loading is from zero, the more one can generalize from that factor to the variable. Comparing loadings of the same variable on several factors provides information concerning how easy it is to generalize to that variable from each factor (Gorsuch, 1983:3). Therefore, the second step employs a rotational method to achieve simpler and theoretically more meaningful factor solutions.

In the third step, the factor analyst assesses the need to specify the factor model, taking into consideration the following: deletion of variables from the analysis, the desire to employ a different rotation method for interpretation, the need to extract a different number of factors or the desire to change from one extraction method to another (Hair, *et al.*, 1995:380).

Rotation of factors

An important tool in interpreting factors is the rotation of factors. The reference axes of the factors are turned about the origin until some other position has been reached. Unrotated factor solutions extract factors in the order of their importance. The first factor tends to be a general factor with almost every variable loading significantly, and it accounts for the largest amount of variance. The second and the subsequent factors are based on the residual amount of variance.

Factor rotation is depicted by a two-dimensional factor diagram. The axes are labeled with 0 at the origin and extend outward up to a +1.0 or a -1.0. The numbers on the axes represent the factor loading. The axes of the factors are turned about the origin until some other position has been reached. The ultimate effect of rotating factor matrix is to redistribute the variance from earlier factors to later ones in order to achieve a simpler, theoretically more meaningful factor pattern. This is achieved either by means of orthogonal or oblique factor rotation methods (Hair, *et al.*, 1995:380).

Orthogonal rotation method

Three major orthogonal approaches have been developed: QUARTIMAX, VARIMAX and EQUIMAX (Hair *et al.*, 1995:383-384):

QUARTIMAX. The ultimate goal of QUARTIMAX rotation is to simplify the rows of the factor matrix; it focuses on rotating the initial factor so that a variables loads high on one factor and as low as possible on all other factors.

VARIMAX. This method maximizes the sum of variances of the required loadings of the factor matrix.

EQUIMAX. This approach is a compromise between QUARTIMAX and VARIMAX. Rather than concentrating either on simplification of the rows or on simplification of the columns, it tries to accomplish some of each.

Oblique rotational method

This method is similar to orthogonal rotation, except that oblique rotations allow correlated factors instead of maintaining independence between the rotated factors. SAS uses PROMAX and ORTHOBLIQUE.

An oblique rotation method, particularly PROMAX, was employed in this study. This method was selected over the orthogonal rotation method because it is more flexible and more realistic.

Criteria for the significance of factor loadings

A rule of thumb that has been used frequently by factor analysts as a means of making a preliminary examination of the factor matrix is to consider factor loadings of greater than 0.30 as meeting the minimal level; loadings of at least 0.40 are considered more important; and if the loadings are 0.50 or greater, they are considered practically significant. The following guidelines as suggested by Hair *et al.* (1995:385-386) are used to interpret the significance of factor loadings:

- (1) The larger the sample size, the smaller the loading to be considered – since this study used a sample size of 410 respondents, the factor loadings for all variables were greater than 0.30.
- (2) The larger the number of variables being analyzed, the smaller the loadings to be considered significant – this study used 35 variables within three factors.
- (3) The larger the number of factors, the larger the size of the loading on later factors, which is to be considered significant for interpretation.

Interpreting a factor matrix

The following steps, suggested by Hair *et al.* (1995:386-387) should be followed when interpreting a factor matrix:

1. Examine the factor matrix of loadings
2. In order to begin with interpretation, the analyst should start with the first variable on the first factor and move horizontally from left to right, looking for the highest loading as regards that variable on any factor. When the highest loading is identified the analyst should underline if it is significant.
3. Once all variables have been underlined in terms of their respective factors, the analyst should examine the factor matrix to identify variables that have not been underlined and therefore do not load on any factor.
4. When a factor solution has been obtained in which all variables exhibit a significant loading on a factor, the analyst attempts to assign some meaning to the pattern of factor loadings.

All four steps have been followed in this study. Factors, representing attributes of service quality, were assigned names. Factor one is the “consistency of the quality of services”, factor two is “responsiveness and reliability of services” while factor three is “added effort as a positioning component”. Gursoy *et al.* (2005), Chang & Yeh (2002), Tsaur *et al.* (2002) and Gordon (1991) grouped their variables representing attributes of service quality using the SERVQUAL model: tangibility, responsiveness, assurance, reliability and empathy. The greatest number of similarities between factors identified in this study and groups used by the abovementioned authors were represented by factor two. Variables that reflected the said factor in this study were represented as the features of reliability and responsiveness by Tsaur *et al.* (2002), Gursoy *et al.* (2005), Chang & Yeh (2002) and Gordon (1991).

Step 6: Validation of factor analysis

The sixth step involves assessing the degree of generalizability of the result to the population and the potential influence of individual cases/respondents on the overall

results. The issue of generalizability is critical for each of the multivariate methods, but it is specifically relevant for those relating to interdependence, because they describe a data structure that should be representative of the population as well. The population for this study is carefully defined, as explained earlier.

5.7.4 Summary Of Factor Analysis

Factor analysis helps the investigator make sense of large bodies of interrelated data. Three of the most frequently cited limitations are as follows: first, there are many techniques for performing factor analyses, so that controversy exists over which technique is the best. Second, the subjective aspects of factor analysis (deciding how many factors to extract, which techniques should be used to rotate the factor axes, which factor loadings are significant, are all subject to many differences in opinion. Third, the problem of reliability is real. Like any other statistical analysis, factor analysis start with a set of imperfect data. When data alter because of changes in the sample, the data gathering process and the results of analysis also alter.

5.7.5 Normality Of Data

Data corresponding to the three factor mean values was not normally distributed. A normal distribution is a standard of comparison for describing distributions of sample data and is used with inferential statistics that assume normally distributed variables (Cooper & Schindler, 2003:473). It is a probability distribution in which the horizontal axis represents all possible values of a variable and the vertical axis represents the probability of those values occurring. The scores on the variable are clustered around the mean in a symmetrical, unimodal pattern known as the bell-shaped or normal curve (Hair *et al.*, 1995:35).

To comply with the assumptions that the residuals must be normally distributed and the variances must be equal, the data was transformed using a ranking method with a BLOM option.

A normal probability plot compares the cumulative distribution of actual data values with the cumulative distribution of a normal distribution. The normal distribution is a

straight line, and the plotted data values are compared with the diagonal (Hair *et al.*, 1995:65). To test the homogeneity of residues, the root mean square test of residues was used. The test calculated $Pr > F = 0.4525$, indicating a homogeneity of variance for ranked mean factor one residue; $Pr > F = 0.1330$, indicating a homogeneity of variance for ranked mean factor two residue and; $Pr > F = 0.0896$, indicating a homogeneity of variance for ranked mean factor three residue. The tests for the normality of variables and the homogeneity of variance of residues confirmed that the data for ranked mean factors residues is normally distributed.

5.7.6 General Linear Model

To test the relationship between the dependent (gender, age, nationality, home language, income group, purpose of travel and carrier) and independent (factor one, factor two and factor three) variables, a general linear model was used in this study as described by Dr. Mike van der Linde of the Department of Statistics, University of Pretoria. The linearity of the relationship between dependent and independent variables represents the degree to which the change in the dependent variable associated with the predictor variable is constant across the range of values for the independent variable. The concept of correlation is based on a linear relationship, thus making it a critical issue in regression analysis.

The covariate that was used in this model is the total number of times, which passengers flew on each of the respective Middle Eastern carriers in both 2005 and 2006. The covariate was employed to correct the number of times a specific carrier was used. Question 13, which represented attributes of service quality, did not contain any indication of which carrier was specified when the respondent rated service attributes. To eliminate this problem, the carrier with which passengers had flown the most times was selected, where more than one carrier was used in Question 6; where different carriers were used an equal number of times, a random pick was followed being carried out electronically.

Analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA) were used to test the relationships between variables in the general linear model. A discussion of these analyses follows.

5.7.7 ANOVA

The statistical method for testing the null hypothesis that the means of several populations are equal is known as the analysis of variance (ANOVA). Two-way analysis of variance was used in this study. It makes use of a multiple-factor model to compare the effects of several factors on a continuous dependent variable (Cooper & Schindler, 2003:552). In this study three ANOVA analyses were applied for each ranked factor mean residue. It was necessary to use these residues, due to the fact that the raw data of factors was not normally distributed. The independent variables used in ANOVA are: age, gender, nationality, home language, income group, purpose of travel and times flown as the covariate variable.

To be able to use ANOVA, certain conditions must be met. The samples must be randomly selected from a normal population and the populations should have equal variances. In addition, the distance from one value to its group's mean should be independent of the distances of other values to that mean (independence of error). ANOVA is reasonably robust and minor variations from normality and equal variance are tolerable (Cooper & Schindler, 2003:546). The requirements for ANOVA were met in this study. The test statistic for ANOVA is the F ratio. If the null hypothesis is true, there should be no difference between the populations and the ratio should be close to 1. If the population means are not equal, the numerator should manifest the difference and the F ratio should be greater than 1, which means that the null hypothesis is rejected. The F distribution determines the size of the ratio necessary to reject the null hypothesis for a particular sample size and level of significance (Cooper & Schindler, 2003:547). The results of ANOVA are presented in Tables 6.5, 6.6 and 6.7.

5.7.8 MANOVA

Multivariate analysis of variance or MANOVA assesses the relationship between two or more dependent variables and the classificatory variables or factors. MANOVA can provide insights into not only the nature and predictive power of the independent measures but also the interrelationships and differences perceived in the set of dependent measures (Hair *et al.*, 1995:268). MANOVA is similar to the univariate ANOVA, but possesses the ability to handle several dependent variables. If ANOVA

is applied consecutively to a set of interrelated dependent variables, the three factors in this study, erroneous conclusions may result. MANOVA can correct this by simultaneously testing all variables and their interrelationships. MANOVA uses sum-of-squares and cross-products (SSCP) matrices to test differences among groups. The F ratio is the ratio used to test equality among the groups (Cooper & Schindler, 2003:619-620). MANOVA presents the analyst with several criteria with which to assess multivariate differences across groups. The four most popular are Roy's greatest characteristic root, Wilks' lambda, Hotelling's trace and Pillai's criterion. The most commonly used statistical test for the overall significance of MANOVA is Wilks' lambda. Although the distribution of Wilks' lambda is complex, good approximations for significance testing are available by transforming it into an F statistic (Hair *et al.*, 1995:277). The results of MANOVA are presented in Table 6.8, Table 6.9, Table 6.10, Table 6.11, Table 6.12, Table 6.13, Table 6.14 and Table 6.15.

5.8 CONCLUSION

This chapter discussed the research methodology of the study. Attention was given to the research process itself. Non-probability sampling technique, namely convenience sampling, was used in this study to achieve the desired objectives and to answer the research question.

Of specific interest is the use of three techniques, namely factor analysis, ANOVA and MANOVA. The first-mentioned was solely used to group variables representing attributes of service quality into three factors. This ensured that information was minimized and usefully grouped.

The ANOVA technique was used to test the relationship between one dependent variable (each of the three factors) and independent variables separately. Results indicated that a relationship existed between factor one and age, income group and the total times flown; factor two and age, income group, purpose of travel and carrier used; factor three and nationality.

The MANOVA technique was used to determine if the independent variables (gender, age, home language, nationality, income group, purpose of travel, carrier and times flown) exert an overall effect on the dependent variables (factor one, factor

two and factor three). The results of the latter two techniques enabled the creation of 3D graphical representations or positioning maps of dependent and independent and covariate variables in this research.

The next chapter presents and discusses the research findings of the study.

CHAPTER 6

6 RESULTS

6.1 INTRODUCTION

The results in this chapter are presented using different types of descriptive statistics. In order to represent the results of the questions relating to passengers' backgrounds pie charts were used. Questions relating to their travel profile were represented using bar charts and pie charts. Attributes of service quality were ranked according to their level of importance to passengers, based on the mean values of attributes.

The results provided below were gathered using 410 self-completion questionnaires, made available to respondents as described earlier. In order to obtain relevant data, the questionnaires needed to include sufficient information, which answered the following research objectives:

- To identify from established theory attributes of service quality in the airline environment
- To establish the importance of service quality attributes for positioning
- To determine the levels of importance of various service attributes
- To measure customers' perceptions of service attributes of selected airlines
- To assess the selected airlines' positioning in terms of performance on identified attributes of service quality

6.2 DESCRIPTIVE STATISTICS

6.2.1 Frequency Tables

Frequency analysis was performed by means of frequency tables: a simple device for arraying data by assigned numerical value, with columns for percent, percent

adjusted for missing values and cumulative percent (Cooper & Schindler, 2003:488). Information from frequency tables was graphically represented through pie charts and bar graphs.

6.2.2 Measures Of Central Tendency And Dispersion

Measures of central tendency include the mean, median and the mode. The mean is the average score, the median is the midpoint of the distribution and the mode is the most frequently occurring value (Cooper & Schindler, 2003:474-475).

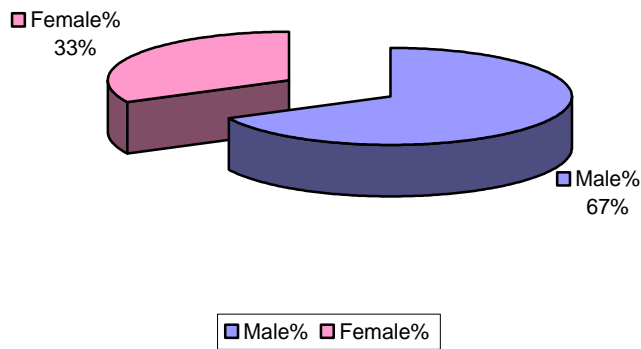
Measures of dispersion or variability indicate the degree to which the scores are spread out. Such measures are: the variance, standard deviation and the range. The variance is the average of the squared scores of deviations from the distribution's mean. It is a measure of score dispersion about the mean. The standard deviation summarizes how far away from the average the data values typically are. The range is the difference between the largest and smallest score in the distribution (Cooper & Schindler, 2003:475).

6.2.3 Pie Charts And Bar Charts

Questions one to question five were related to the backgrounds of business and leisure travellers.

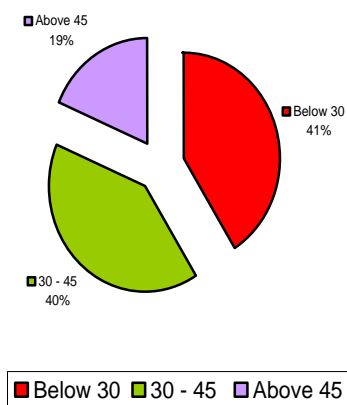
Question 1:	<i>What is your gender?</i>
Findings:	The results show that of 409 respondents, 67.48% were male and 32.52% were female. See Figure 6.1 below for a graphical demonstration of the results.

Figure 6.1: Gender of respondents (n=409)



Question 2:	<i>What is your age?</i>
Findings:	<p>The results indicate the following age spread among 410 respondents:</p> <ul style="list-style-type: none"> • Below 30 years 41.22% • Between 30 – 45 years 40.24% • Over 45 years 18.54% <p>See Figure 6.2 below for a graphical demonstration of results.</p>

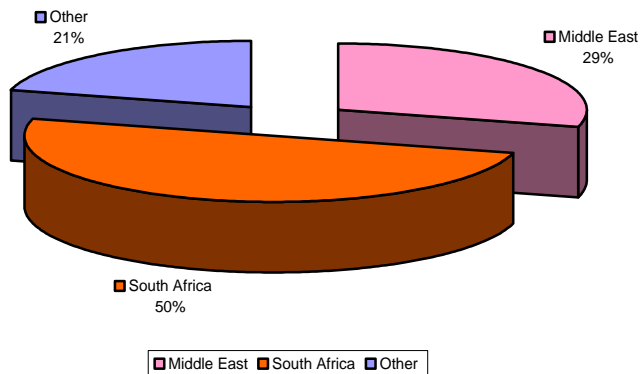
Figure 6.2: Age of respondents (n=410)



Question 3:	<i>What is your nationality?</i>
Findings:	<p>The results in Figure 6.3 show that of 408 respondents, 29.17% are from the Middle East, 50% from South Africa and 20.83% constituted combinations of other different nationalities, including the following: America, Australia, Canada,</p>

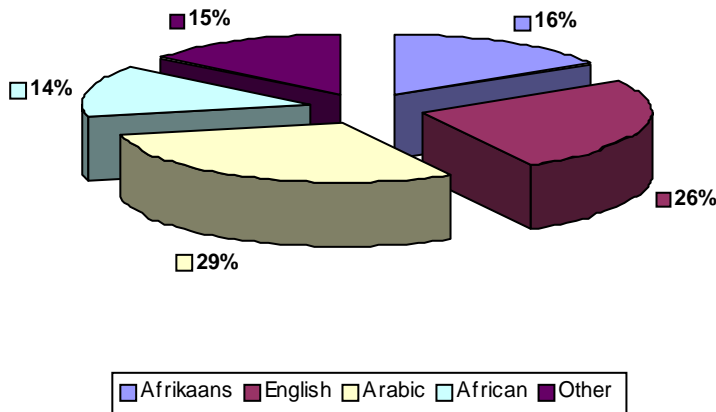
	United Kingdom, China, Cyprus, France, Ghana, India, Ireland, Italy, Lesotho, Malta, Netherlands, New Zealand, Zimbabwe, Spain, Sri Lanka, Sweden, Germany, Philippines, Russia, Moldova and Brazil.
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Figure 6.3: Nationality of respondents (n=408)



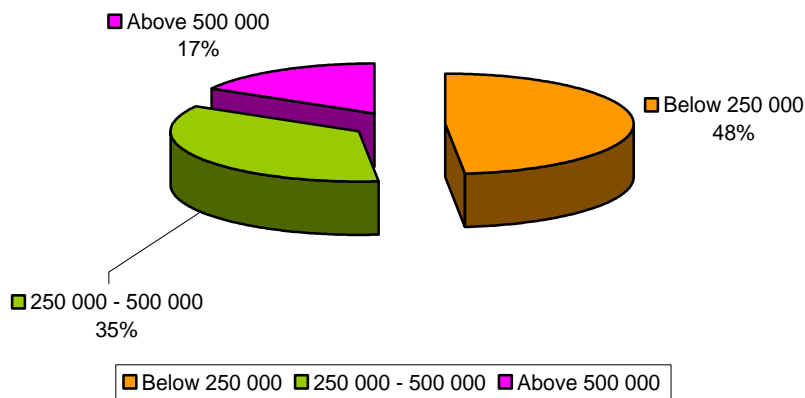
Question 4:	<i>What is your home language?</i>
Findings:	<p>The results indicate the following spread among 406 respondents in terms of their home language:</p> <ul style="list-style-type: none"> • 29% of respondents speak Arabic • 26% of respondents speak English • 16% of respondents speak Afrikaans • 15% of respondents speak other languages • 14% of respondents speak African languages <p>Other languages include: Burmese, Chinese, Dutch, French, German, Greek, Gujarah, Indian, Indonesian, Italian, Portuguese, Spanish, Urdu, Hindu, Russian, Singali, Swedish, Pashto, Tamil, Tagalog and Romanian.</p> <p>Results are graphically represented in Figure 6.4 below.</p>

Figure 6.4: Home language of respondents (n=406)



Question 5:	<i>Into which income group do you fall?</i>
Findings:	The results as shown in Figure 6.5 indicate that 48.40% earn less than R250 000 per annum, 35.06% earn between R250 000-500 000 and 16.54% earn over R500 000 per annum.

Figure 6.5: Income groups of respondents in Rand, per annum (n=405)



Questions six to question 12 were related to respondents' travel profile.

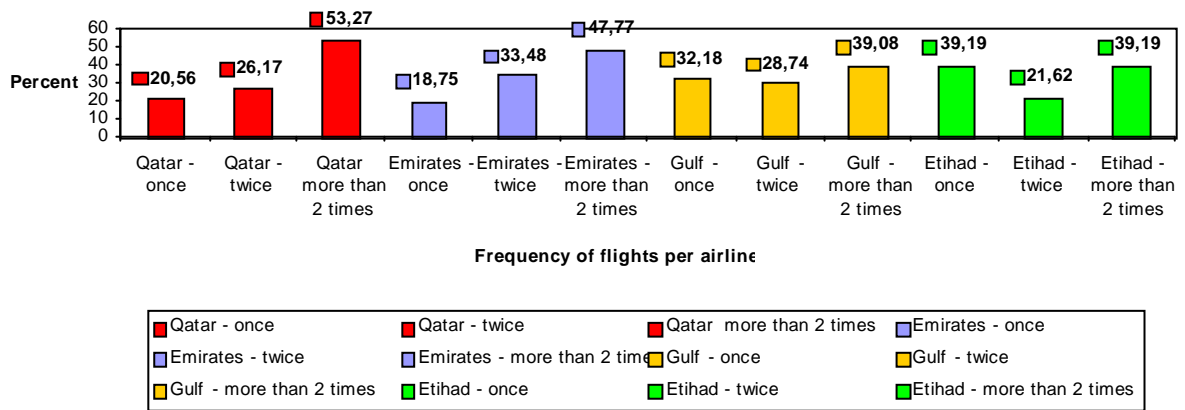
Question 6:	<i>Please indicate the number of times you have used any of the following airlines to get to your destination in 2005 and before.</i>
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Findings:

The results as shown in Figure 6.6 indicate the following spread of frequencies of flights per airline in 2005 and before:

- 20.56% of 107 respondents flew with Qatar Airways once.
- 26.17% of 107 respondents flew with Qatar Airways twice.
- 53.27% of 107 respondents flew with Qatar Airways more than twice.
- 18.75% of 224 respondents flew with Emirates once.
- 33.48% of 224 respondents flew with Emirates twice.
- 47.77% of 224 respondents flew with Emirates more than two times.
- 32.18% of 87 respondents flew with Gulf Air once.
- 28.74% of 87 respondents flew with Gulf Air twice.
- 39.08% of 87 respondents flew with Gulf Air more than two times.
- 39.19% of 74 respondents flew with Etihad once.
- 21.62% of 74 respondents flew with Etihad twice.
- 39.19% of respondents flew with Etihad more than two times.

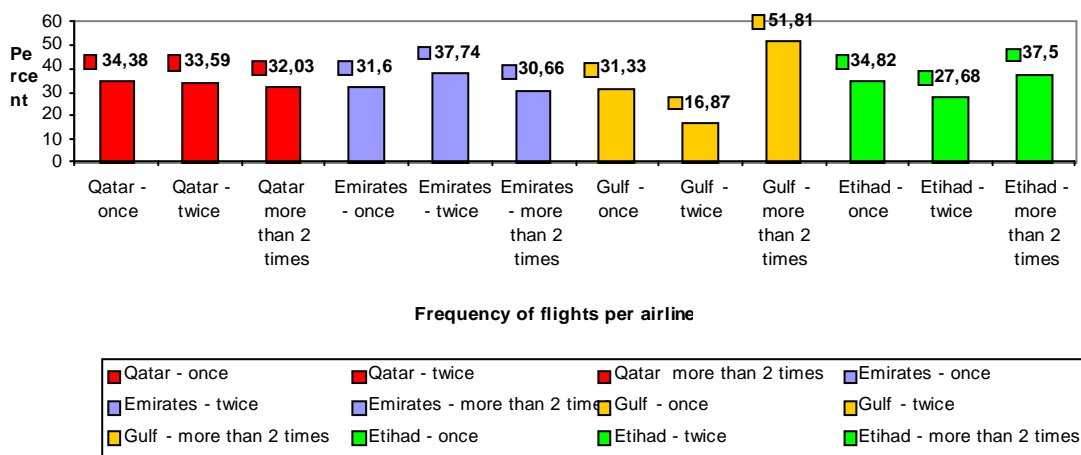
Figure 6.6 Frequency of flights per airline (2005 and before)



<p>Question 6:</p>	<p>Please indicate the number of times you have used any of the following airlines to get to your destination in 2006.</p>
<p>Findings:</p>	<p>The results as shown in Figure 6.7 indicate the following spread of frequencies of flights per airline in 2006:</p> <ul style="list-style-type: none"> • 34.38% of 128 respondents flew with Qatar once. • 33.59% of 128 respondents flew with Qatar twice. • 32.03% of 128 respondents flew with Qatar more than twice. • 31.60% of 212 respondents flew with Emirates once • 37.74% of 212 respondents flew with Emirates twice. • 30.66% of 212 respondents flew with Emirates more than two times. • 31.33% of 83 respondents flew with Gulf Air once. • 16.87% of 83 respondents flew with Gulf Air twice.

	<ul style="list-style-type: none"> • 51.81% of 83 respondents flew with Gulf Air more than two times. • 34.82% of 112 respondents flew with Etihad once. • 27.68% of 112 respondents flew with Etihad twice. • 37.50% of 112 respondents flew with Etihad more than twice.
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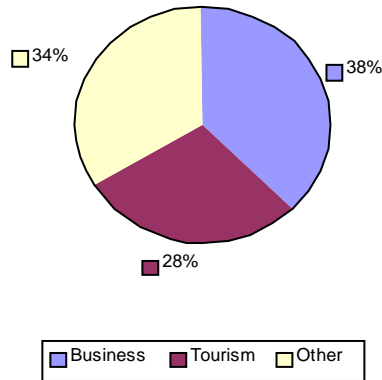
Figure 6.7: Frequency of flight per airline (2006).



Question 7:	<p><i>If you have taken one or more trips what was your main purpose for taking these trips? Select only one option below indicating the purpose of “most” of your trips.</i></p>
Findings:	<p>The results show that of 401 respondents, 38% travelled for business, 34% for leisure and 28% for other reasons.</p> <p>Other reasons include: commuting (for example, expatriates commuting on a regular basis), visiting friends and relatives, attending sport events, competing in sport, working in the travel industry, attending training camps.</p> <p>A graphical representation of these results is</p>

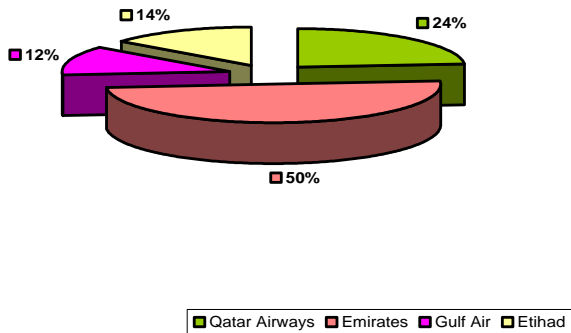
presented in Figure 6.8 below.

Figure 6.8: Main purpose for taking trips (n=401)



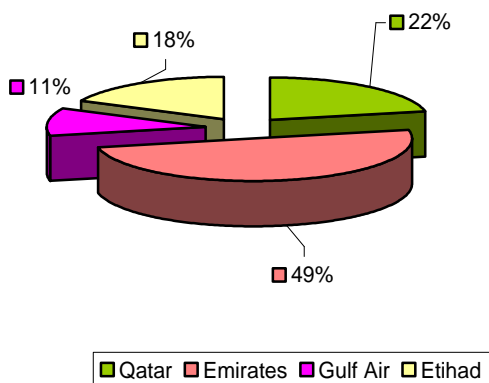
Question 8:	<i>Indicate your airline of choice for business and/or leisure purposes.</i>
Findings:	<p>The results show that of the 329 respondents whose main purpose was business selected the following airlines as their airline of choice:</p> <ul style="list-style-type: none"> • 50% of respondents indicated Emirates • 24% chose Qatar Airways • 14% of respondents nominated Etihad • 12% of respondents selected Gulf Air

Figure 6.9: Airline of choice for business passengers (n=329)



Question 8:	<i>Indicate your airline of choice for business and/or leisure purposes.</i>
Findings:	<p>The results demonstrate that of the 374 respondents who travelled for leisure purposes nominated the following airlines as their airline of choice:</p> <ul style="list-style-type: none"> • 49% of respondents selected Emirates • 22% of respondents chose Qatar Airways • 18% indicated Etihad • 11% mentioned Gulf Air <p>These results are graphically represented in Figure 6.10 below.</p>

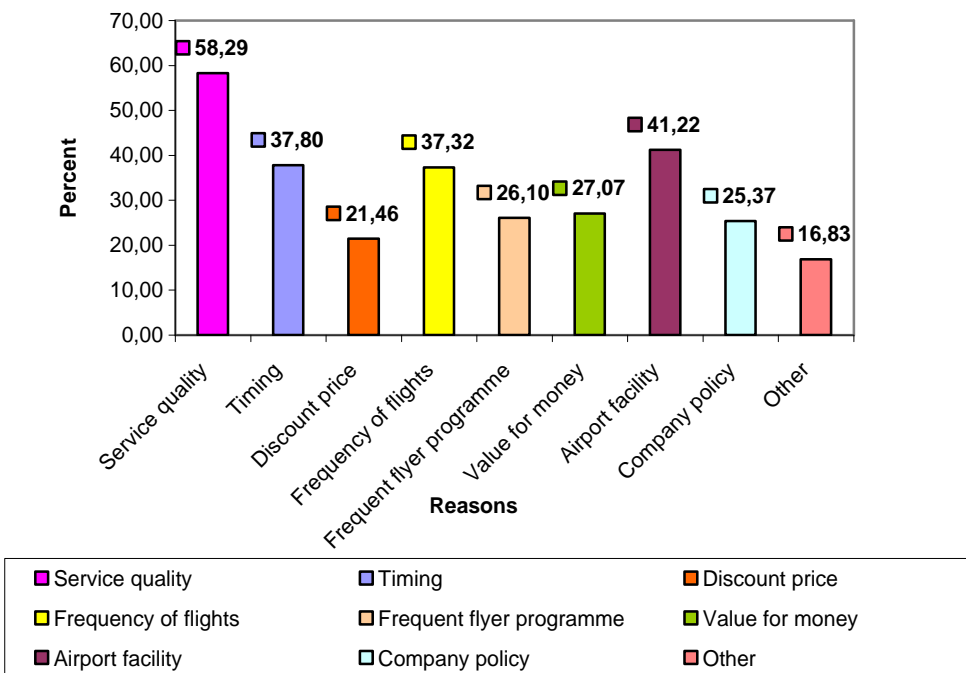
Figure 6.10: Airline of choice for leisure passengers (n=374)



Question 9:	<i>What are your reasons for choosing these airlines? Please select an option for both business airlines and leisure airlines.</i>
Findings:	<p>The results indicated below in Figure 6.11 show that the following reasons were selected by business passengers as influencing their choice of airline:</p> <ul style="list-style-type: none"> • 58.23% of respondents selected service quality • 41.22% mentioned airport facilities • 37.80% selected timing

	<ul style="list-style-type: none"> • 37.32% considered frequency of flights • 27.07% value for money • 26.10% frequent flyer programme • 25.37% company policy • 21.46% discount price • 16.83% other reasons <p>Other reasons include: aircraft type, business at the destination, convenient flight schedule, direct flight, on-board food, good lounge facilities, good on-board service, legspace, comfortable and clean seats, well-established airline, reasonable price of airline ticket, recommendations by friends and relatives and helpful and competent crew and staff members.</p>
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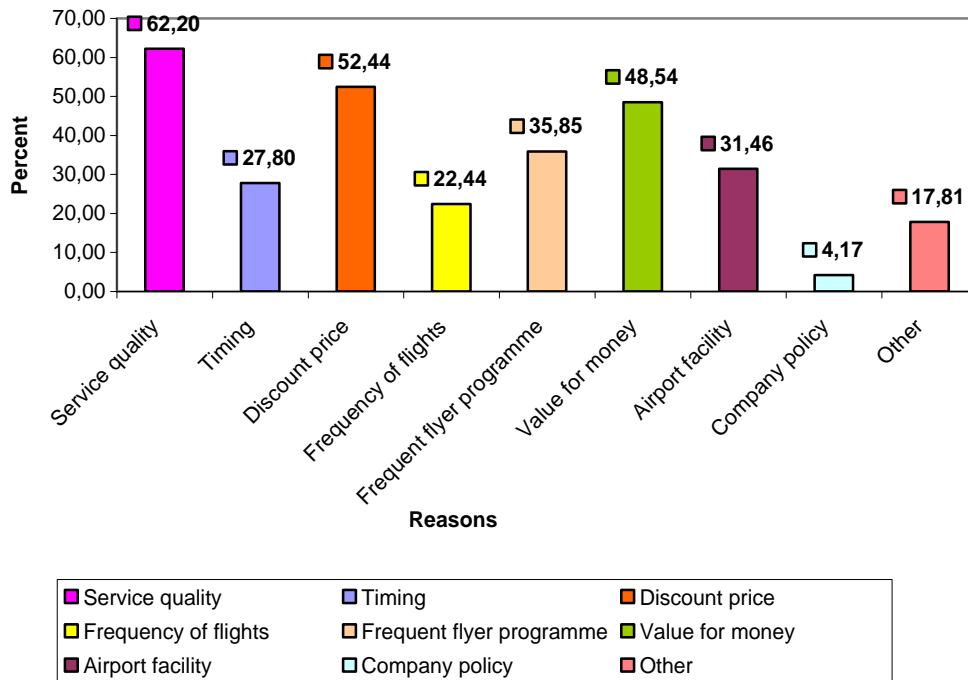
Figure 6.11: Reasons for choosing airlines for business travel (n=410)



Question 9:	<i>What are your reasons for choosing these airlines? Please select an option for both business airlines and leisure airlines.</i>
Findings:	According to the results respondents were influenced by the following reasons for leisure

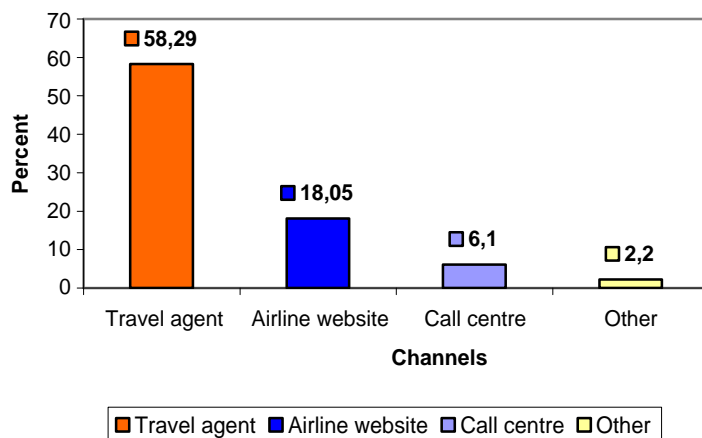
	<p>travel:</p> <ul style="list-style-type: none">• 62.20% service quality• 52.44% discount price• 48.54% value for money• 35.85% frequent flyer programme• 31.46% airport facilities• 27.80% timing• 22.44% frequency of flights• 17.81% other• 4.17% company policy <p>Others include the following: airport facilities, convenient flight times, direct flight, on-board food, good duty-free facilities, good on-board entertainment, friendly and competent staff/crew, just trying the airline, language variety spoken by crew/staff members, on-board level of service, recommendations by friends or relatives, visiting friends and relative, the airline is the sponsor of the flight, enough legroom, discount price, well-known airline, proud to use airline.</p> <p>These results are graphically represented in Figure 6.12 below.</p>
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Figure 6.12: Reasons for choosing airlines for leisure travel (n=410)



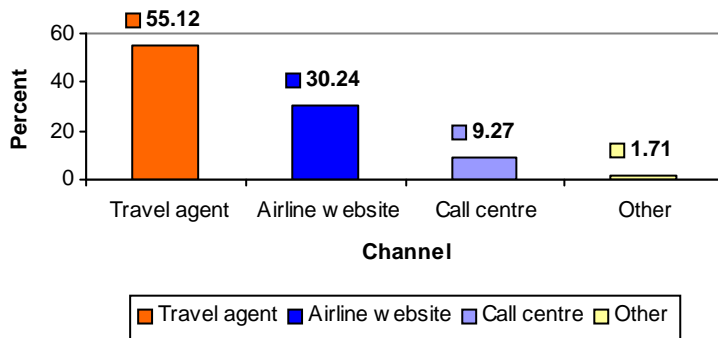
<p>Question 10:</p>	<p><i>Please specify the channel you normally use to book your airline reservation. Please select an option for both business and leisure airlines.</i></p>
<p>Findings:</p>	<p>The results indicate that the following channels were used by respondents when travelling for business purposes:</p> <ul style="list-style-type: none"> • 58.29% a travel agent • 18.05% the airline website • 6.1% the call centre • 2.2% other <p>Others include: company policy and recommendations by friends and/or relatives. See Figure 6.13 below for a graphical representation of the results.</p>

Figure 6.13: Channel used to book airlines for business travel (n=410)



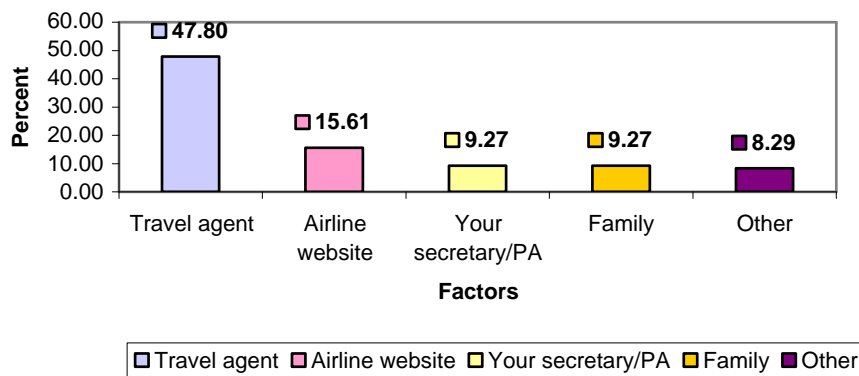
<p>Question 10:</p>	<p><i>Please specify the channel you normally use to book your airline reservation. Please select an option for both business and leisure airlines.</i></p>
<p>Findings:</p>	<p>The results indicate that the following channels were used by respondents when travelling for leisure purposes:</p> <ul style="list-style-type: none"> • 55.12% a travel agent • 30.24% the airline website • 9.27% the call centre and • 1.71% other <p>Other channels include: the airline ticket was purchased by family and the airline was recommended by friends.</p> <p>See Figure 6.14 below for a graphical representation of the results.</p>

Figure 6.14: Channel used to book airlines for leisure travel (n=410)



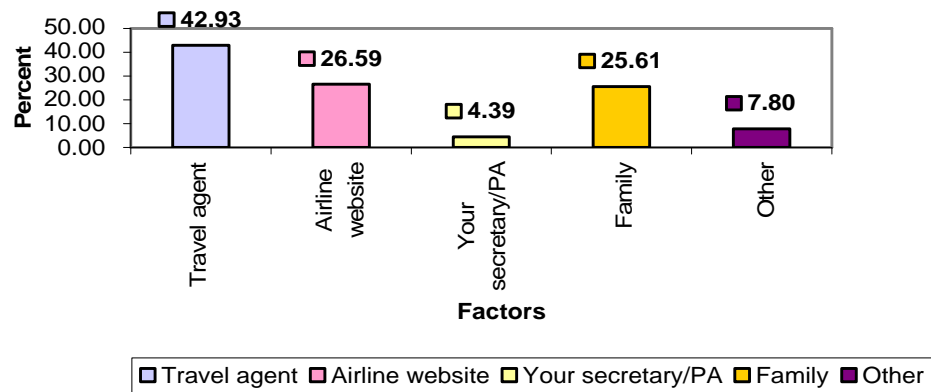
<p>Question 11:</p>	<p><i>Are you generally influenced in your choice of airline by any of the following? (For business and leisure.)</i></p>
<p>Findings:</p>	<p>The results demonstrate that the following factors influence the choice of the airline for business travel, as indicated by the respondents:</p> <ul style="list-style-type: none"> • 47.80% a travel agent • 15.61% the airline website • 9.27% one’s secretary/PA • 9.27% one’s family • 8.29% other <p>Others include: company, work at the destination, family, advance planning, recommendation by colleagues, representatives or e-mails, reputation of airline, personal choice, professionalism and competence of staff and direct flight to destination.</p> <p>Figure 6.15 below provides a graphical representation of the results.</p>

Figure 6.15: Factors influencing the choice of airline for business travel (n=410)



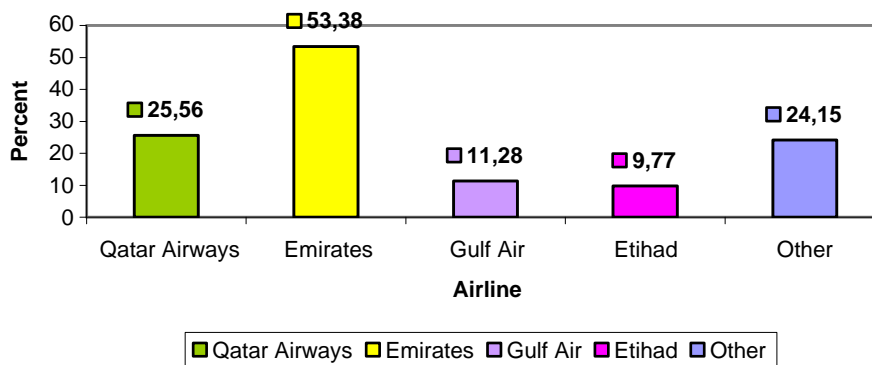
<p>Question 11:</p>	<p><i>Are you generally influenced in your choice of airline by any of the following? (For business and leisure.)</i></p>
<p>Findings:</p>	<p>According to the results the following factors influence the choice of the airline for leisure travel, as indicated by the respondents:</p> <ul style="list-style-type: none"> • 42.93% a travel agent • 26.59% the airline website • 25.61% their family • 7.80% other • 4.39% their secretary/PA <p>Others include: advertising in media, attending sport events, call centre, family, general news, discount price, recommendations by friends or colleagues, destination as main attraction, personal choice, word-of-mouth, professionalism and competence of staff and well-known airline.</p> <p>See Figure 6.16 for a graphical demonstration of the results.</p>

Figure 6.16: Factors influencing the choice of airline for business travel (n=410)



Question 12:	<i>Please indicate if you are a member of a Frequent Flyer programme with any of the following:</i>
Findings:	<p>The results show the following percentage spread of Frequent Flyer programmes among respondents:</p> <ul style="list-style-type: none"> • 53.38% Emirates • 25.56% Qatar Airways • 24.15% Other • 11.28% Gulf Air • 9.77% Etihad <p>Others include the following airlines: BAA, SAA, Air France, Continental Airlines, Egypt Air, Swiss, JAL, Olympic, Air Namibia and American Airlines.</p>

Figure 6.17: Frequent Flyer programme (n=266)



<p>Question 13:</p>	<p>Based on your experiences and expectations as a passenger, please rate how important the following service attributes are to you when choosing an airline (irrespective of whether it is for business or leisure purposes). The score 7 represents that the attribute is extremely important and the score 1 means that the attribute is not important at all. There are no correct answers. The score you circle should truly reflect your feeling about the relative importance of airline services that would affect your airline choice.</p>
<p>Findings:</p>	<p>The mean values of perceived importance of attributes of service quality in the airline industry are recorded in Table 6.1 below. The most important service attribute is associated with a “good system of handling luggage loss or damage” ($M = 6.418$, $SD = 0.916$), followed by “the airline has efficient check-in and baggage handling facilities” ($M = 6.331$, $ST = 0.906$).</p> <p>The least important service attribute group, as perceived by the respondents based on their experiences and expectations, is “the airline has other travel-related partners, such as cars, hotels and travel insurance” ($M = 5.309$, $ST = 1.521$).</p>

Table 6.1: Perceived importance of attributes of service quality in the airline environment

Service attribute	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Median	Ranking order
The airline has a good system of handling luggage loss or damage.	407	6.418	0.916	0.840	7.000	1
The airline has efficient check-in and baggage handling services.	408	6.331	0.906	0.045	7.000	2
The airline makes you feel safe.	410	6.327	0.909	0.827	7.000	3
The airline has a good system of handling flight delays.	408	6.311	0.950	0.903	7.000	4

Service attribute	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Median	Ranking order
The aircraft has comfortable seats with enough legroom.	403	6.283	1.005	1.009	7.000	5
The airline has good flight safety and security measures.	408	6.243	0.970	0.941	7.000	6
The aircraft is clean and has comfortable seats.	408	6.235	0.998	0.996	7.000	7
The airline has a low level of security-related accidents.	406	6.153	0.977	0.954	6.000	8
Employees of the airline are always willing to help you.	408	6.142	0.953	0.908	6.000	9
Employees of the airline give prompt service.	408	6.046	0.979	0.959	6.000	10
The airline provides quality food and beverages.	408	6.037	1.089	1.185	6.000	11
The airline performs the service right the first time.	410	6.034	1.015	1.031	6.000	12
The flight departs and arrives at the scheduled time.	410	6.029	1.041	1.085	6.000	13
The airline has a good system of handling customer complaints.	407	6.015	1.017	1.034	6.000	14
Employees of the airline appear neat and tidy.	410	6.015	1.004	1.007	6.000	15
Employees of the airline are never too busy to respond to your request or complaint.	408	6.005	0.974	0.948	6.000	16
The behaviour of employees gives you confidence.	408	5.998	1.060	1.23	6.000	17
Employees of the airline are consistently courteous with you.	410	5.968	1.052	1.107	6.000	18
The airline provides good in-flight services consistently.	410	5.932	0.972	0.944	6.000	19
Employees of the airline have the knowledge to answer your questions.	409	5.932	0.993	0.985	6.000	20
The airline has convenient flight schedules and frequencies.	408	5.914	1.072	1.150	6.000	21
The airline provides good ground services consistently.	410	5.841	1.054	1.112	6.000	22
The airline has up-to-date in-flight entertainment facilities and programmes.	410	5.841	1.117	1.247	6.000	23
The airline has a sound loyalty programme to recognize you as a frequent customer.	410	5.812	1.195	1.429	6.000	24
The airline has a good hub-and-	407	5.771	1.203	1.448	6.000	25

Service attribute	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Median	Ranking order
spoke system.						
Crew members can communicate to you in the desired language.	410	5.756	1.151	1.324	6.000	26
The airline has a sound mileage programme.	410	5.741	1.240	1.537	6.000	27
The airline has comfortable waiting lounges.	407	5.705	1.246	1.553	6.000	28
Employees of the airline understand your specific needs.	408	5.664	1.096	1.201	6.000	29
Employees of the airline give you individual attention.	410	5.639	1.230	1.512	6.000	30
The airline has a global alliance partner to provide a wider and smoother network and transfers.	407	5.636	1.202	1.444	6.000	31
The airline offers you air/accommodation packages.	410	5.566	1.518	2.305	6.000	32
The airport has good tax-free shopping facilities.	407	5.332	1.562	2.439	6.000	33
The airline provides in-flight internet/email/fax/phone facilities.	408	5.328	1.438	2.069	6.000	34
The airline has other travel-related partners, e.g. cars, hotels and travel insurance.	408	5.309	1.521	2.312	6.000	35

⁴ Scale values range from 4 (“Not at all important”), 5 (“Important”), 6 (“Very important”) to 7 (“Extremely important”)

n = number of respondents, *M* = mean, *SD* = Standard deviation

Source: Adapted from D’Astrous (2000:152)

Variables in Question 13, representing the perceptions and expectations of passengers using one or more of the selected Middle Eastern airlines, were analyzed using factor analysis. The resulting statistics are presented below.

6.2.4 Factor Analysis Output

Eigenvalues of each variable, representing perceptions and expectations of passengers, are recorded in Table 6.2 below. Only variables with eigenvalues greater than 1 are considered significant for factor analysis. Table 6.2 indicates that

ten factors are significant, based on their eigenvalues. Three factors were used for the purposes of this study.

Table 6.2: Eigenvalues of the Correlation Matrix

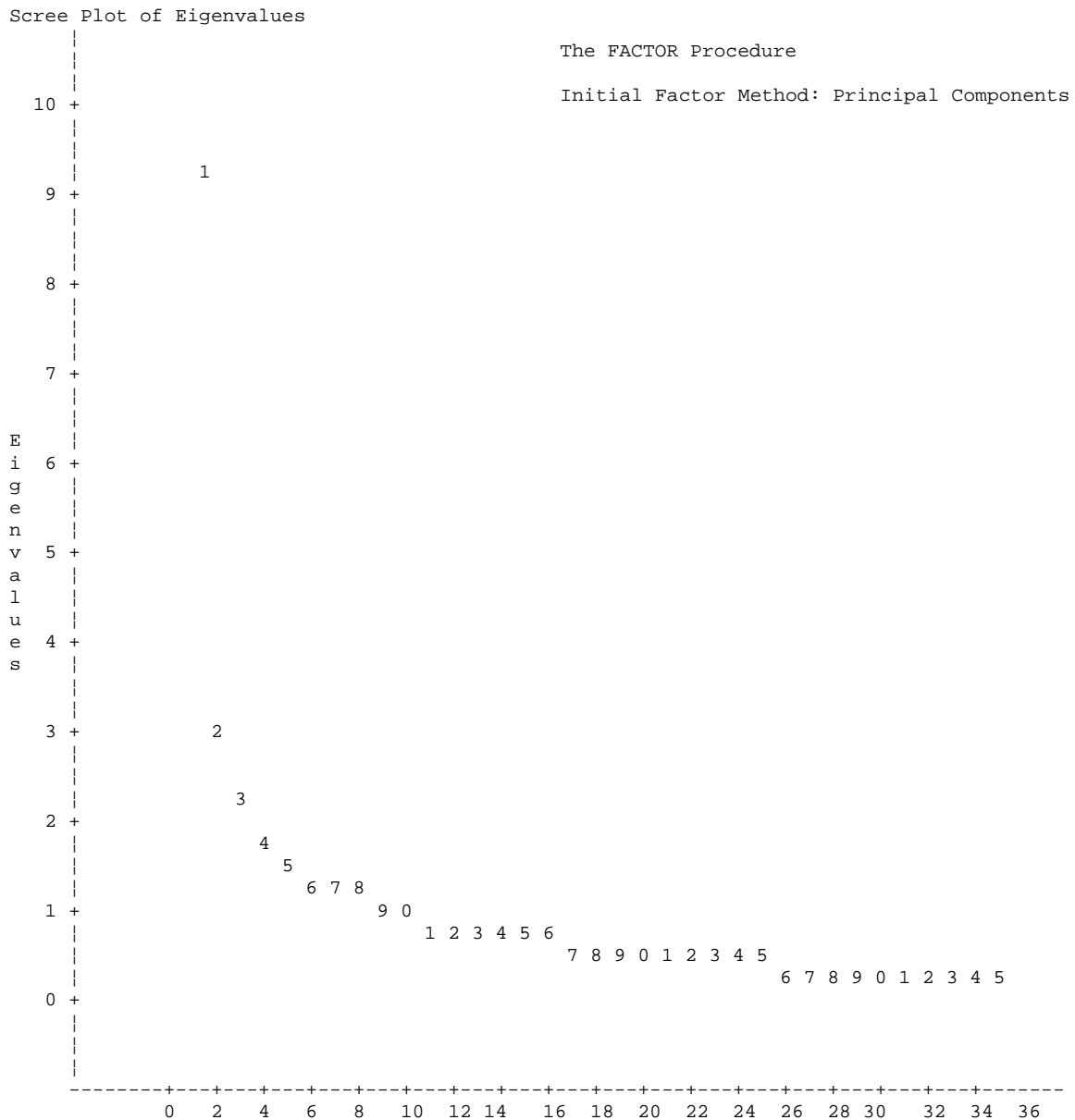
	Eigenvalues	Difference	Proportion	Cumulative
1	9.16827338	6.28988007	0.2620	0.2620
2	2.87839331	0.71468071	0.0822	0.3442
3	2.16371260	0.49184683	0.0618	0.4060
4	1.67186577	0.10441450	0.0478	0.4538
5	1.56745127	0.19842518	0.0448	0.4986
6	1.36902609	0.15630405	0.0391	0.5377
7	1.21272204	0.06765795	0.0346	0.5723
8	1.14506409	0.02767628	0.0327	0.6050
9	1.11738782	0.12499290	0.0319	0.6370
10	1.01707078	0.13918052	0.0291	0.6664
11	0.99239492	0.12407097	0.0284	0.6653
12	0.86832395	0.03190213	0.0248	0.6901
13	0.83642181	0.02819817	0.0239	0.7140
14	0.80822364	0.04036148	0.0231	0.7371
15	0.76786216	0.10391967	0.0219	0.7591
16	0.66394248	0.02912942	0.0190	0.7780
17	0.63481306	0.03188009	0.0181	0.7962
18	0.60293298	0.04322973	0.0172	0.8134
19	0.55970325	0.02882725	0.0160	0.8294
20	0.53087600	0.03524939	0.0152	0.8446
21	0.49562661	0.03012277	0.0142	0.8587
22	0.46550384	0.00713495	0.0133	0.8720
23	0.45836889	0.01741540	0.0131	0.8851
24	0.44095349	0.02775322	0.0126	0.8977
25	0.41320026	0.01931235	0.0118	0.9095
26	0.39388791	0.03033572	0.0113	0.9208
27	0.36355219	0.00501743	0.0104	0.9312
28	0.35853476	0.03722885	0.0102	0.9414
29	0.32130590	0.01568059	0.0092	0.9506
30	0.30562531	0.00657907	0.0087	0.9593
31	0.29904624	0.03449520	0.0085	0.9679
32	0.26455104	0.00762667	0.0076	0.9754
33	0.25692437	0.02006466	0.0073	0.9828
34	0.23685971	0.02942157	0.0068	0.9948
35	0.18132338		0.0052	1.0000

Source: Department of Statistics, University of Pretoria, 2007

In this study, three criteria were employed to determine the number of factors to be extracted: the eigenvalues, a *priori* and scree test criteria. The *priori* criterion was

used when four factors were forced into SAS to produce output. The third criterion, the scree test, is shown in Figure 6.18 below. The scree plot clearly indicates that 10 factors could be extracted. Only three factors were extracted for this study.

Figure 6.18: Scree test criterion



Source: Department of Statistics, University of Pretoria, 2007

The three factors, determined by factor analysis based on factor loadings, are reported in Table 6.3 below. Factor loadings of 0.30 and higher are generally considered as significant for the purpose of identification. Table 6.3 clearly indicates that factor one consists of variables: V62, V61, V60, V67, V75, V59, V77, V66, V64, V73, V74; factor two consists of variables: V90, V84, V91, V88, V85, V87, V86, V68,

V83, V63, V65, V69, V89, V92; and factor three consists of variables: V79, V80, V78, V82, V81, V72, V76, V71, V93, V70 (see Annexure A of questionnaire, question 13).

Table 6.3: Rotated factor pattern

Variables	Factor 1	Factor 2	Factor 3
V62	0.67909	0.30960	- 0.09530
V61	0.66673	0.27994	- 0.03822
V60	0.64348	0.19473	0.06121
V67	0.64285	0.05437	0.08926
V75	0.58411	0.0663	0.25712
V59	0.57990	0.19952	0.05459
V77	0.55805	- 0.03585	0.43417
V66	0.53228	0.20577	0.11294
V64	0.47449	0.34176	0.03658
V73	0.41450	0.29589	0.34241
V74	0.39574	0.30661	0.28577
V90	0.12556	0.70051	0.09129
V84	0.18934	0.67109	0.14109
V91	0.07042	0.63607	- 0.02355
V88	0.06665	0.62761	0.12890
V85	0.29161	0.60772	0.16652
V87	0.08204	0.60615	0.21390
V86	0.22460	0.60021	0.33779
V68	0.37927	0.48109	0.09102
V83	0.38068	0.45687	0.27276
V63	0.33057	0.45174	0.11365
V65	0.39902	0.43892	- 0.01850
V69	0.42321	0.42338	0.06222
V89	0.37246	0.41456	0.16109
V92	0.04450	0.36125	0.34644
V79	- 0.18408	0.23031	0.64090
V80	- 0.24401	0.31554	0.63278
V78	0.23761	0.15336	0.61326
V82	0.12680	0.12548	0.58544
V81	0.24946	0.10341	0.56490
V72	0.20672	- 0.13517	0.55337
V76	0.42438	- 0.01845	0.51912
V71	0.39843	0.17297	0.47224
V93	- 0.15541	0.08069	0.45714
V70	0.15393	0.17653	0.39512

Source: Department of Statistics, University of Pretoria, 2007

To cross-validate the results obtained in Table 6.3, the internal consistency reliability for each factor was computed and yielded a high Cronbach alpha coefficient ranging between 0.783 and 0.873. Teo and King (1996) and Malhotra (1993) suggested that a coefficient equal to 0.60 or more is desirable for internal consistency reliability. The present study met the said requirement. In Table 6.4 the reliability estimates of variables and factors for Question 13 are provided. The correlations between factors are as follows: 0.353 between factor one and two; 0.2571 between factor one and three; 0.305 between factor two and three.

Table 6.4: Internal consistency reliability for variables and factors in Question 13

Name	Cronbach Alpha	Name	Cronbach Alpha	Name	Cronbach Alpha
Factor 1	0.843	Factor 2	0.873	Factor 3	0.783
V59	0.831	V68	0.864	V70	0.774
V60	0.823	V63	0.869	V71	0.761
V61	0.823	V65	0.869	V72	0.769
V62	0.822	V69	0.866	V76	0.767
V64	0.832	V84	0.860	V78	0.758
V66	0.833	V88	0.864	V79	0.758
V67	0.831	V85	0.860	V80	0.758
V73	0.833	V87	0.864	V81	0.758
V74	0.834	V86	0.859	V82	0.761
V75	0.832	V83	0.864	V93	0.784
V77	0.831	V89	0.866		
		V90	0.861		
		V91	0.866		
		V92	0.873		

Source: Department of Statistics, University of Pretoria, 2007

6.2.5 ANOVA Results

Table 6.5 represents the results for ANOVA. This technique was used in the current study to test the relationships between variables and three factors. A statistically significant p value indicates that a relationship exists between the variables and factors tested. The post hoc pairwise comparisons were done using least-square means. LS-means are predicted populations margins, that is, they estimate the marginal means over a balanced population.

Table 6.5: Summary table for two-way ANOVA for factor one

Source	Degree of freedom	Mean square	F Value	p Value
Gender	1	0.9581	1.15	0.2850
Age	2	3.7551	4.49	0.0118
Nationality	2	0.0584	0.07	0.9324
Home language	4	1.6226	1.94	0.1030
Income group	2	2.2661	2.71	0.0678
Purpose of travel	4	0.8917	1.07	0.3726
Carrier	3	1.0741	1.29	0.2792
Total flights	1	4.4759	5.36	0.0212

Source: Department of Statistics, University of Pretoria, 2007

It is clear from Table 6.5 that there is an interaction between factor one (“consistency of the quality of services”) and age ($p = 0.0118$). Interaction also exists between consistency of the quality of service and income group ($p = 0.0678$) while there is a relationship between factor one and the total number of times flown ($p = 0.0212$).

The LS means for factor one and age indicates that there is significant difference between the means of age group one (below 30 years) and age group two (30 – 45 years) with $p = 0.072$; the means of age group one and age group three (over 45 years) with $p = 0.0180$.

The LS means for factor one and income group indicates that there is significant difference between the means of income group one (below R250 000 per annum) and group two (between R250 000 and R500 000 per annum) with $p = 0.0234$.

Table 6.6: Summary table for two-way ANOVA for factor two

Source	Degree of freedom	Mean square	F Value	p Value
Gender	1	0.1191	0.15	0.6988
Age	2	6.9681	8.77	0.0002
Nationality	2	0.2411	0.30	0.7383
Home language	4	1.0413	1.31	0.2652
Income group	2	2.9358	3.70	0.0257
Purpose of travel	4	2.5438	3.20	0.0132

Carrier	3	2.4058	3.03	0.0294
Total flights	1	0.4881	0.61	0.4335

Source: Department of Statistics, University of Pretoria, 2007

It is clear from Table 6.6 that interaction is present between factor two (“responsiveness and reliability of services”) and age ($p = 0.0002$). Interaction also occurs between responsiveness and reliability of services and income group ($p = 0.0257$), purpose of travel ($p = 0.0132$) and carrier used ($p = 0.0294$).

The LS means for factor two and age indicates that there is significant difference between the means of age group one (below 30 years) and age group two (30 – 45 years) with $p < 0.001$; the means of age group one and age group three (over 45 years) with $p = 0.0064$.

The LS means for factor two and income group indicates that significant difference exists between the means of income group one (below R250 000 per annum) and group two (between R250 000 and R500 000 per annum) with $p = 0.0455$; the means of income group one and income group three (over R500 000 per annum) with $p = 0.0115$.

The LS means for factor two and the carrier used indicates that there is significant difference between the means of Qatar Airways and Emirates with $p = 0.035$; Qatar Airways and Gulf Air with $p = 0.0372$; Qatar Airways and Etihad with $p = 0.0415$.

Table 6.7: Summary table for two-way ANOVA for factor three

Source	Degree of freedom	Mean square	F Value	p Value
Gender	1	0.4530	0.49	0.4833
Age	2	0.3261	0.35	0.7018
Nationality	2	2.6767	2.91	0.0558
Home language	4	1.6744	1.82	0.1243
Income group	2	0.7541	0.82	0.4414
Purpose of travel	4	1.3458	1.46	0.2130
Carrier	3	1.9248	2.09	0.1009
Total flights	1	0.4115	0.45	0.5041

Source: Department of Statistics, University of Pretoria, 2007

As indicated in Table 6.7 there is an interaction between factor three (“added effort as a positioning component”) and nationality.

The LS means for factor three and nationality indicates that there is significant difference between the means of respondents from Middle East and South Africa with $p = 0.0183$; respondents from Middle East and other countries with $p = 0.0333$.

6.2.6 MANOVA Results

The MANOVA technique was used to determine if there is an overall effect of variables on the three factors.

Table 6.8: MANOVA test of significance for the hypothesis of no overall gender effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9896	1.29	0.2781
Pillai's Trace	0.1042	1.29	0.2781
Hotelling's Trace	0.0105	1.29	0.2781
Roy's greatest Root	0.0105	1.29	0.2781

Source: Department of Statistics, University of Pretoria, 2007

Using Wilks' Lambda test as the test of significance, Table 6.8 indicates that there is no overall effect of gender on other variables ($p = 0.2781$).

Table 6.9: MANOVA test of significance for the hypothesis of no overall age effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9462	3.43	0.0024
Pillai's Trace	0.0539	3.43	0.0024
Hotelling's Trace	0.0567	3.43	0.0024
Roy's greatest Root	0.0548	3.43	0.0024

Source: Department of Statistics, University of Pretoria, 2007

Using Wilks' Lambda test as the test of significance, Table 6.9 indicates that an age effect on other variables does exist ($p = 0.0024$).

Table 6.10: MANOVA test of significance for the hypothesis of no overall nationality effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9817	1.13	0.3402
Pillai's Trace	0.0183	1.13	0.3413
Hotelling's Trace	0.0186	1.14	0.3389

Roy's greatest Root	0.0183	2.25	0.0824
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Source: Department of Statistics, University of Pretoria, 2007

Table 6.10 indicates that there is no nationality effect on other variables ($p = 0.3402$).

Table 6.11: MANOVA test of significance for the hypothesis of no overall home language effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9288	2.29	0.0071
Pillai's Trace	0.0725	2.28	0.0072
Hotelling's Trace	0.0753	2.30	0.0072
Roy's greatest Root	0.0517	4.77	0.0009

Source: Department of Statistics, University of Pretoria, 2007

Using Wilks' Lambda test as the test of significance, Table 6.11 indicates that there is an overall effect of home language on other variables ($p = 0.0071$).

Table 6.12: MANOVA test of significance for the hypothesis of no overall income effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9482	3.30	0.0033
Pillai's Trace	0.0521	3.28	0.0034
Hotelling's Trace	0.0543	3.32	0.0033
Roy's greatest Root	0.0481	5.90	0.0006

Source: Department of Statistics, University of Pretoria, 2007

Table 6.12 indicates, based on Wilks' Lambda test of significance, that there is an overall effect of income on other variables ($p = 0.0033$).

Table 6.13: MANOVA test of significance for the hypothesis of no overall purpose of travel effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9422	1.84	0.0380
Pillai's Trace	0.0585	1.84	0.0386
Hotelling's Trace	0.0605	1.85	0.0381
Roy's greatest Root	0.0438	4.04	0.0032

Source: Department of Statistics, University of Pretoria, 2007

Using Wilks' Lambda test as the test of significance, Table 6.13 indicates that an overall effect of the purpose of travel on other variables exists ($p = 0.0380$).

Table 6.14: MANOVA test of significance for the hypothesis of no overall carrier effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9491	2.15	0.0231
Pillai's Trace	0.0516	2.15	0.0230
Hotelling's Trace	0.0530	2.16	0.0236
Roy's greatest Root	0.0340	4.19	0.0062

Source: Department of Statistics, University of Pretoria, 2007

Table 6.14, based on Wilks' Lambda test of significance, indicates that there is an overall carrier effect on other variables ($p = 0.0231$).

Table 6.15: MANOVA test of significance for the hypothesis of no overall frequency of flights effect

Test Name	Value	F Value	Significance of F
Wilks' Lambda	0.9837	2.03	0.1095
Pillai's Trace	0.0163	2.03	0.1095
Hotelling's Trace	0.0166	2.03	0.1095
Roy's greatest Root	0.0166	2.03	0.1095

Source: Department of Statistics, University of Pretoria, 2007

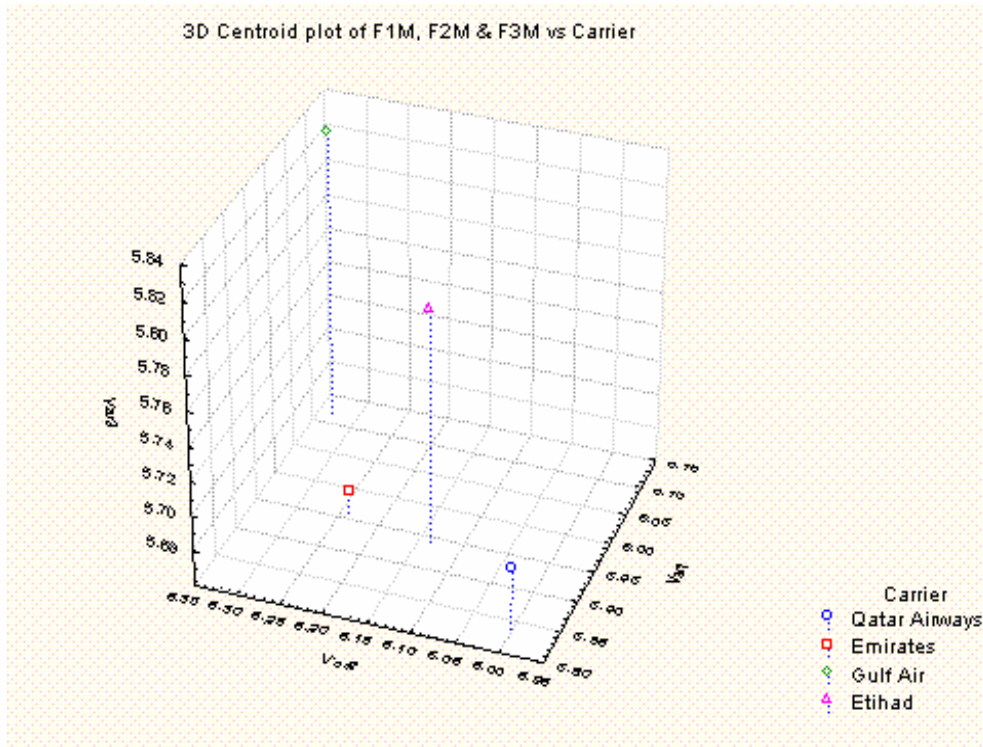
Table 6.15, based on Wilks' Lambda test of significance, indicates that there is no overall frequency of flights effect on other variables ($p = 0.1095$).

6.2.7 Positioning Maps

Positioning or perceptual mapping is a tool that helps marketers and managers understand customers' perceptions of different products or brands in the market (Dibb *et al.*, 2000:402). Positioning maps in this study are represented by 3D Centroid plots. Figure 6.19 below depicts the positioning of Qatar Airways, Emirates, Gulf Air and Etihad for business and leisure travel relative to the level of importance of three factors, representing attributes of service quality as perceived by passengers of the selected airlines. Each of the axes of 3D Centroid plot is represented by the specific factor. Axis Z represents factor one: "consistency of the quality of services", axis X represents factor two: "responsiveness and reliability of services" and axis Y represents factor three: "added effort as a positioning component". The positioning of each airline, as perceived by their passengers, relative to the importance of three factors was plotted based on the mean values of

each factor relative to the airline. The mean values are presented in Table 6.16 below the 3D centroid plot.

Figure 6.19: Positioning of Qatar, Emirates, Gulf Air and Etihad based on identified factors (business and leisure travel)



Source: Department of Statistics, University of Pretoria, 2007

Table 6.16: Mean values for each carrier in terms of its positioning relative to each factor

Carrier	Factor	Mean
Qatar	Factor one	5.839
	Factor two	6.001
	Factor three	5.695
Emirates	Factor one	5.959
	Factor two	6.240
	Factor three	5.674
Gulf Air	Factor one	6.119
	Factor two	6.332
	Factor three	5.825
Etihad	Factor one	5.940
	Factor two	6.136
	Factor three	5.796

Source: Department of Statistics, University of Pretoria, 2007

It is important to note that all passengers regard all three service quality factors: “consistency of the quality of services”, “responsiveness and reliability of services” and “added effort as a positioning component” as being very important but that a difference exists in the level of importance attached to these factors when viewed in relation to the airlines mostly used by passengers.

The position of each airline in relation to all three factors is discussed first; thereafter the position of each airline in relation to individual factors is discussed.

Those passengers, who have flown Gulf Air the most, attach the highest level of importance to all three factors: “consistency of the quality of services”, “responsiveness and reliability of services” and “added effort as a positioning component”, in terms of their experiences and expectations.

Those passengers, who have flown Emirates the most, attach a slightly lower level of importance to all three factors, based on their experiences and expectations.

Those passengers, who have flown Etihad the most, attach a lower level of importance to all three factors, with respect to their experiences and expectations.

Those passengers, who have flown Qatar Airways the most, attach the lowest level of importance to all three factors, based on their experiences and expectations.

In terms of factor three: “added effort as a positioning component” the following results are evident:

Passengers, who have flown Gulf Air the most, attach the highest level of importance to factor three in the light of their experiences and expectations. In interpreting these results it cannot be concluded that Gulf Air has provided the best package and services in terms of “added effort as a positioning component”, but it can probably be deduced that passengers who fly Gulf Air exhibit the highest expectation and experience of its service quality in terms of factor three.

Passengers, who have flown Etihad the most, attach a slightly lower level of importance to factor three, based on their experiences and expectations. In the light

of these results, it cannot be concluded that Etihad offers the second best package and service quality in terms of “added effort as a positioning component”, but one can say that passengers who fly Etihad, report the second highest expectation and experience of the airline’s service quality in terms of factor three.

Passengers, who have flown Qatar Airways the most, attach a lower level of importance to factor three: “added effort as a positioning component” based on their experiences and expectations. It cannot be concluded that Qatar Airways provides a lower level of service in terms of this factor than Gulf Air and Etihad, but one can probably say that passengers who fly Qatar Airways express a lower level of expectation and experience of its service quality in terms of factor three than passengers of the other two airlines.

Passengers, who have flown Emirates the most, attach the lowest level of importance to factor three in terms of their experiences and expectations. It cannot be concluded from the results that Emirates offered the lowest level of service for “added effort”, but one can probably deduce that passengers who fly Emirates display the lowest level of expectation and experience of this airline’s quality in terms of factor three, less than the passengers of the other three airlines.

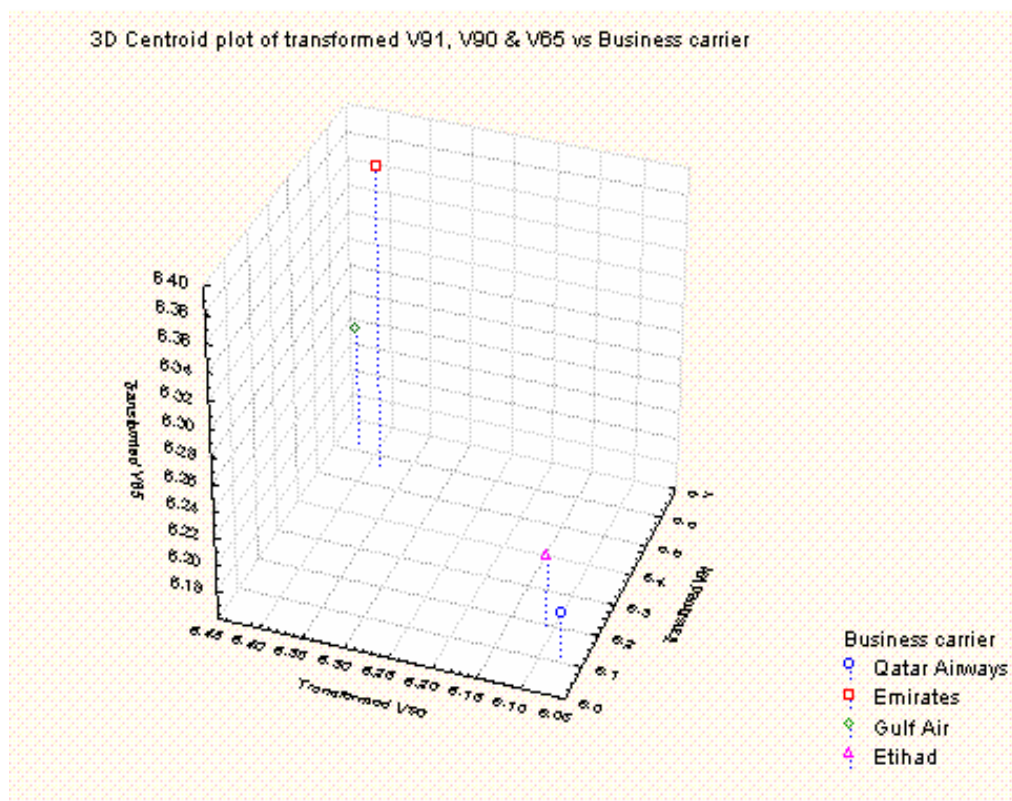
In interpreting these results one cannot conclude that Gulf Air provides the best service but it can probably be said that the passengers who fly Gulf Air exhibit the highest expectations and experience of their service quality in terms of three factors: “consistency of the quality of services”, “responsiveness and reliability of services” and “added effort as a positioning component”.

Based on these results, it cannot be concluded that Emirates provides the second best service, but it can probably be said that the passengers who fly Emirates report the second highest expectations and experience of their service quality in terms of the said three factors.

From these results, it cannot be concluded that Etihad offers a lower level of service than Gulf Air and Emirates, but it can be said that passengers who fly Etihad have a lower level of expectation and experience of their service quality as regards these three factors than passengers of Gulf Air and Emirates.

The results do not allow one to conclude with certainty that Qatar Airways provides the lowest level of service, but it can probably be said that passengers who fly Qatar Airways report the lowest expectation and experience of their service quality in terms of the three given factors.

Figure 6.20: Positioning of Qatar, Emirates, Gulf Air and Etihad in terms of three service attributes for business travel



Source: Department of Statistics, University of Pretoria, 2007

Figure 6.20 above depicts the positioning of Qatar Airways, Emirates, Gulf Air and Etihad for business travel relative to the level of importance of three attributes of service quality as perceived by passengers of the selected airlines. The positioning is only as regards business travel, since the positioning of airlines for leisure travel where these attributes were concerned was not statistically significant. Each of the axes of the 3D Centroid plot is represented by the specific variable. Axis Z represents variable V91: “the airline has a good system of handling luggage loss or damage”, axis X represents variable V90: “the airline has a good system of handling flight delays” while axis Y represents variable V65: “the airline makes you feel safe”.

The three attributes of service quality were selected as a result of their high level of importance to passengers of the said carriers. Passengers ranked variable V91, regarding luggage loss or damage, as the most important attribute of service quality out of 35 such attributes listed in Question 13 of the questionnaire (Annexure A). Variable 90, related to handling of flight delays, was ranked as number four in terms of level of importance to passengers of the four selected airlines. Variable 65: “the airline makes you feel safe” was ranked as number three in terms of level of importance to passengers of the four selected airlines. The ranking of all 35 attributes of service quality is depicted in Table 6.1.

The positioning of each airline, as perceived by their passengers, relative to the importance of three attributes of service quality, was plotted in terms of the mean values of each attribute relative to the airline. The mean values are presented in Table 6.17 below.

Table 6.17: Mean values for each carrier in terms of its positioning relative to the selected attributes of service quality for business travel

Carrier	Variable	Mean value
Qatar	The airline has a good system of handling luggage loss or damage	6.117
	The airline has a good system of handling flight delays	6.077
	The airline makes you feel safe	6.192
Emirates	The airline has a good system of handling luggage loss or damage	6.571
	The airline has a good system of handling flight delays	6.387
	The airline makes you feel safe	6.384
Gulf Air	The airline has a good system of handling luggage loss or damage	6.625
	The airline has a good system of handling flight delays	6.425
	The airline makes you feel safe	6.250
Etihad	The airline has a good system of handling luggage loss or damage	6.196
	The airline has a good system of handling flight delays	6.109
	The airline makes you feel safe	6.213

Source: Department of Statistics, University of Pretoria, 2007

It is important to note that passengers of Qatar Airways, Emirates, Gulf Air and Etihad regard all three attributes as being important for business travel but there is a difference in the level of importance attached to these selected attributes of service

quality when viewed in relation to the airline most used by passengers. The position of each airline in relation to the three selected attributes of service quality is discussed first; thereafter the position of each airline in relation to each selected attribute of service is discussed.

Those passengers, who have flown Gulf Air the most for business travel, attach the highest level of importance to all three selected attributes of service: “the airline has a good system of handling luggage loss or damage”, “ the airline has a good system of handling flight delays” and “the airline makes you feel safe”, based on their experiences and expectations.

Those passengers, who have flown with Emirates the most for the purposes of business travel, attach a slightly lower level of importance to all three selected attributes of service in terms of their experiences and expectations.

Those passengers who have flown Etihad the most with business travel in mind, attach a lower level of importance to all three selected attributes of service based on their experiences and expectations.

Those passengers, who have flown Qatar Airways the most for business travel, attach the lowest level of importance to all three selected attributes of service in terms of their experiences and expectations.

In interpreting these results it cannot be concluded that Gulf Air furnishes the best service in terms of the three selected attributes but it can probably be said that passengers who fly Gulf Air have the highest expectations for and experience of service quality relative to these three attributes of service quality.

It cannot be concluded from the results that Emirates offers the second-best service in terms of the three selected attributes of service quality but it can be said that passengers who fly Emirates report the second highest expectations for and experience of service quality in terms of these three selected attributes.

One cannot conclude from the results that Etihad provides a lower level of service in terms of the selected attributes of service quality than Gulf Air and Emirates but it

can probably be said that the passengers who fly Etihad have a lower level of expectation for and experience of its service quality in terms of these three attributes than passengers of Gulf Air and Emirates.

In terms of the results it cannot be concluded that the worst service is that of Qatar Airways but it can probably be said that passengers who fly Qatar Airways have the lowest expectation for and experience of its service quality in terms handling luggage loss or damage, a good system of handling flight delays and making one feel safe.

In terms of the “airline makes you feel safe” the following results are evident:

Those passengers who have flown Emirates the most for business travel attach the highest level of importance to the feeling of safely provided by the airline, basing this on their experience and expectations. It cannot be said that Emirates is the best airline that engenders this feeling, but it can probably be said that passengers of Emirates have the highest expectations for and experience of the attribute “the airline makes you feel safe”.

Those passengers who have flown Gulf Air the most for business travel attach a slightly lower level of importance to this attribute, based on their experience and expectations of this attribute. It can probably be said that passengers of Gulf Air exhibit the second highest level of expectations and experience of this attribute after passengers of Emirates.

Those passengers who have flown Etihad the most for the purposes of business attach a lower level of importance to the attribute of feeling safe, based on their experience and expectations of this attribute. It can probably be said that the passengers of Etihad exhibit a lower expectation and experience of this attribute than the passengers of Emirates and Gulf Air.

Those passengers who have flown Qatar Airways the most on business trips attach the lowest level of importance to the said attribute, based on their experiences and expectations of this attribute. It cannot be concluded that Qatar Airways is the worst airline in providing a feeling of safety, but it can probably be concluded that

passengers who fly Qatar Airways report the lowest expectation and experience of this attribute.

The discussion of the previous chapters leads to the formulation of the following hypotheses:

6.3 HYPOTHESES TESTS

6.3.1 Hypothesis 1

The first hypothesis (**H1**) focused on the difference of perceptions and expectations of service attributes by passengers using different airlines:

H0: There is no difference in the relative positioning of the selected airlines based on consumer perceptions and expectations of service quality attributes.

H1: The relative positioning of the selected airlines will differ based on consumer perceptions and expectations of service quality attributes.

This hypothesis was tested at a 5% level of significance.

The descriptive statistics for the selected airlines in Table 6.18 indicate a relatively large difference in the mean positioning of Qatar Airways and Etihad based on consumers' perceptions and expectations of service quality attributes (5.401-4.397=1.004), followed by Qatar Airways and Gulf Air (5.401-4.699=0.702) and Emirates and Gulf (5.325-4.699=0.626). There is a very small difference between the relative positioning of Qatar Airways and Emirates (5.401-5.325=0.076) and Gulf Air and Etihad (4.699-4.397=0.302).

Table 6.18: Descriptive statistics for selected airlines (times used) sub-samples on service quality

Gender	<i>n</i>	<i>M</i>	<i>SD</i>
Qatar Airways	152	5.401	6.416
Emirates	271	5.325	8.117
Gulf Air	113	4.699	4.452
Etihad	126	4.397	4.483

Source: Department of Statistics, University of Pretoria, 2007

Since the relative positioning of selected airlines was measured at an interval level of measurement, the appropriate parametric significance test is the one-way ANOVA. If its assumptions cannot be satisfied, the Kruskal-Wallis one-way ANOVA can be used as a non-parametric alternative.

A one-way ANOVA was conducted to explore the impact of perceptions and expectations of service quality attributes on the relative positioning of the selected airlines, as measured by a Likert scale. The airlines were divided into the four carriers and perceptions and expectations of service attributes were categorized into three factors: “consistency of the quality of services”, “responsiveness and reliability of services” and added effort as a positioning component”. There was a significant difference amongst the four carriers based on passengers’ perceptions and expectations with respect to service attributes.

The alternative hypothesis **H1** comprised of the three sub-hypotheses (H1_a, H1_b, H1_c):

H1_a: The relative positioning of the selected airlines will differ based on consistency of service quality.

H1_b: The relative positioning of the selected airlines will differ based on responsiveness and reliability.

H1_c: The relative positioning of the selected airlines will differ based on added effort as a positioning component.

$F(19, 369) = 1.29$ and $p = 0.279$ for factor one, which was “the consistency of service quality”, indicating that there was no effect of this factor on the positioning of the airlines, as perceived by consumers. The hypothesis **H1_a** was therefore rejected.

$F(19, 369) = 3.03$ and $p = 0.029$, for factor two, indicating that a significant relationship exists between “responsiveness and reliability of services” and the relative positioning of selected airlines. Hypothesis **H1_b** was not rejected, indicating that the alternative hypothesis **H1** is partly supported by **H1_b**.

$F(19, 369) = 2.09$ and $p = 0.101$, indicating that there is no effect of “added effort as a positioning component” on the relative positioning of the airlines; thus **H1c** cannot support hypothesis **H1**.

As perceived in the results above, the alternative hypothesis **H1** is partly supported by sub-hypothesis H1b, indicating that the null hypothesis **H0** cannot be fully rejected.

The F distribution determines the size of the ratio necessary to reject the null hypothesis for a particular sample size and level of significance (Cooper & Schindler, 2003:547).

6.3.2 Hypothesis 2

The second hypothesis (**H2**) focused on the impact of needs as regards journeys by air, based on the perceptions and expectations of service quality. The null and alternative hypotheses of **H2** are stated below.

H0: There is no difference in perceptions and expectations of service quality based on passengers’ needs for travelling.

H2: If passengers’ needs for travelling are different, then there will be a significant difference in their perceptions and expectations of service quality.

This hypothesis was tested at 5% level of significance.

Table 6.19: Descriptive statistics for sub-samples relating to service quality in terms of passengers’ purposes of travel

Purpose of travel	<i>n</i>	<i>M</i>	<i>SD</i>
Total (Business, Leisure and Other)	401	2.297	1.313

Source: Department of Statistics, University of Pretoria

Table 6.19 indicates that the majority of respondents tend to report leisure needs for travelling ($M = 2.297$, $SD = 1.313$).

Since the relative positioning of selected airlines was measured at an interval level of measurement, the appropriate parametric significance test is the one-way ANOVA. If its assumptions cannot be satisfied, the Kruskal-Wallis one-way ANOVA can be used as a non-parametric alternative.

A one-way ANOVA was conducted to explore whether passengers' purposes of travel impact on their expectations and perceptions of service attributes, as measured by a Likert scale.

Passengers' main purposes of travel as identified by the study were classified as: business, leisure and other. As already mentioned, their perceptions and expectations of service attributes were divided into three factors. Significant differences in terms of the effect of purposes of travel on these perceptions and expectations were evident.

The alternative hypothesis **H2** consisted of the three sub-hypotheses (**H2a**, **H2b**, **H2c**):

H2a: If passengers' needs for travelling are different, then there will be a significant difference in consistency of service quality.

H2b: If passengers' needs for travelling are different, then there will be a significant difference in responsiveness and reliability.

H2c: If passengers' needs for travelling are different, then there will be a significant difference in added effort as a positioning component.

$F(19, 369) = 1.07$ and $p = 0.372$ for purpose of travel and factor one, which was "the consistency of service quality", indicating that there was no relationship between the purpose of travel and factor one. Hence sub-hypothesis **H2a** is rejected.

$F(19, 369) = 3.20$ and $p = 0.013$ for purpose of travel and factor two, indicating that a significant relationship exists between "responsiveness and reliability of services" and purposes of travel. The results indicate that hypothesis **H2** is partly supported by **H2b**; thus the null hypothesis cannot be fully rejected.

$F(19, 369) = 1.46$ and $p = 0.213$ for purpose of travel and factor three, indicating that no relationship is evident between purposes of travel and “added effort as a positioning component”. This indicates that sub-hypothesis **H2** is rejected.

The F distribution determines the size of the ratio necessary to reject the null hypothesis for a particular sample size and level of significance (Cooper & Schindler, 2003:547).

6.3.3 Hypothesis 3

The third hypothesis (**H3**) focused on the effect of the demographic characteristics of passengers on the perceptions and expectations of service attributes. The null and alternative hypotheses of **H3** are stated below.

H0: There is no impact of the demographic characteristics of passengers on their perceptions and expectations of selected airlines.

H3: Passengers’ perceptions and expectations of selected airlines will differ based on their demographic characteristics.

This hypothesis was tested at 5% level of significance.

Table 6.20: Descriptive statistics for demographic profile sub-samples on service quality

Demographic characteristics	<i>n</i>	<i>M</i>	<i>SD</i>
Gender	409	1.325	0.469
Age	410	1.773	0.740
Nationality	408	1.917	0.703
Home language	406	2.842	1.263
Income group	405	1.681	0.741

Source: Department of Statistics, University of Pretoria, 2007

Table 6.20 indicates that the majority of respondents were males ($M = 1.325$, $SD = 0.469$), close to the age category between 30 and 45 years old ($M = 1.773$, $SD = 0.740$), with the majority of passengers being from South Africa ($M = 1.917$, $SD = 0.703$), and reporting English and Arabic as the main home languages spoken ($M =$

2.842, $SD = 1.263$), falling into an income group close to R250 000– R500 000 per annum ($M = 1.681$, $SD = 0.741$).

Since the relative positioning of selected airlines was measured at an interval level of measurement, the appropriate parametric significance test is the one-way ANOVA. It was pointed out earlier that if its assumptions cannot be satisfied, the Kruskal-Wallis one-way ANOVA could be used as a non-parametric alternative.

A one-way ANOVA was conducted to explore if there is any impact of passengers' purposes of travel on their expectations and perceptions of service attributes, as measured by a Likert scale.

The passengers' demographic profile for the purposes of this study consisted of the following variables: gender, age, nationality, home language and income group. Perceptions and expectations of service attributes were divided into the three factors: "consistency of the quality of services", "responsiveness and reliability of services" and added effort as a positioning component". A significant difference did emerge as regards the relationship of the demographic profile of respondents and their perceptions and expectations of service attributes.

The alternative hypothesis **H3** comprised the three sub-hypotheses (H3a, H3b, H3c):

H3 a: Consistency of service quality as viewed by passengers of selected airlines will differ based on their demographic characteristics.

H3b: Responsiveness and reliability as viewed by passengers of selected airlines will differ based on their demographic characteristics.

H3c: Added effort as a positioning component as viewed by passengers of selected airlines will differ based on their demographic characteristics.

$F(19, 369) = 1.15$ and $p = 0.285$ for gender and factor one, which was "the consistency of service quality", indicating that there was no relationship between gender and factor one.

$F(19, 369) = 4.49$ and $p = 0.012$ for age and factor one, indicating that there is a significant relationship between “consistency of service quality” and the gender of the passenger. This indicates that hypothesis **H3** is partly supported and the null hypothesis cannot be fully rejected.

$F(19, 369) = 0.07$ and $p = 0.932$ for nationality and factor one, indicating that no significant relationship could be established between nationality and “consistency of service quality”.

$F(19, 369) = 1.94$ and $p = 0.103$ for nationality and factor one, indicating that no significant relationship exists between home language and “consistency of service quality”.

$F(19, 369) = 2.71$ and $p = 0.068$ for income group and factor one, indicating that there is a significant relationship between income group and “consistency of service quality”. This indicates that hypothesis **H3** is partly supported and the null hypothesis cannot be fully rejected.

In interpreting the results for factor one: “consistency of service quality”, it is evident that a significant relationship exists between factor one and the age and income group of passengers.

$F(19, 369) = 0.15$ and $p = 0.699$ for gender and factor two, indicating that there is no significant relationship between gender and “responsiveness and reliability of services”.

$F(19, 369) = 8.77$ and $p < 0.000$ for age and factor two, indicating that a significant relationship does exist between age and “responsiveness and reliability of services”. This indicates that hypothesis **H3** is partly supported and the null hypothesis cannot be fully rejected.

$F(19, 369) = 0.30$ and $p = 0.738$ for nationality and factor two, indicating that no significant relationship could be found between nationality and “responsiveness and reliability of services”.

$F(19, 369) = 1.31$ and $p = 0.265$ for home language and factor two, indicating that there is no significant relationship between home language and “responsiveness and reliability of services”.

$F(19, 369) = 3.70$ and $p = 0.026$ for income group and factor two, indicating that a significant relationship is evident between the income group and “responsiveness and reliability of services”. This indicates that hypothesis **H3** is partly supported and the null hypothesis cannot be fully rejected.

In interpreting the results for factor two: “responsiveness and reliability”, it is clear that there is a significant relationship between factor two and the age and income group of passengers.

$F(19, 369) = 0.49$ and $p = 0.483$ for gender and factor three, indicating that there is no relationship between gender and “added effort as a positioning component”.

$F(19, 369) = 0.35$ and $p = 0.701$ for age and factor three, indicating that no relationship could be found between age and “added effort as a positioning component”.

$F(19, 369) = 2.91$ and $p = 0.056$ for nationality and factor three, indicating that a significant relationship exists between nationality and “added effort as a positioning component”. This indicates that hypothesis **H3** is partly supported and **H0** cannot be fully rejected.

$F(19, 369) = 1.82$ and $p = 0.124$ for home language and factor three, indicating that no significant relationship could be established between home language and “added effort as a positioning component”.

$F(19, 369) = 0.82$ and $p = 0.441$ for income group and factor three, indicating that there is no significant relationship between income group and “added effort as a positioning component”.

In interpreting the results for factor three: "added effort as a positioning component", it is seen that a significant relationship does exist between factor three and the nationality of passengers.

CHAPTER 7

7 DISCUSSION

7.1 INTRODUCTION

The aim of this study was to investigate the positioning of Middle Eastern airlines such as Etihad, Emirates, Gulf Air and Qatar Airways in terms of attributes of service quality as perceived and experienced by their passengers. The importance of such attributes was determined with respect to these perceptions and expectations. The study specifically focused on South African business and leisure travel markets. The following objectives were identified for the purposes of the study:

- To identify, from established theory, attributes of service quality in the airline environment
- To establish the importance of service quality attributes for positioning
- To determine the levels of importance of various service attributes
- To measure customers' perceptions and expectations of the service attributes of selected airlines
- To assess the selected airlines' positioning in terms of performance on identified attributes of service quality as seen and perceived by their passengers.

In order to achieve these objectives, the following hypotheses were formulated:

- **H1.** The relative positioning of the selected airlines will differ based on consumer perceptions and expectations of service quality attributes.
- **H2.** If passengers' needs for travelling are different, then there will be a significant difference in their perceptions and expectations of service quality.
- **H3.** Passengers' perceptions and expectations of selected airlines will differ based on their demographic characteristics.

For many airlines, the concept of understanding and improving service quality is viewed as a “grey area”. However, the only way customers can differentiate between similar services offered by airlines, is by means of the experience and satisfaction gained from excellent services. Where all airlines offer comparable fares and matching frequent flier programmes, a differentiated position based on attributes of service quality is a key to success (Gursoy *et al.*, 2005:59).

A variety of studies have been published in the travel and tourism literature, indicating the importance of service quality in the airline industry (Tsaour, *et al.*, 2002; Gursoy *et al.*, 2005; Chang & Yeh, 2002; Gordon, 1991). Airlines in different countries are adopting different positioning strategies to ensure that they are differentiated from competitors and positively reflected in consumers’ minds. The present research contributes value to the airline industry by addressing the need for reliable information on attributes of service quality that are perceived by South African consumers as crucial factors impacting on their choice of airline, using the four examples indicated.

7.2 SUMMARY OF FINDINGS

The results indicated that passengers using the given airlines are 67.48% male and 32.52% female, with the main age spread in the two main age groups: 41.22% below 30 years and 40.24% between 30 and 45 years. Half of the respondents were from South Africa, while 29.17% were from the Middle East, with 29% of respondents speaking Arabic, 26% of respondents speaking English and 15% of respondents speaking Afrikaans. Almost half of the respondents (48.40%) earned below R250 000 per annum while 35.06% earned between R250 000 and R500 000. This demographic profile is an important indication for airlines of the current trends within their customer markets. The large number of respondents from South Africa indicates that Middle Eastern airlines satisfy their needs and wants, though for different purposes.

Results also indicated that passengers of these four Middle Eastern airlines report different purposes of travel: 38% of respondents travelled for business, 34% for leisure and 28% for other reasons: including commuting, visiting friends and relatives, attending sports events, sightseeing. This shows that the destinations to

which the passengers journeyed could be regarded as the push-factors or main reasons why they flew with Etihad, Emirates, Qatar and Gulf Air. Many South African expatriates are living in Dubai, Bahrain, Doha and Abu Dhabi and a number of businesses are basing their headquarters in the United Arab Emirates. The Middle Eastern airlines provide direct flights to these destinations, which is a vital factor in their selection, particularly for business passengers.

The results of the questionnaires indicated that 50% of passengers select Emirates as their airline of choice for business travel, 24% Qatar Airways, 14% Etihad and 12% Gulf Air. Of importance is the fact that 58.23% mentioned service quality as their main reason for choosing their airline for business travel, followed by airport facilities with 41.22%, timing with 37.80% and frequency of flights with 37.32% as the other main reasons for choosing a particular airline. It can be concluded that currently, as perceived by passengers, Emirates is the most favourite airline of business travellers since it provides the best services, with the best airport facilities (compared to Qatar, Etihad and Gulf Air), best on-time performance and frequency of flights. This is accurate, as Emirates is the most well-established Middle Eastern airline in the South African air travel market, with the biggest airport and duty-free facilities in the Middle East and offers the best timing and most frequent flights among the Middle Eastern airlines surveyed (according to Pegg, 2006, Managing Director of Sure Viva Travel).

Results for the leisure market indicated that 49% of respondents selected Emirates as their airline of choice, followed by Qatar Airways (22%), Etihad (18%) and Gulf Air (11%). The main reasons in this respect were: 62.20% service quality, 54.44% discount price, 48.54% value for money and 55.85% frequent flyer programme.

The results clearly indicate that business travellers are concerned with service quality, the variety and quality of airport facilities, the timing and frequency of flights, and that the choice of their airline will depend on these main factors. Leisure passengers, on the other hand are more price-sensitive, they are still concerned with service quality aspects, but their biggest push-factors for selecting an airline are a discounted price, value for money and a good frequent flyer programme. The airline that offers the best package will attract this particular market segment.

The channels used to book a seat for business travel were: 58.29% a travel agent and 18.05% the airline website. Business passengers also indicated that they were influenced by the travel agent (47.80%) and by the airline website (15.61%). The results indicate the importance of the abovementioned channels for business passengers. Airlines wanting to attract this specific market segment should focus on their relationships with the travel agents and the ease and convenience of using the website to book a flight.

On the other hand the channels used to book a ticket for leisure travel were: 55.12% a travel agent and 30.24% the airline website. Leisure passengers also indicated that they were influenced by the following when selecting an airline: 42.93% the travel agent, 26.59% the airline website and 25.61% their family. The airline website plays a more important role in attracting leisure passengers than business passengers, while the family is also a major push-factor because leisure passengers are more sensitive to their relatives' opinions. It is therefore important to ensure that the airline website is user-friendly for the entire family.

Among the 35 attributes of service as perceived by passengers using Middle Eastern airlines, the most important is "the airline has a good system of handling luggage loss or damage", followed by "the airline has efficient check-in and baggage handling services" while the least important attribute of service is "the airline provides in-flight internet/email/fax/phone facilities", followed by "the airline has other travel-related partners, such as cars, hotels and travel insurance". The results of the study indicate that customers are mostly concerned with the responsiveness of the airline and reliability of services (efficient check-in, handling luggage loss or damage, safety and security, handling of flight delays, enough legroom, willingness of employees), followed by consistency in the quality of services (quality food and beverages, ability of airline to perform right the first time, on-time performance, tangible aspects of employees, courtesy of employees) and less concerned about the added effort of the airline as its positioning component (onboard entertainment facilities, loyalty programme, global alliances, air or accommodation packages, in-flight facilities, waiting lounges and travel-related partners). The findings suggest that airlines should ensure that their employees are well-trained and equipped with the necessary knowledge to attend to customers' needs and wants and that the airline is in a position to deliver what it promises, from the beginning of the booking process until

the end of the flight. As can be seen from the results, customers are mainly concerned with the delivery of services consistently and the ability of the airline to ensure that everything runs smoothly. These results suggest the direction, which service improvement should take. Airline managers should also become more committed to improvement in management and be alert to the implications of poor management where service quality is concerned.

Discussion of the hypotheses in this chapter will cover only the statistically significant results.

The results of this study, in terms of the first hypothesis, testing the relationship between perceptions and expectations of service quality and relative positioning of the airlines, indicated that a statistically significant relationship existed in terms of:

There was a statistically significant effect of the responsiveness and reliability of services on the relative positioning of airlines. This is an indication to the airlines that they should focus on their own and their employees' readiness and willingness to satisfy customers' needs and wants through reliable delivery of services. Passengers who have flown Gulf Air the most, attach the highest level of importance to "responsiveness and reliability of services", based on their expectations and experiences ($M = 6.332$), followed by passengers who have flown the most with Emirates ($M = 6.240$), who attach a slightly lower level of importance to this factor. Passengers who have flown Etihad the most attach a lower level of importance to "responsiveness and reliability of services" in terms of their expectations and experiences ($M = 6.136$) while passengers who have flown Qatar Airways the most attach the lowest level of importance to this factor, as far as their expectations and experiences are concerned ($M = 6.001$).

Gulf Air's main positioning strategies as reflected by means of the media and the airline's website are those of a superior product through technology positioning, customization and performance. It is interesting to observe that the image projected by Gulf Air is the same image that its passengers see. Responsiveness and reliability of services is interlinked with customization and airline performance.

The main positioning strategies of Emirates, as reflected in the media and its website, are: innovativeness, performance and customization. Performance is always linked with reliability: for the airline always to be reliable it needs to perform to the best of its abilities. Customization and innovativeness have a direct impact on the airline's ability to respond.

Etihad's main positioning strategies are: reliability and augmentation of service offering. Once again, its passengers perceive reliability as important and this is what the airline is trying to project to its customers.

Qatar Airways' main positioning focuses, as is clear from the media and the airline's website are those of people advantage and augmentation of the product. The passengers of this airline attach the lowest level of importance to the aspect of responsiveness and reliability of services.

"Responsiveness and reliability of services" is evidently considered as the crucial factor in selecting airlines and the way they are perceived in consumers' minds. Airlines should focus on taking more security measures and training employees well, as this will give passengers more confidence. Being responsive or prompt and willing to help, with a courteous attitude, should be a priority objective of the employees as part of the service culture.

The results of the study, in terms of the second hypothesis, testing the relationship between passengers' expectations and perceptions of service quality and purposes of travel, indicated the existence of a statistically significant relationship in terms of:

Purposes of travel and responsiveness and reliability of services. Leisure travellers attached the highest level of importance to this attribute ($M = 6.260$), followed by business passengers ($M = 6.220$), whereas passengers travelling for reasons other than business or leisure ($M = 5.964$) attached the lowest level of importance to this factor. This is an interesting finding as it is usually the consistency of the quality of services and added effort as a positioning component on which airlines concentrate on in regard to business and leisure passengers. This provides an ideal opportunity for an airline to excel in the area pertaining to responsiveness and reliability of services. The study conducted by Tsaur *et al.* (2002) identified the following aspects

as being important to the passengers surveyed: comfort of seat (tangibility), safety (reliability), courtesy of attendants (responsiveness), the certainty that an airline will provide for its customers (assurance) and how it deals with customer complaints (empathy). The results of this study are in line with those by Tsaur *et al.* (2002).

The results of the study, in terms of the third hypothesis, testing the relationship between demographic profile of respondents (age, gender, nationality, home language and income level) and their perceptions and expectations of service quality, indicated the following statistically significant results:

The only significant relationship was found between the consistency of the quality of services and age as well as income group. Respondents in the age group between 30 and 45 years ($M = 6.022$) attached the highest level of importance to the consistency of service quality, followed by respondents over 45 years ($M = 6.004$) and respondents below 30 years of age ($M = 5.870$). Respondents in the income group below R250 000 per annum ($M = 6.013$) attached the highest level of importance to the consistency of the quality of services, followed by respondents with an income between R250 000 and R500 000 per annum ($M = 5.910$) and respondents with an income of over R500 000 per annum ($M = 5.897$). This demographic profile suggests a further objective for airlines: to ensure that quality service is delivered consistently throughout different flights.

A significant relationship was also established between the responsiveness and reliability of services and the age as well as the income group. The same demographic pattern was followed as with the consistency of the quality of services, which is an interesting finding, indicating that customers with similar age and income profiles find consistency of services to be as important as their reliability and responsiveness.

The results demonstrated a significant relationship between added effort as a positioning component and the nationality of respondents. Respondents from the Middle East attached the highest level of importance to added effort as a positioning component ($M = 5.923$), followed by respondents from other countries (European and African) ($M = 5.725$) and respondents from South Africa ($M = 5.603$). The airlines should emphasize their added effort to their passengers who hail from the

Middle East, as they value this attribute the most out of three passenger groups. Resources should be invested in customization, such as loyalty and frequent flyer programmes.

These findings are in line with Gilbert and Wong's study (2003) of passenger perceptions and airline services, which indicated that safety; assurance, on-time performance and responsiveness are considered as the most important aspects. Their study (2003) indicated that reliability was not as important as the other service aspects to passengers in Hong Kong. As indicated in the current study, reliability and responsiveness was the most important factor affecting the satisfaction of passengers using Middle Eastern airlines, followed by consistency of the quality of services. The least important to the passengers of Etihad, Emirates, Qatar and Gulf Air was factor three, added effort.

7.3 MANAGERIAL IMPLICATIONS

Today, airline managers as well as academics better understand the importance and impact of service quality in the airline industry (Tsaur *et al.*, 2002; Gordon, 1991; Gilbert & Wong, 2003; Gursoy *et al.*, 2005; Chang & Yeh, 2002). Comprehending the relationship between an airline's service and its success is important. However, it is perhaps more managerially useful to identify specific attributes of service quality that are important to passengers, because then the most successful strategies can be formulated.

The results of this study have suggested that customers are mostly concerned with the responsiveness of the airline and the reliability of its services (efficient check-in, handling luggage loss or damage, safety and security, handling of flight delays, enough legroom, willingness of employees), followed by consistency as regards the quality of services (quality food and beverages, ability of airline to perform right the first time, on-time performance, tangibility aspects of employees, courtesy of employees) and less concerned about the added effort of the airline as its positioning component (onboard entertainment facilities, loyalty programme, global alliances, air or accommodation packages, in-flight facilities, waiting lounges and travel-related partners). The findings suggest that airlines should ensure that their employees are well-trained and equipped with the necessary knowledge to attend to customers'

needs and wants and that the airline is in a position to deliver what it promises from the beginning of the process of booking until the end of the flight. This suggests the direction for service improvement.

The study represents a picture of passengers' perceptions and expectations in terms of service and the following are recommended:

- Airlines should recognize what their target and potential customers want in order to ensure that their needs and wants are met. This study has offered a useful indication in terms of customers' demographic profile and purpose of travel. The findings can be used to address specific target market in terms of their requirements to ensure maximum satisfaction being gained from the air travel product.
- Airline managers should also be more committed to management improvement and be alert to the implications of poor management of the quality of service rendered. This brings one back to the reliability and responsiveness mentioned as the most important factor by passengers of four selected airlines. The results of the study can be used by these airlines to see how passengers perceive them in terms of service quality and delivery.
- Airlines should focus on their own and their employees' readiness and willingness to satisfy customers' needs and wants through reliable and consistent delivery of services.
- Airlines should focus on taking more measures with respect to security and training employees better, as this will give passengers more confidence. Being responsive or prompt and willing to help, showing a courteous attitude, should be a priority objective for their employees as part of the service culture. This recommendation is in line with the study by Gursoy *et al.* (2005).
- Resources should be invested in customization, such as loyalty and frequent flyer programmes. As identified through information provided

by the media, Emirates and Gulf Air focus on customization as one of their main positioning strategies.

7.4 LIMITATIONS

Some limitations might be related to collection of data and interpretation of results. No database was available from the airlines in this study, which necessitated that data be collected using a non-random sampling method. This is the first limitation of the study. The data collected was not normally distributed. The data had to be transformed and then tested for normality. The 7-point Likert scale was transformed into a four-point scale (1, 2, 3, 4 on the original scale were all combined into 4 = not important, 5 = important, 6 = very important and 7 = extremely important). Only the respondents from Etihad could be interviewed at O.R. Tambo Airport, which limited the access to passengers. An alternative data-gathering method, such as the client base acquired from Sure Viva Travel, had to be used to ensure that the business and leisure passengers of four Middle Eastern airlines were adequately represented.

Another limitation of the study was the absence of a question linking a specific airline to service attributes. No question specified that there was a relationship between airlines flown and the choice of the specific service attribute. This difficulty was overcome by using the total number of times flown per airline in both 2005 and 2006. If passengers selected more than two airlines, the most frequently used airline was linked to attributes of service quality. If passengers selected two airlines with the same number of flights, a random pick was done electronically to select the airline.

Despite the limitations the study does provide a foundation for other studies in the future.

7.5 RECOMMENDATIONS FOR FUTURE RESEARCH

This research attempted to furnish an indication of how Middle Eastern airlines are perceived by their passengers to be positioned against each other, based on attributes of service quality, which were grouped into three factors, to ensure the easier comparison of data. These attributes of service were ranked by passengers of the four Middle Eastern airlines according to their expectations of where the airlines

were positioned. Future researchers may want to expand on this by differentiating between perceptions and expectations of attributes of service quality. This study involved only four Middle Eastern airlines, so future research could be directed to evaluating different airlines flying to and from South Africa. More research could be undertaken in terms of these Middle Eastern airlines' competitors, their areas of success and lessons that could be learned.

7.6 CONCLUDING REMARKS

The results and findings should be considered taking into consideration the limitations and the scope of the study. The objectives of the study were successfully achieved and the research problem addressed. This study makes a contribution towards the air transportation literature by confirming the validity of grouping a large number of service quality attributes and adds value to the role players' understanding of their particular airlines' influence and the importance of service quality as regards positioning.

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APPENDIX A: PASSENGER QUESTIONNAIRE