

**POLITECNICO DI MILANO**

**Facoltà di Ingegneria dei Sistemi**



**POLO REGIONALE DI COMO**

**Master of Science in**

**Management, Economics and Industrial Engineering**

**SERVICE QUALITY PERCEPTION ANALYSIS TO  
DEFINE LOYALTY IN THE AIRLINE INDUSTRY**

**Supervisor: Prof. Alessandro Brun**

**Master Graduation Thesina By: Neli Mincheva Aleksieva**

**Student Id. number: 748375**

**Academic year: 2010/2011**

## **ABSTRACT**

This study attempts to evaluate the quality attributes and brand image effect over perceived service quality of the airline services. To measure functional quality and perceived quality satisfaction in the airline industry, there are some models. However, in this study, the proposed model was developed by the help of the most popular and complete service quality measurement model of SERVQUAL and GRÖNROOS' service quality model. Moreover, it reports the difference in the passengers' loyalty definition preference based on gender, age, education and income level related to airline services. To have the statistic data for the study, one survey with 10 questions was implemented. As a result, 130 respondents answered the questionnaire. The last part of this study is to report the findings and analyze the results of survey.

## SOMMARIO

Questo studio cerca di valutare gli attributi di qualità e l'immagine di marca e l'effetto sulla qualità del servizio percepita dei servizi di trasporto aereo.

Per misurare la qualità funzionale e di soddisfazione percepita qualità nel settore del trasporto aereo, ci sono alcuni modelli. Tuttavia, in questo studio, il modello proposto è stato sviluppato con l'aiuto del più diffuso e completo modello di misurazione del servizio di qualità di modello di servizio SERVQUAL e GRÖNROOS di qualità.

Inoltre, segnalala differenza di preferenza fedeltà dei passeggeri 'definizione basata su sesso, età, istruzione e livello di reddito relativi ai servizi aerei.

I dati statistici necessari per lo studio sono stati raccolti tramite un sondaggio composto da 10 domande, pubblicato sia su internet. I 130 responsi ottenuti sono stati raccolti ed analizzati e compongono la parte conclusiva dello studio; da questi dati infatti sono state dedotte importanti considerazioni a supporto della tesina.

## ACKNOWLEDGEMENTS

This thesina has been written for a Master of Science Degree in Management, Economics and Industrial Engineering. Many people have helped me during the process to whom, I would like to extend my appreciation and regard.

First and foremost, I would like to express my deep and sincere gratitude to my supervisor, Prof. Alessandro Brun for his enthusiasm, dedication, support and guidance during my entire research study.

I would like to extend my sincere gratitude to the entire staff of the Politecnico di Milano University, including visiting lecturers, who have contributed in many ways towards my study.

I wish to express my profound gratitude and thanks to my father and mother and also my sister, for their love, affection, trust, support and encouragements throughout my life.

Last but not least, I wish to give a special thank to Güner Özgür for his great help as well as encouragement.

I would also like to thank all the participants who contributed to my work. Completion of this research is impossible without their participation.

Neli Mincheva Aleksieva

June, 2011

# CONTENT

ABSTRACT .....	ii
SOMMARIO .....	iii
ACKNOWLEDGEMENTS .....	iv
List of Figures.....	vii
List of Table .....	viii
CHAPTER 1: INTRODUCTION .....	1
1.1 Background.....	1
1.2 Problem Definition.....	2
1.3 Purpose and Research Questions.....	4
1.4 Disposition.....	6
CHAPTER 2: LITERATURE REVIEW ON AIRLINE INDUSTRY .....	7
2.1 What is Airline Industry?.....	7
2.2 History of Airline Industry .....	8
2.2.1 European Airline Industry.....	8
2.2.2 Airline Industry in Turkey .....	10
2.3 Airline Classification.....	11
2.4 Growth and Latest Trends .....	13
2.4.1 Turkey.....	15
CHAPTER 3: LITERATURE REVIEW .....	17
3.1 Defining Quality .....	17
3.1.1 Strengths and Weaknesses of Different Definitions of Quality.....	21
3.2 Service Quality.....	29
3.2.1 The Impact of Services on Definitions of Quality.....	30
3.2.2 The Measurement of Service Quality .....	31
3.2.3 Service Quality Perception - Satisfaction .....	38
3.3 Loyalty.....	39
3.3.1 Relationship Between Customer Satisfaction and Loyalty .....	40
3.3.2 Relationship Between Image and Loyalty .....	41
3.4 The Proposed Model .....	43
3.4.1 Construct Measurement .....	44
CHAPTER 4: RESEARCH METHODOLOGY .....	50
4.1 Purpose of Research .....	50

4.2 Research Approach .....	51
4.3 Research Strategy .....	52
4.4 Data Collection Method.....	53
4.5 Sampling Selection.....	54
4.6 Validity and Reliability .....	55
4.6.1 Reliability.....	55
4.6.2 Validity .....	57
CHAPTER 5: DATA ANALYSIS .....	58
5.1 Cronbach’s Alpha.....	58
5.2 Descriptive Statistics .....	59
5.3 Service Quality Measurement .....	63
5.4 Analysis .....	64
5.4.1 The impact of service quality on service quality perception.....	64
5.4.2 The impact of image on service quality perception .....	68
5.4.3 Relationship between functional quality and brand image .....	69
5.5 Loyalty Definition .....	70
5.5.1 Correlation Analysis .....	71
5.5.2 Demographic Profile Based Analysis .....	71
CHAPTER 6: DISCUSSION AND CONCLUSION .....	79
6.1 Conclusion .....	79
6.2 Theoretical Implications .....	81
6.3 Managerial Implications .....	82
6.4 Limitations of This Research .....	83
6.5 Suggestions for Future Research.....	84
6.6 Discussion.....	84
REFERANCES.....	86
APPENDIX .....	94
1. List of airlines .....	94
2. Questionnaire .....	95
3. Pilot Test Data .....	98
4. Reliability Test Data (IBM SPSS Statistics).....	98
5. Average Gross Wage by Gender and Education Level .....	100

## List of Figures

<i>Figure 1: Service quality model by Parasuraman</i> .....	33
<i>Figure 2: Grönroos service quality model</i> .....	37
<i>Figure 3: Retention and satisfaction relationship</i> .....	41
<i>Figure 4: Proposed model</i> .....	44
<i>Figure 5: Survey participants profile by gender</i> .....	60
<i>Figure 6: Survey participants profile by marital status</i> .....	60
<i>Figure 7: Survey participants profile by age</i> .....	61
<i>Figure 8: Survey participants profile by education level</i> .....	61
<i>Figure 9: Survey participants profile by income status</i> .....	62
<i>Figure 10: Survey participants profile by family size</i> .....	63
<i>Figure 11: Loyalty definition preference analysis by gender</i> .....	72
<i>Figure 12: Loyalty definition preference by marital status</i> .....	73
<i>Figure 13: Loyalty definition preference analysis by age data</i> .....	74
<i>Figure 14: Loyalty definition preference analysis by education level</i> .....	75
<i>Figure 15: Loyalty definition preference analysis by income level</i> .....	76
<i>Figure 16: Loyalty definition preference analysis by family size</i> .....	77

## List of Table

<i>Table 1: SERVQUAL development .....</i>	<i>31</i>
<i>Table 2: Proposed model construct operationalization .....</i>	<i>45</i>
<i>Table 3: Characteristics of survey .....</i>	<i>53</i>
<i>Table 4: Reliability statistics .....</i>	<i>57</i>
<i>Table 5: Reliability value for each attribute of the questionnaire .....</i>	<i>58</i>
<i>Table 6: Survey participants' demographic information .....</i>	<i>59</i>
<i>Table 7: Service quality attributes that are used in questionnaire .....</i>	<i>63</i>
<i>Table 8: Functional quality and perceived service quality descriptive statistics .....</i>	<i>65</i>
<i>Table 9: Functional quality and perceived service quality correlation rates .....</i>	<i>67</i>
<i>Table 10: Brand image and perceived service quality descriptive statistics.....</i>	<i>68</i>
<i>Table 11: Brand image and perceived service quality correlation rates.....</i>	<i>68</i>
<i>Table 12: Functional quality and brand image correlation rates .....</i>	<i>69</i>
<i>Table 13: Perceived service quality and loyalty definitions correlation rates.....</i>	<i>71</i>
<i>Table 14: Mean satisfaction rate analysis by gender.....</i>	<i>73</i>
<i>Table 15: Mean satisfaction rate analysis by marital status.....</i>	<i>74</i>
<i>Table 16: Mean satisfaction rates analysis by age data .....</i>	<i>75</i>
<i>Table 17: Mean satisfaction rates analysis by education level .....</i>	<i>76</i>
<i>Table 18: Mean satisfaction rates analysis by income level .....</i>	<i>77</i>
<i>Table 19: Mean satisfaction rates analysis by family size .....</i>	<i>78</i>
<i>Table 20: Survey findings summary table .....</i>	<i>79</i>



## **CHAPTER 1: INTRODUCTION**

This chapter focuses on the importance of the chosen subject and its different aspects that are to be highlighted later on as the thesis proceeds. The area that will be investigated is related to airlines, the service customers receive, the brand image, their perceived service quality and quality based loyalty definition preference. The background of the problem why this specific subject has been chosen for the research study, and furthermore, the research problem and the purpose with this study will also be presented in this chapter.

### **1.1 Background**

Air travel industry is a large and growing industry. By the effect of the globalization it facilitates economic growth, world trade and tourism. Travel for both business and leisure purposes grew strongly worldwide. In the leisure market, the availability of large aircraft such as the Boeing 747 made it convenient and affordable for people to travel further to new and exotic destinations. Business travel has also grown as companies become increasingly international in terms of their investments, their supply and production chains and their customers. The rapid growth of world trade in goods and services and international direct investment have also contributed to growth in business travel.

Customer Satisfaction is one of the most important processes in airline industry and is recognized as key to the success of business competition which is the individual's perception of the performance of the service in relation to expectations. Customers have drastically different expectations and, the objective of airline marketing efforts in today's fast moving world is to maximize customer satisfaction. For this reason, airline marketers offer more products and services than ever before.

Customer demands and expectations are altering in today's world, in the airline industry many of the airline companies have lost track of the true needs and wants of their passengers and are sticking to the outdated views of what airline services are all about (Gustafsson et al, 1999). Many airline managers think of passenger needs from their own perspective so their immediate focus is on cost reductions in driving to more

efficient operations, keeping customers at a least priority in their strategic planning programs. But the customer should not be ignored (Boland, Morrison and O'Neill, 2002). The airline business must aim at fulfilling the individual customer needs or even reaching beyond these (Gustafsson et al, 1999).

Successful service quality strategies are generally characterized by customer segmentation, customized service, guarantees, continuous customer feedback, and comprehensive measurement of company performance. The experience in many industries and companies demonstrates that this process, although generally acknowledged, is not universally implemented. Market segmentations by customer expectations, to create separate levels of service that exceed those levels of expectations, have also been found essential to attract customers and create customer loyalty (Porter, 1980, 1985).

Customer satisfaction is the feeling or attitude of a customer towards a product or service after it has been used. Customer satisfaction is a major outcome of marketing activity whereby it serves as a link between the various stages of consumer buying behavior. For instance, if customers are satisfied with a particular service offering after its use, then they are likely to engage in repeat purchase and try line extensions (East, 1997). Customer satisfaction is widely recognized as a key influence in the formation of customers' future purchase intentions (Taylor and Baker, 1994). Satisfaction and service quality are often treated together as functions of a customer's perceptions and expectations. Customer satisfaction is determined by defining customer perceptions of quality, expectations, and preferences (Barsky, 1995).

This study aims to examine the relationships between functional quality, brand image perception and perceived service quality based on loyalty definition in the airline industry.

## **1.2 Problem Definition**

Customer satisfaction has been widely accepted as an important issue for many marketing managers. It is commonly used as a marketing benchmark of a company's

performance (Bennett & Rundle -Thiele, 2004). In the airline industry understanding what passengers need and expect is essential to providing desired service quality (Gilbert & Wong, 2003) and consequently to understand the airline's performance levels (Chen & Chang, 2005).

Furthermore, it is generally believed that a satisfied customer is more likely to display loyalty behavior, i.e. repeat purchase and willingness to give positive word of mouth (Taylor, 1998; Bennett & Rundle -Thiele, 2004; Schultz, 2005). Although this is the case, Taylor (1998) stated that "companies began to notice that they often were losing customers despite high satisfaction" (p. 41).

Reichheld (1994) argued that satisfied customers are not necessary loyal. Evidently, Reichheld and Markey (2000) noted that those customers said to be satisfied or very satisfied on the survey, showed that between 60 and 80% will defect in most businesses. The criticisms of relying solely on consumer satisfaction survey (Jones & Sasser, 1995; Reichheld, 1994) have deliberately called for a paradigm shift from emphasis on satisfaction to the pursuit of loyalty as a strategic business goal (Oliver, 1999). Oliver (1999) noted the shift "appeared to be a worthwhile change in strategy for most firms because business understood the profit of having a loyal customer base" (p. 33). Therefore, it was suggested that those who are measuring customer satisfaction should not stop there (Reichheld, 1994). The shift to measure loyalty is based on a desire to better understand retention, a component of loyalty which had a direct link to a company's profit (Taylor, 1998).

Apparently nowadays companies are concerned that today's consumers tend to be less loyal (Dekimpe, Steenkamp, Mellens, & Abeele, 1997; Bennett & Rundle - Thiele, 2005; Kapferer, 2005). The glory of brand loyalty appears to be slightly declining in particular to some of the major national brands. In fact, there is more growing acceptance of the private labels brand in today's market (Howell, 2004; Dekimpe et al., 1997). Furthermore, the present environment of increased competition and rapid market entry of new product and services into the marketplace, leads consumers to experience product knowledge in terms of a wider choice of better alternatives and opportunities (Ballantyne et al., 2006). Therefore, it is crucial for companies and manufacturers to focus on differentiating their product from that of the competitors (Bennett & Rundle - Thiele, 2005).

Several scholars have suggested that those brands that express image may generate more loyal consumers (Bennett & Rundle-Thiele, 2005; Nandan, 2005). Empirical supports have confirmed that image does influence satisfaction, which in turn led to loyalty in the context of retailing, e.g. Bloemer and Ruyter (1998). However, the impact of image on satisfaction required a more complete validation, since some contradictory results can be observed in image literature (Palacio, Meneses, & Perez, 2002). Similarly, Bloemer, De Ruyter, and Peeters (1998) pointed out that "the exact relationship between image and loyalty had remained a matter of debate" (p. 278).

To summarize it is not possible to say if service quality is evaluated as high, I'll be loyal to that brand. Loyalty thought as a result of both the service quality level and brand image in airline industry. In my study, I focused on quality definition based loyalty perceived by the consumer depending on their brand choice. I tried to understand their preferences related to their perceived brand image and quality evaluation.

### **1.3 Purpose and Research Questions**

Loyal customers can bring enormous benefits to a company. They allow for a continuous stream of profit, reduce marketing and operating costs, increase referral, and are immune to competitors' promotion efforts (Reichheld and Teal, 1996). Moreover, the expenses of acquiring a new customer are much higher than those of retaining an existing one (Korte, 1995). Thus, customer loyalty cannot be overemphasized in today's highly competitive business world (Reinartz and Kumar, 2000).

An important antecedent of loyalty is customer satisfaction. A positive impact of satisfaction is reported on repurchase behaviour (Sambandam and Lord, 1995; LaBarbera and Mazursky, 1983), repurchase intent (Anderson and Sullivan, 1993; Cronin et al., 2000), positive word-of-mouth (Bitner, 1990; Swan and Oliver, 1989), customer retention (Bolton, 1998), and use of continuously provided services (Bolton and Lemon, 1999). Even though customer satisfaction is strongly associated with loyalty, it is not the only variable that can impact upon loyalty. Ostrowski et al. (1993), for example, found a significant relationship between passengers' image of an airline carrier and customer loyalty. Surprisingly, the relationship between image and loyalty has received much less attention than the one between satisfaction and loyalty. Studies

that integrated all three variables – satisfaction, image, and loyalty – are even scarcer and none of them considers the customer's loyalty definition preference with the service. However, preferred defined cause of loyalty might play an important role on repurchase behavior that effect directly loyalty.

From this perspective, the goal of this study is to integrate satisfaction, image, and loyalty in one model and to analyze the impact of loyalty definition over perceived service quality level and brand image within this model.

To be able to achieve the stated purpose above, following research questions will be further investigated:

RQ1: Which functional quality dimension is more relevant with service quality perception?

All of the quality dimensions have effect over perceived service quality, but the aim is to find out which dimension have a significant effect over it? Which one is the most satisfied and also to find out which one need to be more focused in order to improve performance.

RQ2: What is the image's effect over perceived service quality?

Here we consider the image of the brand from consumer's point of view related to reputation, reliability, sincerity to passengers and its superior technology in its flight services.

RQ3: Establishing the passenger's perceptions of the service they receive; is it positively correlated with the functional quality and brand image?

In the findings we aim to recognize if they are positively correlated or not? If perceived performance is at a higher level, what about brand image? Maybe perceived performance is at a higher rate but empathy attribute has quite significant low ratings?

RQ4: Which quality based loyalty definition is much more relevant in terms of service quality perception?

Here we both consider each separate functional service attributes - tangibles, responsiveness, reliability, assurance and empathy - satisfaction level and brand image

ratings. Also it is possible to make analysis depending on demographic information as gender, age, education level, marital status and income level.

## **1.4 Disposition**

In this section the study structure is explained:

Chapter 2: This chapter presents the literature review on airline industry, history, development of the industry, growth and latest trends worldwide and in Turkey.

Chapter 3: This chapter presents the theoretical perspective of the research and the recent empirical studies that are relevant to the research questions.

Chapter 4: This chapter explains and justifies the choice of methodology that will be used in order to conduct my study.

Chapter 5: This chapter encompasses the empirical findings and combines them and the theories in order to conduct an analysis.

Chapter 6: This chapter will present the conclusions, implications and recommendations based on survey's findings.

## CHAPTER 2: LITERATURE REVIEW ON AIRLINE INDUSTRY

This chapter outlines the concept of airline industry. It presents the overview of airline industry, its history and it also discusses about the growth and trend of the airline industry nowadays.

### 2.1 What is Airline Industry?

Few inventions have changed how people live and experience the world as much as the invention of the airplane. During both World Wars, government subsidies and demands for new airplanes vastly improved techniques for their design and construction. Following the World War II, the first commercial airplane routes were set up in Europe. Over time, air travel has become so commonplace that it would be hard to imagine life without it. The airline industry, therefore, certainly has progressed. It has also altered the way in which people live and conduct business by shortening travel time and altering our concept of distance, making it possible for us to visit and conduct business in places once considered remote.

The airline industry exists in an intensely competitive market. In recent years, there has been an industry-wide shakedown, which will have far-reaching effects on the industry's trend towards expanding domestic and international services. In the past, the airline industry was at least partly government owned. This is still true in many countries, but in the U.S. all major airlines have come to be privately held.

The airline industry can be separated into four categories by the U.S. Department of Transportation (DOT):

- International - 130+ seat planes that have the ability to take passengers just about anywhere in the world. Companies in this category typically have annual revenue of \$1 billion or more.
- National - Usually these airlines seat 100-150 people and have revenues between \$100 million and \$1 billion.
- Regional - Companies with revenues less than \$100 million that focus on short-haul flights.
- Cargo - These are airlines generally transport goods.

Airport capacity, route structures, technology and costs to lease or buy the physical aircraft are significant in the airline industry. Other large issues are:

Weather - Weather is variable and unpredictable. Extreme heat, cold, fog and snow can shut down airports and cancel flights, which costs airline money.

Fuel Cost - According to the Air Transportation Association (ATA), fuel is an airline's second largest expense. Fuel makes up a significant portion of an airline's total costs, although efficiency among different carriers can vary widely. Short haul airlines typically get lower fuel efficiency because take-offs and landings consume high amounts of jet fuel.

Labor - According to the ATA, labor is the an airline's No.1 cost; airlines must pay pilots, flight attendants, baggage handlers, dispatchers, customer service and others.

## **2.2 History of Airline Industry**

The first airlines: American aviation pioneers, such as Rufus Porter and Frederick Marriott, attempted to start airlines using airships in the mid-19th century, focusing on the New York–California route. Those attempts floundered due to such mishaps as the airships catching fire and the aircraft being ripped apart by spectators. DELAG, Deutsche Luftschiffahrts-Aktiengesellschaft was the world's first airline. It was founded on November 16, 1909 with government assistance, and operated airships manufactured by The Zeppelin Corporation. Its headquarters were in Frankfurt. The four oldest non-dirigible airlines that still exist are Netherlands' KLM, Colombia's Avianca, Australia's Qantas, and the Czech Republic's Czech Airlines. KLM first flew in May 1920, while Qantas (which stands for Queensland and Northern Territory Aerial Services Limited) was founded in Queensland, Australia, in late 1920.

### **2.2.1 European Airline Industry**

The first countries in Europe to embrace air transport were Austria, Belgium, Finland, France, Germany, the Netherlands and the United Kingdom.

Austria initiated the first regularly scheduled airmail service on March 31, 1918 in the midst of World War I. The route provided airmail service spanning Vienna to Krakow (now in Poland) to Lviv (now in Ukraine), as was often also extended to Kiev and Odessa.



KLM, the oldest carrier still operating under its original name, was founded in 1919. The first flight (operated on behalf of KLM by Aircraft Transport and Travel) transported two English passengers to Schiphol, Amsterdam from London in 1920. Like other major European airlines of the time, KLM's early growth depended heavily on the needs to service links with far-flung colonial possessions (Dutch Indies). It is only after the loss of the Dutch Empire that KLM found itself based at a small country with few potential passengers, depending heavily on transfer traffic, and was one of the first to introduce the hub-system to facilitate easy connections.

France began an air mail service to Morocco in 1919 that was bought out in 1927, renamed Aéropostale, and injected with capital to become a major international carrier. In 1933, Aéropostale went bankrupt, was nationalized and merged with several other airlines into what became Air France.

In Finland, the charter establishing Aero O/Y (now Finnair) was signed in the city of Helsinki on September 12, 1923. Junkers F 13 D-335 became the first aircraft of the company, when Aero took delivery of it on March 14, 1924. The first flight was between Helsinki and Tallinn, capital of Estonia, and it took place on March 20, 1924, one week later.

Germany's Lufthansa began in 1926. Lufthansa, unlike most other airlines at the time, became a major investor in airlines outside of Europe, providing capital to Varig and Avianca. German airliners built by Junkers, Dornier, and Fokker were the most advanced in the world at the time. In 1931, the airship Graf Zeppelin began offering regular scheduled passenger service between Germany and South America, usually every two weeks, which continued until 1937. In 1936, the airship Hindenburg entered passenger service and successfully crossed the Atlantic 36 times before crashing at Lakehurst, New Jersey on May 6, 1937.

The British company Aircraft Transport and Travel commenced a London to Paris service on August 25, 1919; this was the world's first regular international flight. The United Kingdom's flag carrier during this period was Imperial Airways, which became BOAC (British Overseas Airways Co.) in 1939. Imperial Airways used huge Handley-Page biplanes for routes between London, the Middle East, and India: images of

Imperial aircraft in the middle of the Rub'al Khali, being maintained by Bedouins, are among the most famous pictures from the heyday of the British Empire.

In Soviet Union the Chief Administration of the Civil Air Fleet was established in 1921. One of its first acts was to help found Deutsch-Russische Luftverkehrs A.G. (Deruluft), a German-Russian joint venture to provide air transport from Russia to the West. Domestic air service began around the same time, when Dobrolyot started operations on 15 July 1923 between Moscow and Nizhni Novgorod. Since 1932 all operations had been carried under the name Aeroflot. By the end of the 1930s Aeroflot had become the world's largest airline, employing more than 4,000 pilots and 60,000 other service personnel and operating around 3,000 aircraft (of which 75% were considered obsolete by its own standards). During the Soviet era Aeroflot was synonymous with Russian civil aviation, as it was the only air carrier. It became the first airline in the world to operate sustained regular jet services on 15 September 1956 with the Tupolev Tu-104.

Deregulation:

Deregulation of the European Union airspace in the early 1990s has had substantial effect on structure of the industry there. The shift towards 'budget' airlines on shorter routes has been significant. Airlines such as EasyJet and Ryanair have grown at the expense of the traditional national airlines.

There has also been a trend for these national airlines themselves to be privatised such as has occurred for Aer Lingus and British Airways. Other national airlines, including Italy's Alitalia, have suffered - particularly with the rapid increase of oil prices in early 2008.

### **2.2.2 Airline Industry in Turkey**

Turkey is strategically positioned astride Europe, Africa and Asia. The Republic of Turkey shares a common border with nine other nations in the region. With a growing population, rapid urbanization, a healthy foreign tourism industry and an active regional commercial base, Turkey has witnessed a need to further develop civil aviation and airport infrastructure. In the current decade Turkey, is larger than any country in Western Europe, given its large size and growing population base, the residents of Turkey have come to rely on domestic and international air service.

The roots of the Turkish airline industry could be traced back to 1933, when Turkish Airlines (THY) was founded. Between 1933 and 1982, it was the only player in the Turkish airline industry. Until 1982, Turkish Airlines was the only airlines company operating in Turkey, and had no domestic competitors. In 1982, the market was deregulated. At that time competitors entered the airline market and began to operate domestic and international flights. However, the fierce competition left many bankrupt: of the 29 airlines established in 1982, 22 were soon bankrupted (<http://www.byegm.gov.tr/>, 2009).

In 1983 Turkish Civil Aviation Law was enacted. This law provided the private sector the right to operate an airline and an airport. After that, a new era began for Turkish Civil Aviation and civil aviation activities grew rapidly. In 80's along with the growth of tourism industry worldwide air transportation industry also showed a growing trend. Many charter airlines were founded and started to operate Europe-Turkey tourist charter markets. Second half of the decade both Turkish Airlines and private charter airlines enlarged their fleets. At the end 2003, government changed air transportation politics and all restrictions on private airline companies to operate in scheduled domestic routes were lifted and domestic routes were opened into competition. Moreover, tax reduction was provided for domestic flights. This was the re-deregulation of the Turkish Air Transportation Industry. This re-deregulation has given private airlines an opportunity to enter domestic market and they have grown rapidly since. Therefore, airlines could offer 30-35% lower prices. This caused a huge demand for air transportation and market has grown (Sengur, Sarilgan, 2005).

As can be seen at appendix 1, today there are 20 national airlines currently operating in Turkey.

### **2.3 Airline Classification**

Airlines are classified in three different ways. First of all the U.S. Department of Transportation, the primary government entity that oversees national transportation policy defines airlines based strictly on annual revenues as follows:

- Major Airline: A major airline is one that generates over \$1 billion in annual operating revenues. This list currently includes Alaska Airlines, American Airlines, American Eagle, ATA Holdings, America West, Continental Air Lines,

Delta Air Lines, DHL Airways, FedEx, Northwest Airlines, Southwest Airlines, United, United Parcel Service (UPS), and US Airways.

- National Airline: A national airline is one that generates between \$100 million and \$1 billion in annual operating revenues. The national airlines tend to serve particular regions of the country; however, some do fly long-haul flights. Some examples are: AirTran, Frontier Airlines, JetBlue, and Midwest Express.
- Regional Airline: A regional airline is one that generates under \$100 million in revenues and generally serves small communities. The Regional Airline Association defines regional airlines as "...operat(ing) short and medium haul scheduled airline service connecting smaller communities with larger cities and connecting hubs. The airlines' fleet primarily consists of 19 to 68 seat turboprops and 30 to 100 seat regional jets." Some examples are: American Eagle Airlines, Atlantic Southeast Airlines, Atlantic Coast Airlines, and SkyWest Airlines.

A second type of classification is by level of service. The Skytrax Airline Star-Ranking System evaluates all airlines and awards a rating between one and five stars. The rating is derived from examining 800 areas of service and products offered. For now, there were only seven five-star-rated airlines worldwide. (Skytrax)

- 5-star airlines: The Official 5 Star Airline® ranking recognizes the high standards of Airport and Onboard Product across assessment categories, combined with consistently high standards of Staff Service delivery in both the Onboard and Airport environments. The Official 5 Star Airline® ranking recognizes those airlines at the forefront of product and service delivery excellence, often setting trends to be followed by other airlines.
- 4-star airlines: The Official 4 Star Airline® ranking signifies airlines achieving a good standard of Product across all travel categories - with good standards of Staff Service delivery in both the Onboard and Airport environments.
- 3-star airlines: The Official 3 Star Airline® ranking signifies a satisfactory standard of core Product for most travel categories - but may reflect inconsistent standards of Staff Service and/or Product delivery in either Onboard or Airport environments.
- 2-star airlines: An Official 2 Star Airline® ranking normally signifies a poor standard of Product and / or poor and inconsistent standards of Staff Service delivery in the Onboard or Airport environments.

- 1-star airlines: The Official 1 Star Airline® ranking signifies some very poor standards of Product across the ranking sectors, with poor, inconsistent standards of Staff Service delivery in Onboard and Airport environments.
- Unclassified airlines: The Unclassified Airline category covers airlines that are either still subject to a Star Ranking review, or those airlines which have been dropped / suspended from the Star Ranking programme.

The last classification is applied by the airlines named as the travel classifications. Airlines have their own internal classifications for seating and rewards programs, with particular flight routes offering economy, business and first-class services and with different rewards and mileage programs.

In addition to these classifications there is another term which is quite popular nowadays in airline industry: Low cost carriers

A low-cost carrier or low-cost airline (also known as a no-frills, discount or budget carrier or airline) is an airline that generally has lower fares and less comforts. To make up for revenue lost in decreased ticket prices, the airline may charge for extras like food, priority boarding, seat allocating, and baggage etc.

The term originated within the airline industry referring to airlines with a lower operating cost structure than their competitors. While the term is often applied to any carrier with low ticket prices and limited services, regardless of their operating models, low-cost carriers should not be confused with regional airlines that operate short flights without service, or with full-service airlines offering some reduced fares.

## **2.4 Growth and Latest Trends**

For any country, the aviation sector is not only its gateway to the world but also one of the most important sectors for its economy and its growth; generating billions in revenues and creating hundreds of thousands of jobs. In recent years, the global aviation industry has been through many ups and downs. From skyrocketing fuel prices to pandemics to recent financial crisis, aviation industry has confronted a very rough weather in last ten years or so. Consolidation in mature markets, higher ticket prices, modernization of airports, policies to reduce emissions and tremendous growth prospects in emerging economies have been some of the trends during the decade. According to recent industry reports, the global aviation industry is on the path of

recovery and future looks optimistic and would present ample opportunities for the stakeholders.

In 2010, the travel industry enjoyed some improvement over the very difficult 2008-2009 period. While budgets for consumers and businesses remained tight, occupancy rates were increasing in the hotel industry, and airline seats were relatively full. Southwest Airlines reported “robust” consumer traffic as of mid-2010. Nonetheless, when the middle class does take a vacation, it is generally on a reduced budget. Businesses are sending more employees on trips, but are keeping a tight regime on costs at the same time.

During 2008 and 2009, many airlines cut routes and reduced the total number of seats available, partly by removing older, fuel-guzzling aircraft from service. This put the airline industry in much more efficient operating condition for 2010. U.S. airlines are operating with much smaller staff counts. The number of employees in the air transportation industry plummeted from 563,500 in 2002 to 415,300 in 2009. U.S. airlines were operating at about 81% of potential passenger load during 2010. During the peak summer travel season in July 2010, JetBlue had a load factor of 86.2%.

Dozens of new discount airlines have been launched in emerging nations in the past few years, some of them with great success. Meanwhile, Emirates has carved out a place for itself as a major long-haul airline, with routes spanning the entire world and a major hub in the Middle East.

IATA, the international association that represents most of the world’s major airlines, projected a global airline industry net profit of \$2.5 billion for 2010, after a net loss of \$9.9 billion in 2009 and \$16.8 billion in 2008.

The 2008-2009 periods was an ugly time for airlines. Many airlines took bankruptcy protection in 2008, including Frontier, and some, such as Aloha Airlines and ATA, once major airlines in Hawaii and elsewhere, were forced to discontinue operations altogether. Several specialty and business-class-only airlines ceased operations, including MAXjet, Eos and Skybus. Government-controlled Alitalia, in Italy, took bankruptcy in August 2008.

Meanwhile, advanced new aircraft will bring significant changes in the global airline industry. Boeing’s 787, with first deliveries planned for early 2011, will enable

international airlines to offer great enhancements to passenger comfort with extremely long intercontinental range, while the airlines will benefit from a fuel efficiency boost of about 20%. Although this mid-size aircraft carries fewer passengers than the 747 and the giant A380, it will enable airlines to open up many new, direct routes. For example, new flights from Europe directly to growing markets in Africa and Southeast Asia will be started. Likewise, new routes from markets in the U.S. such as Denver or Minneapolis, that historically have not been major jumping off points for direct flights to Europe or Asia, will likely be tried. Nearly three dozen of the giant Airbus A380 had been delivered by mid-2010, typically set up to carry about 550 passengers in great comfort from one global capital to another.

Discount airlines remain very important players in the U.S. as well as in Europe and the rest of the world. Southwest Airlines holds the top rank in America by number of passengers, and JetBlue has enjoyed very rapid growth. Outside the U.S., many carriers have carefully studied Southwest's methods and strategies, and have enjoyed strong growth. Good examples include Kingfisher in India, Dragonair in China and Ryanair in Europe.

#### **2.4.1 Turkey**

Since its opening up in 1983, Turkish civil aviation sector has progressed at a fast pace. Privatization, coupled with globalization and economic growth in Turkey, have led to a significant growth in country's aviation sector. By the end of 2009, the total flight traffic in Turkey was more than 1.1 million and total passenger traffic was 85.5 million. This translates into compound annual growth rate (CAGR) of 10.94% for flight traffic and 14.16% for passenger traffic over the last seven years. Government owned Turkish Airlines, is still the leading carrier in Turkish skies with a market share of 64% of both international and domestic traffic. Other players in the sector include Onur Air, Pegasus, Sun Express and Atlasjet. Ministry of Transportation manages the air transport sector through the Directorate General of Civil Aviation (DGCA) and Directorate General of State Airports Administration (DHMI).

Due to globalization of the economy and growth in air traffic, the need to develop new airports and expand the existing ones has arisen. The government of Turkey has initiated the process of privatizing its airports and "build-operate-transfer (BOT)" model has been adopted to develop the airports. In recent years, Turkey has also emerged as

one of the preferred aircraft maintenance repair & overhaul (MRO) centers in the world due to its geographic and low cost advantage. In coming years, Turkey aims at becoming one of the major MRO players in the region with more than US\$500 million earmarked for private investment over the next five years. The overall prospects of the aviation sector in Turkey looks bright with passenger traffic expected to reach 153 million while flight traffic expect reach 1.8 million.



## CHAPTER 3: LITERATURE REVIEW

This chapter outlines the concept of service quality and customer satisfaction. From the last decade, the service sector has become greater economic importance. The elimination of waste due to poor quality and meeting customer expectations are the major challenges facing managers in the service sector. The chapter consist of five parts, the quality definition will be discussed firstly, and then followed by discussing the service quality, image, service quality perception and customer loyalty, in which each construct showed in the model is discussed respectively, and the research hypothesis are proposed accordingly.

### 3.1 Defining Quality

The concept of "quality" has been contemplated throughout history and continues to be a topic of intense interest today. In a lately conducted survey, executives ranked the improvement of service and product quality as the most critical challenge facing U.S. businesses (Zeithaml, Parasuraman, & Berry, 1990). Quality has been described as "the single most important force leading to the economic growth of companies in international markets" (Feigenbaum, 1982: 22).

A search for the definition of quality has yielded inconsistent results. Quality has been variously defined as value (Abbott,1955; Feigenbaum, 1951), conformance to specifications (Gilmore, 1974; Levitt, 1972), conformance to requirements (Crosby,1979), fitness for use (Juran, 1974, 1988), loss avoidance (Taguchi, cited in Ross, 1989), and meeting and/or exceeding customers' expectations (Grönroos, 1983; Parasuraman, Zeithaml & Berry, 1985). Regardless of the time period or context in which quality is examined, the concept has had multiple and often muddled definitions and has been used to describe a wide variety of phenomena.

Since there are many different definitions of quality, each definition has its own group of supporters, and various schools of quality have grown up around particular versions. This has led to fragmentation and confusion in the field of quality. Garvin ( Garvin, D.A., "What Does Product Quality Really Mean?", Sloan Management Review, Fall 1984, pp. 25-43. )is one of the few authorities who have analyzed the range of quality definitions, classifying them into five groups:

- Judgmental perspective – quality is synonymous with superiority or excellence: Transcendent definition of quality: “Quality is the goodness of a product” (Shewart, 1931)

Quality as excellence also has been debated. Tuchman (1980: 38) argued that quality : “means investment of the best skill and effort possible to produce the finest and most admirable results possible. . . . You do it well or you do it half-well. . . . Quality is achieving or reaching for the highest standard as against being satisfied with the sloppy or fraudulent. . . . It does not allow compromise with the second-rate.”

In fields such as religion, music, sculpture, and painting, where judgments are dominated by unique preferences, it may not be possible to evaluate quality in anything other than abstract terms. Defining quality as excellence means it is understood "ahead of definition . . . as a direct experience independent of and prior to intellectual abstractions" (Pirsig, 1992: 73)

- Product-based perspective – quality as a function of specific, measurable variables:

Differences in quality reflect differences in level of some product attribute. Thus, the higher the level (or the amount) of characteristics supplied, the higher the product’s quality.

- User-based perspective – based on the assumption that quality is determined from what a customer wants: Quality is fitness for intended use, or how well the product performs its intended function.

The most pervasive definition of quality currently in use is the extent to which a product or service meets and/or exceeds a customer's expectations (Buzzell & Gale, 1987; Gronroos, 1990; Zeithaml et al., 1990). This definition grew out of the services marketing literature (Lovelock, 1981; Normann, 1984; Shostack, 1977; Zeithaml, 1981), wherein researchers argued that a conformance-to-specifications definition of quality failed to address the unique characteristics of services. An important catalyst for the widespread movement away from conformance to specifications and toward a user-based definition of quality was the increasingly important role played by services in the U.S. and other Western economies.

- Value-based perspective – compares usefulness or satisfaction with price. A generic product is then higher quality than a brand name one if it performs as well as the brand name product at a lower price.

Feigenbaum (1951: 1) contended that the notion of value had to be included in any quality definition:

“Quality does not have the popular meaning of "best" in any absolute sense. It means "best for certain customer conditions." These conditions are (a) the actual use and (b) the selling price of the product. Product quality cannot be thought of apart from product cost.”

Traditional economic models were based on the notion that price was the primary determinant of consumer choice. By the 1950s, the role of product quality began to appear in economic theory. Abbott (1955) argued that by focusing solely on price competition, economists ignored a critical component of consumers' decision processes—quality. Both price and quality had to be considered in a competitive market.

When price tags are attached to ideas or services or products, it is the best bargain that wins. How good a bargain anything is depends upon both quality and price; these two elements compounded together form the basis for evaluation of winning contestants in the market place. Only when differences in quality have been eliminated by standardization does "cheapest" necessarily coincide with "best." (Abbott, 1955: 108)

Feigenbaum and Abbott asserted that differentiation in levels of both quality and price, or value, were important in consumers' decisions. Researchers (Cronin & Taylor, 1992) have advanced the notion that purchasing decisions may be influenced by convenience, availability, or price, as well as by judgments of quality.

- Manufacturing-based perspective – quality is the desirable output of engineering and manufacturing practices, or conformance to specifications:

“Conformance to specifications” provides a mean to measure quality

Specifications are meaningless, however, if they do not reflect attributes that are deemed important to the consumer.

To Shewhart, the prevailing view of quality as a measure of goodness was too indefinite for practical purposes. Quality had to be quantifiable if manufacturers were going to be able to use statistical procedures to measure it. According to Shewhart:

We must define quality of product in such a way that the numerical measure of this quality serves the following two purposes:

1. To make it possible for one to see whether or not the quality of product for a given period differs from that for some other period taken as a basis of comparison.
2. To make possible the comparison of qualities of product for two or more periods to determine whether or not the differences are greater than should be left to chance. (1931: 44)

Subjective quality was important, but standards could be established and performance could be measured only for objective (quantitative) quality. Thus, the task for the engineer was (a) to translate consumer wants into the physical characteristics of the product and (b) "to set up ways and means of obtaining a product which will differ from the arbitrarily set standards for these quality characteristics by no more than may be left to chance" (Shewhart, 1931: 54). These requirements led to the development and use of process control charts and statistical sampling.

Juran's *Quality Control Handbook* (1951), an edited volume of quality control methods begun in 1945, expanded on Shewhart's work. Like Shewhart, Juran began his volume by trying to clarify the definition of quality. He separated quality into two components: quality of design and quality of conformance. Quality of design relates to grade (i.e., a Cadillac has more features than a Chevrolet, even though both serve the same purpose). Quality of conformance concerns how well the product conforms to design specifications. Thus, Juran incorporated the notions of both excellence and conformance into his quality definition.

### 3.1.1 Strengths and Weaknesses of Different Definitions of Quality

Before designing the research survey we conducted a focus group with 10 participants to see which quality definition is more preferable and clear in terms of airline service. By their participation 3 most preferred ones (Manufacturing based, user based and value based definitions) are selected and decided to put in the survey. To adapt the definitions in the airline industry many descriptive sentences are illustrated and voted to select one for each. Since different definitions of quality have been proposed at various times in response to the evolving and constantly changing demands of business, there are strengths and weaknesses for each of the 3 definitions as:

**Manufacturing based definition:** Conformance to specifications

**Strengths:** Measuring quality using a conformance-to-specifications definition of quality is relatively straightforward and easy. An organization can monitor progress in achieving its quality goals by measuring how well it is conforming to the established specifications. Likewise, researchers can use objective measures to assess the impact of differing levels of quality on organization performance, both across companies and over time.

Defining quality as conformance to specifications should lead to increased efficiency on the part of the organization. In low-contact services, it is possible to seal off the "technical core" and establish specifications that can be met with little variation (Chase & Tansik, 1983), thus lowering the cost of producing the service. When speed is a critical variable to customers (e.g., fast-food restaurants, routine bank transactions, video rental checkout), adherence to specifications should enhance customer evaluations of quality. Taking the time to respond uniquely to each customer increases the time required for delivery to both that customer and others waiting for service, potentially decreasing those customers' level of satisfaction (Bowen & Lawler, 1992; Schneider, 1973).

As the world's economy becomes more internationalized, conformance to specifications is increasingly important. Conformance to specifications leads to the consistency necessary for a global rather than a multidomestic strategy. A global strategy, in turn,

may result in cost reductions, improved quality of products and programs, enhanced customer preference, and increased competitive leverage (Yip, 1989).

The major advocates (Crosby, Deming, Feigenbaum, and Juran) of a conformance-to-specifications definition of quality also stressed that customers' wants must be the driving force of the specifications that are established. For customers' wants to be considered, management must explicitly disaggregate the components that go into the final product and/or service if appropriate standards are to be established. Similar to the rationale behind Porter's (1985) value-chain analysis, effective disaggregation makes it less likely that a firm will ignore activities that might be critical to customers' quality judgments.

If customers' needs are governed by specific requirements or standards, as they would be for many industrial customers, conformance to specifications is the most parsimonious, appropriate, and easily measured definition of quality. The more subjective definitions of excellence, value, and meeting and/or exceeding expectations become unnecessary and might, in fact, detract from meeting the needs of some customers. Similar to a value definition of quality, if customers' needs are correctly identified, a conformance-to-specifications definition of quality drives an organization toward both efficient and effective product and/or service delivery.

**Weaknesses:** Many, if not most, consumer goods are not evaluated in terms of conformance to specifications. Customers may not know or care about how well the product and/or service conformed to internal specifications. For the consumer, performance is subjective. "Even objective quantifiable performance is perceived subjectively" (Oliver, 1981b: 38).

Specifications may be met at one point in the value-added chain, but a customer's final evaluation process will encompass the totality of the product and/or service package. Thus, a suit might meet all manufacturing specifications, but the customer's judgment of the quality of that suit may be influenced heavily by the helpfulness and competence of the retailer from whom it was purchased. Likewise, a customer's evaluation of a retailer is partly determined by the quality of the suit being purchased, even though the retailer

did not produce the product and may have conformed to specifications in the customer transaction.

A conformance-to-specifications definition of quality may be inappropriate for services, especially when a high degree of human contact is involved. By meeting the specifications established for a service encounter, one may defect from the customer's final quality judgment (Bowen & Lawler, 1992; Chase, 1985). Human interactions are an integral part of quality in many industries, making it difficult or counterproductive to specify standards that must be met.

Are they [the standards] compatible with more general (and perhaps in the long run more functional) goals of human dignity? Could such measures serve to divert attention from more genuine attitudes of care and helpfulness? Do they lead to a type of behavior which some customers find repellent? Do they contribute to an internal climate of trust or of control, and which climate is relevant in specific situations? In what cultures could such measures work and where would they not work? (Normann, 1984: 106)

When specifications cannot be established or conformance to them actually detracts from the quality of the service, defining quality as conformance to specifications results in lower, not higher, quality. If a conformance-to-specifications definition of quality governs the establishment of organization structure, reward systems, and human resource practices like selection and training in an organization, an escalation of commitment toward these practices may occur when none is warranted (Galbraith, 1983). The standardization that is necessary for a conformance-to-specifications definition of quality works against an adaptive organization that has the flexibility to respond to marketplace changes.

The establishment of appropriate specifications is dependent on management's ability to identify customer needs. However, preferences change, sometimes dramatically, over time (Cameron & Whetten, 1983), and established specifications quickly become irrelevant. The internal focus of a conformance-to-specifications definition of quality makes it likely that a firm will be unaware of or ignore what competitors are doing. Thus, competitors may be driving customers' expectations to new heights while a firm

continues to meet internal specifications. A classic example of this phenomenon is Henry Ford's experiences with the Model T in the 1920s. Ford was a world leader in meeting specifications, but General Motors successfully pursued a strategy of giving customers a choice of colors and styling that was missing in Ford's product. A firm will not succeed in the long term if its drive for efficiency causes it to ignore the marketplace changes that determine effectiveness (Hofer & Schendel, 1978).

**User based definition:** Meeting and/or exceeding customers' expectations

**Strengths:** In the marketplace, quality must ultimately be evaluated from the customer's perspective. Customers can articulate how well a product and/or service meets their expectations, a perceptual judgment they cannot make about how well the product and/or service conforms to specifications. Defining quality as the extent to which a product and/or service meets and/or exceeds expectations allows managers and researchers to include subjective factors (i.e., courtesy, helpfulness, confidence, appearance) that are critical to customers' judgments but difficult to quantify into assessments of quality. It is possible to capture what is important to customers rather than establishing standards based on management judgments that may or may not be accurate.

The extent to which a firm has met and/or exceeded customers' expectations is applicable across a wide variety of industries. The SERVQUAL instruments developed by Parasuraman et al. (1985; Parasuraman, Zeithaml, & Berry, 1988; Parasuraman, Berry, & Zeithaml, 1991, 1993) is a generic instrument designed to measure the gap between customers' expectations and perceptions. Although subsequent researchers (Babakus & Boiler, 1992; Brown, Churchill, & Peter, 1993; Carman, 1990; Cronin & Taylor, 1992) have questioned the applicability of the instrument when applied without industry-specific adjustments, its developers continue to argue that it provides "core evaluation criteria that transcend specific companies and industries" (Parasuraman et al., 1993:145). Whether or not one measurement instrument is universally applicable, careful selection of the variables to be measured allows one to assess the impact of meeting and/or exceeding expectations across industries.

Meeting and/or exceeding expectations is an externally focused definition of quality. Firms defining quality in this way are likely to note major changes in the marketplace



unless their monitoring systems are inadequate or infrequently used. Managers can account for and respond to escalating expectations on the part of customers. Further, if a firm can consistently discover or drive customers' expectations, and meet them, its competitive advantage will be difficult to overcome.

Defining quality as whether a product and/or service meets and/or exceeds expectations is all encompassing. Firms can include numerous attributes and weights when trying to judge expectations, thus capturing the fact that different firms in an industry will typically compete on different dimensions of quality (Garvin, 1988). Wal-Mart may meet customers' expectations as well as or better than Nordstrom, even though Wal-Mart focuses on delivering low price and speedy checkout, whereas Nordstrom focuses on attentive service and responding to the unique demands of each customer. Thus, customers' judgments across firms are possible, even though the corporate strategies vary greatly.

**Weaknesses:** Meeting and/or exceeding customers' expectations is the most complex definition of quality and, thus, is the most difficult to measure. Researchers must account for the fact that different customers place different weights on the various attributes of a product and/or service. Devising an unbiased statistical procedure for aggregating such widely varying preferences is difficult (Carman, 1990). Aggregating widely varying individual preferences so that they lead to meaningful definitions of quality at the market level is also problematic (Garvin, 1988).

Determining and measuring customer expectations is a complex task because often customers do not know what their expectations are, particularly with infrequently purchased products and/or services (Cameron & Whetten, 1983; Lawrence & Reeves, 1993). A customer may conclude only after consumption that what was received was not all that was desired. Because customers have idiosyncratic reactions to different experiences, predicting when product and/or service attributes will meet expectations and when they will fall short is complex. The difficulty in predicting reactions is exacerbated with intangible output because the more intangible the output, the greater the ambiguity faced by consumers when assessing service quality (Bowen & Schneider, 1988).

Prepurchase attitudes play a major role in subsequent customer evaluations. Summarizing a series of marketing studies, Oliver (1981a: 36) concluded that "disconfirmation, satisfaction, and one's attitude prior to a purchase or use experience all work to affect one's post-usage attitude." For example, "consumers with initially favorable expectations tended to be satisfied, even when disconfirmation was negative and, likewise, initially unfavorable expectations tended to result in dissatisfaction, even when positive disconfirmation occurred" (Oliver, 1981b: 39). Current measurement techniques (SERVQUAL and related instruments) assume that a high level of service quality has been achieved if the gap between a customer's expectations and his or her subsequent perceptions is positive and large. However, Oliver's work suggests that customers will evaluate the quality of a product and/or service more favorably if their initial expectations are high. Thus, although the *gap* is larger when customers enter an experience with lower expectations, the perceptions component of the quality judgment will be more favorable when initial expectations are higher. This is particularly important because numerous researchers (Brown et al., 1993; Carman, 1990; Cronin & Taylor, 1992) have found that the perceptions component, by itself, possesses stronger psychometric properties than a gap measurement.

Managers and researchers must consider the difference in short-term and long-term quality evaluations. A product or service may be judged high in quality in the short term but low in quality over the long term and vice-versa (Curry, 1985). Further, several authors argued that perceived service *quality* is a long-run, global attitudinal evaluation, whereas transaction-specific evaluations are more appropriately considered as a measure of customer satisfaction (Bitner, 1990; Bolton & Drew, 1991a; Parasuraman et al., 1988). "Attitude is the consumer's relatively enduring affective orientation for a product, store, or process (e.g., customer service), while satisfaction is the emotional reaction following a disconfirmation experience which acts on the base attitude level and is consumption specific" (Oliver, 1981a: 42). Thus, perceived quality of service tends to be a stable construct, whereas a customer's satisfaction may change with each individual transaction (Bolton & Drew, 1991a).

The customer service/satisfaction debate extends to which construct precedes the other. Bitner (1990) and Bolton and Drew (1991b) concluded that service quality is an

outcome of customer satisfaction. Cronin and Taylor (1992), however, found empirical support for the argument that this relationship is, in fact, reversed. Their results indicated that perceived service quality led to satisfaction but that satisfaction did not lead to perceived service quality. This discrepancy suggests significant confusion about the quality/satisfaction constructs.

Although satisfaction and service quality have been treated as separate constructs, their typical operationalization makes it difficult to distinguish between the two. Both have been operationalized along the lines suggested by adaptation-level theory. This theory maintains that the basic determinant of consumer *satisfaction* is "the prepurchase expectation level and the degree to which the product or service performance deviates from that level" (Oliver, 1981a: 28). Parasuraman and colleagues similarly measure perceived service quality as "the degree and direction of discrepancy between consumers' perceptions and expectations" (1988: 17). The difference, according to these authors, is that the literature on satisfaction defines expectations as predictions made by consumers, whereas the literature on service quality views expectations as *desires* or wants of consumers. This distinction may be difficult for managers, consumers, and researchers to perceive and measure.

**Value based definition:** Comparing usefulness or satisfaction with price

**Strengths:** In the marketplace, consumption decisions are based on both price and quality. In his study of appliance manufacturers, Curry (1985: 112) found that "consumers clearly recognize differences in value," as demonstrated by the fact that firms offering high quality at consistently low prices were market share leaders. Whereas economists traditionally have ignored the impact of quality in purchasing behavior (Abbott, 1955), researchers investigating quality have, to a large extent, ignored the role of price. If quality is defined as value, multiple attributes of a product and/or service (e.g., excellence, price, and durability) are included.

If the quality of a firm's offering is determined by the value offered to customers, firms must concentrate on both internal efficiency and external effectiveness if they are to be successful. Thus, firms are forced to consider both the cost implications of internal conformance to specifications and the extent to which external customer expectations

are met. For long-term survival of a firm, this conceptualization of quality is critical because it takes into account both effectiveness and efficiency.

Defining quality as value allows one to compare widely disparate objects and experiences, such as a dinner at a five-star restaurant versus a meal received at a local hamburger emporium. In any industry, numerous price/quality bundles exist about which consumers are indifferent. Numerous price/quality strategies can thus be successfully pursued by firms within an industry. The value definition of quality facilitates cross industry analyses about consumers' decisions among multiple substitutes (e.g., books vs. movies vs. music vs. other entertainment). Defining quality as value may give a more accurate indication of how products or services are perceived in the marketplace and how purchase decisions are made.

**Weaknesses:** It is difficult to extract the individual components that (a) what components are important and (b) what weights an individual assigns to those components. For example, price might be the main consideration in a value judgment for undifferentiated items such as compact discs, yet it could be a minor criterion in a health-care situation. Additionally, the weight of these components is likely to change over time. When computers were first introduced, knowledgeable salespeople and after-sales service were critical. As the sophistication of buyers increased, price became a much more important element of the value judgment.

Considerable disagreement exists regarding the inclusiveness of a value definition of quality. Stahl and Bounds (1991) argued that quality may be a component of value, but value is not synonymous with quality. In contrast, a meeting-and/or-exceeding expectations definition of quality should include value considerations in customers' expectations. Thus, value is seen by some to be a subcomponent of quality, whereas others view quality as a subcomponent of value.

Although value and quality have been viewed as synonymous, they are more frequently treated as separate constructs in both the academic and popular press. A firm advertises that a consumer will experience both quality and value with the purchase of its product and/or service. Bolton and Drew (1991b) found that customers' assessments of service value depend on their assessments of service quality. Although customers' assessments

of service value were positively related with their evaluations of service quality, the two were not identical constructs. Value has the disadvantage of blending "two related but distinct concepts: excellence and worth. The result is a hybrid—'affordable excellence'—that lacks well defined limits and is often highly subjective" (Garvin, 1988: 46).

### 3.2 Service Quality

Service is different from physical products. Compared with physical products, service is thought to be intangible, heterogeneous, produced and consumed simultaneously, unable to be kept in stock, etc. A widely accepted definition of service is proposed by Grönroos in 1990 as: "A service is a process consisting of a series of more or less intangible activities that normally, but not necessarily always, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems" (Grönroos, 2000, p.46). This definition implied that service is a process where interactions between customer and service provider most often exist.

The service package as described by Fitzsimmons and Fitzsimmons, (1994) in Heineke and Tsikriktsis, (1998) comprises four elements – the supporting facility (such as the aircraft which carry passengers to the desired locations), facilitating goods (such as the catering goods, videos, magazines, newspapers on board and requested flight related documents), explicit services, and implicit services (such as the air staffs attitude when providing the service). During the flight the passenger will experience all these four elements, and because services are intangible, it is particularly important for managers to understand what actually composes the service product (Heineke and Tsikriktsis, 1998).

According to Zeithaml, et al., (1985) in their study of problems and strategies in services marketing, intangibility of service refers to the fact that services are performances, rather than objects, they cannot be seen, felt, tasted, or touched in the same manner in which goods can be sensed. Inseparability of production and consumption involves the simultaneous production and consumption which characterizes most services, while heterogeneity refers to the potential for high variability in the performance of services, and perishability means that services cannot

be saved. In a study investigating the four characteristics of services, Wolak, Kalafatis and Harris (1998:25) introduced the idea of services as being “activities, benefits or satisfactions which are offered for sale, or are provided in connection with the sale of goods”.

The quality of a service is subjectively perceived by customers during the interactions with a firm (Grönroos, 2000). Parasuraman et al. (1988) defined service quality as the consumers’ judgment about a firm’s overall excellence or superiority. What happens and perceived by customers in the interaction process will obviously have critical impacts on customers’ evaluation of service quality (Grönroos, 2000).

### **3.2.1 The Impact of Services on Definitions of Quality**

In 1900, only 3 out of 10 workers in the United States were employed in the service sector of the economy. By 1950, the number of people employed in the goods-producing and service sectors was approximately equal. By 1968, the service sector accounted for 6 of 10 workers in the United States, and this number was close to 8 in 10 by 1990 (Bureau of Labor Statistics, 1991). The movement to a service economy has been equally dramatic in other Western countries. From 1950 to 1980, the proportion of GNP accounted for by services increased from 44 to 55 percent in Sweden and from 34 to 52 percent in Finland. By 1980, 70 percent of all Swedish firms belonged to the service sector (Gronroos, 1983). The increased importance of the service sector led to changes in the way the most prominent thinkers defined and approached quality.

The increasingly important role played by services and the inability of researchers to apply traditional manufacturing definitions to service quality led to a new conceptualization of service quality. Only one definition of quality was judged to be appropriate by service scholars (Gronroos, 1983; Parasuraman et al., 1985), and that definition was governed by the extent to which a service met the expectations of customers. "Only customers judge quality; all other judgments are essentially irrelevant" (Zeithaml et al., 1990). Gronroos (1990: 37) argued that "it should always be remembered that what counts is quality as it is perceived by the customers." Service scholars were not the only advocates of a customer-oriented definition of quality. The profit impact of market strategy (PIMS) program database, which is primarily composed of manufacturing firms, also uses this approach to quality: "Quality is

whatever the customers say it is, and the quality of a particular product or service is whatever the customer perceives it to be" (Buzzell & Gale, 1987: 111). Although most operations management scholars continue to focus on a conformance-to-specifications definition of quality, the meeting-and/or-exceeding expectations definition of quality is now widely accepted.

According to primarily conducted research to understand the most preferred loyalty definition according to Garvin's five different quality classifications, I focused on user-based, value based and manufacturing based definitions in my study.

### 3.2.2 The Measurement of Service Quality

Due to the peculiar attributes of service, the evaluation of service quality is more complex than evaluation of product quality. There have been various ways for measurements of service quality proposed by previous researches and literatures. In order to understand service quality, the three characteristics of services – intangibility, heterogeneity and inseparability – must be acknowledged (Parasuraman, Zeithaml & Berry, 1985). According to Grönroos (1984), two types of service quality exist; technical quality, which is what the customer receives from the service, and functional quality, which is how the service is delivered.

#### 3.2.2.1 The SERVQUAL

SERVQUAL was developed by a research team consisting of Parasuraman, Zeithaml and Berry based on a conceptual framework called the "GAPS model". The model was first offered at 1985 but several improvements and developments have been made since the initial model introduced. An outline of SERVQUAL development is given in table below:

**Table 1: SERVQUAL development**

YEAR	DEVELOPMENT
1983 - 1985	Conceptual model of SQ - GAPS model
1985 - 1988	SERVQUAL instrument
1988 - 1990	Extended Gaps model
1990 - 1993	Nature and determinants of service expectation
1993 - 1994	Refined SERVQUAL instrument
1995 - 1996	Multiple - method listening: a SQ information system
1996 - 2003	Role of technology in service delivery

2000 - 2003 Understanding a measuring e-service quality

2001 - 2003 Network - based customer service systems

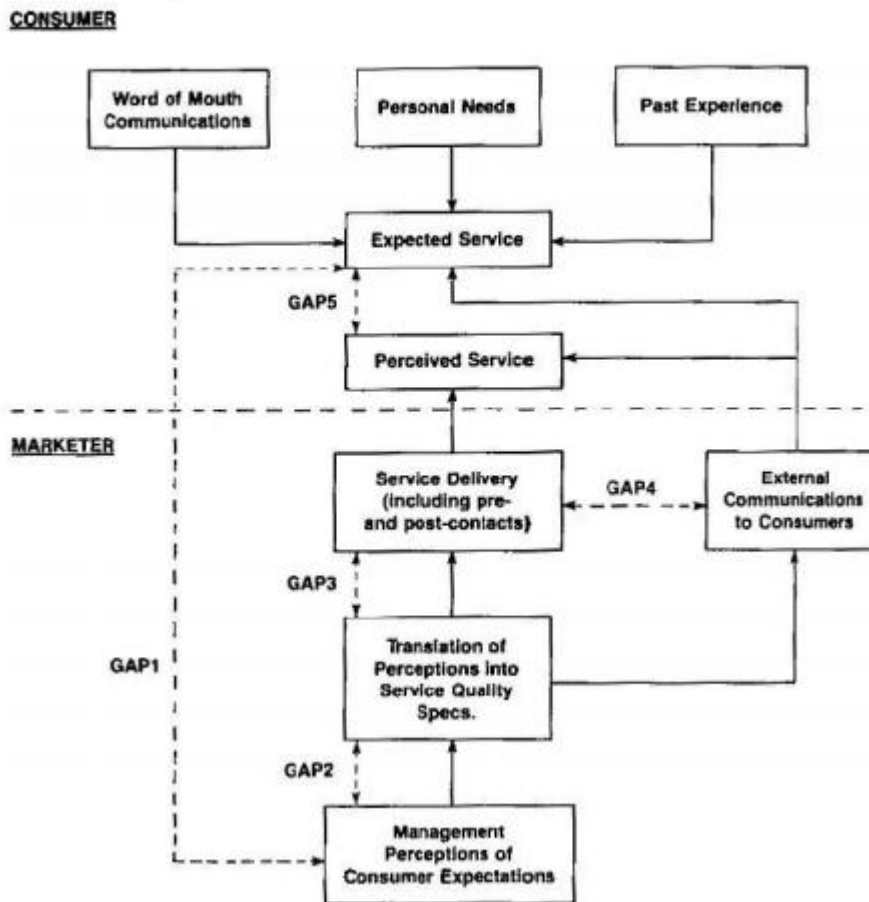
Source: Parasuraman 2004

It is designed to measure service quality as measured by the customer. Consumers in the focus groups discussed service quality in terms of the extent to which service performance on the dimensions matched the level of performance that consumers thought a service should provide. A high quality service would perform at a level that matched the level that the consumer felt should be provided. The level of performance that a high quality service should provide was termed consumer expectations. If performance was below expectations, consumers judged quality to be low.

After researches and focus groups, Parasuruman et al. (1985) proposed the well known service quality model or what has come to be known as the gaps-model. In this model, there are five gaps that the service firm must ensure are all closed in order to guarantee service quality.



## Service Quality Model



**Figure 1: Service quality model by Parasuraman**

- Gap1: Gap between customer expectation and management perception. This gap is one the three important gaps related to the external customers. This gap is big if an organization has a lot of management layers, a wrong orientation in marketing research or lack of the upward communication.
- Gap 2: Gap between management perception and service specifications. This gap is resulted by inadequate commitment to service quality of manager board or employees, a perception of unfeasibility, lack of task standardization and absence or unsuitable goal.
- Gap 3: Gap between service specifications and service delivery. Employees do not perceive clearly their position and/or their tasks that lead to this gap. In other cases, even employees know their roles but they are not able to perform their

task well. Besides, lack of team work and inappropriate supervisory control systems can be reasons.

- Gap 4: Gap between service deliveries versus external communication. Over-promise to both external and internal customers as well as the low horizontal communication state can be reasons of this gap.
- Gap 5: The gap between customer expectations versus their perceptions of the service delivered. This gap is very important and considered the true measure of service quality. It has a direct relation with external customer also is the gap that SERVEQUAL model influences on. All of providers try to satisfy the needs and expectations of customers which are really diversified. However, their perception of service delivered is not based only on service itself, their needs and expectations but also external impacts such as word of mouth and the breakthrough of competitors.

To summarize; gaps 1-4 are provider gaps and include 1) not knowing what customers expect, 2) not selecting the right service designs and standards, 3) not delivering to service design and standards, and 4) not matching performance to promises (Zeithaml et al., 2006). The fifth gap is the customer gap, which is the difference between expectations and perceptions of customers.

Parasuraman et al.'s (1985;1988) basic model emphasizes that consumer perceptions of quality emerge from the gap between performance and expectations, as performance exceeds expectations, quality increases; and as performance decreases relative to expectations, quality decreases (Parasuraman et al., 1985; 1988). Thus performance to expectations "gaps" on attributes that consumers use to evaluate the quality of a service form the theoretical foundation of SERVQUAL.

Parasuraman and his research team test, develop and refine a scale for measuring service quality as perceived by customers by five dimension led to SERVQUAL. The first and second parts of SERVQUAL measures customers' expectations and perceptions respectively along different kinds of service attributes grouped into five dimensions; Parasuraman (2004) defines these five dimensions as the following: Reliability, responsiveness, assurance, empathy and tangibles.

- **Reliability:** Ability to perform the service dependably and accurately. For example the consistency in meeting service promises which could include keeping schedules or appointment times, completing tasks on time, ensuring that outcomes are met (Gabbott et al 2006, 189.) Reliability covers such things as being efficient in check-in process, showing on time performance for scheduled flights, and performing service right the first time.
- **Responsiveness:** Willingness to assist customers. This refers to the ability of the service to respond to individual customer requirements such as specifying delivery times, altering aspects of the delivery process, and ensuring that customers remain involved (Gabbott et al 2006, 190.) When employees' correct problems immediately or when they show a willingness to answer customer questions related the flight, the airline company is demonstrating its responsiveness to the customer.
- **Assurance:** This includes competence, courtesy, credibility and security. This dimension would include staff training in the use of tools and knowledge of their service processes, customer interaction, and the perception that the service is competent and not going to harm anyone. This has also been seen to include brand names, and reputation (Gabbott et al 2006, 189.) Customers expect a lot from their selected brand; like knowledgeable and skillful provision of services.
- **Empathy:** This includes access, communication and understanding. This composite dimension is really about the communication style of the service organization through its service personnel, its communications including leaflets, instructions, signage and people management (Gabbott et al 2006, 190.) Talking to customers in language they can understand, and making an effort to understand the needs of the customers (Mill 2001, 151).
- **Tangibles:** Appearance of physical facilities, equipment, and personnel. The elements of the service environment impact upon perceived service quality for instance cleanliness of premises, staff appearance and the appropriateness of things like decor, seats and on board facilities.

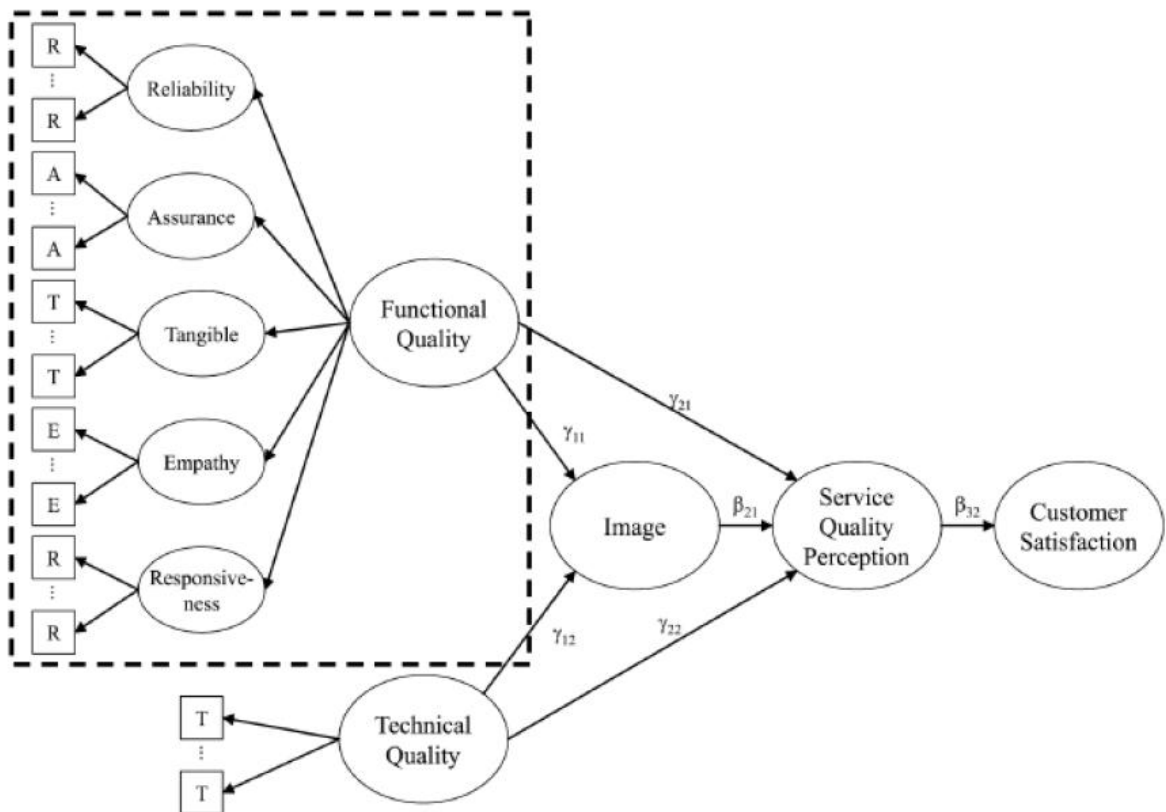
Accepting the general validity of SERVQUAL model (Zeithaml et al., 1990), which assesses gaps between customer expectations of service quality and their perceptions of its actual delivery by the provider, in other words, focusing on five “gaps” impairing the delivery of excellent service quality; this study focuses on Gap 5: the difference between airline passenger expectations and perceptions of service.

In order to implement the necessary corrective actions to eliminate the management problems that impede the delivery of truly excellent service quality; it is needful to know to what degree customer perceptions of existing service fail to meet expectations; this study focuses on that primary issue. Afterwards, it becomes important to know if any differences exist in management perceptions of customer expectations (Gap 1) etc. Thus I study Gap 5 which focuses on the differences between consumer expectations and perceptions. This is also the only gap that can be examined solely on the data from the consumer; study of other gaps, while important, would require data collection from companies themselves.

### *3.2.2.2 The Grönroos' Service Quality Model*

Servqual with its five dimensions (i.e. tangible, assurance, reliability, responsiveness, and empathy) has come to symbolize the American perspective on service quality (Brandy and Cronin, 2001). The European perspective, best represented in Grönroos' service quality model (Grönroos, 1982, 1990) included not only the process or “functional” aspect of service but also the technical or outcome-related aspect as well as corporate image of the firm. Recent work suggests that the five SERVQUAL dimensions are captured by a second-order latent variable corresponding to “functional” quality in the European model (Kang and James, 2004).

The American perspective of service quality is based primarily on Parasuraman et al.'s (1985, 1988) proposition that service quality dimension, characterized by five components. This perspective does not account for additional dimensions of service quality. A more complete representation of service quality, based on the European perspective (Grönroos, 1982, 1990; Lehtinen and Lehtinen, 1982), should include three dimensions; technical, functional and image.



**Figure 2: Grönroos service quality model**

With the suggestion that the —perceived service quality model“ replace the product features of a physical product in the consumption of services, Grönroos (1982) identified two service quality dimensions, the technical aspect (—what“ service is provided) and the functional aspect (—how“ the service is provided). The customers perceive what s/he receives as the outcome of the process in which the resources are used, i.e. the technical or outcome quality of the process. But s/he also and often more importantly, perceives how the process itself functions, i.e. the functional or process quality dimension.

Grönroos also emphasized the importance of corporate image in the experience of service quality, similar to the idea proposed by Lehtinen and Lehtinen (1982). Customers bring their earlier experiences and overall perceptions of a service firm to each encounter because customers often have continuous contacts with the same service firm (Grönroos, 2001). Therefore, the image concept was introduced as yet another important component in the perceived service quality model, so that the dynamic aspect of the service perception process was considered as well. A favorable and well-

known image is an asset for a firm because image has an impact on customer perceptions of the communication and operations of the firm in many respects. If a service provider has a positive image in the minds of customers, minor mistakes will be forgiven. If mistakes often occur, however, the image will be damaged. If a provider's image is negative, the impact of any mistake will often be magnified in the consumer's mind. In a word, image can be viewed as a filter in terms of a consumer's perception of quality.

The current study seeks to extend our understanding of service quality by assessing a two dimensional model that include functional quality and image based on Grönroos' (1982, 1990) model.

### **3.2.3 Service Quality Perception - Satisfaction**

High service quality is regarded as a key to succeed in competitive service markets. Many researchers have showed that service quality perceived by customers will directly influence customers' satisfaction, as well as their trust in the service firm (Parasuraman et al., 1988; Aydin and Özer, 2005; Ismail et al., 2006; etc.). Customers might be satisfied when a firm provides better services than their pre-purchase expectations. In airline industry which belongs to service industry, service quality is an important indicator to assess a service provider's performance. Offering a high quality service is considered to be a visible way to create customers trust and satisfaction, as well as obtaining competitive advantages and building a long-term relationship with customers.

Many researchers such as Truong and Foster (2006) perceive satisfaction to be the same as service quality. Oliver (1980) proposes that consumer satisfaction is a function of expectation and expectancy disconfirmation. Specifically, expectations create a frame of reference that a comparative judgment can be based on. When outcomes are worse than expected and rated below this reference point, a negative disconfirmation is created. Comparatively, outcomes that are better than expected and rated above the reference point are a positive disconfirmation. Thus, when outcomes are just as expected and rated precisely on the reference point, confirmation or zero disconfirmation is created (Oliver, 1980; Oliver, 1981).

Churchill and Surprenant (1982) further investigate the confirmation/disconfirmation paradigm and suggest that it includes four constructs: expectations, performance, disconfirmation and satisfaction.

Satisfaction is often measured as the gap between expectations to a product or, in the case of airlines, a service, and how the actual performance of the service corresponds to these expectations. That is, satisfaction is an evaluation of a service and is associated with to what extent a consumer likes or dislikes a service (Baker & Crompton, 2000; Bosque & Martín, 2008; Truong & Foster, 2006; Zeithaml et al., 2009; Parasuraman et al., 1985). This is in accordance with Bosque & Martín (2008, p. 553) who define satisfaction as “the consumer’s response to the congruence between performance and comparison standard”.

### 3.3 Loyalty

Although loyalty has been defined in various ways, two main approaches have evolved: the behavioral and attitudinal approaches (Yi and La, 2004). The behavioral approach defines loyal customers as those who rebuy a brand, consider only that brand, and do no brand-related information seeking. As researchers learned more about the loyalty construct, they increasingly recognized not only its behavioral dimension, but also its attitudinal dimension.

Oliver (1999) described four consecutive phases of loyalty. The first one, cognitive loyalty, is based on brand belief; the attribute information available to the customer indicates that one brand is preferable to its alternatives. For affective loyalty, the second phase, a liking or attitude toward the brand is needed, based on several satisfying experiences. The next phase, cognitive loyalty, implies a commitment to repurchase and, therefore, attaches customers more strongly to a company than affective loyalty. However, the desire to re-buy may be an anticipated, yet unrealized step. Action loyalty is the fourth phase: motivated intention is now transformed into readiness to act, accompanied by a desire to overcome obstacles that might prevent the act. Based on this fourth phase, Oliver (1999, p. 34) defines loyalty as “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior”.

Loyalty in the behavioral sense is measured using repurchase probability, long-term choice probability, or switching behavior. In the attitudinal sense, loyalty is operationalized as brand preference or emotional commitment and is, therefore, measured with repurchase intention, resistance against better alternatives, price tolerance, and intention to recommend the product or service (Yi and La, 2004).

Practitioners and researchers have not clearly identified a theoretical framework identifying factors that could lead to the development of customer loyalty (Gremler and Brown, 1997). However, there is a consensus amongst practitioners and academics that customer satisfaction and service quality are prerequisites of loyalty (Gremler and Brown, 1997; Cronin and Taylor, 1992). Those technical, economical and psychological factors that influence customers to switch suppliers are considered to be additional prerequisites of loyalty (Selnes, 1993; Gremler and Brown, 1997). Recent studies also indicate that the firm's image may influence customer enthusiasm: value, delight, and loyalty (Bhote, 1996).

### **3.3.1 Relationship Between Customer Satisfaction and Loyalty**

Customer satisfaction is determined by defining customer perceptions of quality, expectations and preferences (Barsky, 1995, Ch. 2). Said another way, “satisfaction, or lack of it, is the difference between how a customer expects to be treated and how he or she perceives being treated” (Davidov and Uttal., 1989, p.19). To attain true customer satisfaction companies need to achieve quality not only by eliminating the causes for direct complains but they need to provide their products with excellent, attractive quality - provide delight to customer. So research on customer satisfaction is often closely associated with the measurement of service quality (Anderson and Sullivan, 1993; Cronin and Taylor, 1992; Bitner and Hubbert, 1994; Taylor and Baker, 1994; Rust and Oliver, 1994; Levesque and McDougall, 1996).

Quality is the most important purchase decision factor influencing the customer’s buying decisions. In addition to that, it has strategic benefits of contributing to market-share and return on investment (Anderson and Zeithaml, 1984; Philips, Chang and Buzzell, 1983).

Parasuraman et al. described service quality as: the ability of the organization to meet or exceed customer expectations. Customer expectations may be defined as the “desires



and wants of consumers” i.e. what they feel a service provider should offer rather than would offer (Parasuraman, Zeithaml and Berry, 1998).

The research over the relationship between customer satisfaction and loyalty has shown there is a positive correlation between them (Anderson, Fornell & Lehmann, 1994; Heskett et al., 1994; Baker & Crompton, 2000; Zeithaml et al., 2006; Bosque & Martin, 2008). The figure below shows the relationship in a linear way where loyalty is measured as the retention rate and satisfaction is measured objectively on a 1 to 5 scale indicated below.



**Figure 3: Retention and satisfaction relationship**

### 3.3.2 Relationship Between Image and Loyalty

An organization's image is an important variable that positively or negatively influences marketing activities. Image is considered to have the ability to influence customers' perception of the goods and services offered (Zeithaml and Bitner, 1996). Thus, image will have an impact on customers' buying behavior.

Service literature identifies a number of factors that reflects image in the customer's mind. Image is considered to influence customers' minds through the combined effects of advertising, public relations, physical image, word-of-mouth, and their actual experiences with the goods and services (Normann, 1991). Similarly, Grönroos (1983), using numerous researches on service organizations, found that service quality was the

single most important determinant of image. Thus, a customer's experience with the products and services is considered to be the most important factor that influences his/her minds in regard to image.

According to Hsieh, Pan, and Setiono (2004), "a successful brand image enables consumers to identify the needs that the brand satisfies and to differentiate the brand from its competitors, and consequently increases the likelihood that consumers will purchase the brand" (p. 252). A company or its product/services which constantly holds a favorable image by the public, would definitely gain a better position in the market, sustainable competitive advantage, and increase market share or performance (Park, Jaworski, & MacInnis, 1986). In addition, several empirical findings have confirmed that a favorable image (i.e. brand, store/retail) will lead to loyalty (e.g. Koo, 2003; Kandampully & Suhartanto, 2000; Nguyen & LeBlanc, 1998), brand equity (Faircloth, Capella, & Alford, 2001; Biel, 1992; Aaker, 1991; Keller, 1993), purchase behavior (Hsieh et al., 2004) and brand performance (Roth, 1995).

Overall, image can generate value in terms of helping customer to process information, differentiating the brand, generating reasons to buy, give positive feelings, and providing a basis for extensions (Aaker, 1991). Creating and maintaining image of the brand is an important part of a firm's marketing program (Roth, 1995) and branding strategy (Keller, 1993; Aaker, 1991). Therefore, it is very important to understand the development of image formation and its consequences such as satisfaction and loyalty.

Loyalty has been extensively analyzed in relation to customer satisfaction; however, image has received much less attention. Selnes (1993) suggested that image should be incorporated into a model of loyalty together with satisfaction; he found that both variables, image and satisfaction, were associated with loyalty. Since then, most other studies have replicated these results (Abdullah et al., 2000; Bigne' et al., 2001; Zins, 2001; Park et al., 2004). However, Bloemer and Ruyter (1997) concluded from their findings that image only has an indirect impact on loyalty, which is mediated by satisfaction, whereas Andreassen and Lindestad (1998) found a significant effect on loyalty for image but not for satisfaction. The latter argue that for complex and infrequently used services, image rather than satisfaction may be the main predictor of loyalty. Other researchers support the notion that satisfaction will only exert a direct

impact on loyalty if customers are able to evaluate the quality of the goods or a service (Selnes, 1993; Zins, 2001).

Concerning the relationship between satisfaction and image, several authors (e.g. Bigne' et al., 2001; Zins, 2001) suggest that image perceptions affect satisfaction because they mould customers' expectations before the visit and because, by definition, satisfaction depends on the comparison between those expectations and the actual service. Moreover, when a customer is satisfied with the service, the image of the company is improved and this upgraded image will then influence satisfaction making the relationship between the two constructs reciprocal (Andreassen and Lindestad, 1998; Ostrowski et al., 1993). This reciprocal approach was used for this study.

### 3.4 The Proposed Model

For the purpose of this study, thus, it is imperative to examine the relationship between quality based defined customer loyalty and the two prerequisites; customer satisfaction and image in an airline industry. It proposes to examine four hypotheses:

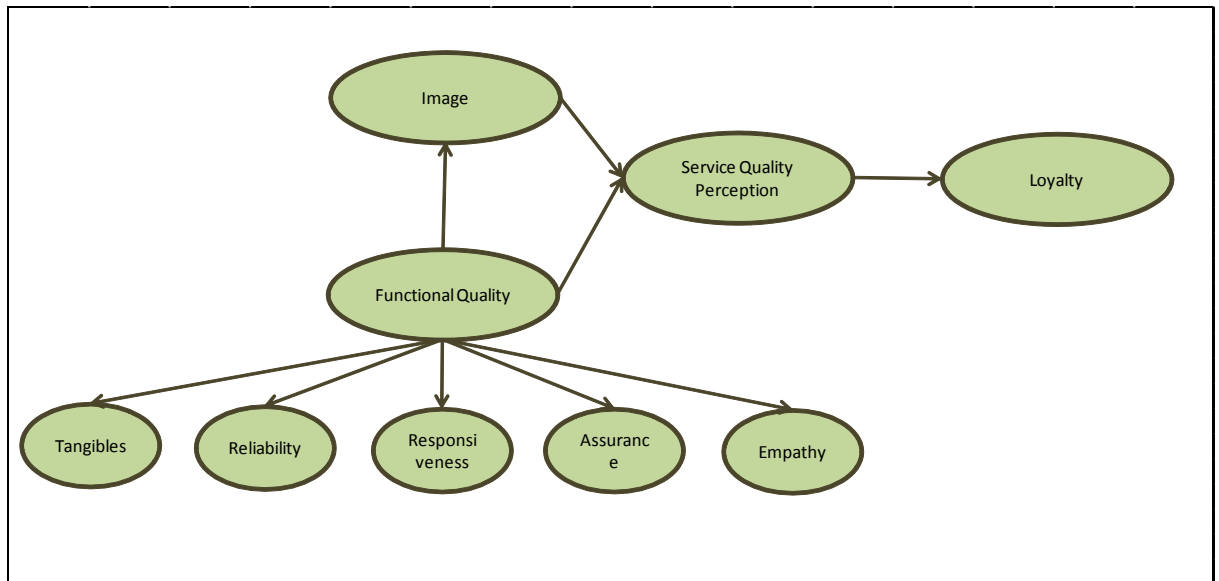
H1: Satisfaction of functional quality correlates with overall service quality perception. Functional quality being measured as five quality dimensions of reliability, responsiveness.... etc

H2: Satisfaction of functional quality correlates positively with brand image.

H3: Service quality perception is strongly correlates with brand image.

H4: To find out which quality based loyalty definition is much more relevant in terms of service quality perception.

Based on the mentioned relationships a model is proposed in **Figure X** below:



**Figure 4: Proposed model**

Five other hypotheses are defined on the formative constructs which determine the factors explaining perceived performance:

H5: Tangibles have a positive, direct and significant effect on perceived performance.

H6: Reliability has a direct, positive and significant effect on perceived performance.

H7: Responsiveness has a direct, positive and significant effect on perceived performance.

H8: Assurance has a direct, positive and significant effect on perceived performance.

H9: Empathy has a direct, positive and significant effect on perceived performance.

The proposed model shown in figure 4 consists of nine constructs (latent variables). The most widely used customer perceived service quality model is the SERVQUAL model (Chang and Yeh, 2002) for this reason the five formative latent constructs are based on the five dimensions of the SERVQUAL instrument. To measure these five latent construct, four reflective items (indicators) were used to measure each construct.

### 3.4.1 Construct Measurement

The variables used for this study (see Table 2) were identified from the research literature.

Service quality perception, image and functional quality were measured using Rating scales: “1” (Strongly disagree), “4” (Neither agree nor disagree), “7” (Strongly agree). To collect the data, questionnaires designed on-line and distributed via e-mail and also

shared at facebook, groups pages etc. Total of 135 surveys were returned, of which 130 proved usable.

**Table 2: Proposed model construct operationalization**

<b>Variable</b>	<b>No. of Items</b>	<b>Description</b>
	<i>Functional Quality</i>	
Tangibles	4	Staff's physical appearance, variety and quality in on board catering, physical facilities status and quality
Reliability	4	Service quality, efficiency in check-in process, on time performance, remedial procedures
Responsiveness	4	Staff's willingness to help and respond to passenger's questions and request
Assurance	4	Knowledgeable and skillful provision of services, instilling confidence, attitude towards complaints
Empathy	4	The provision of caring, individualized attention to customers
	<i>Others</i>	
Image	4	Four items are used to evaluate image of the selected brand; reputation, reliability, sincerity and superior technology in its flight services
Service Quality Perception	4	Overall service quality performance rate based on being adequate, proper, good and appropriate
Quality Definition Based Loyalty	3	User-based, value based and manufacturing based definitions of quality used to explain the cause of being loyal to that brand
<b>Total</b>	<b>31</b>	

The survey (see Appendix 2) consists of 10 questions collecting the information about evaluation the quality of five dimensions of SERVQUAL (tangibility, reliability, responsiveness, assurance and empathy), brand image and perceived service quality, then try to understand preferred loyalty definition from passengers point of view; and the last 6 questions collecting demography information.

### **Q1 - Five dimension of service quality**

There were twenty questions related to this part of the questionnaire. The questions order was mixed automatically by the system and different for each of the respondent.

Tangibles: There were 4 questions to evaluate the perceived quality of the appearance of physical facilities, equipment, personnel and communication materials as:

T1: Staff appears neat and appropriately dressed

T2: Has visually attractive, modern and clean physical on board facilities

T3: Has variety and up-to-date videos/ magazines/ newspapers with quality on board

T4: Has variety and quality in on board catering

They were tend to evaluate by 1 to 7 liker scale to get the data used for analysis to see the regression of each specific element, to evaluate their reliability and also to figure out strong and weak points of these attributes.

Reliability: There were 4 questions to evaluate the ability to perform the promised service dependably and accurately as:

REL1: Performs service right the first time

REL2: Efficient in check-in process

REL3: Shows on time performance for scheduled flights

REL4: Has remedial procedures for delayed or missing baggage

They were tend to evaluate by 1 to 7 liker scale to get the data used for analysis to see the regression of each specific element, to evaluate their reliability and also to figure out strong and weak points of these attributes.

Responsiveness: There were 4 questions to evaluate the willingness to help customers and provide prompt service.

RES1: Keeping passengers informed about when services will be performed

RES2: Prompt respond of staff to passengers request or complaint

RES3: Staff never too busy to respond to passenger's requests

RES4: Staff is always willing to help you.

They were tend to evaluate by 1 to 7 liker scale to get the data used for analysis to see the regression of each specific element, to evaluate their reliability and also to figure out strong and weak points of these attributes.

Assurance: There were 4 questions to evaluate the knowledge and courtesy of employees and their ability to cover trust and confidence.

A1: Sincerity and patience in resolving passenger's problems

A2: Knowledgeable and skillful provision of services

A3: Staff instills confidence to passengers

A4: Sincere and responsive attitude to passenger complaints

They were tend to evaluate by 1 to 7 liker scale to get the data used for analysis to see the regression of each specific element, to evaluate their reliability and also to figure out strong and weak points of these attributes.

Empathy: There were 4 questions to evaluate the provision of caring, individualized attention to customers.

E1: Has a convenient flight scheduling and variable easy to use ticketing channels

E2: Staff has a pleasant demeanor and provides individual attention

E3: Staff shows spontaneous care and concern for passenger's needs

E4: Having other travel related partners e.g. car rentals, hotels, travel insurance

They were tend to evaluate by 1 to 7 liker scale to get the data used for analysis to see the regression of each specific element, to evaluate their reliability and also to figure out strong and weak points of these attributes.

## **Q2 - Brand Image**

Since we haven't focused on a specific brand and just focused to evaluate the brand effect over perceived service quality, the question says participants to respond the question related to the most frequently used airline brand. The attributes are:

IM1: It has a good reputation

IM2: It is a reliable company

IM3: It is sincere to the passengers

IM4: It has a superior technology in its flight services

They were tend to evaluate by 1 to 7 liker scale to get the data used for analysis to see the regression of each specific element, to evaluate their reliability and also to figure out image's effect on perceived service quality and loyalty definition preference.

### **Q3 - Perceived Service Quality**

To evaluate the overall perceived service quality we put 4 different performance indicators in 1 to 7 liker scale as:

- 1) Adequate - enough for what you need: Satisfying needs of the passengers - evaluates directly satisfaction level from the service.
- 2) Proper - Correctly, in an acceptable way: Evaluates the service is well arranged, neat and smoothly served or not.
- 3) Good: To compare the service from their point of view with a preset expectation level.
- 4) Appropriate - suitable or right: Proper for defined classes as first, business or economy class.

### **Q4 - Loyalty definition preference**

As described in literature review section there are five quality based loyalty definitions. By the help of the pre-tested focus group each of them defined with a commonly approved sentence but judgmental and product based definitions are put out of the research. Because majority of the focus group participants voted user-based, value based and manufacturing based definitions more preferable in terms of loyalty definition.

The omitted definitions are:

Judgmental perspective: It's special for me, I love it! (I have an emotional connection.)

Product based perspective: It provides many services - much more than competitors.

In the questionnaire the participants were asked to select the most suitable comment for them as:

✓ **I'm loyal to this brand because;**

..... I know that I'll never face with an unexpected lead balloon and they'll do what they said they'll do. - Manufacturing based perspective



..... It provides what I'm searching for! (And completely satisfy my needs). - User based perspective

..... It's much cheaper than its competitors but also as good as them. - Value based perspective

This information will help us to see the loyalty definition preference from passengers point of view and also to get information about the relationship between the loyalty preference and overall perceived service quality.

### **Q5 to Q10 Survey group demographics**

#### **1. What is your age?**

..... 20 - 25 ..... 26 - 30 ..... 31 - 40 ..... 41 - 50 .....  
Over 50

#### **2. Are you?**

..... Male ..... Female

#### **3. Graduated from?**

..... High School ..... Collage .... University ... Master .....  
Doctorate

#### **4. You are?**

..... Single ..... Married

#### **5. Your family size is?**

..... Living alone ..... 2 .....3 .....4  
.....Over 4

#### **6. Your income level is?**

... 500 - 1500 TL ....1500- 2500 TL ... 2500 - 3500 TL 3500 - 5000 TL  
... Over 5000 TL

The above six questions are to report the demographic profile. This would be very useful for analyze the differences in satisfaction levels, brand image perceptions and loyalty definition preferences according to their demographic pattern.

## CHAPTER 4: RESEARCH METHODOLOGY

This chapter discusses the research methodology including explanation about survey, sampling and instrument development applied in this research.

### 4.1 Purpose of Research

Cooper and Schindler (2003) mentioned; Business research is a systematically inquiry whose purpose is to provide information to solve the problems. Yin (1994) categorizes case studies as exploratory, explanatory and descriptive.

Exploratory research involves gathering information and developing ideas about a relatively under-researched problem or context. The value of exploratory research could be that it clears the ground for other kinds of research, or that it throws up interesting differences and comparisons between more well-studied topics, and those that are less well-studied. The prime purpose is to develop understanding in an area that is little understood.

Descriptive research involves describing a problem, context or a situation. This is a feature of exploratory research as well of course; however descriptive-type questions are generally more structured, and more reliant on prior ideas and methods. You would more usually be describing what was happening in terms of pre-existing analytical categories, or relying on other ideas in some way. This type of study could be suited to either qualitative or quantitative methods: for example a case study is a descriptive piece of research; but statistics and numerical data can also be used to describe.

Explanatory research focuses on seeking and providing or evaluating an explanation between two or more phenomena, "low pay causes demoralization", or "poor management practice is the main cause for resign" etc. It can be thought as being concerned with causes, it typically tries to identify and explain casual relationship that is important or meaningful. This type of approach is more likely to employ quantitative methods, typically a survey, but one could also seek explanatory type of research using case study, or observational data. (Morrel, 2006)

The purpose of my study is descriptive because the survey questions are generally structured to describe factors which result in less satisfied passengers. Also I tried to find out the most relevant quality based defined loyalty description.

The study about airline industry was chosen, because;

- Airline service is very popular nowadays. There are different airlines for different expectations. Even you are rich or poor, you are a CEO or a blue collar worker; you can find a suitable airline company which fits your demand and satisfy your needs.
- There is a lack of standard about difference between men and women in their expectation to flight experience.
- There is a lack of understanding about what passengers really matters and how they define the cause of loyalty from their point of view.

The aim of this study is to gain an insight into the airline industry and the quality attributes of customer services. It includes:

- Gain understanding of the scope of the airline industry
- Identification of profile of critical service quality components in the airline industry
- What do passengers really cares while evaluating customer service quality?
- What is the role of the brand image in service quality perception?
- How do passengers define loyalty from their point of view?
- How can the airline companies improve the perceived customer service quality to gain loyal passengers?

## **4.2 Research Approach**

There are two different ways to approach a research; quantitative and qualitative. Malhotra and Birks (2003, p.132) define qualitative and quantitative research as follows:

*Qualitative research:* An unstructured, primarily exploratory design based on small samples, intended to provide insight and understanding.

*Quantitative research:* Research techniques that seek to quantify data and typically apply some form of statistical analysis.

We can summarize as: quantitative research is objective; seeks explanatory laws and measures what it assumes to be a statistic reality in hopes of developing universal laws. On the other hand, qualitative research is subjective, aims at in-depth description and it is an exploration of what is assumed to be a dynamic reality. It does not claim that what is discovered in the process is universal and thus replicable. (Mc. Kereghan, 1998)

This thesis is somewhat qualitative research because loyalty definition should be described and it can not be measured by numbers; it is quantitative research in the sense that we compare factors of service quality together and find top priorities.

A questionnaire based on the components of perceived service quality has developed and distributed via e-mail and facebook to reach the people who have experienced flight apart from destination. SERVQUAL (Parasuraman, 1988) approach has been the most popular method for choosing because it is quite complete measure for all the service industry. All the questions based on the five elements that are the underlying dimensions of service quality; tangibles, reliability, responsiveness, assurance and empathy. They are all designed to be specific and related to airline industry. More than those different questions are added related to image and perceived service quality, to evaluate the relationship among them.

The questionnaire is a complete survey of 10 questions covering airline services, image and expectations for men and women together. At the end of the questionnaire are the questions about demographic profile.

### **4.3 Research Strategy**

Yin (1989) suggests that —empirical research advances only when it is accompanied by logical thinking, and not when it is treated as a mechanistic endeavor“. He indicates that case studies are preferred when —how“ or —why“ questions are being posed, when the investigator has little control over events and when the focus is on contemporary phenomena. (Morrel, 2006)

The purpose of this study was to find information to answer —“how” questions. The study did not require control over behavioral events. The study focused on

collecting, analyzing and comparing data to get the opportunity to find critical elements influencing perceived passenger satisfaction and to make comparisons between them.

#### 4.4 Data Collection Method

The written questionnaire method was chosen to collect the responses. Because; questionnaires can be given to large numbers of people simultaneously; they can also be sent by mail. It is possible to cover wide geographic areas and to question large number of people relatively inexpensively. Therefore it is likely to be less expensive, particularly in terms of the time spent collecting the data. Another advantage of questionnaires is that subjects are more likely to feel that they can remain anonymous and thus may be more likely to express controversial opinions.

The technical specification of the survey is presented in the table 3.

**Table 3: Characteristics of survey**

Characteristics	Survey
Sample Size	130
Method of information gathering	Personal Interview Online Survey

In order to identify important quality attributes for the airline services and the different expectation of male and female customers, a total 140 respondents were asked to participate. All the respondents have had experiences with the airline services, they would provide an evaluable respond regarding to the services. Moreover, the response rate was quite high, so this survey method was chosen.

The participants answered the questionnaire. Then the results was gathered from all the survey and computed for interpretation.

#### **Measurement of the structures and pilot test:**

The questionnaire consists of three parts (Appendix 2). Part one asked the respondents to answer 20 service quality questions, including tangibles, assurance, reliability, empathy and responsiveness in order to measure the degree of experienced quality in their flight experience. Part two explores the perceived brand image as well as the

amount of respondent's perceived service quality satisfaction by asking 4 questions related to overall experience. In addition to that there are 3 choices to let them select the loyalty definition from their point of view. Finally, part three gathered general information about the respondents' gender, age, education, marital status, family size and income level. Questions related to service quality, brand image and perceived service quality were assessed using a seven point Licker scale with end points of "strongly disagree" and "strongly agree".

Once the quality literature review was made, quality based loyalty definitions were designed. In order to reach the best description in each different approach, total of 10 people were selected to get insight and personal view related to the topic. The definitions were reworded where seen necessary and the whole questionnaire designed. Several checks were made by the help of Prof. Brun and the last version launched online for more than one month.

#### 4.5 Sampling Selection

In my study I preferred to use probabilistic sample in which passengers I contacted were picked randomly from the entire group of people who have ever flight experience in Turkey. As long as the response rate is high enough, probabilistic samples are not biased, so inferences can be made about the entire group of customers represented by the ones selected.

Large samples give the effects of randomness a chance to work. They maximize the possibility that the means, percentages, and other statistics are true estimates of the population. The chance of error goes down in direct proportion to the increased size of the sample. The basic formula for evaluating the sampling error is as follows:

$$\textit{Sampling Error} = \frac{\text{Variability of the measurement (values among the sampling units)}}{\sqrt{(\text{Size of Sample})}}$$

By the help of this formula, you can predict the necessary sample size for your study. The more accuracy you are trying to achieve, the larger the sample should be. But for using it you need to know the variance of the measurement. To evaluate it the measurement must be used before with the same or a similar population so that the variance is known. When none of the measurements vary too far from the mean for the

population, it takes too far from the mean for the population; it takes only a small sample to obtain measurements that accurately reflect the population. But if there is a lot of variation in measurements, a larger group will be needed to incorporate the entire range of scores in the sample.

I did a pilot test and the standard variations in factors of proposed model were as below:

Items means standard variation in Tangibles: 0.681

Items means standard variation in Reliability: 0.642

Items means standard variation in Responsiveness: 0.568

Items means standard variation in Assurance: 0.365

Items means standard variation in Empathy: 0.673

Items means standard variation in Image: 0.681

Items means standard variation in Perceived Service Quality: 0.621

Items means standard variation in Loyalty Definition: 0.3

5% sampling error is appropriate enough for an academic study. To choose the precise sample size, the biggest standard variations of factors were selected that belonged to items means standard variation for tangibles and image. Following the formula:

$$0,05 = \frac{0,681}{\sqrt{(\text{Size of Sample})}} \Rightarrow \text{Size of sample} \simeq 186$$

Because of the strict deadline 130 randomly selected people were completed the questionnaire during one and a half month.

## **4.6 Validity and Reliability**

In order to reduce the possibility of getting wrong answers, pay attention to validity and reliability in designing the research essential (Saunders et. al., 2003).

### **4.6.1 Reliability**

Reliability refers to the degree to which data collection method or methods will yield consistent findings, similar observations, or conclusions reached by other researches or the amount of transparency in how sense was made from the row data (Saunders et. al.,

2003). A measure is reliable to the degree that it supplies consistent results. It is a necessary contributor to validity but is not sufficient condition for it.

Reliability can be assessed by the following questions (Easterby - Smith et. al., 2002, p.53):

1. Will the measures yield the same results on other occasions?
2. Will similar observation be reached by other observers?
3. Is there transparency in how sense was made from the raw data?

The reliability analysis allows studying the properties of measurement scales and the items that make them up. It provides information about the relations between individual items in the scale. SPSS software offers reliability analysis statistics. The following models of reliability are available:

1. *Alpha (Cronbach)*: This is a model of internal consistency, based on the average inter-item correlation.
2. *Split - half*: This model split the scale into two parts and examines the correlation between parts.
3. *Guttman*: This model computes guttman's lower bounds for true reliability.
4. *Parallel*: This model assumes that all items have equal variances and equal error variances across replications.
5. *Strict Parallel*: This model makes assumptions of the parallel model and also assumes equal means across items.

The following steps are taken to ensure the reliability of this study:

- 1) Questionnaire was divided into three parts in order to enable respondents to better concentrate on each question and to answer the questions with adequate knowledge and understanding of each single field of the questions.
- 2) The theories selected for the study were clearly described.
- 3) Alpha Cronbach test also has been applied to all questions. As shown in table 4, the result for the whole questions are 0.956, which is more than 0,7 confirming the reliability of questions.



**Table 4: Reliability statistics**

Cronbach's Alpha	N of items
,956	29

A tool that has alpha Cronbach more than the minimum quantity level which suggested through Nunnally (0,7) is considered reasonable from reliability aspect (Jamal & Naser, 2002, p.154).

#### **4.6.2 Validity**

Cooper and Schindler (2003) believe that validity refers to the extent to which a test measures what we actually wish to measure. There are two major forms: external and internal validity. The external validity of research findings refers to the data's ability to be generalized across persons, settings and times. Internal validity is the ability of a research instrument to measure what is proposed to measure (Cooper and Schindler, 2003).

There were different steps taken to ensure validity of this study:

- Data was collected from the reliable resources, from respondents who are experienced flight at least one time.
- Survey questions were designed base on literature review to ensure the validity of the results.
- Questionnaire has been pre tested by at least 10 persons before starting the survey.
- Data has been collected through 6 weeks without any changes in the design.

## CHAPTER 5: DATA ANALYSIS

Information analysis is considered to be the most important part of the research process. This chapter presents the data that has been collected through quantitative survey. In addition, the demographic and descriptive statistics, reliability and validity assessment and the results of hypothesis tests are delivered. To analyze the collected data, first Cronbach's Alpha method will be used to show the reliability of the questionnaire, and then descriptive statistics will be assessed to examine the sociological variables including gender, age, education, status, family size and income level. The proposed hypothesis will be discussed by the help of Spearman's rank correlation coefficient. Finally the quality based loyalty definition will be discussed by the correlation coefficient and also demographic profile based analysis separately.

### 5.1 Cronbach's Alpha

Cronbach's Alpha method is applied to calculate the reliability of measurement tool e.g. questionnaire or tests which measure different characteristics. According to Jamal & Naser (2002:154) a tool with Cronbach's Alpha greater than the minimum quantity level 0.7 suggested by Nunnally (1987) is considered reasonable from reliability aspect.

To assess the reliability of the questionnaire in this research, Cronbach's Alpha was used. The results of reliability test by using SPSS software for the whole questionnaire is 0,956, which is more than the minimum level (0.7). The reliability numbers for each factor of quality, perceived service quality, as well as loyalty definition section have been presented in table 5:

**Table 5: Reliability value for each attribute of the questionnaire**

<b>Constructs and Variables</b>	<b>Cronbach's Alpha based on standardized items</b>	<b>Number of items</b>
All of the questions	,956	31
Service quality	,936	20
Brand Image	,929	4
Perceived service quality	,940	4
Loyalty definition	1	3

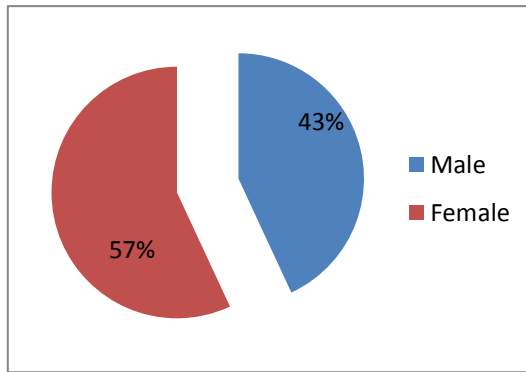
## 5.2 Descriptive Statistics

In this section, the way of statistical sample distribution with regard to the variables such as gender, age, education, marital status, family size and income level is studied (Table 6).

**Table 6: Survey participants' demographic information**

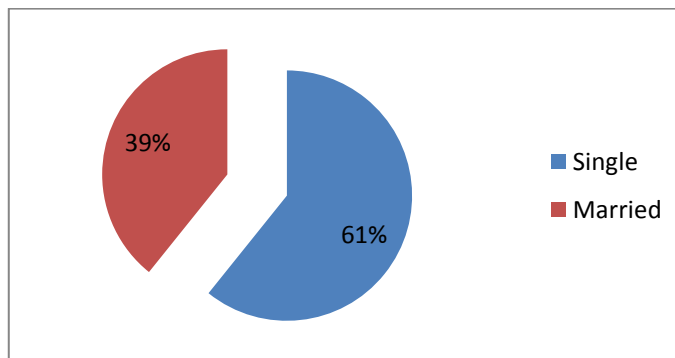
Measure	Items	Frequency	Percent
Gender	Male	56	43%
	Female	74	57%
	Total	130	100%
Age	20 - 25	27	21%
	26 - 30	57	44%
	31 - 40	34	26%
	41 - 50	9	7%
	Over 50	3	2%
	Total	130	100%
Education	High School	2	2%
	Collage	13	10%
	University	73	56%
	Master	36	28%
	Doctorate	6	5%
	Total	130	100%
Marital Status	Single	79	61%
	Married	51	39%
	Total	130	100%
Family Size	Living alone	15	12%
	2	35	27%
	3	43	33%
	4	26	20%
	Over 4	11	8%
	Total	130	100%
Income Level	500 - 1500 TL	25	19%
	1500 - 2500 TL	35	27%
	2500 - 3500 TL	25	19%
	3500 - 5000 TL	23	18%
	Over 5000 TL	22	17%
	Total	130	100%

In the research, the female guests are account for 57%; while 43% is the portion of the male guests. Because 100% of the respondents have experienced a flight, this ratio cannot lead to the conclusion that there are more women flying to different destinations than man.



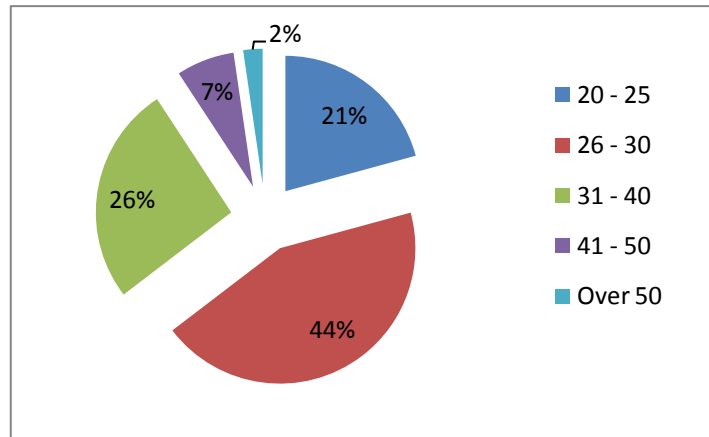
**Figure 5: Survey participants profile by gender**

People fly because of business or travel. It is supported by the ratio of the participants' marital status descriptive; singles participants are about two times more than married participants. Married participants' ratio is 39% while single participants' ratio is 61%.



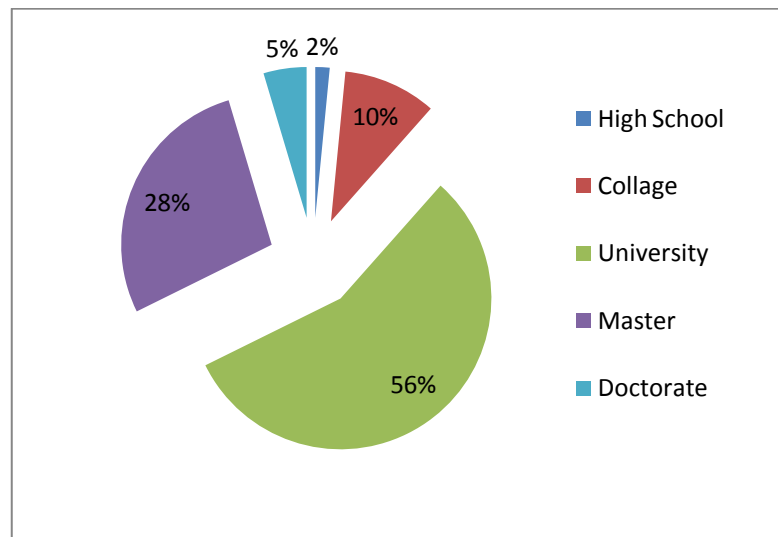
**Figure 6: Survey participants profile by marital status**

Since we focus on business people that can afford to fly easily than students or retired people, and conducted the survey on line, most of the participants are 40 years old or younger, accounts for 91%. Among them, 21% are from 20 to 25 years old, 44% of them are from 26 to 30 years old and 26% of the participants are from 31 to 40 years old. Only 7% of the participants' ages are in the range of 41 to 50 years old and 2% of them are more than 50 years old.



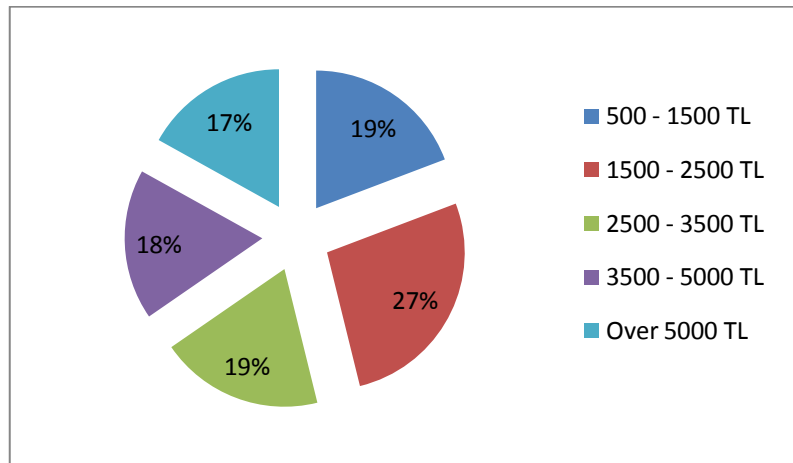
**Figure 7: Survey participants profile by age**

In today's fast changing environment education is the top priority in all businesses. Because of the increased importance of at least university education and research's focused age group, it is understandable to see more than 80% of the participants are graduated from university. In addition to that management positions are required master degree in Turkey till 5 years and its more frequent flyers in these job titles. As seen in the figure below 56% of the participants are graduated from university, 28% of them are completed a master degree and 5% of them have a doctorate degree. Just 10% of the participants graduated from a collage and 2% of them graduated from a high school.



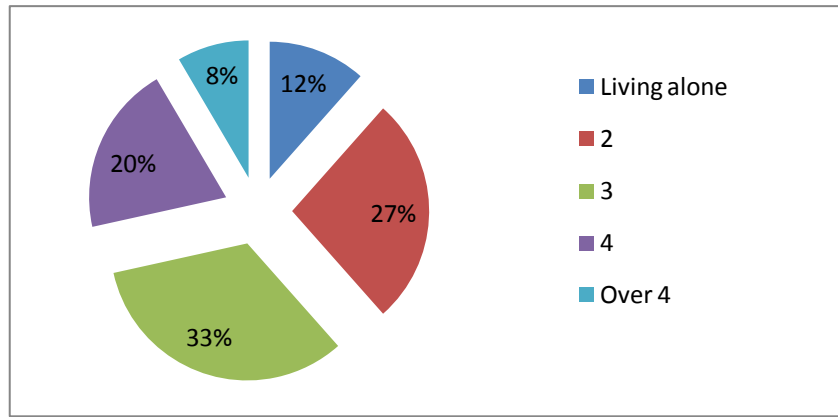
**Figure 8: Survey participants profile by education level**

At past income status depends strictly on job positions and experience, but in today's world it is much more important to have creativity and perform sounding projects. Also critical positions paid well, independently from experience that means independent from age. Air travel industry nowadays serves in all kinds of budgets, even to blue collar workers. So it is meaningful to see income distribution quite equal in all ranges. 27% of the participants are at the income range of 1500 to 2500 TL which is a common salary range in graduate program participants, means age group of 26-30. 19% of them are between 500-1500 TL or 2500-3500 TL income range. 18% of them are 3500 - 5000 TL income range and at last 17% of them are at the over 5000 TL income range.



**Figure 9: Survey participants profile by income status**

Flying requires budget, so we decided to also put family size descriptive additional to income data. Turkey's family tradition and also economy makes many single people live together with their family. So it's common to see extended families. 62% of the survey participant's family size is more than 2. Among them 33% of them living in families have 3 members, 20% of them have 4 members and 8% of them have more than 4 members. However 12% of the participants are living alone and 27% of the participants have 2 members in their families.



**Figure 10: Survey participants profile by family size**

### 5.3 Service Quality Measurement

A widely used method of measuring service quality is the gap analysis model, originally developed by Zeithaml, Berry, and Parasuraman in 1998. The model concentrates on five ‘gaps’ which can impair the extent of service quality delivered. This study focused on Gap 5: the difference between airline passengers’ experiences and expectations of service. The result can be either positive (the experience was better than the passenger thought it would be) or negative (the experience was worse than expected). Although other four gaps are also important factors in service quality, Gap 5 is the only one that can be determined solely from data collected from airline passengers; in order to determine other gaps; we would require data from airline, itself. In order to measure Gap 5; which determined the difference between customer expectations and perceptions, the SERVQUAL instrument, developed by Parasuraman, Zeithaml and Berry in 1985 was adopted. It contained five determinants; they are ‘Tangibles’, ‘Reliability’, ‘Responsiveness’, ‘Assurance’ and ‘Empathy’. Details from these service attributes are presented in table 7.

**Table 7: Service quality attributes that are used in questionnaire**

TAN 1	Staff appears neat and appropriately dressed
TAN 2	Has visually attractive, modern and clean physical on board facilities
TAN 3	Has variety and up-to-date videos/ magazines/ newspapers with quality on board
TAN 4	Has variety and quality in on board catering

REL 1	Performs service right the first time
REL 2	Efficient in check-in process
REL 3	Shows on time performance for scheduled flights
REL 4	Has remedial procedures for delayed or missing baggage
RES 1	Keeping passengers informed about when services will be performed
RES 2	Prompt respond of staff to passengers request or complaint
RES 3	Staff never too busy to respond to passenger's requests
RES 4	Staff is always willing to help you.
ASS 1	Sincerity and patience in resolving passenger's problems
ASS 2	Knowledgeable and skillful provision of services
ASS 3	Staff instills confidence to passengers
ASS 4	Sincere and responsive attitude to passenger complaints
EMP 1	Has a convenient flight scheduling and variable easy to use ticketing channels
EMP 2	Staff has a pleasant demeanor and provides individual attention
EMP 3	Staff shows spontaneous care and concern for passenger's needs
EMP 4	Having other travel related partners e.g. car rentals, hotels, travel insurance
IMG 1	It has a good reputation
IMG 2	It is a reliable company
IMG 3	It is sincere to the passengers
IMG 4	It has a superior technology in its flight services

## 5.4 Analysis

In this part we will try to find evidence in the data analyzed that could support or dismiss the hypothesis. Explanations or underlying reasons for the results will be made as well.

### 5.4.1 The impact of service quality on service quality perception



In order to see the relationship between the service quality attributes and perceived quality, we used Spearman's rank correlation in analysis. Spearman's rank correlation coefficient or Spearman's rho, named after Charles Spearman and often denoted by the Greek letter  $\rho$  (rho) or as  $r_s$ , is a non-parametric measure of statistical dependence between two variables. It assesses how well the relationship between two variables can be described using a monotonic function. If there are no repeated data values, a perfect Spearman correlation of +1 or -1 occurs when each of the variables is a perfect monotone function of the other.

At the beginning, to get a general review we calculated the mean and standard deviation of each attribute. The most floating and least scored ones are tangible 3, reliability 3 and empathy 4.

TAN 3 Has variety and up-to-date videos/ magazines/ newspapers with quality on board

REL 3 Shows on time performance for scheduled flights

EMP 4 Having other travel related partners e.g. car rentals, hotels, travel insurance

Since travel related partners standard deviation is not much means get always low rates, on time performance and up to date videos/magazines get quite changing rates. We can say that air travel companies need to pay attention to these subjects.

On the other hand tangible 1 gets the highest mean rate. As it got the least standard deviation rate, that means most of the passengers agreed on this attribute.

TAN 1 Staff appears neat and appropriately dressed

**Table 8: Functional quality and perceived service quality descriptive statistics**

	Mean	Std. Deviation	N
Tangible 1	6,09	1,158	130
Tangible 2	5,20	1,411	130
Tangible 3	4,75	1,840	130
Tangible 4	4,83	1,667	130
Reliability 1	5,02	1,463	130
Reliability 2	5,49	1,469	130
Reliability 3	4,68	1,889	130

Reliability 4	4,80	1,562	130
Responsiveness 1	4,88	1,455	130
Responsiveness 2	4,85	1,567	130
Responsiveness 3	5,01	1,309	130
Responsiveness 4	5,28	1,312	130
Assurance 1	5,08	1,434	130
Assurance 2	5,24	1,256	130
Assurance 3	5,31	1,340	130
Assurance 4	5,02	1,575	130
Empathy 1	5,33	1,326	130
Empathy 2	5,40	1,280	130
Empathy 3	5,23	1,273	130
Empathy 4	4,58	1,539	130
Perceived service quality 1	5,61	1,378	130
Perceived service quality 2	5,42	1,329	130
Perceived service quality 3	5,42	1,346	130
Perceived service quality 4	5,28	1,209	130

In order to measure whether there is such a correlation as described in related hypothesis, a Spearman's Rho ( $\rho$ ) correlation is calculated between tangible attributes and all perceived quality attributes.

H1: Satisfaction of functional quality correlates with overall service quality perception. Functional quality being measured as five quality dimensions of reliability, responsiveness.... etc

H5: Tangibles have a positive, direct and significant effect on perceived performance.

H6: Reliability has a direct, positive and significant effect on perceived performance.

H7: Responsiveness has a direct, positive and significant effect on perceived performance.

H8: Assurance has a direct, positive and significant effect on perceived performance.

H9: Empathy has a direct, positive and significant effect on perceived performance.

The findings illustrate statistical significance at the 1 percent level (2-tailed) for all service quality attributes except empathy 4 and perceived quality attributes. Thus,

confirming that the hypothesis of H1, H5, H6, H7, and H8 are acceptable. H9 can be partially accepted because of Empathy 4<sup>th</sup> question. This correlation test cannot be used to infer a casual relationship (Bryman and Bell, 2007), thus the all service quality attributes measured in the survey might influence overall perceived quality or vice versa.

**Table 9: Functional quality and perceived service quality correlation rates**

		Perceived SQ 1	Perceived SQ 2	Perceived SQ 3	Perceived SQ 4
TANGIBLES	TAN 1	,330**	,376**	,356**	,339**
	TAN 2	,500**	,549**	,629**	,617**
	TAN 3	,378**	,583**	,572**	,564**
	TAN 4	,347**	,470**	,473**	,500**
RELIABILITY	REL 1	,390**	,533**	,552**	,534**
	REL 2	,395**	,447**	,478**	,521**
	REL 3	,334**	,490**	,440**	,488**
	REL 4	,280**	,315**	,369**	,324**
RESPONSIVENESS	RES 1	,294**	,300**	,336**	,358**
	RES 2	,463**	,647**	,665**	,653**
	RES 3	,368**	,509**	,471**	,518**
	RES 4	,479**	,518**	,557**	,567**
ASSURANCE	ASS 1	,457**	,519**	,523**	,513**
	ASS 2	,474**	,498**	,564**	,538**
	ASS 3	,485**	,565**	,569**	,577**
	ASS 4	,446**	,574**	,624**	,549**
EMPATHY	EMP 1	,380**	,526**	,522**	,524**
	EMP 2	,478**	,592**	,579**	,541**
	EMP 3	,509**	,594**	,590**	,631**
	EMP 4	,197*	,153	,247**	,305**

\*\* Correlation is significant at the 0,01 level (2-tailed).

\* Correlation is significant at the 0,05 level (2-tailed).

Listwise N=130

EMP 4 Having other travel related partners e.g. car rentals, hotels, travel insurance

SQ 1 Overall service quality performance is adequate

SQ 2 Overall service quality performance is proper

#### 5.4.2 The impact of image on service quality perception

Image attributes 1,2 and 3 got high mean rates and low standard deviations. We can conclude that passengers prefer air travel companies that have a good image in terms of reputation, reliability and sincerity to passengers. In addition to that most of them do not believe they have a superior technology in their flight services.

IMG 1 It has a good reputation

IMG 2 It is a reliable company

IMG 3 It is sincere to the passengers

IMG 4 It has a superior technology in its flight services

**Table 10: Brand image and perceived service quality descriptive statistics**

	Mean	Std. Deviation	N
IM1	5,89	1,410	130
IM2	5,92	1,401	130
IM3	5,75	1,241	130
IM4	5,31	1,524	130
SQ1	5,61	1,378	130
SQ2	5,42	1,329	130
SQ3	5,42	1,346	130
SQ4	5,28	1,209	130

**Table 11: Brand image and perceived service quality correlation rates**

		Perceived SQ 1	Perceived SQ 2	Perceived SQ 3	Perceived SQ 4
IMAGE	IM 1	,496**	,660**	,629**	,596**
	IM2	,492**	,681**	,670**	,611**
	IM 3	,445**	,603**	,620**	,559**

	IM 4	,505**	,723**	,720**	,719**
--	------	--------	--------	--------	--------

\*\* Correlation is significant at the 0,01 level (2-tailed).

Listwise N=130

The findings illustrate statistical significance at the 1 percent level (2-tailed) for all image attributes and perceived quality attributes. Thus, confirming that the hypothesis of “H3: Service quality perception is strongly correlates with brand image” is acceptable. The entire image attributes positively correlates with perceived service quality attributes. This correlation test cannot be used to infer a casual relationship (Bryman and Bell, 2007), thus the all image attributes measured in the survey might influence overall perceived quality or vice versa.

### 5.4.3 Relationship between functional quality and brand image

As many empirical findings show that a favorable image strongly effects perceived performance, our aim is to find out if there is a correlation between them.

**Table 12: Functional quality and brand image correlation rates**

Spearman's Rho Correlation Coefficient

		IMAGE 1	IMAGE 2	IMAGE 3	IMAGE 4
TANGIBLES	TAN 1	,411**	,384**	,339**	,356**
	TAN 2	,419**	,468**	,398**	,635**
	TAN 3	,475**	,533**	,433**	,600**
	TAN 4	,457**	,460**	,371**	,546**
RELIABILITY	REL 1	,428**	,487**	,450**	,532**
	REL 2	,374**	,390**	,358**	,383**
	REL 3	,240**	,290**	,423**	,375**
	REL 4	,289**	,340**	,295**	,357**
SIVENES S	RES 1	,237**	,262**	,293**	,296**
	RES 2	,516**	,510**	,573**	,674**

	RES 3	,341**	,413**	,538**	,473**
	RES 4	,328**	,405**	,524**	,464**
ASSURANCE	ASS 1	,366**	,394**	,474**	,418**
	ASS 2	,367**	,403**	,420**	,419**
	ASS 3	,413**	,500**	,491**	,521**
	ASS 4	,447**	,491**	,564**	,531**
EMPATHY	EMP 1	,462**	,442**	,417**	,488**
	EMP 2	,499**	,517**	,591**	,532**
	EMP 3	,373**	,376**	,500**	,546**
	EMP 4	,259**	,216*	,187*	,211*

\*\* Correlation is significant at the 0,01 level (2-tailed).

\* Correlation is significant at the 0,05 level (2-tailed).

Listwise N=130

The findings illustrate statistical significance at the 1 percent level (2-tailed) for all service quality attributes except empathy 4 and image attributes. Thus, confirming that the hypothesis of “H2: Satisfaction of functional quality correlates positively with brand image” is partially acceptable without empathy. So we can conclude like, as empathy 4 deals with other travel related partners, this hasn’t got a direct effect over company’s reliability, sincerity and technological capability brand image. This correlation test cannot be used to infer a casual relationship (Bryman and Bell, 2007), thus the all service quality attributes measured in the survey might influence brand image attributes or vice versa.

### 5.5 Loyalty Definition

Our aim is to find out which quality based loyalty definition is most relevant in terms of positively evaluated perceived service quality.

H4: To find out which quality based loyalty definition is much more relevant in terms of service quality perception.

To prove the last hypothesis we studied on two different analyses. Correlation and demographic profile based analysis.

### 5.5.1 Correlation Analysis

From the analysis results it can be seen that survey participants find “L3 - (value based loyalty definition) - It’s much cheaper than its competitors but also as good as them” correlates negatively with perceived service quality attributes. Also it is not infer to a casual relationship.

As correlation coefficient tells us about the magnitude and direction of the association between perceived service quality and loyalty definition, we can say that between perceived service quality attributes and value based loyalty definition there is a moderate correlation but much higher than others and here we can see a negative correlation. So if perceived service quality degree decreases, value based loyalty definition more preferable.

**Table 13: Perceived service quality and loyalty definitions correlation rates**

Correlations<sup>a</sup>

			SQ1	SQ2	SQ3	SQ4	L1	L2	L3
Spearman's rho	SQ1	Correlation Coefficient	1,000	,678**	,789**	,668**	,039	,142	-,175*
		Sig. (2-tailed)	.	,000	,000	,000	,658	,107	,047
	SQ2	Correlation Coefficient	,678**	1,000	,805**	,816**	,141	,164	-,292**
		Sig. (2-tailed)	,000	.	,000	,000	,109	,062	,001
	SQ3	Correlation Coefficient	,789**	,805**	1,000	,813**	,107	,202*	-,297**
		Sig. (2-tailed)	,000	,000	.	,000	,224	,021	,001
	SQ4	Correlation Coefficient	,668**	,816**	,813**	1,000	,069	,225*	-,283**
		Sig. (2-tailed)	,000	,000	,000	.	,438	,010	,001
	L1	Correlation Coefficient	,039	,141	,107	,069	1,000	-,452**	-,500**
		Sig. (2-tailed)	,658	,109	,224	,438	.	,000	,000
	L2	Correlation Coefficient	,142	,164	,202*	,225*	-,452**	1,000	-,547**
		Sig. (2-tailed)	,107	,062	,021	,010	,000	.	,000
	L3	Correlation Coefficient	-,175*	-,292**	-,297**	-,283**	-,500**	-,547**	1,000
		Sig. (2-tailed)	,047	,001	,001	,001	,000	,000	.

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

a. Listwise N = 130

### 5.5.2 Demographic Profile Based Analysis

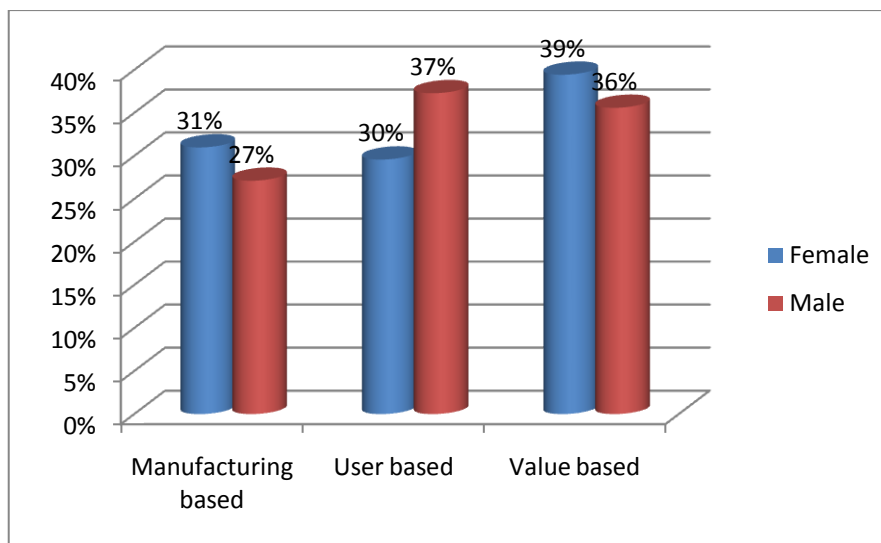
The survey includes three quality based loyalty definitions as:

L1: I know that I'll never face with an unexpected lead balloon and they'll do what they said they'll do. - (Manufacturing based perspective)

L2: It provides what I'm searching for! (And completely satisfy my needs). - (User-based perspective)

L3: It's much cheaper than its competitors but also as good as them. - (Value based perspective)

### 5.5.2.1 Gender based analysis



**Figure 11: Loyalty definition preference analysis by gender**

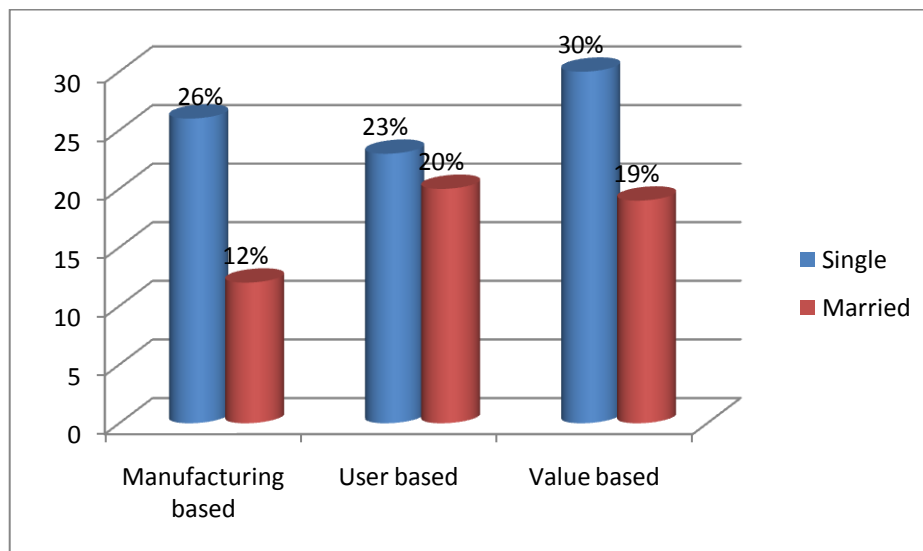
We can conclude that females are more focused on price than males. Since males' income level is generally higher than females (statistics of Turkey can be seen at the appendix 5), they more focused on satisfactory elements. In detail we can see the table below that, males' reliability and responsiveness rates are lower than mean rates. Reliability means performing the promised services dependably and accurately, on the other hand responsiveness means willingness to help customers to provide prompt services.



**Table 14: Mean satisfaction rate analysis by gender**

		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Image	Perceived Quality
Mean for females	74	5,32	5,09	5,10	5,30	5,17	5,70	5,44
Mean for males	56	5,10	4,88	4,89	5,00	5,09	5,74	5,42
TOTAL	130	5,22	5,00	5,00	5,16	5,13	5,72	5,43

*5.5.2.2 Marital status based analysis*



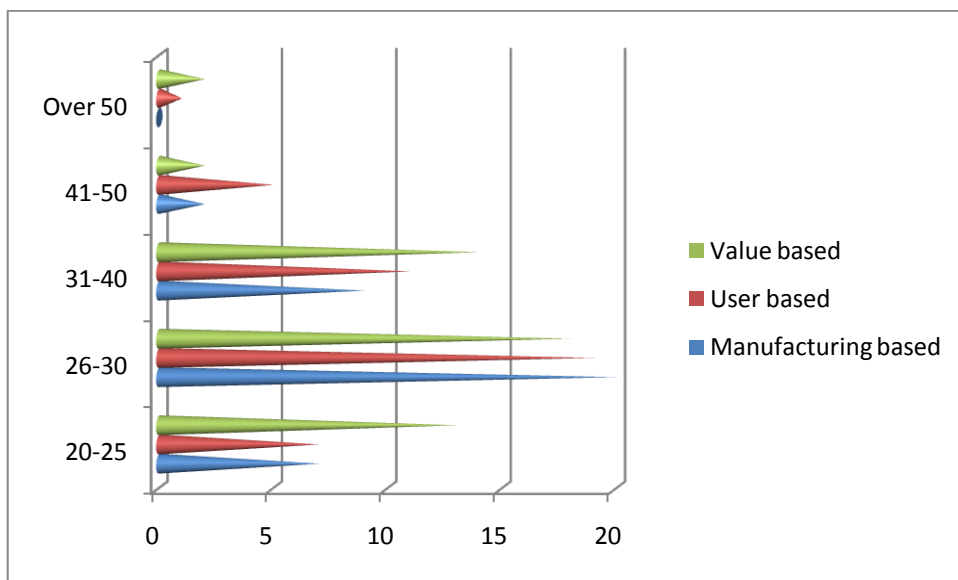
**Figure 12: Loyalty definition preference by marital status**

Single participants are more focused on price than married ones. What is significant here is married participants are not tolerate unexpected problems and their expectation is to realize the service properly. They give closer importance to price and satisfaction of their needs.

**Table 15: Mean satisfaction rate analysis by marital status**

		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Image	Perceived Quality
Single	79	5,24	4,90	4,97	5,09	5,08	5,72	5,51
Married	51	5,18	5,14	5,06	5,27	5,22	5,72	5,31
TOTAL	130	5,22	5,00	5,00	5,16	5,13	5,72	5,43

*5.5.2.2 Age data based analysis*



**Figure 13: Loyalty definition preference analysis by age data**

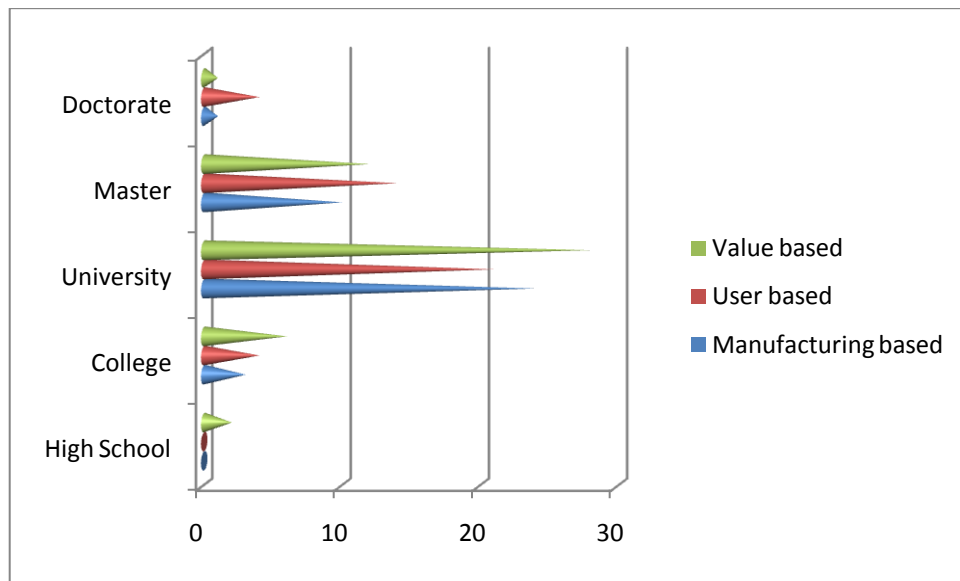
Most of our survey participants are business people and survey population is concentrated between the age group of 20 to 40. There is a remarkable trend that since value based loyalty definition is significant at the age group 20 to 25, then tends to move manufacturing based definition at the age group of 26 to 30, and afterwards turns back to 31 to 40 age group. At the perceived service quality level, survey participants that are at the age group of 20 to 25 are not satisfied with many of the functional quality attributes. In addition to that their perceived service quality rate is also low from the mean. Most satisfied participants are at the age group of over 50 or 26 to 30. Since over

50 age group participants give importance to the price of the service, 26 to 30 age group participants are more focused on having the services appropriately.

**Table 16: Mean satisfaction rates analysis by age data**

		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Image	Perceived Quality
20-25	27	5,13	4,70	4,75	4,84	4,92	5,56	5,31
26-30	57	5,21	5,14	5,10	5,21	5,13	5,85	5,63
31-40	34	5,09	4,96	4,98	5,11	5,26	5,74	5,18
41-50	9	5,78	4,81	5,11	5,56	5,06	5,31	5,36
Over 50	3	5,92	5,92	5,50	6,33	6,00	5,58	5,75
TOTAL	130	5,22	5,00	5,00	5,16	5,13	5,72	5,43

*5.5.2.3 Education data based analysis*



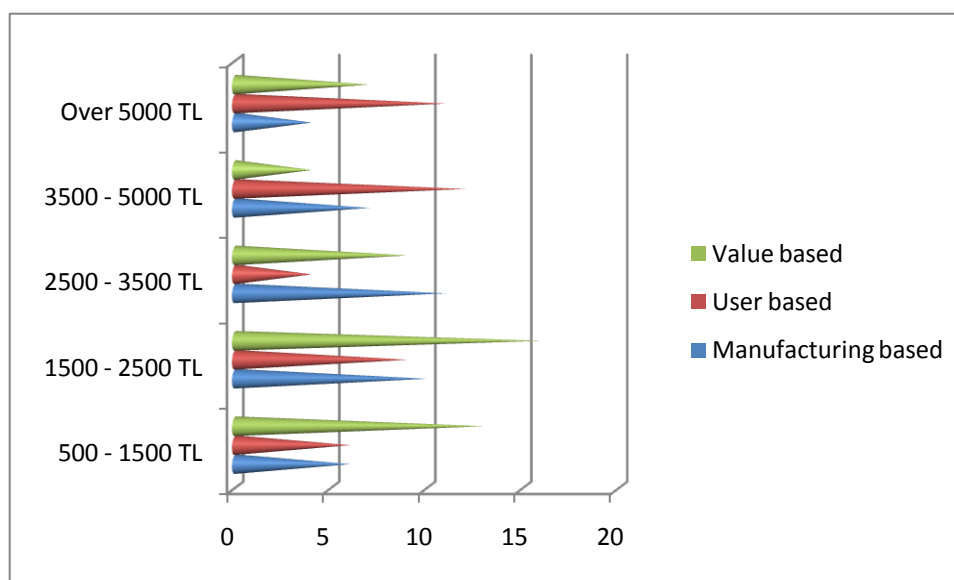
**Figure 14: Loyalty definition preference analysis by education level**

The findings illustrate that there is a change at the loyalty definition preference; while the survey participants that are graduated from high school, college or university consider price for loyalty, the survey participants that have a master or doctorate degree prefer to have their needs completely satisfied to be loyal to a brand. At the perceived service quality level, the survey participants who have a master degree show the minimum perceived quality satisfaction rate, especially they are not satisfied with the responsiveness, assurance, empathy and image of the airline company.

**Table 17: Mean satisfaction rates analysis by education level**

		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Image	Perceived Quality
High School	2	6,25	5,88	5,88	6,25	6,50	6,88	6,75
College	13	5,96	5,75	5,52	5,73	5,77	6,12	5,88
University	73	5,02	4,80	4,93	5,11	5,09	5,73	5,37
Master	36	5,19	4,94	4,86	4,93	4,92	5,50	5,25
Doctorate	6	5,83	5,75	5,29	5,54	5,21	5,67	5,83
Total	130	5,22	5,00	5,00	5,16	5,13	5,72	5,43

#### 5.5.2.4 Income data based analysis



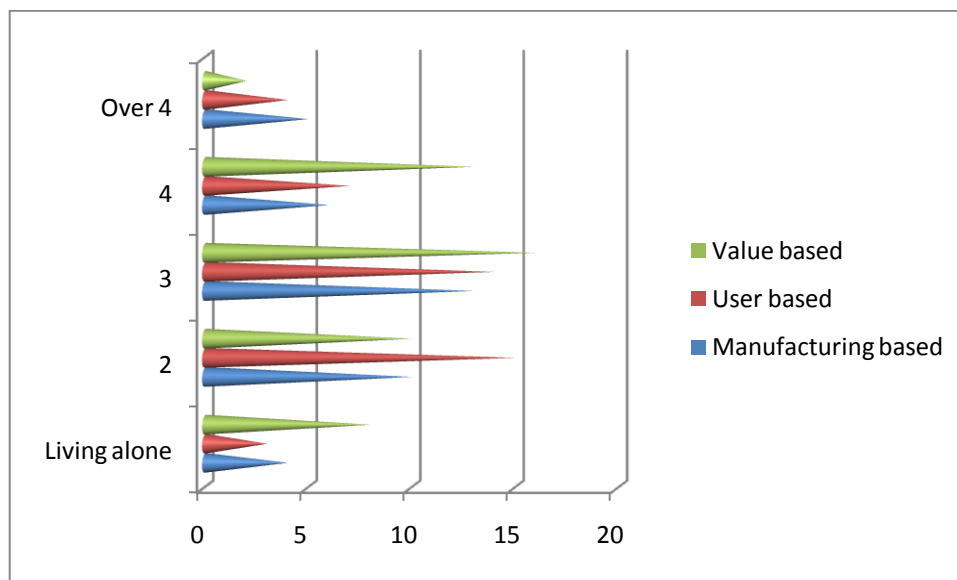
**Figure 15: Loyalty definition preference analysis by income level**

From the graph above we can say that while the participants that are gaining 500 to 2500 TL per month are more focused on price of the service, the participants that are gaining 2500 to 3500 TL per month are more focused on having the services properly. On the other hand the participants that are gaining more than 3500 TL per month show interest in satisfying all of their needs. In perceived service quality level, it is noteworthy that participants that are gaining over 5000 TL per month gave all of the service quality and image attributes quite low ratings. Maybe they are ready to pay more for a better service but there is not such a company serving in this level.

**Table 18: Mean satisfaction rates analysis by income level**

		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Image	Perceived Quality
500 - 1500 TL	25	5,38	5,29	5,16	5,36	5,44	5,95	5,61
1500 - 2500 TL	35	5,39	4,98	5,20	5,24	5,18	5,96	5,61
2500 - 3500 TL	25	5,16	4,95	5,05	5,24	5,04	5,57	5,29
3500 - 5000 TL	23	5,21	4,92	4,99	5,18	5,08	5,83	5,52
Over 5000 TL	22	4,84	4,82	4,48	4,68	4,89	5,13	5,02
Total	130	5,22	5,00	5,00	5,16	5,13	5,72	5,43

*5.5.2.5 Family size data based analysis*



**Figure 16: Loyalty definition preference analysis by family size**

Family size shows importance in terms of the budget of the family. The findings illustrate that price is important for the participants living alone and have 3 or 4 members in their family. On the other hand the participants that have two members in their family more focused on satisfying their needs. The participants that have more than four members in their family are not tolerable to any unexpected problems and desires to have all promised services on time. In perceived service quality level , while the most satisfied participants are having more than four members in their family, the participants that have 4 members in their family is not satisfied much in terms of tangibility, responsiveness and assurance.

**Table 19: Mean satisfaction rates analysis by family size**

		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Image	Perceived Quality
Living alone	15	5,00	4,50	4,68	4,82	4,75	5,18	5,42
2	35	5,22	5,13	5,14	5,29	5,17	5,76	5,43
3	43	5,42	5,22	5,23	5,45	5,40	5,91	5,59
4	26	4,80	4,61	4,48	4,55	4,82	5,52	5,03
Over 4	11	5,70	5,32	5,39	5,55	5,27	6,02	5,80
Total	130	5,22	5,00	5,00	5,16	5,13	5,72	5,43

## CHAPTER 6: DISCUSSION AND CONCLUSION

This chapter will make conclusions of the study, focusing on survey findings and analysis of hypotheses. Then theoretical and managerial implications will be made as well as recommendations for further research.

### 6.1 Conclusion

In order for the airline companies to be able to determine the strategies suitable for their own operational structures, they should accurately identify expectations of the passengers they offer service to. As most of the airline companies offering services operate in the same routes and with similar prices and capacities, retaining passenger attraction and loyalty seems to have become a critical requirement for companies to gain competitive advantage. For these airline companies, competitive advantage tends to focus on customers and on the level of satisfaction they seek. They have to believe customers as core concept of their business: customer satisfaction is what guarantees the future of airlines and it is achievable by an adoption between their services and passengers' needs.

In the study we try to understand the most disappointing quality attributes from the passengers point of view, the brand image effect over perceived service quality and loyalty definition preference. To reach these objectives, the online survey conducted after some pretests and data analysis were conducted over the results gathered.

In this chapter, statistical analysis will be presented using the results of data analysis in chapter 5 followed by suggestions based on research findings. Suggestions for future researches and limitations of this research also are reflected.

To summarize the general findings the following table is developed:

**Table 20: Survey findings summary table**

Loyalty Definition	Strengths	Weaknesses
<b>Manufacturing based - Not to face with an unexpected lead balloon and receive the promised</b>	<ul style="list-style-type: none"><li>○ Facilitates precise measurement in terms of promised services</li><li>○ Got the highest</li></ul>	<ul style="list-style-type: none"><li>○ Internally focused</li><li>○ Got quite low preference among men participants maybe we</li></ul>

<p><b>service properly</b></p>	<p>reliability satisfaction rate among three definition definitions.</p> <ul style="list-style-type: none"> <li>○ Most preferable by the participants that are at the age group of 26 to 30 which is the dominant age group in Turkey population.</li> </ul>	<p>can assume they are more open to sudden changes and thinks positively.</p>
<p><b>User based - Providing what is passengers are searching for and completely satisfying their needs</b></p>	<ul style="list-style-type: none"> <li>○ Evaluates from customer's perspective</li> <li>○ Responsive to market changes</li> <li>○ Got the highest satisfaction rates in terms of all the functional quality, brand image and overall service quality attributes except reliability</li> <li>○ More preferred by the survey participants that have highest education (master, doctorate)</li> <li>○ That's the preferable definition for the high level income groups - over 3500 TL per month</li> </ul>	<ul style="list-style-type: none"> <li>○ Most complex definition</li> <li>○ Difficult to measure</li> <li>○ Customers may not know expectations</li> <li>○ Idiosyncratic reactions</li> <li>○ Pre-purchase attitudes affect subsequent judgments</li> <li>○ Short-term and long-term evaluations may differ</li> <li>○ Not sounding preferable to the age group under 40 and extended families that have more than 2 members</li> </ul>
<p><b>Value based - Much cheaper than its</b></p>	<ul style="list-style-type: none"> <li>○ Focuses attention on a firm's internal</li> </ul>	<ul style="list-style-type: none"> <li>○ Difficulty extracting individual components</li> </ul>



<b>competitors but also as good as them</b>	efficiency and external effectiveness	of value judgment
	○ Concept of value incorporates multiple attributes	○ Quality and value are different constructs
	○ Allows for comparisons across disparate objects and experiences	○ Got the lowest satisfaction rates among all off the functional quality, brand image and perceived service quality attributes
	○ Most preferred loyalty definition among single participants as well as the participants whose education level is lower than master degree	

## 6.2 Theoretical Implications

The main contributions to theoretical implications involve the confirmation of some of the hypothesized relations among functional quality, image and perceived service quality.

Based on the results of this research, there is a positive and significant relation between each of the functional quality dimensions (tangibles, reliability, responsiveness, assurance and empathy), image and perceived service quality. Moreover; correlation coefficients show that empathy has the lowest correlation rate with the perceived quality, especially Empathy 4 - Having other travel related partners e.g. car rentals, hotels, travel insurance.

In detail, the highest correlation is seen between the perceived service quality and having a superior technology in flight services, prompt respond to passengers request / complaint, showing spontaneous care and concern for passenger's needs, having visually attractive, modern and clean physical on board facilities.

On the other hand; the lowest correlation rate is between perceived service quality and having other travel related partners, keeping passengers informed about when services

will be performed, having remedial procedures for delayed or missing baggage and appearance of the staff.

Image show a positive correlation with perceived service quality and having superior technology in flight services has the highest correlation rate. Although the entire image attributes show quite high rates, showing sincerity to passengers got the lowest rate among them.

The study over loyalty preference shows moderate and negative correlation between value-based loyalty definition and perceived service quality. In addition to that the most satisfied survey participants selected user-based loyalty definition, responsiveness has the lowest rate among others. The lowest satisfaction rate is at the value-based definition and both tangibility and reliability attributes show quite low rates.

Finally, moving to the user-based loyalty definition - (satisfying all customer needs), the image and the overall perceived service quality rates also gets higher. But they need to pay more attention on responsiveness - the willingness to help passengers and to provide prompt services-, because they still lose rates because of that attribute.

### **6.3 Managerial Implications**

Retaining customers is very important for the future of many companies; this is even more the case in stagnating markets where service or product differences are minimal. Customer satisfaction and image are two variables that are thought to influence customers' loyalty. From a managerial perspective, understanding the relationships among the three variables and other moderating factors is important.

By the data analysis and interpretation of the results, some recommendations are given as follows:

- This research shows the airline companies that are serving in Turkey have a low and insufficient service performance in reliability and responsiveness dimensions. As Parasuraman et al. (1985) also found reliability and responsiveness as the two most important criteria, the management should take considerable actions in the areas such as:
  - Performing the service right the first time
  - To be efficient in check-in process
  - Showing on time performance for scheduled flights

- Showing prompt respond of staff to passengers request or complaint
  - Staff never too busy to respond to passenger's requests
  - Staff is always willing to help passengers
- The next dimension which the airline companies should mostly focus on is empathy dimension such as:
    - Having a convenient flight scheduling and variable easy to use ticketing channels
    - Staff has a pleasant demeanor and provides individual attention
    - Staff shows spontaneous care and concern for passenger's needs
  - Other dimensions such as tangibility, assurance and brand image although show good service performance by the airline companies but should be considered for continuous improvement.
  - Turkey has a young population but the major age group for now is moving to thirties. Since the technology and globalization effects the education level, the major population is moving to higher education and well paid income levels. The analysis shows that education and income level is parallel with the service expectations and shows a positive correlation. In today's competitive world, price is a highly effective factor for choices, but this trend is moving to satisfaction of needs factor because of growing population in Turkey. We can foresee more dependent passengers focused on quality rather than price.
  - In today's fast changing environment creating loyal customers will become more difficult in the future. Solely price can never be a loyalty dimension, but with satisfaction and better quality, it is still possible to create loyal customers because, image still has a strong effect over perceived service quality perception.

#### **6.4 Limitations of This Research**

There are some limitations listed below in this research:

- The survey was done in one season of the year (spring) 2011 and at a limited period of time with 130 survey participants.

- The survey was conducted online, so the participants are just good internet users.
- The survey was done by Turkish citizens so the research is disregarded the effect of culture on perceived service performance and loyalty preference.

## 6.5 Suggestions for Future Research

With regard the research limitations, following suggestions are recommended for future research:

- To focus on different preferences of loyalty definition among business travelers and holiday / individual travelers to provide more practical recommendations.
- Make a longitudinal study that covers more broad time, more participants and use different kinds of data gathering tools like face to face interviews on board or at airports.
- Expand the research to different locations, countries and cultures to see the effect of culture on identifying the functional quality attributes and brand image over perceived service quality performance and also to see the effects over loyalty definition preference.
- To use other quality evaluation tools or methods in order to confirm the results of this research or maybe complete it.
- Studying and identifying other factors explaining perceived performance.
- Studying the effect of the fare (ticket price) and the class the passenger is traveling, on satisfaction formation process.

## 6.6 Discussion

While customer satisfaction is widely accepted and proven prerequisite to gain customer loyalty and improve perceived service quality, there have been relatively few studies on image as the prerequisite for them. This research shows that the inclusion of image and functional quality in one model not only highlights the importance of image, but also provides a more comprehensive understanding of how it influences both customer satisfaction at perceived service quality and customer loyalty. This also suggests that

both image and functional quality should be included when measuring perceived service quality level.

Findings from this research highlight that improving perceived service performance depends, not only on airline companies' ability to increase functional quality performance, but also on its ability to establish a favorable image. Especially, establish a brand image of having superior technology in its flight services and being sincere to the passengers might make it one step front from their competitors.

Results from this study clearly indicate that all aspects of a functional quality are not equally correlates directly at the perceived service performance level from the customer's point of view. It was found that prompt respond of staff to passengers' requests / complaints, spontaneous care and concern for passenger's needs in all services and visually attractive, modern and clean physical on board facilities were most important factors determining perceived service quality level.

This study highlights the importance of image and functional quality to improve perceived service quality and loyalty. Moreover, in an airline company that offers domestic and international flights, this may present challenges for management since the presented performance in one flight may influence customer's perception of other flights in the same route or others. It is this vital to maintain consistency in service standards in all flights that are domestic or international.

The strength of this research lies in the fact that it provides an actionable focus for the managers of airline companies in their pursuit of a competitive advantage. Since an organization's long term success in a market is essentially determined by its ability to expand and maintain a large and loyal customer base, it is important to recognize that customer loyalty is time specific and non-permanent, thus, requires continuous and consistent investment.

## REFERENCES

- Abbott, L. (1955), "Qualify and competition". New York: Columbia University Press.
- Anderson, E. and Sullivan, M. (1993), "The antecedents and consequences of customer satisfaction for firms", *Marketing Science*, Vol. 12, pp. 125-43.
- Babakus, E., & Boiler, G. W., (1992), "An empirical assessment of the SERVQUAL scale", *Journal of Business Research*. 24: 253-268.
- Ballantyne, R., Warren, A., & Nobbs, K. (2006). "The evolution of brand choice". *Brand Management*, 13(4/5), 339–352.
- Bennet, R., & Rundle-Thiele, S. (2004). "Customer satisfaction should not be the only goal". *Journal of Service Marketing*, 18(7), 514–523.
- Bitner, M. (1990), "Evaluating service encounters: the effects of physical surroundings and employee response", *Journal of Marketing*, Vol. 54, pp. 69-82.
- Bloemer, J., & De Ruyter, K. (1998). On the relationship between store image, store satisfaction and store loyalty. *European Journal of Marketing*, 32(5/6), 499–513.
- Bloemer, J., De Ruyter, K., & Peeters, P. (1998). "Investigating drivers of bank loyalty: The complex relationship between image, service quality and satisfaction." *International Journal of Bank Marketing*, 16(7), 276–286.
- Boland Declan, Doug Morrison and Sean O'Neill (2002). "The future of airline CRM". IBM Institute for Business Value.
- Bolton, R. (1998), "A dynamic model of the duration of the customer's relationship with a continuous service provider: the role of satisfaction", *Marketing Science*, Vol. 17, pp. 45-65.
- Bolton, R. and Lemon, K. (1999), "A dynamic model of customer's usage of services: usage as an antecedent and consequence of satisfaction", *Journal of Marketing Research*, Vol. 36, pp. 171-86.
- Bolton, R. N., & Drew, J. H., (1991a), "A longitudinal analysis of the impact of service changes on customer attitudes", *Journal of Marketing*, 55(1): 1-9.

- Bolton, R. N., & Drew, J. H., (1991b), "A multistage model of customers' assessments of service quality and value", *Journal of Consumer Research*, 17: 375-384.
- Bowen, D. E., & Lawler, E. E. III., (1992), "The empowerment of service workers: What, why, how and when", *Sloan Management Review*, 33(3): 31-39.
- Bozorgi, M. (2007). Measuring service quality in the airline using servqual model: case of IAA, Master Thesis, Continuation Courses Marketing and e-commerce / 2007:046. [Online] Available: <http://epubl.ltu.se/1653-0187/2007/046/index-en.html>. (February, 2009).
- Brown, T. J., Churchill, G. A., Jr., & Peter, J. P., (1993), "Improving the measurement of service quality", *Journal of Retailing*. 69(1): 127-139.
- Bryman, A. & Bell, E. (2007). *Business Research Methods*, 2<sup>nd</sup> edition. New York: Oxford University Press.
- Buzzell, R., & Gale, B., (1987), "The PIMS principles: Linking strategy to performance", New York: Free Press.
- Cameron, K. S., & Whetten, D. A., (1983), "Organizational effectiveness: A comparison of multiple models", New York: Academic Press.
- Carman, I. M., (1990), "Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions", *Journal of Retailing*, 66(1): 33-55.
- Chase, R. B., & Tansik, D. A., (1983), "The customer contact model for organization design", *Management Science*. 49: 1037-1050.
- Chase, R. B., (1985), "The 10 commandments of service system management, interfaces", 15(3): 68-72.
- Cooper Donald R., Schindler Pamela S. (2003). *Business Research Methods*, Mcgraw Hill.
- Cronin, J. J., Jr., & Taylor, S. A., (1992), "Measuring service quality: A reexamination and extension", *Journal of Marketing*, 56(3): 55-68.

- Cronin, J., Brady, M. and Hult, G.T. (2000), "Assessing the effects of quality, value, and customer satisfaction on consumer behavioural intentions in service environments", *Journal of Retailing*, Vol. 76, pp. 193-218.
- Crosby, P. B. (1979), "Quality is free: The art of making quality certain". New York: New American Library.
- Curry, D. J., (1985), "Measuring price and quality competition", *Journal of Marketing*, 49(2): 106- 117.
- Dekimpe, M. G., Steenkamp , J. B. E. M., Mellens, M., & Abeele, P. V. (1997). "Decline and variability in brand loyalty". *International Journal of Research in Marketing*, 14(5), 405–420.
- Feigenbaum, A. V, (1951), "Quality control: Principles, practice, and administration". New York: McGraw-Hill.
- Feigenbaum, A. V., (1982), "Quality and business growth today. Quality Progress", 15(11): 22-25.
- Galbraith, J. R., (1983), "Strategy and organization planning", *Human Resource Management*, 22(1/2): 63-77.
- Garvin, D. A., (1988), "Managing quality: The strategic and competitive edge", New York: Free Press.
- Garvin, D.A., "What Does Product Quality Really Mean?", *Sloan Management Review*, Fall 1984, pp. 25-43.
- Gilmore, H. L., (1974), "Product conformance cost. Quality progress", 7(5): 18-19.
- Gronroos, C., (1983), "Strategic management and marketing in the service sector", Cambridge, MA: Marketing Science Institute.
- Gronroos. C., (1990), "Service management and marketing: Managing the moments of truth in service competition", Lexington, MA: Lexington Books.
- Gustafsson A., Fredrik Ekdahl, Bo Edvardsson (1999). "Customer focused service development in practice: A case study at Scandinavian Airlines System (SAS)." *International Journal of Service Industry Management*, 10(4): 344 - 358.



Harris, D. H., & Chaney, F. B., (1989), "Human /actors in quality assurance", New York: Wiley.

Hofer, C. W., & Schendel, D. E., (1978), "Strategy formulation: Analytical concepts", St. Paul. MN: West.

Howell, D. (2004) "Today's consumers more open to try new brands." DSN Retailing Today, October.

<http://en.wikipedia.org/wiki/Airline>

[http://en.wikipedia.org/wiki/List\\_of\\_airlines\\_of\\_Turkey](http://en.wikipedia.org/wiki/List_of_airlines_of_Turkey)

[http://en.wikipedia.org/wiki/Low-cost\\_carrier](http://en.wikipedia.org/wiki/Low-cost_carrier)

<http://ostpxweb.dot.gov/aviation/airlineclassifications.htm>

<http://plunkettresearch.com/travel%20tourism%20market%20research/industry%20overview>

<http://www.airlinequality.com/StarRanking/ranking.htm>

<http://www.byegm.gov.tr/>, 2009.

[http://www.ehow.com/facts\\_7529981\\_airline-industry-classification.html](http://www.ehow.com/facts_7529981_airline-industry-classification.html)

<http://www.investopedia.com/features/industryhandbook/airline.asp>

<http://www.marketresearch.com/product/display.asp?productid=2822026>

[http://www.xooarticles.com/research-and-markets-aviation-sector-in-turkey-trends-and-opportunities-2009-2013\\_302.html](http://www.xooarticles.com/research-and-markets-aviation-sector-in-turkey-trends-and-opportunities-2009-2013_302.html)

Jamal, A. & Naser, K. (2002). Customer satisfaction and retail banking: an assessment of some of the key antecedents of customer satisfaction in retail banking. International Journal of Bank Marketing, 146 - 160.

Jones, T. O., & Sasser, J. W. E. (1995). "Why satisfied customers defect". Harvard Business Review, 73(6), 88–99.

Juran, J. M., (1951), "Quality control handbook", New York: McGraw-Hill.

- Kapferer, J. N. (2005). "The roots of brand loyalty decline: An international comparison". *Ivey Business Journal*, 69(4), 1–6.
- Korte, C. (1995), "Kundenzufriedenheit", *Planung und Analyse*, Vol. 6, pp. 36-9.
- LaBarbera, P. and Mazursky, D. (1983), "A longitudinal assessment of consumer satisfaction/dissatisfaction: the dynamic aspect of the cognitive process", *Journal of Marketing Research*, Vol. 20, pp. 393-404.
- Lawrence, R. C, & Reeves, C. A., (1993), "Ambiguity in understanding quality: Antecedent judgments of customers and firms", *Southern Management Association Proceedings*: 324-326.
- Levitt, T., (1972), "Production-line approach to service", *Harvard Business Review*. 50(5): 41-52.
- Lovelock, C., (1981), "Why marketing management needs to be different for services", In J. Donnelly, & W. George (Eds.), *Marketing of services*: 5-9. Chicago: American Marketing Association.
- Malhotra Naresh K., David F. Birks, (2003), "Marketing Research an Applied Approach", Printice Hall.
- McKereghan Donna L., (1998), "Quantitative versus qualitative research an attempt to clarify the problem".
- Morrell, Kevin, (2006), "Senior Research Fellow", Warwick Business School, University of Warwick (<http://www.kevinmorrell.org.uk/>)
- Nandan, S. (2005). "An exploration of the brand identity-brand image linkage: A communications perspective." *Brand Management*, 12(4), 264–278.
- Normann, R., (1984), "Service management: Strategy and leadership in service businesses", New York: Wiley.
- Oliver, R. L. (1981a), "Measurement and evaluation of satisfaction processes in retail settings", *Journal of Retailing*, 57(3): 25-48.
- Oliver, R. L. (1999). "When consumer loyalty?" *Journal of Marketing*, 63(4), 33–44.

- Oliver, R. L., (1981b), "What is customer satisfaction?", *Wharton Magazine*, 5(3): 38-41.
- Ostrowski, P., O'Brien, T. and Gordon, G. (1993), "Service quality and customer loyalty in the commercial airline industry", *Journal of Travel Research*, Vol. 32, pp. 16-24.
- Palacio, A. B., Meneses, G. D., & Perez, P. J. P. (2002). "The configuration of the university image and its relationship with satisfaction of students." *Journal of Education Administration*, 40(5), 486-505.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A., (1991), "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing*, 87: 420-450.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A., (1993), "More on improving service quality measurement", *Journal of Retailing*, 89: 140-147.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L., (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, 4(4): 41-50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L., (1988), "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, 84: 12-37.
- Pirsig, R. M., (1992), "Lila: An inquiry into morals", New York: Bantam Books.
- Porter, M. E., (1985), "Competitive advantage: Creating and sustaining superior performance", New York: Free Press.
- Reichheld, F. (1994). "Loyalty and the renaissance of marketing". *Marketing Management*, 2(4), 10-21.
- Reichheld, F. and Teal, T. (1996), "The Loyalty Effect", Harvard Business School Press, Boston, MA.
- Reinartz, W. and Kumar, V. (2000), "On the profitability of long-life customers in a noncontractual setting", *Journal of Marketing*, Vol. 64, pp. 17-35.

- Sambandam, R. and Lord, K. (1995), "Switching behavior in automobile markets: a consideration-sets model", *Journal of the Academy of Marketing Science*, Vol. 23, pp. 57-65.
- Saunders, M., Lewis, P. & Thonhill, A. (2003). *Research methods for business students*. 3<sup>rd</sup> Harlow: Prentice Hall.
- Schneider, B., (1973), "The perception of organizational climate: The customer's view", *Journal of Applied Psychology*, 57(3): 248-258.
- Schultz, D. E. (2005). "The loyalty paradox." *Marketing Management*, 14(5), 10–11.
- Sengun, Y., Sarilgan E., (2005), "Turkish air transports industry evolution and current outlook. The second World congress aviation in the XXI st century", Kiev, 19-21 September.
- Shewhart, W. A., (1931), "Economic control of quality of manufactured product", New York: Van Nostrand.
- Shostack, G. L., (1977), "Breaking free from product marketing", *Journal of Marketing*, 41(2): 73-80.
- Stahl, M. J., & Bounds, G. M., (1991), "Competing globally through customer value", New York: Quorum Books.
- Swan, J. and Oliver, R. (1989), "Postpurchase communications by consumers", *Journal of Retailing*, Vol. 65, pp. 516-33.
- Taylor, T. B. (1998). "Better loyalty measurement leads to business solutions". *Marketing News*, 32(22), 41.
- Tuchman, B. W., (1980), "The decline of quality", *The York Times Magazine*. November 2: 38-41, 104.
- Yin R., (1989), "Case study research: Design and methods" (Rev. ed.), Beverly Hills, CA: Sage Publishing.
- Yin R., (1994), "Case study research: Design and methods (2<sup>nd</sup> edition), Beverly Hills, CA: Sage Publishing.

Yip, G. S., (1989), "Global strategy in a world of nations", *Sloan Management Review*, 89(1): 29-41.

Zeithaml, V. A., (1981), "How consumer evaluation processes differ between goods and services". In J. Donnelly, & W. George (Eds.), *Marketing of services*: 186-190, Chicago: American Marketing Association.

Zeithaml, V. A., Parasuraman, A., & Berry, L. L., (1990), "Delivering quality service", New York: Free Press.

## APPENDIX

### 1. List of airlines

AIRLINE 	AIRLINE (in Turkish) 	ICAO 	IATA 	CALLSIGN 
<a href="#">ACT Airlines</a>	ACT Havayolları	RUN	9T	CARGO TURK
<a href="#">Anadolujet</a>	Anadolujet Havayolları	AJA	TK	ANADOLUJET
<a href="#">Atlasjet</a>	Atlasjet Havayolları	KKK	KK	ATLASJET
<a href="#">Borajet</a>	Borajet Havayolları	BRJ	BJ	
<a href="#">Corendon Airlines</a>	Corendon Havayolları	CAI	7H	CORENDON
<a href="#">Cyprus Turkish Airlines</a>	Kıbrıs Türk Hava Yolları	KYV	YK	AIRKIBRIS
<a href="#">Freebird Airlines</a>	Hürkuş Havayolu Taşımacılık ve Ticaret	FHY	FH	FREEBIRD AIR
<a href="#">Izair</a>	İzmir Hava Yolları	IZM	4I	IZMIR
<a href="#">ULS Airlines Cargo</a>	ULS Airlines Cargo	KZU	GO	KUZU CARGO
<a href="#">MNG Airlines</a>	MNG Havayolları	MNB	MB	BLACK SEA
<a href="#">Onur Air</a>	Onur Air Taşımacılık	OHY	8Q	ONUR AIR
<a href="#">Orbit Express Airlines</a>		OAC	OA	FLYCARGO
<a href="#">Pegasus Airlines</a>	Pegasus Hava Taşımacılığı	PGT	PC	SUNTURK
<a href="#">Saga Airlines</a>	Saga Hava Taşımacılık	SGX	2J	
<a href="#">Sky Airlines</a>	Sky Havayolları	SHY		ANTALYA BIRD
<a href="#">SunExpress</a>	Güneş Ekspres Havacılık	SXS	XQ	SUNEXPRESS
<a href="#">Tailwind Airlines</a>		TWI		TAILWIND
<a href="#">Turkish Airlines</a>	Türk Hava Yolları	THY	TK	TURKISH
<a href="#">Turkuaz Airlines</a>	Turkuaz Havayolları	TRK		
<a href="#">ULS Airlines Cargo</a>		KZU	GO	UNIVERSAL CARGO

## 2. Questionnaire

### Service Quality Perception Effects Over Loyalty

[Exit this survey](#)

#### 1. Hello!

I am doing a survey for my thesis research in M.Sc. in Management, Economics and Industrial Engineering from Politecnico di Milano.

Thank you for your assistance in filling this questionnaire. Please fill in as accurate as possible.

All information provided by you for this research is confidential. Information will be used only to create a general profile of the people who responded to this questionnaire.

I greatly appreciate your help for completing the survey!

Neli Mincheva Aleksieva

[Next](#)

### Service Quality Perception Effects Over Loyalty

[Exit this survey](#)

#### 2. Functional Quality Perception Evaluation

\*1. Please indicate the extent to which you agree or disagree with the following statements regarding your most frequently used airline brand or the latest used one. Please rate your answers by the value from 1 - strongly disagree to 7 - strongly agree, use the values in between to graduate your opinion:

	1 - Strongly disagree	2	3	4 - Neither agree nor disagree	5	6	7 - Strongly agree
Has visually attractive, modern and clean physical on board facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performs service right the first time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a convenient flight scheduling and variable easy to use ticketing channels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff instills confidence to passengers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficient in check-in process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has variety and quality in on board catering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has other travel related partners e.g. car rentals, hotels, travel insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prompt respond of staff to passengers request or complaint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keeping passengers informed about when services will be performed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has remedial procedures for delayed or missing baggage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff appears neat and appropriately dressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable and skillful provision of services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sincerity and patience in resolving passenger's problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Staff is always willing to help you.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff never too busy to respond to passenger's requests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff shows spontaneous care and concern for passenger's needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shows on time performance for scheduled flights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sincere and responsive attitude to passenger complaints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has variety and up-to-date videos/ magazines/ newspapers with quality on board	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff has a pleasant demeanor and provides individual attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Exit this survey](#)

### Service Quality Perception Effects Over Loyalty

#### 3. Image

**\*1. Please respond related to the most frequently used Airline Brand:**

	Strongly disagree	2	3	4	5	6	Strongly agree
It has a good reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It has a superior technology in its flight services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a reliable company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is sincere to the passengers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\*2. Overall, service quality performance is :**

	Extremely not						Extremely
Adequate - Enough for what you need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appropriate - Suitable or right.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proper - Correctly, in an acceptable way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\*3. Please select the most suitable comment for you:**

I'm loyal to this brand because;

- I know that I'll never face with an unexpected lead balloon and they'll do what they said they'll do.
- It's much cheaper than its competitors but also as good as them.
- It provides what I'm searching for! (And completely satisfy my needs).



**4. Demographic Information**

\*1. What is your age?

20 - 25

26 - 30

31 - 40

41 - 50

Over 50

\*2. Are you?

Male

Female

\*3. Graduated from?

High School

Collage

University

Master

Doctorate

\*4. You are?

Single

Married

\*5. Your family size is?

Living alone

2

3

4

Over 4

\*6. Your net income level is? (Per month)

500 - 1500 TL

1500 - 2500 TL

2500 - 3500 TL

3500 - 5000 TL

Over 5000 TL

### 3. Pilot Test Data

T1	T2	T3	T4	REL1	REL2	REL3	REL4	RES1	RES2	RES3	RES4	A1	A2	A3	A4
7	7	7	7	5	7	6	7	6	5	6	7	6	7	6	6
7	6	6	6	6	7	5	5	6	6	7	6	6	6	6	7
7	5	6	5	5	6	6	6	6	5	5	6	6	6	7	6
7	6	6	6	5	7	5	6	6	4	5	6	6	6	6	6
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Tangibles standard deviation			0,825578	Reliability standard deviation			0,801315	Responsiveness standard deviation			0,753937	Assurance standard deviation			0,604805
Variation			0,681579	Variation			0,642105	Variation			0,568421	Variation			0,365789
E1	E2	E3	E4	IM1	IM2	IM3	IM4	SQ1	SQ2	SQ3	SQ4	LOYALTY			
6	6	7	7	7	7	6	7	6	7	5	7	2			
4	6	6	5	7	7	6	6	7	7	7	6	2			
5	6	6	6	6	6	6	5	7	7	6	6	3			
6	6	6	4	6	6	6	6	6	6	6	6	3			
5	5	5	5	5	5	5	4	5	5	5	5	3			
Empathy standard deviation			0,820783	Image standard deviation			0,825578	Service quality standard deviation			0,788069	Loyalty standard deviation			0,547723
Variation			0,673684	Variation			0,681579	Variation			0,621053	Variation			0,30

### 4. Reliability Test Data (IBM SPSS Statistics)

#### Reliability

[DataSet 6]

#### Scale: ALL VARIABLES

##### Case Processing Summary

		N	%
Cases	Valid	130	100,0
	Excluded <sup>a</sup>	0	,0
	Total	130	100,0

a. Listwise deletion based on all variables in the procedure.

##### Reliability Statistics

Cronbach's Alpha	N of Items
,956	29

## Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
T1	142,64	719,302	,588	,955
T2	143,53	707,057	,641	,954
T3	143,98	695,597	,600	,955
T4	143,90	703,207	,579	,955
REL1	143,72	702,531	,677	,954
REL2	143,24	708,385	,596	,955
REL3	144,05	702,718	,508	,956
REL4	143,93	714,809	,478	,956
RES1	143,85	715,371	,510	,955
RES2	143,88	692,490	,754	,953
RES3	143,72	707,628	,687	,954
RES4	143,45	705,878	,711	,954
A1	143,65	700,538	,719	,953
A2	143,49	708,035	,711	,954
A3	143,42	701,517	,759	,953
A4	143,72	692,252	,753	,953
E1	143,40	706,552	,693	,954
E2	143,33	705,107	,742	,953
E3	143,50	704,190	,760	,953
E4	144,15	732,224	,271	,958
IM1	142,84	703,113	,696	,954
IM2	142,81	701,490	,724	,953
IM3	142,98	706,666	,742	,953
IM4	143,42	693,471	,765	,953
SQ1	143,12	705,101	,686	,954
SQ2	143,31	699,920	,789	,953
SQ3	143,32	695,349	,846	,952
SQ4	143,45	703,024	,822	,953
LOYALTY	146,65	768,727	-,270	,959

## 5. Average Gross Wage by Gender and Education Level

**Cinsiyet ve eğitim durumuna göre ortalama çalışma süreleri, aylık ortalama brüt ücret ve cinsiyetler arası ücret farkı, 2006**  
Average working hours and monthly average gross wage by sex, educational attainment and gender pay gap, 2006

	Ücretli çalışanların oranı The distribution of employees			Aylık ortalama brüt ücret Monthly average gross wage (YTL)			Cinsiyetler arası ücret farkı Gender pay gap (%)
	Toplam - Total	Erkek - Male	Kadın - Female	Toplam - Total	Erkek - Male	Kadın - Female	
<b>Toplam - Total</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>1 103</b>	<b>1 107</b>	<b>1 091</b>	1,4
<b>İlkokul ve altı</b>							
Primary school and below	30,9	34,0	20,6	764	784	650	17,1
<b>İlköğretim ve ortaokul</b>							
Primary education and secondary school	16,4	17,3	13,2	760	788	640	18,7
<b>Lise</b>							
High school	22,4	21,0	27,2	922	943	870	7,7
<b>Meslek lisesi</b>							
Vocational high school	11,3	12,0	9,0	1 233	1 298	944	27,2
<b>Yüksekokul ve üstü</b>							
Higher education	19,0	15,7	30,0	2 088	2 231	1 837	17,7

**Kaynak: TÜİK, 2006 Kazanç Yapısı Anketi sonuçları**

Source: TurkStat, The results of Structure of Earnings Survey, 2006