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<p style="text-align: center;">ASSESSMENT OF PASSENGER SATISFACTION AND SERVICE QUALITY: A COMPARATIVE ANALYSIS OF TURKISH AND INTERNATIONAL AIRLINE MARKETS</p>		
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ABSTRACT

Air transportation today functions not only as a means of travel but also as a strategic sector that facilitates social mobility, enhances quality of life, and fulfils public service obligations. Within this framework, understanding user perceptions of airline service quality is vital for shaping effective social policies in the sector. The purpose of this study is to examine and compare economy-class passenger evaluations of airline service quality, thereby identifying strengths and weaknesses across different carriers. This study conducted a content analysis of 1,129 economy-class passenger reviews posted in 2024 on Tripadvisor for four airlines: Delta Airlines (Brand Finance Global 500) and Turkish Airlines, Pegasus, and SunExpress (Brand Finance Turkey 100). Nine service categories were identified: legroom, seat comfort, in-flight entertainment, customer service, value for money, cleanliness, check-in and boarding, and food and beverage. Data normality was tested using the Shapiro-Wilk method, and Kruskal-Wallis tests were applied to identify inter-airline differences. Findings revealed that Delta Airlines received significantly higher scores across all categories, while Turkish Airlines consistently scored lower, with the highest mean in cleanliness (2.117/5). Correlation analysis showed positive associations between service categories, emphasizing the holistic nature of passenger experiences. The study recommends that airlines utilize digital feedback proactively and suggests expanding future research to include diverse cabin classes, broader service metrics, and multiple review platforms.

Keywords: Passenger Satisfaction, Service Quality, Comparative Analysis, Airline Industry.

1. INTRODUCTION

Today, air transportation has become an indispensable element of global transportation systems, offering fast, safe, and comfortable travel opportunities that have gained significant importance for both individuals and commercial activities. Technological advancements and the digitalization process, in particular, have radically transformed the nature of service delivery in the airline industry, creating a decisive impact on passenger expectations and satisfaction levels. This transformation has not only shaped airlines' competitive strategies but also has significant implications for social policy (Wensveen, 2016; Upadhyay et al., 2024).

Quality has a multifaceted structure encompassing both abstract and concrete dimensions. While its objective characteristics can be measured concretely and technically, customer perception of a service or product carries abstract and qualitative meanings (Taşkın, 2000). In this respect, it is not limited to physical elements; it can vary depending on individuals' experiences and expectations. Similarly, service quality, like the concept of quality, has a very comprehensive function and is defined as the totality of the differences between the service customers currently perceive and the service they actually expect to receive (Yıldız and Yıldız, 2015). In this context, many factors influence quality, from the physical characteristics of service providers and their reliability to the attitudes of service

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personnel during delivery. Successfully managing these factors by service providers, improving service quality, results in customer satisfaction (Şahin and Şen, 2017).

Today, with the acceleration of technological advancements, it has become significantly easier for customers to share their opinions and evaluations regarding services. The global proliferation of internet technologies and the diversification of digital communication tools, in particular, have accelerated access to information and enabled users to instantly express their experiences. These developments have contributed to the interaction between consumer behaviour and service quality becoming more transparent and traceable. Customer satisfaction is considered a key determinant of competitive advantage in many industries and stands out as a critical performance indicator, especially in areas directly affected by service quality (Rust and Lemon, 2001; Amerta and Madhavi, 2023; Mhlongo et al., 2023).

In this context, the aviation industry is a dynamic one, where customer feedback and satisfaction analyses play a strategic role in improving service quality due to its highly competitive environment and constantly rising customer expectations. The multi-layered and complex nature of the services offered in the aviation industry necessitates careful evaluation at every stage of the customer experience. Passenger feedback regarding pre-flight, during-flight, and post-flight services constitutes an indispensable resource for businesses to optimize their operational processes, strengthen customer relationships, and solidify their market position. Therefore, effectively collecting, analysing, and integrating customer feedback into service quality, in line with the opportunities offered by technological advancements, is crucial for achieving sustainable competitive advantage in the aviation industry (Buhalis, 1998; James et al., 2023; Dike et al., 2024).

Turkish and global airline markets exhibit diverse dynamics due to their distinct economic, cultural, and regulatory structures, necessitating a multidimensional analysis in evaluating passenger experiences. The challenges faced by the sector, particularly since the early 2020s due to the global pandemic and the subsequent recovery process, have reshaped service quality and customer satisfaction (Nalbantoğlu and Kansoy, 2023; Aktemur, 2024). This study aims to provide a comparative analysis of selected examples from Turkish and global airline markets in terms of service quality and passenger satisfaction, using passenger reviews obtained from the Tripadvisor travel digital platform.

These digital platforms significantly simplify travel planning and booking processes and allow users to comprehensively manage their flight preferences. Among the functional advantages offered by these platforms are the ability for passengers to purchase tickets from their preferred airport to any destination in the world in seconds, choose between different flight classes, select additional service options, and customize travel conditions such as baggage allowances (Xiang et al., 2015; Pencarelli, 2020). Additionally, these digital platforms provide a significant platform for interaction, not only limiting the flight experience to the booking phase but also enabling passengers to evaluate their experiences and share these evaluations with other users' post-flight. Passengers have the opportunity to rate and provide detailed comments on the service quality they experience on the platforms. This data plays a decisive role in shaping potential passengers' travel preferences and enabling airlines to develop quality improvement strategies based on customer feedback. Therefore, digital travel platforms serve as a central tool in strengthening the link between customer satisfaction and service quality, playing a strategic role in sustaining competitive advantage in the aviation industry (Brochado et al., 2019; Ban and Kim, 2019).

This research was conducted on Tripadvisor, a globally recognized travel review platform with a large user base. The study focused on a comprehensive analysis of passenger feedback regarding the experiences of Delta Airlines and Turkish Airlines, two of the leading airlines in the aviation industry. The primary data source for the study was passenger reviews from Delta Airlines, ranked 230th in the 2024 Brand Finance Global 500, and Turkish Airlines, ranked first in the Brand Finance Turkey 100 list that same year. This collected passenger feedback was subjected to a multidimensional assessment using both qualitative and quantitative analysis methods. In the qualitative analysis, passenger comment texts were examined using content analysis techniques, while in the quantitative analysis, user ratings were analysed using statistical methods. These analyses yielded meaningful and industry-

specific findings regarding passenger perceptions of service quality. The study's findings provide important insights into how airlines can more effectively manage the customer experience to increase customer satisfaction and gain competitive advantage. At the end of the study, based on the analysed data, concrete practical recommendations were developed to improve service quality for airline companies. These recommendations aim to improve operational processes and customer relationship management to increase customer satisfaction and strengthen competitive advantage. Furthermore, based on the research findings, comprehensive and guiding recommendations were presented for future academic studies in the field of customer experience and service quality in the aviation sector. These recommendations aim to contribute to research progressing from both methodological and theoretical perspectives, enabling the enrichment of relevant literature and the scientific foundation of sectoral practices. Thus, it can be said that the study has produced valuable outcomes in both practical and academic contexts.

2. CONCEPTUAL FRAMEWORK

With the acceleration of technological advances and increased infrastructure investments, the modes of transportation used in the transportation sector have diversified and evolved significantly. In this context, air transportation has emerged as one of the most preferred modes of transportation for both passengers and commercial activities, particularly due to its dynamic structure, high speed and time efficiency, as well as its adherence to the highest levels of sectoral safety standards. The civil aviation sector has experienced significant growth in parallel with the integration of technological innovations and increasing customer demands. This growth has led to the emergence of an intense and multifaceted competitive environment among airlines. This increased competition has led to a rapid increase in the number of airlines operating in the sector and has also led to increased service diversity and quality standards. Consequently, air transportation has become increasingly complex and customer-centric in both domestic and international markets (Lee and Mo, 2011; Nhuta, 2012; Deng, 2013).

The aviation sector has undergone significant change and growth in Turkey, as it has globally, in recent years. Both air passenger transportation and air cargo transportation are key sectors that strengthen the country's connection to global trade and contribute to its economic development. Turkey's strategic location, geographical advantages, and its integration into global transportation networks have significantly accelerated its development in this area. Direct and indirect factors such as creating employment, developing infrastructure, increasing trade volume, strengthening international relations, and supporting tourism positively impact the country's economic growth. In this respect, the aviation sector plays a strategic role, positively influencing not only transportation but also development and growth processes within a broader economic framework (Aslan, 2025).

While it holds strategic importance within the service sector on both a national and international scale (Kasper et al., 1999), it is considered one of the most important factors contributing directly to the economic development of a region (Oktal, 2007). A new era began in Turkey's aviation sector, particularly after 2003. During this period, some restrictions on private airlines operating on domestic routes were lifted; new regulations were introduced to encourage the sector, such as the removal of special transaction taxes and education contribution shares from ticket prices, a reduction in taxes paid to the State Airports Authority (SAA), and a 50% government subsidy for accommodation expenses. Most importantly, the granting of domestic flight permits to private airlines led to significant development in the sector (Torlak and Şanal, 2007). As a result of these developments, new airlines entered the market and began offering flight services, while existing airlines either established new flight routes or increased the number of flights (Yaylalı and Dilek, 2009). Tax reductions, in particular, allowed private airlines to offer services at 30-35% more affordable prices (Atalık and Arslan, 2009). As a result of the regional aviation policies implemented during this period, and considering the re-opening of some idle airports through regulations, there was a remarkable 59% increase in domestic passenger traffic in 2004 (Işık, 2015).

It plays a significant role in strengthening international and intercontinental connections and contributes to integration processes by increasing countries' global accessibility. In Turkey's case, total passenger traffic, which stood at 34.4 million in 2003, has shown significant growth, reaching 213.7

million in 2023. The sector is a fundamental element of national economies in terms of both cargo and passenger transport, contributing to the development of important foreign exchange-generating sectors such as tourism and foreign trade. According to EUROCONTROL data for 2023, Turkey ranked 6th in Europe with the busiest air traffic with an average daily number of 3,026 flights, and recorded the highest increase in flight traffic, a 16% increase compared to the previous year. Furthermore, Istanbul Airport ranked first in Europe in terms of average daily flights, while Turkish Airlines ranked third overall in Europe in terms of average daily flights (DHMI, 2024).

Before the liberalization process, service quality depended on managerial and sectoral variables such as flight frequency, transit times, aircraft models, and loading factors. However, the competition that emerged with the implementation of liberalization policies led businesses to be more responsive to customer expectations and prioritized the concept of service quality based on passenger satisfaction (Tiernan et al., 2008). To differentiate themselves in an intensely competitive sector, it is crucial to identify existing service quality deficiencies, their origins, and develop appropriate solution strategies. The variable, intangible, and inseparable characteristics of service make it difficult to define a standard service outcome and complicate the quality measurement process (Parasuraman et al., 1985). Individuals' perceptions of service are influenced by many variables, including habits, cultural background, social environment (Ling et al., 2005), travel motivation, demographic characteristics, ethnic identity, and nationality. In this context, expectations from service vary from person to person, and therefore perceptions of quality are far from homogeneous and contain individual differences (Gilbert and Wong, 2003).

With the acceleration of globalization and technological advancements, air travel has become an indispensable transportation alternative for passengers worldwide. Advantages such as fast travel, extensive coverage, and comfort have made the airline industry a preferred choice for both individual and corporate travellers. In parallel, competition in the industry has intensified, and airlines are striving to continuously improve service quality to increase customer satisfaction and build brand loyalty. Passenger experiences and feedback play a crucial role in companies' strategic decisions. Airlines operate as commercial enterprises whose primary function is to generate profit; however, ensuring flight safety and customer loyalty is a key priority for these businesses. Due to the nature of the industry, airlines are strictly bound by the legal and regulatory frameworks specific to the country or region in which they operate. These legal regulations are among the fundamental elements that determine companies' operational standards, security protocols, and service quality. Furthermore, airlines' organizational structures, collaborations, partnership models, and the diversity of geographic regions they serve can vary. This directly impacts companies' strategic decision-making processes, operational efficiency, and market position, shaping the competitive dynamics within the industry. Therefore, the regulatory obligations and organizational diversities airlines face, both domestically and internationally, are critical to their sustainable success in the industry (Park et al., 2001; Lynes and Dredge, 2006; Igwe et al., 2023).

An air passenger is defined as an individual who purchases services from an airline for a specific date, time, flight class, and destination. Within this definition, the services provided to passengers encompass all stages of the flight process, starting with pre-flight preparations and continuing through the flight itself and subsequent services. A large portion of services are systematically classified and managed within the aviation industry under the heading "passenger services." Passenger services include ticketing, check-in procedures, baggage handling, in-flight catering and comfort services, and post-flight support and complaint management. This comprehensive range of services is critical for ensuring passenger satisfaction and for airlines to achieve competitive advantage. Passenger services encompass the entire process from the moment the passenger and their luggage enter the departure airport to their departure from the destination terminal. These services are part of the core operational processes of air transportation and are considered critical elements that determine the quality of the passenger experience. Key passenger service activities include regularly and accurately informing passengers and relevant stakeholders about flight departure and arrival times, providing the appropriate number and qualifications of personnel and necessary equipment for each passenger's profile, tracking lost or damaged baggage and executing related procedures quickly and efficiently, and organizing check-in and boarding procedures. Providing these services effectively and seamlessly

is crucial for enhancing passenger satisfaction and enhancing airlines' competitiveness. Therefore, the quality of passenger service is considered a key determinant of sustainable success and customer loyalty in the aviation industry (Yeh and Kuo, 2003; Tsafarakis et al., 2018; Wittner et al., 2020).

Passenger services in businesses are defined as service quality-focused units that rely heavily on direct human resources and aim to increase customer satisfaction. The quality of the services provided by these units plays a central role in enhancing airlines' brand value and establishing passenger loyalty. The positive impact of service quality on passengers is visible both through official feedback systems established by airlines themselves and through independent channels such as social media and digital aviation platforms. This provides guiding data for airlines to strengthen their competitive position through the widespread transparency and evaluation of customer experience, while also laying the foundation for continuous improvement of service quality (Silvestri et al., 2017; Brochado et al., 2019). For example, the success of Turkish Airlines (THY), considered one of the fastest-growing airlines in the world in terms of seat capacity, is not limited to quantitative growth. The company's high passenger satisfaction rates in recent years clearly demonstrate the qualitative dimension of growth and support the effectiveness of its customer-focused strategies with concrete data. This is considered an indicator that THY has achieved a sustainable competitive advantage in the sector by both increasing its operational capacity and improving the passenger experience. Therefore, the company's performance is closely linked not only to its expanding fleet and seat count, but also to the service quality resulting from its commitment to customer satisfaction (Erdogan and Kaya, 2014; Matila and Akpınar, 2018).

3. MATERIAL AND METHOD

This section systematically defines the fundamental research problem and identifies the main problem area on which the study focuses. The following sections provide a detailed explanation of the research objectives and the reasons for its implementation. Furthermore, information is provided about the study population and sample structure; the scope and limitations of the study are clearly outlined, and the context of the study is defined. The tools and methods used in the data collection process are comprehensively described, and the statistical and qualitative analysis techniques used in the analysis of the obtained data are explained. Furthermore, the hypotheses tested within the scope of the study are clearly stated, and the analysis strategies for verifying each hypothesis are outlined. It is emphasized that statistical analyses were conducted based on a 95% confidence level for the reliability and validity of the study.

The study examined in detail passenger reviews of three internationally recognized airlines operating from three different regional hubs. These reviews were obtained from Tripadvisor, a leading online travel review platform in terms of widespread usage and user engagement. The collected data underwent a statistical analysis process and was comprehensively analysed using both qualitative and quantitative techniques. Within the scope of the qualitative analysis, passenger reviews were classified into thematic categories using content analysis, revealing key trends. Furthermore, in the quantitative analysis, passenger ratings and numerical data were evaluated using statistical methods, yielding meaningful and sector-specific findings regarding service quality perception.

One of the fundamental assumptions of the research is that passengers used the Tripadvisor platform effectively, objectively, and entirely voluntarily. This assumption provides a critical basis for the validity and reliability of the data obtained, ensuring that the research findings are well-founded. Within this framework, user reviews are considered a key indicator of accurate perceptions of airline service quality. Furthermore, these reviews are considered valuable data sources that will contribute to scientific and applied studies on service improvements across the sector. Thus, it is envisioned that passenger reviews on Tripadvisor can be effectively used both in academic research and in the strategic planning processes of airlines.

3.1. Problem of the Research

With the proliferation of online travel platforms, passengers' ability to share their airline experiences in a public and accessible manner has significantly increased. This has made the flow of information within the airline industry more transparent, dynamic, and effective. Passenger reviews and comments

are not merely a reflection of individual satisfaction, but rather a significant factor directly shaping potential passengers' travel preferences. These reviews are also considered a strategic data source that allows airlines to review and improve their service quality. In this context, passenger reviews are an indispensable component of both individual consumer feedback and the development of corporate performance and competitive strategies.

From this perspective, the fundamental research problem is to systematically and holistically examine passenger reviews of airlines on Tripadvisor, a leading travel platform providing user-based data. Furthermore, it also comprehensively assesses the sectoral impact of these reviews on service quality and customer satisfaction in the aviation industry. The research is designed around a theoretical and practical problem of understanding how online passenger experiences are structured and what outcomes these experiences produce within the context of the relationship between corporate service quality and customer satisfaction.

3.2. Objective and Importance

The primary objective of this research is to comprehensively examine passenger reviews of airlines included in the study, published on the online travel platform Tripadvisor. By analysing this user-generated online content, we aim to systematically demonstrate passenger satisfaction levels within the airline industry and gain a detailed understanding of the specific service elements associated with satisfaction. The findings from the study will allow airlines to objectively assess their current service quality while also contributing significantly to their strategic improvement processes aimed at enhancing the customer experience. Therefore, the study aims to both contribute new knowledge to the academic literature on customer satisfaction and service quality and provide practical guidance for airlines to strengthen their competitive position.

3.3. Sample, Scope, and Limitations

In this research, the airlines examined were selected based on the 2024 Brand Finance Global 500 (Brand Finance, 2024a) and Brand Finance Turkey 100 (Brand Finance, 2024b) lists for analysing user reviews on the Tripadvisor travel platform. These lists constitute an important reference point for airlines' brand value and performance at both the global and national levels. Founded in 2000 in Massachusetts, United States, Tripadvisor is now considered one of the largest and most influential online travel platforms worldwide. The platform serves an average of approximately 463 million users monthly and provides access to user reviews and ratings of over 8.6 million accommodations, restaurants, various experiences, and cruises. In addition, Tripadvisor hosts over 859 million user reviews across comprehensive travel forums covering hotels, rentals, activities, food and beverage venues, and user feedback. The platform guides user preferences through special features like "Travellers' Choice," listing the most popular destinations and businesses to guide a broad user base. Furthermore, Tripadvisor operates in 49 international markets and offers services in 28 different languages, establishing a broad global footprint (Scott and Orlikowski, 2014; Mihălcescu et al., 2024). With these features, the platform stands out as a strategic tool in the travel industry that both shapes consumer behaviour and provides valuable feedback to industry stakeholders.

The four international airlines included in the Brand Finance Global 500 list and their rankings are as follows:

- Delta Airlines (Rank 230)
- American Airlines (Rank 213)
- United Airlines (Rank 252)
- Southwest Airlines (Rank 444)

On the other hand, three airlines based in Türkiye that are on the Brand Finance Turkey 100 list were included in the research:

- Turkish Airlines (Rank 1)
- Pegasus (Rank 22)
- SunExpress (Rank 43)

In this context, passenger reviews from airlines with significant positions both globally and in the Turkish market were systematically examined, allowing the study to reveal potential differences in service quality and customer experiences across different geographic regions. However, the limited number of companies selected and the fact that data was obtained solely from the Tripadvisor platform are significant factors that limit the scope of the study and the generalizability of the results.

To enhance the representativeness of the research population, specific criteria were carefully considered in sample selection. The four American airlines listed on the Brand Finance Global 500—Delta Airlines, American Airlines, Southwest Airlines, and United Airlines—were likely to share similar structural characteristics and service profiles, but due to their close rankings, they were also assessed as likely to exhibit a high degree of overlap in content. Therefore, to avoid content duplication in the sample and increase the efficiency of data analysis, it was anticipated that only Delta Airlines would be included. This optimized the sample structure for both diversity and analytical efficiency. However, according to information on the Tripadvisor website, American Airlines reviews are currently blocked due to the high prevalence of spam comments. In Turkey, Turkish Airlines (THY), which operates internationally and boasts high brand recognition and prestige, was included in the study sample. However, Pegasus and SunExpress, which are on the same Brand Finance list, were deemed unsuitable because they are classified as low-cost carriers and offer services that differ significantly from THY's, thus preventing a homogeneous service analysis. Therefore, they were excluded from the sample. As a result, the airlines analysed within the scope of the research were:

- Delta Airlines
- Turkish Airlines (THY).

Given the time and cost constraints of the study, the scope of the analysis was limited to passenger reviews for 2024. This decision was considered a key criterion for controlling the size of the dataset and ensuring its manageability. Furthermore, by limiting the scope of the analysis to economy class flights, we aimed to ensure consistency and comparability in the analysis. This minimized the impact of service differences across different flight classes and clarified the focus of the study.

The passenger reviews included in the study consisted only of feedback where all evaluation categories were fully and completely filled out. The evaluation categories examined consisted of the following:

- Overall score
- Legroom
- In-flight entertainment
- Value for money
- Check-in and boarding
- Seat comfort
- Customer service
- Cleanliness
- Food and beverage

Passenger comments collected within this scope were meticulously structured to provide both qualitatively rich and consistent content and quantitative data suitable for statistical analysis. This increased the validity and comparability of the findings obtained during the analysis process.

3.4. Data Collection Tool and Analysis

In this study, passenger reviews of the airlines included in the study, published on the Tripadvisor travel platform, were selected from data published between January 1, 2024, and December 31, 2024. Data collection took place between March 1, 2025, and May 30, 2025. The collected data was analysed qualitatively using content analysis, and thematic trends in passenger reviews were systematically identified. This method provides an in-depth understanding of user experiences and allows for a more holistic assessment of perceptions of airline service quality.

The data collection process was based on the rating categories provided by Tripadvisor. These categories enabled the systematic analysis of passenger reviews and the generation of comparable data. Passengers share their experiences within these rating categories on the Tripadvisor platform

using a scoring system ranging from 1 to 5. This scoring method allows passengers to quantify their perceptions of airline service quality, making qualitative assessments measurable, comparable, and analysable. Therefore, this numerical data enabled both a systematic evaluation of individual experiences and significantly contributed to revealing general trends in service quality.

The content analysis conducted in this context was conducted within the framework of the quantitative content analysis method. Within this approach, data were systematically analysed not only based on their textual characteristics but also by considering their numerical distributions, frequencies, and averages. The data obtained during the analysis process was processed using appropriate statistical methods and interpreted based on the significance levels of the findings. Through these analytical techniques, the relationships between user evaluations were thoroughly investigated, identifying the service categories where passenger satisfaction was concentrated and the areas requiring improvement.

3.5. Research Hypotheses

This research aimed to determine whether statistically significant differences exist among three selected airlines based on ratings reflecting passenger experiences across various service elements. User-completed review categories on the Tripadvisor platform constitute the primary data sources for this research. Based on passenger ratings for these evaluation categories, the following hypotheses were developed. These hypotheses are based on a comparative analysis of passenger ratings for three different airlines in the relevant service categories:

- H0: There is no statistically significant relationship between the categories passengers evaluate.
- H1: There is a statistically significant difference between airlines in terms of passenger ratings for legroom.
- H2: There is a statistically significant difference between airlines in terms of passenger ratings for in-flight entertainment.
- H3: There is a statistically significant difference between airlines in terms of passenger ratings for value for money.
- H4: There is a statistically significant difference between airlines in terms of passenger ratings for check-in and boarding.
- H5: There is a statistically significant difference between airlines in terms of passenger ratings for seat comfort.
- H6: There is a statistically significant difference between airlines in terms of passenger ratings for customer service.
- H7: There is a statistically significant difference between airlines in terms of passenger ratings for cleanliness.
- H8: There is a statistically significant difference between airlines in terms of passenger ratings for food and beverage.

Analyses conducted in line with these hypotheses aim to systematically reveal how passenger satisfaction varies across different service components. Furthermore, the study aims to comparatively assess the service quality strengths and weaknesses of the airlines examined, thereby contributing to the strategic improvement processes of industry stakeholders.

4. FINDINGS

This section presents a systematic and comprehensive analysis of the data obtained within the scope of the study. First, a reliability analysis was conducted to determine the internal consistency and reliability levels of the evaluation categories used in the study. This analysis is crucial because it reflects the consistency of the data set and the measurement tool, and the results are considered a key indicator of the overall validity of the study. Next, normality tests were applied to assess the distributional characteristics of the category scores. These tests are critical for determining the suitability of the data for parametric analysis techniques and are essential for the robust conduct of statistical analyses. Following this, descriptive statistics for the data set are presented, providing a general profile using measures of central tendency and dispersion, such as mean, median, and standard deviation, by category. These descriptive data quantitatively summarize participants' perceptions of

service quality and form the basis for subsequent analyses. Following this, variance analyses (e.g., ANOVA or Kruskal-Wallis test) were conducted to test for significant differences between category scores across different airlines. These analyses reveal how service quality elements are perceived across companies, enabling sectoral performance comparisons. Finally, correlation analyses were used to examine the relationships between service categories. By revealing correlations between category scores, these analyses contribute to a better understanding of the key factors affecting passenger satisfaction. All these analyses play a crucial role in testing the research hypotheses and interpreting the results.

4.1. Reliability Analysis of Categories

Reliability analysis is one of the fundamental statistical procedures performed to assess the internal consistency of measurement instruments used in research. Internal consistency indicates the extent to which the items in the measurement align with each other and how consistently they measure the same concept. In this context, when there are no errors or inconsistencies among the data, the reliability coefficient approaches 1, and if internal consistency issues exist, this value decreases to 0 (Kimberlin and Winterstein, 2008; Hajjar, 2018). A high reliability coefficient is a significant indicator that the data collection instrument produces robust and reliable results.

This study used nine different categories to measure airline service quality: "overall score," "legroom," "in-flight entertainment," "value for money," "check-in and boarding," "seat comfort," "customer service," "cleanliness," and "food and beverage." These categories were chosen to provide a multidimensional picture of passengers' perceptions of service quality and constitute the scope of the study.

In the reliability analysis, Cronbach's Alpha coefficient was calculated as 0.904. This high value indicates that the scales and categories used in the study are highly consistent and reliable. Therefore, it was concluded that the data obtained had no internal consistency problems and that the measurement tool functioned appropriately for the research purpose. This indicates that the analyses were conducted on a solid data base, supporting the validity and reliability of the study.

4.2. Normality Test of Category Scores

Determining the distribution properties of the category scores used in the study is a critical step in selecting the statistical analysis methods to be applied. In this context, the Kolmogorov-Smirnov and Shapiro-Wilk normality tests were used to test the data's conformity to a normal distribution. Both tests measure the data's conformity to a theoretical normal distribution, and the results provide guidance on whether analyses should be conducted using parametric or nonparametric methods (Razali and Wah, 2011). An examination of the test results presented in Table 1 reveals that the significance levels (p values) for all category scores in the Kolmogorov-Smirnov and Shapiro-Wilk tests were below 0.05. This suggests that the category scores do not conform to a normal distribution and, therefore, the data do not meet the parametric test assumptions. This finding indicates that nonparametric tests should be preferred in the analysis process and necessitates that comparisons and correlational analyses between different airlines regarding service quality evaluations be conducted accordingly. In addition, the fact that the data are not normally distributed may indicate that variations in passengers' perceptions of service quality may be affected by certain factors and adds a different dimension to the interpretation of the results of the research.

Table 1. Normality Analysis Table of Category Scores

Evaluation Criteria	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistical Result	Sample Size (n)	P	Statistical Result	Sample Size (n)	P
Legroom	,196	1299	,000	,828	1299	,000
In-flight entertainment	,207	1299	,000	,821	1299	,000
Value for money	,262	1299	,000	,721	1299	,000
Check-in and	,083	1299	,000	,878	1299	,000

boarding						
Seat comfort	,219	1299	,000	,793	1299	,000
Customer service	,143	1299	,000	,804	1299	,000
Cleanliness	,212	1299	,000	,877	1299	,000
Food and beverage	,239	1299	,000	,758	1299	,000

4.3. Descriptive Statistics

This section presents descriptive statistical findings related to passenger reviews obtained and analysed from the Tripadvisor platform as part of the research. Descriptive statistics are crucial for revealing the overall structure of the data set and identifying average trends and distribution characteristics. In this context, measures of central tendency and variability, such as mean, median, standard deviation, and minimum and maximum values, were calculated for each airline included in the study by category. The descriptive data obtained serves both to identify the strengths and weaknesses of individual airlines and to provide initial observations in intercompany comparisons. It also provides a preliminary basis for gap analyses and correlation analyses to be conducted in subsequent stages. In particular, the distribution of mean values by category provides meaningful clues about the service areas where passenger satisfaction is concentrated or which elements need improvement. In conclusion, the descriptive statistics presented in this section transparently reveal the overall data structure of the research and provide the necessary foundation for a more in-depth analysis of the relationship between service quality and passenger satisfaction.

Table 2. Descriptive Statistics on Passenger Reviews of Economy Class Airlines on Tripadvisor in 2024

Airline Company	Frequency (n)	Percentage (%)
Turkish Airlines	27	2,08
Pegasus	46	3,54
SunExpress	39	3,00
Delta Airlines	1187	91,38
Total	1299	100,00

4.3.1. Evaluation in the National Market

A sample descriptive statistics of economy class passenger reviews of Turkish Airlines, Pegasus and SunExpress airlines, prepared in line with Tripadvisor data, is presented in Table 3.

Table 3. Descriptive Statistics of National Airlines in 2024

Evaluation Criteria	Frequency (n)	Mean (\bar{x})
Legroom	112	1,904
In-flight entertainment	112	1,877
Value for money	112	1,696
Check-in and boarding	112	1,992
Seat comfort	112	1,824
Customer service	112	1,878
Cleanliness	112	2,026
Food and beverage	112	1,752

First of all, the highest average score belongs to the "Cleanliness" criterion with 2.026. This indicates that passengers are generally satisfied with the cleanliness services. This is followed by "Check-in and boarding" (1.992), "Legroom" (1.904), and "Customer service" (1.878). These results may indicate that airlines are relatively successful in the passenger on boarding process and customer relations areas. On the other hand, the lowest average score of 1.696 was observed in the "Value for money" criterion. This suggests that passengers are not fully satisfied with the value of the service they receive for the price they pay. Furthermore, the "Food and beverage" (1.752), "Seat comfort" (1.824), "In-flight entertainment" (1.877), and "Check-in and boarding" (1.992) criteria also have lower average scores compared to the other evaluation areas, indicating need for improvement in these areas. In

conclusion, passenger evaluations indicate that airline service is generally relatively positive in the areas of cleanliness, boarding, and customer service, but that improvements are needed in value for money and in-flight comfort. This data suggests that airlines should primarily review their pricing strategies and in-flight service quality to improve customer satisfaction.

4.3.2. Evaluation in the International Market

To enable a comparative assessment with Turkish Airlines, Pegasus Airlines, and SunExpress, which operate in the domestic market, economy class passenger reviews from Delta Airlines, which operates globally, were also included in the analysis. In this context, descriptive statistical findings from the economy class passenger reviews of these four airlines on the Tripadvisor platform are presented in detail in Table 4.

Table 4. Descriptive Statistics of National Airlines and Delta Airlines in 2024

Evaluation Criteria	Frequency (n)	Mean (\bar{x})
Legroom	1299	1,995
In-flight entertainment	1299	1,984
Value for money	1299	1,766
Check-in and boarding	1299	2,038
Seat comfort	1299	1,923
Customer service	1299	1,914
Cleanliness	1299	2,117
Food and beverage	1299	1,850

First of all, the highest average score is observed in the "Cleanliness" criterion with 2.117. This indicates that passengers were generally quite satisfied with the Cleanliness services. "Check-in and boarding" followed with a score of 2.038, indicating a positive perception of the efficiency and quality of passenger check-in and boarding processes. Furthermore, the "Legroom" (1.995) and "In-flight entertainment" (1.984) criteria also received relatively high scores, indicating relatively high passenger satisfaction with these service areas. In contrast, the "Value for money" criterion received the lowest average score compared to the other criteria, with a score of 1.766. This suggests that passengers were not satisfied with the value they received for the price they paid. Additionally, the averages for "Food and Beverage" (1.850), "Customer Service" (1.914), and "Seat Comfort" (1.923) are lower than those for other high-scoring categories, indicating potential for improvement in these areas. In conclusion, it can be said that overall passenger satisfaction with airline service is high in the areas of cleanliness, boarding, and comfort, but there is need for improvement in the value-for-money balance and food and beverage services. This data suggests that airlines should focus particularly on pricing strategies and catering services to increase customer satisfaction.

4.4. Category-Based Difference Analyses

Based on the normality tests conducted in the previous section, it was determined that the category scores analysed in the study did not meet the normal distribution assumption. Therefore, the Kruskal-Wallis H test, a nonparametric analysis method, was chosen. The Kruskal-Wallis test is a reliable method used to determine statistical differences based on median values between three or more independent groups. In this context, four different airlines included in the study: Turkish Airlines, Pegasus, SunExpress, and Delta Airlines, were compared based on the categories examined.

During the analysis process, the criteria shown in Table 5, which were evaluated by passenger comments, were examined one by one and it was tested whether the scores for these service components differed significantly across airline companies. Since the p-values obtained across all categories were greater than 0.05, there was no statistically significant difference. In other words, based on passenger evaluations, no significant differences were observed among the four airlines in these service categories. However, it should be noted that this result has limited generalizability due to the limited sample size and the dataset's use of average values. This analysis provides important findings, revealing which service areas airlines excel in and which categories they underperform in terms of passenger satisfaction. Furthermore, the results can contribute to the development of sectoral service strategies.

Table5. Average Ratings of Airline Companies by Category Based on Passenger Comments(Out of 5)

Airline Company	Legroom	In-flight entertainment	Value for money	Check-in and boarding	Seat comfort	Customer service	Cleanliness	Food and beverage
Turkish Airlines	1,852	1,926	1,704	2,000	1,815	1,704	1,815	1,778
Pegasus	2,087	1,978	2,022	2,022	2,022	2,065	2,217	1,978
SunExpress	1,773	1,727	1,364	1,955	1,636	1,864	2,045	1,500
Delta Airlines	2,270	2,305	1,976	2,176	2,221	2,024	2,388	2,143
Mean (\bar{x})	1,995	1,984	1,766	2,038	1,923	1,914	2,117	1,850

An examination of the average scores reveals that passengers expressed the highest satisfaction in the “Cleanliness” ($\bar{x} = 2.117$) and “Check-in and boarding” ($\bar{x} = 2.038$) categories. This suggests that airlines place relatively greater emphasis on hygiene and passenger on boarding procedures during operational processes. On the other hand, the lowest average scores were in the “Value for money” ($\bar{x} = 1.766$) and “Food and beverage” ($\bar{x} = 1.850$) categories. These findings suggest that passengers found the services offered insufficient for the ticket price and were dissatisfied with the in-flight refreshments.

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4.4.1. Turkish Airlines (THY)

Turkish Airlines received scores ranging from 1.704 to 2.000 across the service categories examined in the study. Receiving the highest score in Check-in and Boarding (2.000), THY demonstrates effective process management in this area. Its In-flight Entertainment (1.926) and Cleanliness (1.815) scores suggest that, as a national carrier, it offers an experience approaching international standards. However, relatively low scores of 1.704 in Customer Service and Value for Money demonstrate that THY has failed to fully meet passenger expectations in these areas. This points to the need for improvement in customer relationship management and the balance of service and price.

4.4.2. Pegasus

Pegasus has one of the most homogeneous service categories. Its scores range from 1.978 to 2.217. It received its highest scores in the Cleanliness (2.217) and Legroom (2.087) categories. This result demonstrates that, despite being a low-cost airline, it offers effective service in some operational areas. On the other hand, the scores for services that affect the in-flight experience, such as In-flight Entertainment (1.978) and Food and Beverage (1.978), are relatively lower. This may reflect the company's limited performance in additional services due to its core service-focused structure. Furthermore, its score of 2.022 in the Value for Money category indicates that its low-cost policies are generally well-received by passengers.

4.4.3. SunExpress

SunExpress scores poorly in almost every category. Scores are particularly low in the Value for Money (1.364), Food and Beverage (1.500), and In-Flight Entertainment (1.727) categories. This suggests that the airline's service offerings fall short of passenger expectations. On the other hand, relatively high scores in categories like Cleanliness (2.045) and Customer Service (1.864) demonstrate that a certain standard is maintained in core operational processes. However, overall, SunExpress lags behind other airlines in terms of service quality.

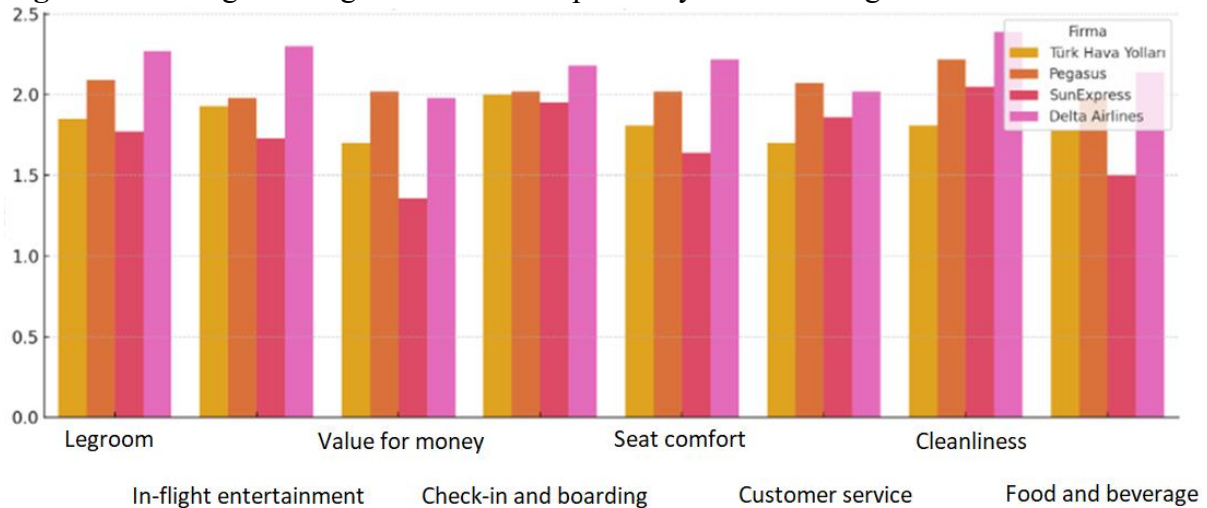
4.4.4. Delta Airlines

Delta Airlines is by far the airline with the highest average passenger ratings. Receiving top scores in the Cleanliness (2,388), In-flight entertainment (2,305), Seat Comfort (2,221), and Check-in and Boarding (2,176) categories, it demonstrated a service profile that supports the passenger experience holistically. This demonstrates Delta Airlines' commitment to quality in pre-flight and in-flight services. Its 1,976 score in the Value for Money category demonstrates a generally positive perception that, despite the high prices of international flights, the service is worth the price. This data demonstrates that Delta Airlines offers a higher satisfaction level than its competitors thanks to its corporate customer policies, comfort-focused flight experience, and professional service approach.

4.4.5. Comparative Overall Assessment

As shown in Figure 3.1, when all companies are evaluated together, it becomes clear that passengers are quite sensitive to cleanliness and operational processes, while they are more critical of the service offered relative to ticket prices. Furthermore, it is noteworthy that Delta Airlines, an international carrier, offers a higher standard of service quality and customer experience than local and regional carriers. This demonstrates that it stands out in areas such as comfort, hygiene, and entertainment systems, areas to which global companies can allocate more resources.

Figure 1. Passenger Ratings of Airline Companies by Service Categories



4.5. Hypothesis Test Results

This study conducted hypothesis testing to examine whether there are differences among airlines across eight basic service categories, which are the subject of passenger evaluations. The statistical results obtained are important in revealing both the significance levels within service categories and the differences between companies.

4.5.1. Evaluation of the H0 Hypothesis

The Friedman test, which was applied to determine whether there was a statistically significant difference between the scores given by passengers to different service categories, yielded a significant result ($\chi^2(7) = 15.51, p = 0.030$). This result suggests that service categories are not evaluated independently or equivalently in terms of passenger satisfaction. In other words, passengers are more satisfied with some service areas (e.g., cleanliness, check-in process) while rating others lower (e.g., price-performance, food, and beverage). This finding suggests that airlines' ability to meet passenger expectations varies across categories and that strategic areas for improvement are necessary.

4.5.2. Evaluation of Hypotheses H1-H8

Kruskal-Wallis H tests, which were conducted to determine whether there were differences among airline companies regarding each service category, revealed that the significance level for all categories remained above the statistical significance limit of 0.05. ($p = 0.392$ for all categories). These results show that passengers give similar ratings when evaluating the same service categories of different airlines. In other words, there is no statistically significant difference in terms of scoring

between companies in service dimensions such as “Legroom”, “Seat comfort”, “In-flight entertainment”, “Customer service”, “Value for money”, “Cleanliness”, “Check-in and boarding” and “Food and beverage”.

This finding raises several important interpretations:

- **Market Standardization:** It may be suggested that airlines, in particular, implement similar service policies, or that passenger perceptions are shaped within a more general framework for service categories, independent of individual companies. This may indicate that service standardization is occurring within the sector.
- **Sample Limitation:** The study was conducted with a limited number of companies based solely on average values. This may have resulted in insufficient observation of variation and the failure to detect statistically significant differences.
- **Perceptual Similarity:** Passengers may be rating services from different companies based on similar criteria. This suggests that evaluations are shaped around the overall service experience rather than company-specific differences.

4.5.3. Hypothesis Test Results and Recommendations

While the results indicate that passenger satisfaction is more prominent in certain service categories (H0), the lack of significant differences in ratings across companies for these categories (H1-H8) suggests that airlines' efforts to improve service quality are generalized. However, for companies seeking to build a competitive advantage, it would be beneficial to differentiate themselves by focusing on relatively lower-rated areas such as price-performance, food and beverage services, and customer service. Furthermore, further expanding these analyses using broader datasets, passenger segmentations (e.g., domestic/international, business/economy class), and time series data will enable the generation of more robust sectoral insights.

Table 6. Hypothesis Test Results

Hypothesis	Test Type	P-value	Comment
H0: There is no statistically significant relationship between the categories passengers evaluate.	Friedman	0.030	There is a significant difference ($p < 0.05$)
H1: There is a statistically significant difference between airlines in terms of passenger ratings for legroom.	Kruskal-Wallis	0.392	Not significant difference
H2: There is a statistically significant difference between airlines in terms of passenger ratings for in-flight entertainment.	Kruskal-Wallis	0.392	No significant difference
H3: There is a statistically significant difference between airlines in terms of passenger ratings for value for Money.	Kruskal-Wallis	0.392	No significant difference
H4: There is a statistically significant difference between airlines in terms of passenger ratings for check-in and boarding.	Kruskal-Wallis	0.392	No significant difference
H5: There is a statistically significant difference between airlines in terms of passenger ratings for seat comfort.	Kruskal-Wallis	0.392	No significant difference
H6: There is a statistically significant difference between airlines in terms of passenger ratings for customer service.	Kruskal-Wallis	0.392	No significant difference
H7: There is a statistically significant difference between airlines in terms of passenger ratings for cleanliness.	Kruskal-Wallis	0.392	No significant difference
H8: There is a statistically significant difference between airlines in terms of passenger ratings for food and beverage.	Kruskal-Wallis	0.392	No significant difference

4.6. Examining Relationships Between Categories

This section analyses the direction and degree of relationships between the service categories evaluated by passengers. Correlation analysis was applied to determine the extent to which different service dimensions are interrelated. This analysis is important for understanding the multidimensional structure of passenger satisfaction and for revealing the existence of interactions between specific service elements. Firstly, before proceeding with the correlation analysis, the distributional characteristics of the category scores were evaluated. The normality test determined that the evaluation scores did not exhibit a normal distribution. Therefore, Spearman's rho (ρ) correlation coefficient, based on rank differences, a nonparametric correlation analysis method, was preferred. Spearman's correlation is widely used in the analysis of this type of rating data due to its ability to measure the level of nonlinear but monotonic relationship between variables. The correlation coefficients obtained from the analysis indicate the extent to which passengers' ratings for one service category are consistent with the ratings they assign to other categories. Therefore, the observation of strong positive or negative relationships between specific service elements provides important data for airlines to develop holistic approaches to strategic service planning.

Table 7. Correlation Analysis Between Service Categories Rated by Passengers

Service Categories	Legroom	In-flight entertainment	Value for money	Check-in and boarding	Seat comfort	Customer service	Cleanliness	Food and beverage
Legroom	1							
In-flight entertainment	,823	1						
Value for money	,956	,954	1					
Check-in and boarding	,887	,992	,984	1				
Seat comfort	,972	,933	,998	,970	1			
Customer service	,764	,262	,540	,379	,591	1		
Cleanliness	,658	,115	,408	,236	,464	,989	1	
Food and beverage	,932	,973	,997	,994	,991	,477	,340	1

Table 7 shows the correlation coefficients between different evaluation criteria for airline services. Correlation coefficients indicate the direction and strength of the relationship between two variables; values close to 1 indicate a strong positive relationship, while values close to 0 indicate a weak or no relationship. This correlation matrix comprehensively demonstrates the relationships between airline passengers' perceptions and evaluations of different service criteria. Analysis of the matrix provides important clues for understanding the impact of service quality elements on passenger satisfaction. First of all, it is noteworthy that there are very high positive correlations (generally 0.9 and above) between the criteria of Legroom, Seat comfort, Food and beverage, Value for money, In-flight entertainment and Check-in and boarding. This suggests that passengers evaluate these fundamental elements of flight comfort and service quality in relation to each other. In other words, when passengers develop a positive perception of one criterion, they tend to evaluate other comfort and service elements similarly positively. For example, the perception of adequate seat comfort correlates with the ample legroom and the quality of in-flight entertainment. These high correlations suggest that airlines should adopt a holistic approach to comfort-focused improvements, as improvements in one area can directly positively impact perceptions in other areas. In contrast, the very strong positive correlation (0.989) between the Customer Service and Cleanliness criteria is both interesting and significant. These two criteria can be considered a relatively separate group from the general comfort and service quality categories. Customer Service and Cleanliness are critical elements that passengers directly interact with and shape service perception, and passengers evaluate these two areas within a similar framework. In this context, it can be said that customer service satisfaction tends to increase on aircraft with high Cleanliness quality. This suggests that airlines should address these two areas in an integrated manner to increase customer satisfaction. On the other hand, lower correlations exist between Customer Service and comfort and entertainment-focused criteria (e.g., Customer Service and In-flight Entertainment 0.262; Customer Service and Value for Money 0.540). Similarly, correlations

between Cleanliness and comfort are moderate to low (e.g., Cleanliness and Seat Comfort 0.464; Cleanliness and In-flight Entertainment 0.115). These differences indicate that passengers view customer service and cleanliness as distinct and independent dimensions from flight comfort and entertainment. In other words, when evaluating comfort and entertainment, passengers consider customer service and cleanliness criteria as distinct areas with distinct dynamics. This distinction provides important guidance for airlines in strategic planning. To enhance the customer experience, companies should make holistic improvements to both flight comfort and entertainment offerings and develop separate policies for customer service and cleanliness, considering them as distinct service quality dimensions. For example, improving the quality of customer service personnel training and raising cabin cleaning standards can significantly increase customer satisfaction. Furthermore, the overall high correlations demonstrate that passengers' assessments of service quality are interrelated and consistent. This consistency is also important for the validity of surveys or customer feedback mechanisms, as high correlations support the internal consistency of the data set and the reliability of the measurement tools. As a result, this correlation matrix provides a guiding framework for airlines on which areas they should focus to increase customer satisfaction. In particular, considering comfort, entertainment, and price-performance criteria together, while designing customer service and cleanliness as distinct and powerful service dimensions, will contribute to a holistic improvement in service quality. This can lead to sustainable improvements in passenger satisfaction, creating significant competitive advantages for airlines.

5. CONCLUSION AND RECOMMENDATIONS

Today, customer reviews and product ratings are considered important tools for measuring customer satisfaction and in the decision-making process of potential customers. Individuals and organizations can analyse the experiences of multiple users online to assess whether a service they receive will meet their expectations and shape their future spending decisions accordingly. This study aimed to analyse passenger reviews of airlines on the Tripadvisor travel platform. Among the reasons for choosing travel platforms are the ability for passengers to make informed decisions by reading other users' experiences and the ability to quickly navigate them to the ticket purchase process.

In this study, passenger reviews for four different airlines were obtained through the Tripadvisor travel platform. Tripadvisor is a large user base where individuals and organizations share their experiences with the services they receive through reviews and ratings. The airlines included in the study were selected based on the Brand Finance Global 500 and Brand Finance Turkey 100 lists. As part of the study, content analysis was conducted on reviews from passengers traveling in economy class, and gap analyses were conducted based on the resulting categories. The analyses determined that the cleanliness category had the highest average score (2.117 out of 5).

The hypothesis tests conducted in the study yielded two main findings. The first finding was that Delta Airlines demonstrated statistically significantly superior performance compared to other airlines in all evaluation categories in the analysis of differences between airlines. This result could be interpreted as indicating that passengers found Delta Airlines more successful across all service criteria, or that they generally expressed a higher level of satisfaction with the Delta Airlines brand. Conversely, Turkish Airlines received lower evaluation scores in all categories compared to its global competitors. This suggests that passengers evaluate Turkish Airlines more critically than other brands regarding the quality of service offered. These differences suggest that airlines need to re-examine their strategies for improving customer satisfaction. Secondly, the correlation analysis revealed significant and positive relationships between the evaluated categories. This finding demonstrates that positive or negative experiences in any category directly impact the evaluation of other categories. Therefore, it becomes clear that the services offered by airlines should be considered holistically, rather than in isolation. It should be noted that improvements or disruptions in service quality can affect overall customer satisfaction.

In light of the findings of the study, concrete and technical recommendations for airline companies have been developed. Firstly, it is not sufficient for companies to view passenger evaluation scores in relevant service categories simply as indicators. These scores should be the starting point for continuous performance monitoring and quality improvement processes to increase customer

satisfaction. Companies are recommended to establish a comprehensive customer experience management system that regularly monitors performance indicators and integrate multi-channel data with feedback from surveys, social media, and digital platforms. Furthermore, content analysis of passenger reviews can be automated using data analytics and artificial intelligence-assisted natural language processing (NLP). This allows for the rapid identification of trends, sentiment analysis, and frequently expressed complaints or areas of satisfaction in large data sets. This allows companies to monitor changes in customer expectations in real time and dynamically optimize service quality. Furthermore, regularly monitoring passenger reviews on Tripadvisor and similar platforms and integrating them into internal customer relationship management systems is critical. This feedback should be used not only to quickly address negative experiences but also to develop innovative service development, product differentiation, and target audience-specific marketing strategies. With this approach, airlines can both increase customer loyalty and gain a competitive advantage. Finally, among the recommended strategies are revising employee training programs with a focus on customer experience, tightening hygiene and cleaning protocols in line with post-pandemic standards, and enhancing in-flight services in line with digitalization trends. All of these practices will contribute to airlines achieving sustainable improvements in customer satisfaction.

Another suggestion is to expand the scope of the study by considering the cabin class in which the passengers participated. The current study only evaluated the opinions of passengers traveling in economy class. Future research is recommended to analyse the experiences of business and first class passengers as well, allowing for comparisons across different classes. This approach will allow for a more detailed understanding of the expectations and satisfaction levels of different passenger segments. Furthermore, by drawing on similar studies in the literature and quantitative or qualitative passenger research, it is possible to diversify the evaluation categories and criteria. This could broaden the measurement dimensions of the current study, enabling more comprehensive and in-depth analyses. Finally, to broaden the scope of the analysis, it is recommended to increase the number of travel platforms evaluated or to repeat similar analyses on different platforms. This would reveal the consistency and differences in passenger evaluations of airlines across platforms, thus developing a more comprehensive and comparative understanding of customer perceptions of the industry. From a social effect perspective, the study's findings suggest the need to strengthen the principles of equality, accessibility, and quality in transportation services. Because air transportation is not only a commercial but also a public service, passenger satisfaction should be evaluated within the framework of public welfare and service equity. In this context, reducing inequalities in service quality, systematically analysing passenger feedback obtained from digital platforms, and ensuring access to services for disadvantaged groups should be among the current objectives of social policy. The study demonstrates that airlines need to restructure their service production processes not only for sectoral competitiveness but also for social benefit and public service.

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