

# The Role of Service Quality in Ensuring Customer Satisfaction in the Airline Industry

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## Abstract

*Globalisation and intense market competition have affected the business environment of the 21st century. The changes have mainly occurred at the customer level, where expectations in terms of service quality have increased, whilst customer loyalty has not reached the same level of expectation.*

*This change has also been felt in the passenger air transport industry, with passenger airlines increasing their efforts to identify and implement new ways of improving the quality of services they provide to customers. However, air transport, be it cargo or passenger, faces considerable challenges arising from the increasingly dynamic and uncertain environment in which it operates.*

*This paper is part of an empirical study aimed at developing a model for measuring and analysing the quality of air passenger services in order to improve the quality of customer service. This paper therefore aims to present some important aspects of the influence of quality on customer satisfaction in a major international airline.*

**Key words:** air transport industry, customer satisfaction, customer loyalty, service quality

**J.E.L. classification:** M10, M12, M16, M19

## 1. Introduction

The air transport sector is a key provider of a wide range of services and is growing rapidly. The many events and trends influencing it both economically and socially mean that it is also facing an increasing number of challenges when it comes to generating benefits (IATA, 2020; ATAG, 2020).

Air transport, be it passenger or cargo, is one of the most important sectors of the current economy, and has a strong competitive market. The highly competitive environment in which airlines operate means that they have to make every effort to offer high-quality services, especially in passenger transport, in order to ensure customer satisfaction, which is crucial for increasing their market share and profitability.

In a wide variety of circumstances that greatly influence the passenger air transport sector, the key element in ensuring a competitive advantage is not only to offer customers and employees services with high safety and security standards, but also to ensure continuous improvement in the quality of the services provided according to customer expectations and needs.

Increased competition in the service industry has led many companies to view service quality as a strategic tool. In this context, techniques for measuring service quality and service performance have become an important area in the dedicated literature in recent decades. This has led airlines to look for effective ways to meet customer needs and expectations with high standards of customer service in order to retain current customers and attract as many prospective ones as possible.

Quality assurance has always been one of the top priorities for passenger airlines, playing a key role in ensuring a competitive advantage, and strategic and operations management has come to focus on its continuous improvement in line with customer expectations and needs.

More and more theorists and practitioners argue that the increased competition in the international passenger transport market means that airline leadership must find appropriate and effective ways to improve service quality, by better understanding customer needs and expectations then meeting or even exceeding them, with the effect of increasing customer satisfaction and loyalty as a measure of organisational performance.

As enhanced passenger service quality and organisational performance are viable ways of ensuring airline competitiveness, the main objectives of this research are firstly to gain a broader view of the contributions made by different authors to the dedicated literature on the role of quality in the organisational performance of passenger airlines, and secondly to determine the role of service quality provided by an international airline in ensuring a good performance.

## 2. Literature review

Today we are witnessing a development of services based on the economics of new experiences that are “intangible, tailored to the customer, co-participant and cannot be stored” (Fitzimmons, 2006:4).

Service, in general terms, can be defined as:

- an activity or sequence of activities with a greater or lesser degree of tangibility “performed during the interaction between customers and employees, and physical resources or assets and systems of the service provider that offer solutions to customer problems” (Gronroos, 1990:27);
- facts, processes and performance (Zeithaml & Bitner, 1996:5);
- any intangible act that one party performs for another and that does not result in possession of the good offered (Kotler & Keller, 2009:789);
- performance, process, production or supply, defined differently in various service sectors (Daniel and Berinyuy, 2010:8).

In contrast with the production of tangible goods, the process of passenger air transport, which is considered a “basic service” accompanied by secondary goods and services offered by each airline, has a number of characteristics that determine a certain specificity in management and supply. They are:

- intangibility;
- the impossibility of storing;
- simultaneity between provision and consumption of the service (implies inseparability between the provider and the customer);
- heterogeneity or variability of services and lack of ownership (the sale of the service does not mean the transfer of ownership as is the case for tangible goods (Zeithaml & Bitner, 1996; Fitzimmons, 2006; Ioncić, 2006).

If we try to classify air services based on the theory of Lovelock et al (2010), which classifies services according to their degree of tangibility (tangible and non-tangible) and the type of product (tangible goods or services), we can say that the services provided by passenger airlines are tangible goods directed at customers, as they must be present when the service is offered, and the quality of the service can only be observed when it is put into operation, there being many points of contact with the customer (Crişan & Ilieş, 2010). When it comes to passenger airline services, “value is created through engagement and contact with the customer in a personalised way” (Fitzimmons et al, 2006:11).

The air transport industry plays an increasingly important role both in the economies of different individual countries and in the world economy, due to globalisation (Suhartanto & Noor, 2012). Passenger air transport has a number of specific characteristics compared to other services, with features such as speed, efficiency, comfort, flexibility and cost, as well as safety and security standards, which are more demanding and sensitive than those for other types of transport, such as land transport (ATAG, 2014; Pacheco, Fernandes & Domingos, 2014).

Improving safety standards has always been one of the top priorities, if not the first priority, in the civil aviation sector (Liou, Yen & Tzeng, 2008). Compliance with these requirements plays a key role, and improving them is a major factor in operations management (McFadden & Hosmane, 2001).

As regards passenger air transport services, contact with the customer is achieved through specific activities on the ground (before and after the flight) and during the flight, and service quality is directly linked to the customer's perception and requirements. Thus, the elements that make up a service can make it stand out in the market and ultimately contribute to a competitive advantage.

Passenger air transport services are characterised by a high degree of professionalism which creates many challenges: staff selection and recruitment; continuous training of employees; application of standard procedures for service delivery; ensuring competitive prices; ensuring a high standard of customer service tailored to the customer's needs and expectations; prompt reaction by involving the customer in the delivery process (Schmenner, 1986; Fitzimmons et al, 2011).

Based on the definition and classification of services by Fitzimmons et al (2006), the defining elements of passenger air transport service are as follows:

- *aircraft, equipment and buildings*
- *information*
- *explicit services*: visible outcomes relating to the purpose of the service provision, requiring staff with general and specific skills; provision of the service to the standards promised in the offer; accessibility and availability of the service, etc.;
- *implicit services*: benefits of a psychological nature, vaguely perceived by the customer and not necessarily associated with the basic service process (e.g. airport and airplane ambience).

To develop an effective strategy for air passenger service quality, airlines need to address a number of issues including both elements relating to the service delivery system (availability of aircraft and specific equipment) and operational issues relating to the implementation of effective management policies and practices, which address human resources, service quality, environmental protection, occupational health and safety, etc. (Sumathi, N et al, 2018).

Airlines provide international passenger transport services. Through the excellence of those services, they not only satisfy their customers' expectations and needs, but also charm them. In recent years, there has been an increase in the efforts made by airlines to ensure ever-higher levels of quality in order to remain competitive in an increasingly dynamic and uncertain market.

The interrelated processes of passenger airlines are dynamic and highly innovative, based on the philosophy of continuous improvement as the essence of Total Quality Management (TQM). When it comes to new technologies, there is an increased focus on equipping the fleet with state-of-the-art aircraft with a high degree of safety and comfort.

Based on the fact that the solutions for ensuring competitiveness are first and foremost people, airlines consider human resources to be an important asset for achieving high performance levels, which is why there is an increased emphasis on providing core and specific competencies that facilitate employee empowerment and commitment.

The participation and active involvement of customers in the service process ensures a differentiated approach by taking into account the fact that their impact is achieved through the actual transport and back office activities, and that the quality of service is directly linked to customer perception, requirements and expectations.

The elements that make up customer service therefore determine quality and can stand out in the market to ensure customer satisfaction and loyalty, thus playing an important role in increasing sales.

Service quality promotes customer satisfaction, stimulates the desire to return and encourages recommendations. In the highly competitive airline industry, managers need to find ways to make their services stand out from the competition. To achieve this, they must understand the needs of their customers and set out to meet and exceed those needs. If service quality is to be improved, it must be reliably assessed and measured. Results from various studies show that quality significantly influences both customer satisfaction, which is positively related to the desire to

repeat the purchase, and word-of-mouth advertising (Nadiri et al, 2008).

Gajjar (2013) points out that the main factors influencing customer satisfaction are price, quality, reliability, empathy and responsiveness.

All awards for excellence based on national and internationally recognised standards focus on quality and customer satisfaction. Thus, one of the best-known excellence awards, the M. Baldrige Award (USA), focuses on the level of customer service, for which it awards up to 300 points out of a possible 1000 (Brown, 2008). At the same time, EFQM (the European Foundation for Quality Management) promotes the concept of "customer satisfaction", showing that it has a major influence on a company's outcomes. The EQA (European Quality Award) places great importance on customer satisfaction, i.e. how customers perceive the quality of an organisation's products and services as components of customer service.

The customer service provided by passenger airlines is a key factor for success, delivering value and quality to customers so as to meet their needs and expectations and creating customer satisfaction in order to secure a competitive advantage. Researchers and airline managers alike believe that providing high quality service is an essential strategy for success and competitiveness in an increasingly competitive market. Today, their efforts are focused on measuring and analysing the quality of customer service and developing and implementing effective strategies, policies and procedures to meet and exceed customer needs and expectations.

Today, service quality, customer satisfaction and customer loyalty are at the forefront of management and marketing studies in the increasingly dynamic passenger air transport market, which has undergone sudden and radical changes in the last two years. The size and measurement of service quality is an important concern for most researchers. Customer satisfaction is influenced simultaneously by service quality and price according to the conceptual model of Parasuraman, Zeithaml and Berry (1994).

### **3. Research methodology**

This paper is part of an empirical study aimed at developing a model for measuring and analysing the quality of air passenger services for the purpose of improving the quality of customer service. This paper therefore aims to present some important aspects of the influence of quality on customer satisfaction in a major international airline.

The results of the study are based on quantitative methods of data analysis using the questionnaire as a tool, and qualitative methods using the interview as a tool, in order to assess the respondents' perception of the quality of services provided by the company under analysis.

To conduct the empirical study on the quality of the services provided by the airline – analysed from the external customer perspective – variables were developed at different levels of aggregation, taking into account the quality level of the services provided by the company under analysis and the factors addressed in the study that influence the company's performance, based on non-financial indicators. The respondents were customers who had used the flight services.

The research sample consists of 126 customers, i.e. passengers, who have used the services offered by the company under analysis and have agreed to voluntarily participate in this study by completing a valid questionnaire. Given the complexity of the questionnaire due to the volume of information collected, the process required that customers be made aware of the objectives of the study in advance by company contact staff.

### **4. Findings**

Customer satisfaction in air transport is a major factor for ensuring the competitiveness of airlines, and the on-board travel experience has a major influence on the way passengers perceive the quality of the services provided. If customers are dissatisfied, low satisfaction will lead them to choose another airline for their future travel.

Knowing one's customers and their requirements and having an informed customer base is an important step in increasing satisfaction. By having a good understanding of customer interest and requirements, a company can measure the degree to which the service it provides meets customer expectations.

Customer satisfaction is an essential indicator in the analysis of quality from the perspective of a company's customers; it expresses their degree of satisfaction with the services provided by the company. The statistical variable summarising customer satisfaction is the aggregate variable *Stsf\_cl*, which sums up 9 items/primary variables.

According to the results of the reliability analysis, the variable *Stsf\_cl* has a good internal consistency, with a Cronbach's Alpha coefficient of 0.8834. According to Table 1, the variable *Stsf\_cl* has a mean of 4.1751, a standard deviation (sd) of 0.4177, which is considered good, and a standard error "se(mean)" of 0.0372, meaning that the mean of the variable and the true value are sufficiently close.

Table no. 1 The variable *Stsf\_cl*

variable	N	mean	sd	se(mean)
Stsf_cl	126	4.1751	.4177	.0372

Source: own research

According to the respondents, the most important factors determining customer satisfaction with the passenger service provided by the airline under review are:

- quality of the services provided by the company;
- prices;
- efficiency and honesty of the staff;
- company image;
- prompt handling and resolution of complaints;
- safety and security levels for the service provided;
- past experience;
- quality and performance of the aircraft fleet;
- promptness and quality of the service provided by the company in the event of a cancellation;
- appropriate external communication channels.

The analysis showed that an important factor determining customer satisfaction was the emotional one: passengers felt well treated by the company's employees, felt safe and were offered individual treatment. These aspects explain why customers can be satisfied even if the flight is delayed, the dish they order is no longer available or their ticket is expensive. Furthermore, some research performed by the company has indicated that even if passengers do not forget negative experiences with the company, they appreciate positive ones as well as their emotional relationship with the company, created by factors such as a modern fleet of well-equipped aircraft, the competence and empathy of the employees or the company image.

The passenger air transport sector has experienced rapid growth and transformation over the last 10 years, resulting in increasing competition in the market. This has led airlines to focus not only on customer satisfaction but also on retaining customers through the creation and development of customer loyalty programmes.

Building on the quality research into the degree to which services meet the requirements of the customers who use them (Montgomery, 1996), the model adopted in this study focuses on measuring customer perception of the service provided (offered to customers), which reflects the extent to which the product/service matches the way in which the customer intends to use it. This choice aims to measure service quality as perceived by the customer in order to identify problems and improve quality as an important factor for increased customer satisfaction and loyalty.

The main variables showing the quality of passenger service from the customer's perspective and presented in this study are:

- *Pre-flight ground service quality (PFGSQ)*: summarises the quality of the ground transport process and covers website design; passenger information; baggage policy; online booking and check-in policy; staff attitude and behaviour; passenger boarding

procedures; airport lounges. To these are added the services performed by the airport staff, such as checking and loading baggage onto the aircraft; services performed by shops and restaurants; recreation areas in the airport; adequate waiting areas; airport facilities equipped with new technology, etc. This category is represented by the variable statistic *PFGSQ*, which has a very good internal consistency, Cronbach's Alpha  $\alpha = 0.9401$ , a mean of 4.0547, a standard deviation of 0.3613 and a standard error of 0.0189.

- *In-flight service quality (IFSQ)*: summarises the quality of the in-flight passenger service provided by the airline and includes aircraft type, cabin configuration, interior design, catering services (quality of menus, beverage selection), flight crew behaviour, employee image, ability to answer questions and provide passengers with assistance, etc. The category is represented by the statistical variable *IFSQ*, which has a very good internal consistency, Cronbach's Alpha  $\alpha = 0.9523$ , a mean of 4.0789, a standard deviation of 0.3547 and a standard error of 0.0182.
- *Post-flight ground service quality (PFSQ)*: summarises the quality of the passenger service after the flight and refers to airport design; passenger information; baggage return and handling policy; staff attitude and behaviour; passenger disembarkation procedures; airport facilities; adequate waiting areas; provision of transport and hotel services upon request, etc. To these are added special safety and security services. The category is represented by the statistical variable *PFSQ*, which has a very good internal consistency, Cronbach's Alpha  $\alpha = 0.9705$ , a mean of 4.0295, a standard deviation of 0.5036 and a standard error of 0.0258.
- *Overall (whole process) service quality (OSQ)*: summarises the quality of air passenger service over the whole process and includes the three sections (pre-flight, in-flight and post-flight service quality). It is represented by the statistical variable *OSQ*, which has a very good internal consistency, Cronbach's Alpha  $\alpha = 0.9560$ , a mean of 4.0722, a standard deviation of 0.5065 and a standard error of 0.0251.

It can be observed that all aspects of the passenger service provided by the airline under review show a good level of perceived quality.

In the following paragraphs, we would like to study the impact that the variables determining the quality of passenger service have on customer satisfaction from the customer's perspective.

Table no. 2 Influence of independent variables expressing service quality on the dependent variable customer satisfaction

Independent variable	Dependent variable	N	Prob > F	R-squared	Coef.	Std. Err	t	P> t
<i>PFGSQ</i>	Stsf cl	126	0.0000	0.7354	.9446715	.0569341	16.59	0.000
<i>IFSQ</i>	Stsf cl	126	0.0000	0.7091	.8826691	.0743134	11.88	0.000
<i>PFSQ</i>	Stsf cl	126	0.0000	0.4538	.4158358	.0692126	6.01	0.000
<i>OSQ</i>	Stsf cl	126	0.0000	0.7759	.957849	.0488801	19.60	0.000

Source: own research

In Table 2, we see that all the variables studied, which show the quality of passenger service from the customer's perspective, have a statistically significant impact on customer satisfaction. This is supported by the *F-test*, whose *Prob > F* is 0.000 in all the cases analysed.

We would also like to note that the variable which explains most of the variations in customer satisfaction is the one that summarises the overall (whole process) quality of service (*OQS*), with a level of 77.59%, followed by the one summarising the pre-flight ground service quality (*PFGSQ*), at 73.54%.

As for the value of the regression coefficient, it can be observed that the variable with the highest value is the overall quality of the whole service process (*OSQ*), with an impact coefficient of 0.9578 ( $P > |t| = 0.000$ ). This translates into the fact that the overall quality throughout the service process has a statistically significant impact on customer satisfaction, which means that for an increase of one unit in the *OSQ* variable, the customer satisfaction variable will increase by

0.9578 units. It can also be seen that the pre-flight ground service quality (*PFGSQ*, 0.9446) and the in-flight service quality (*IFSQ*, 0.8826) variables also have a significant impact on customer satisfaction. It should further be noted that, according to the regression analysis in Table 2, post-flight ground service quality (*PFSQ*) has a low impact (0.4158) on customer satisfaction.

## 5. Conclusions

Successful airlines undertake targeted customer studies to gain useful insights into their passengers' experience and develop appropriate quality and performance improvement programmes. The primary aim is to collect information from customers to help the company and its employees better understand the customer experience. Another goal is to find appropriate and effective ways to change the mindset of employees and managers in accepting change when it is required.

The dedicated literature has suggested that the main reasons for improving customer experience are related to the focus airlines put on its positive impact on customer satisfaction, thus increasing customer loyalty and trust. A positive customer experience creates benefits not only for passengers but also for the airline and its employees, which can lead to job satisfaction and commitment to the work and the company.

The company's efforts to ensure customer satisfaction by improving customer service are essential in retaining customers, which costs far less than winning back lost customers or attracting new ones (Heskett et al, Schlesinger, 1997:63). Based on the findings in the present study, we can say that customer satisfaction comes from a positive experience with a specific product or service, contributing to a repeated purchase, positive word-of-mouth advertising and, ultimately, increased loyalty and higher profitability. In the extremely challenging airline market, one of the key indicators influencing competitive advantage and sustainable market shares is passenger loyalty. The concept of a loyal customer has developed over the years thanks to researchers, academics and various schools who have carried out studies analysing the relationship between customer satisfaction and customer loyalty as a measure of company performance.

Customer satisfaction has a great impact on a company's business, as poor satisfaction means low loyalty and consequently fewer repeated purchases. It is therefore necessary to monitor non-financial indicators that express performance, identifying both the strengths of the services provided and the weaknesses – compared to competitors – that require improvement.

As is well known, there are many studies by recognised authors in the field providing evidence of a significant and positive relationship between airline passenger/customer satisfaction and customer loyalty. Satisfaction is known by many researchers to be a good predictor of customer loyalty, and is considered a determining factor in repeated sales, positive word-of-mouth advertising and customer loyalty (Gures et al, 2014).

All these aspects, acknowledged and appreciated by the respondents to the questionnaire and the customers who participated in the interview, demonstrate the company's care for its passengers, based on an adequate and effective customer experience and attitude prior to the actual purchase. That said, it also appears that one of the main sources of increased customer satisfaction and loyalty is the emotional factor determined by both customer satisfaction and the company image.

From the results of the empirical study on the quality of passenger air transport services in the company analysed, we can see that the approach to quality, both as a whole process and in its specific dimensions, has a significant impact on customer satisfaction and loyalty. At the same time, a high level of customer satisfaction has a great impact on customer loyalty.

In conclusion, it can be said that the quality both of the whole process and of specific elements is a good predictor for ensuring customer satisfaction in a very direct manner. Quality is also a good predictor that determines customer loyalty both directly and indirectly through customer satisfaction. In the same context, it is shown that customer satisfaction is a good predictor of customer loyalty.

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