# Airline Service Quality: A Revisited Concept

**Harith Yas [1] \*, Ahmad Jusoh [2]**

*[1] Faculty of Management, Universiti Teknologi Malaysia, Johor Bahru, Malaysia*
*[2] Faculty of Management, Universiti Teknologi Malaysia, Skudai, Malaysia*
*\*Corresponding author E-mail: Harith.albayati@yahoo.com*

### Abstract

This article critically examines the development of service quality constructs in airline services, placing particular emphasis on the continuing pursuit of reliability in operationalizing perceived customer perceptions. Although numerous conventional models, such as SERVQUAL, have been widely used to measure service quality, they have also been criticized in general for their inability to document industry specifics and to reflect the evolving expectations of airline customers. To address these constraints, many authors have developed alternative methodologies that can be better adapted to the complicated context of the airline industry. This paper analyses established and evolving airline service quality models, scrutinizing the strengths, limitations, and implications of the models in the airline industry today. The paper adds to the current literature on the theoretical foundations and criticisms of service quality models, contributing to the continued improvement of service quality assessment instruments. Particular emphasis is placed on delineating the impact of service quality on satisfaction, behavioral loyalty, and psychological variables, such as price elasticity and perceptions of value. The findings of this study reveal the strategic role of service quality as a competitive advantage, especially in mature, price-sensitive markets. It suggests that a more defined, context-specific evaluation framework will help airlines to more closely match their level of service delivery with customer expectations. Overall, this paper recommends the development of more holistic and context-specific models to improve service quality measurement, facilitate strategic planning, and manage customer relationships in the airline industry.

*Keywords*: *Carbon Footprint; Displacement Matrix; Carbon Disclosure; Return Index.*

## 1. Introduction

In today's fast-moving and global market, obtaining and sustaining a competitive advantage are essential objectives for each airline. However, to achieve these goals, it is necessary to understand the impact of quality of service on customer satisfaction and loyalty. Though globalization and the Internet have raised both the level of connectivity and the ease of getting information, they have also altered the way consumers view a brand and come to a decision about making a purchase. Today's airline passengers are not only price-conscious; they also derive purchase intent from service and experience offerings. Airline passengers now use their purchasing power as a form of feedback, rewarding companies that meet their expectations and penalizing those that do not. Consequently, it is important to understand how psychological perceptions of value, and in this case, how perceived quality and price interact, affect consumer behavior (AlLouzi, A.S., & Alomari, K.M., 2023). This study contributes to current knowledge and the airline industry by examining the impact of service quality on customer satisfaction and loyalty. The paper discusses existing service quality concepts while also pointing to the necessity for context-dependent evaluation models. It explores the efficacy of pre-existing frameworks like SERVQUAL, demonstrating why specific models are more efficient than others in evaluating airline performance. Moreover, the paper highlights the shortcomings of current methods and suggests areas for improvement. Overall, the objective of this study is to assist airline companies in formulating more customer-oriented service strategies (Saeed, M. D., & Khudhair, H. Y., 2024). The study forms the basis for advancing service quality concepts by serving as a core foundation for future doctoral-level research. These themes will be discussed in more detail in the following chapters, giving due attention to both theory and practice (Aboelazm, K.S., & Afandy, A., 2019).

## 2. Airline industry service model

The SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1985), is an established model commonly implemented in service quality evaluations across diverse sectors like aviation. It involves the identification and analysis of differences between customers' expectations and perceptions of services provided to them. The model highlights differences in several areas: between first, what management thinks customers expect and what customers perceive; second, what management identifies as expectations and the service quality standards that have been set; third, those standards and the actual provision of service; and fourth, what is promised and what is experienced

by the customer (Abdel Rady, Hussein, 2018). The fourth element is the distinction between the features of service promoted to the customer and the actual service provided. These assessments of gaps attempt to measure service quality in terms of both real and functional dimensions.

The model has been modified several times to make it more relevant to current service provision. Initially, communication, competence, and courtesy were re-categorized under the assurance dimension. The dimension originally geared toward employee attentiveness was also transformed to "empathy". The revised SERVQUAL model now includes five major dimensions: tangibility, reliability, assurance, responsiveness, and empathy. Though the SERVQUAL model is widely used, it has been criticized for not adequately measuring outcome-based service evaluation (Allouzi, A.S., 2024). This criticism particularly applies to the airline sector, where safety, reliability, and value for money are key. Furthermore, the model has been criticized for its reliance on inflexible scales of measurement, such as the Likert scale, which may not accurately represent passengers' experiences. Some scholars have also criticized the static structure of the SERVQUAL model, arguing that the five dimensions may not sufficiently reflect the rapid changes in modern service industries. Still, SERVQUAL remains a pragmatic point of reference for the construction of more customized service assessment instruments (Yas, H., Aburayya, A., & Shwedeh, F., 2024). For the airline sector, it serves as a structured instrument for companies to recognize gaps and opportunities for service improvement. However, further adaptation is necessary to make the instrument more applicable (Ibrahim, E., Sharif, H., & Aboelazm, K.S., 2025).
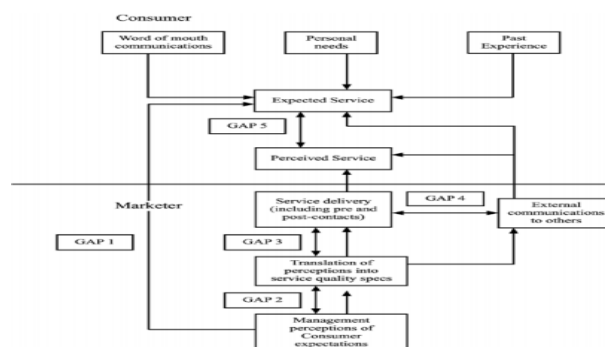


**Fig. 1:** SERVQUAL Model by Parasuraman Et Al. (1985a).

## 3. AIRQUAL model

The limitations of the SERVQUAL model are well documented, particularly its limited ability to accurately capture the unique needs of the air transport industry. Consequently, several researchers have proposed alternative models that can better capture the quality of service in the airline context (Aboelazm, K.S., 2021). One such alternative is the AIRQUAL model, which is developed for airline passengers and studies elements of quality and satisfaction that affect passenger satisfaction and loyalty. Although the SERVQUAL scale was not intended for use in the aviation sector, but rather for a wide variety of services, the AIRQUAL scale was developed to account for service elements unique to airlines, which concern operational, environmental, and psychological factors. The main dimensions of the AIRQUAL model consist of five factors: tangibles, the quality of services at the terminal, the performance of personnel, empathy, and overall corporate image. This model strives to address all aspects of the passenger journey, end-to-end (Aboelazm, K.S., 2024). The tangibles factor includes such features as how clean the plane is or the state of facilities, while the service dimension evaluates check-in qualities, boarding efficiency, and security services (Yas, N., Dafri, W., Yas, H., & Shwedeh, F., 2024). Conversely, the staff performance factor measures professionalism and responsiveness of staff, whereas empathy would include an airline being on time and providing personalized services. On the other hand, the perpetual corporate image factor comprises perceived worth, fairness in ticket pricing, and brand trust. With these airline-centric dimensions, the AIRQUAL model provides a more focused set of measures for measuring service evaluation of passengers (AlKhamaiseh, M. A., Allouzi, A., & Karima, K. R. I. M., 2025).
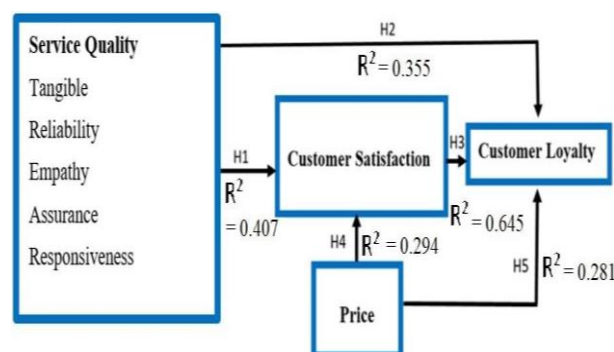


**Fig. 2:** Service Quality Model by (Tanomsin & Chen, 2018).

A model that was assessed in the study is the one proposed by Tanomsin & Chen (2018). In this model, passenger loyalty is considered a dependent variable in the relationship between service quality and customer satisfaction. At the same time, customer satisfaction acts as the linking variable in the relationship between service quality, price, and customer loyalty. The moderator, in this case, between passenger satisfaction and loyalty is the price variable (Allouzi, A.S., Alomari, K.M., Maghaydah, S., 2024). The model acknowledges the multidimensional nature of consumer behavior in the airline industry, in which consumers evaluate value based on both experience and price. Additionally, Gures, Arslan, and Tun (2014) provide an expanded model that incorporates the passenger expectation as an essential antecedent. It connects customer satisfaction and loyalty through interactions with service qualities like reliability, personalization, quickness to respond, employee behavior, flight schedule, and facilities (Park, 2019). Satisfaction is the mediator variable from quality perception to

loyalty behavior in this model, which expands the static and traditional view of the customer road map (lbayati, Y.K., Allouzi, A.S., Abdalaziz, M.M.O., Al-Ali, M., & Yas, H., 2025).
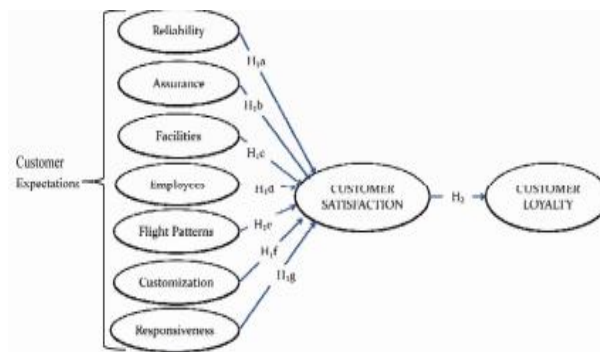


**Fig. 3:** Service Quality Model (Gures Et Al., 2014)

On the other hand, the work by Rahim (2016) takes a different path from conventional models. Instead of customer satisfaction serving as the mediator, service quality is the intervening variable between passenger satisfaction and loyalty. This change reflects the realization of service quality as a primary determinant in situations with market or infrastructure-induced constraints (Khudhair, H. Y., Jusoh, A., Mardani, A., Nor, K. M., & Streimikiene, D., 2019). According to Rahim (2016), trust, personalization, and frontline employee productivity are important factors in establishing customer satisfaction and driving repeat purchases (Aboelazm, K.S., 2023).
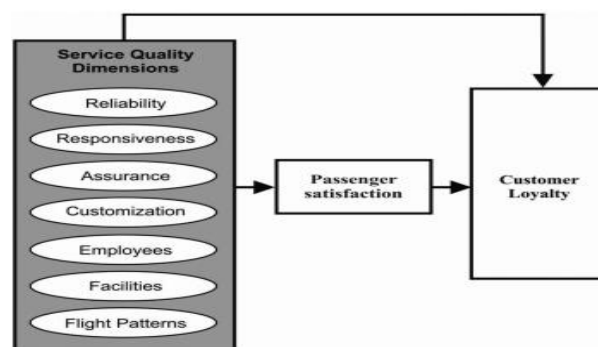


**Fig. 4:** Model of Service Quality, Customer Satisfaction, and Loyalty (Rahim, 2016).

Namukasa (2013) offers a different assessment model, particularly for the airlines sector, where service quality was unraveled into three dimensions, namely pre-flight, in-flight, and post-flight. The pre-flight variables include reliability, staff attentiveness, and early bird offers. Courtesy, language comprehension, and the physical interior of the aircraft are the quality factors of in-flight service. Post-flight variables comprise punctuality and frequent flyer programs (Dafri, W., Yas, N., Salem, O., Khalifa, A. A., & AlLouzi, A. S., 2025). This model enables academics and practitioners to identify inefficiencies across the service journey and develop targeted strategies to enhance key touchpoints. The model considers the cumulative impact of a variety of experiences on customer satisfaction and loyalty through a practical, phase-based service interaction design (Aboelazm, K.S., Tawakol, F., Ibrahim, E., & Ramadan, S. A., 2025).
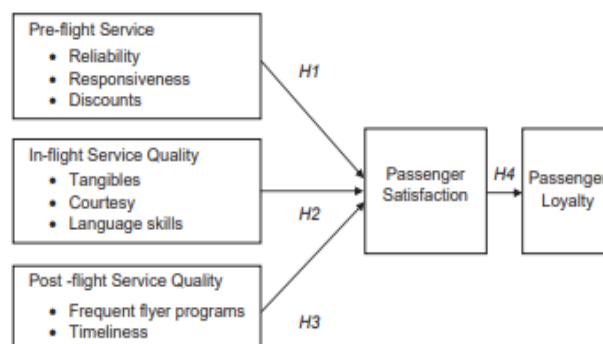


**Fig. 5:** The Influence of Airline Service Quality on Passenger Satisfaction and Loyalty: The Case of Uganda Airline Industry (Namukasa, 2013).

Gambo (2016) also highlights service quality at airports, concentrating on five quantifiable touch-points, including check-in-service effectiveness, in-flight services, staff response, baggage handling, and reliability. The study's model is based mainly on SERVQUAL dimensions, but from the perspective of operational efficiency in terms of airport logistics and passenger service flow. This model, as represented, does not include customer loyalty as an outcome variable, treating satisfaction as the only dependent variable (Yas, N., Salem, O., AlLouzi, A. S., Abdalaziz, M. M. O., Marks, A., & Al-Jumaili, A., 2025). This is indicative of an operational orientation, whereby service quality enhancements are assumed to have a direct positive impact on satisfaction in the short run, without accounting for long-term retention (Aboelazm, K.S., Ibrahim, E., Sharif, H., & Tawakol, F., 2025).
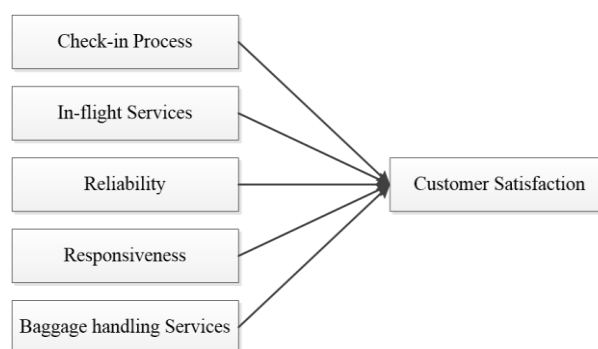
**Fig. 5:** Service Quality Model by Gambo (2016).

Khudhair, Jusoh, Mardani, Nor, & Streimikieneb (2019) developed an extended conceptual model, in which both price sensitivity and quality-seeking are moderating factors in the relationship between service quality and satisfaction, and subsequently, loyalty. Their model corresponds to the reality that today's passengers have different expectations; some seek economy, while others seek luxury. These two psychological orientations are considered essential for explaining why similar service quality can bring about different satisfaction and loyalty effects with passengers. The idea is also consistent with modern marketing knowledge, as customer segmentation is important when shaping personalized service strategies (Aboelazm, K.S., Tawakol, F., Ibrahim, E., & Sharif, H., 2025).

The consolidation of these different models illustrates how the measurement of airline service quality has developed over the years. From early gap models such as SERVQUAL to more nuanced frameworks like AIRQUAL, Namukasa's stage-based model, or Khudhair et al.'s structured approach, the trend towards contextualization, behavioral realism, and strategic fitness in the literature is evident. Furthermore, these models together emphasize the need to treat service quality as a technical construct, consisting of lists of performance standards, and as a psychological construct involving expectations, perceptions, and ideals (Allouzi, A.S., & Yas, N., 2024).. The ability of an airline to sustain the loyalty of its customers relies on maintaining an adequate level of service and positively influencing passengers' emotional and cognitive reactions (Yas, H., Jusoh, A., Streimikiene, D., Mardani, A., Nor, K. M., Alatawi, A., & Umarlebbe, J. H., 2021). An interesting recurrent result among the models is the role of customer satisfaction as an intervening variable between quality and loyalty. Satisfaction is a core element of the customer journey and is portrayed as a direct and indirect variable. This emphasizes that airlines need to be vigilant, assess, and adjust how service is provided to the customer to meet the operational goals and passenger-centric service expectations (Al-bayati, Y.K., Allouzi, A.S., Abdalaziz, M.M.O., Al-Ali, M., & Yas, H., 2025).
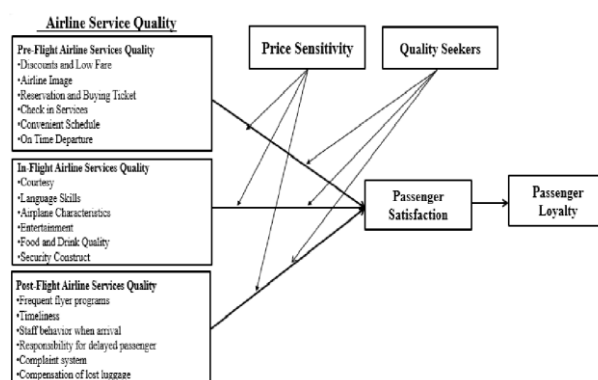


**Fig. 6:** Moderating Effects of Price Sensitivity and Quality Seekers in the Airline Industry (Khudhair, Jusoh, Mardani, Nor, & Streimikieneb, 2019).

Overall, the literature review chapter provides a theoretical underpinning for this study's proposed model, which integrates essential features of highlighted models. The proposed model in this study will examine how service quality dimensions, which are moderated by price attitudes and expectations, affect passenger satisfaction and, by extension, passenger loyalty (Aboelazm, K.S., Tawakol, F., Dganni, K.M., & AlFil, N.Z., 2024). The significance of this research lies in its contribution to existing theoretical fields and its adaptation of existing theories to contemporary industry practice, particularly in the context of the UAE's highly competitive aviation sector. The study aims to provide practical insights that enhance airline performance through service innovation and customer relationship marketing strategies (Khudhair, H. Y., Jusoh, A., Mardani, A., & Nor, K. M., 2019).

From the analysis of the above table, the relationship between the disclosure guidelines, which regulate market disclosures, and the displacement matrix is a strong, statistically significant correlation at the 0.05 level, with a correlation coefficient of 0.73. The disclosure guidelines that regulate market disclosure do not mandate companies to disclose their carbon footprint and climate impacts in their financial reports (Aboelazm, K.S., & Ramadan, S. A., 2023). However, they affect household displacement. On the other hand, a positive, statistically significant correlation at the 0.05 significance level is observed, with a correlation coefficient of 0.55. This indicates that the unified accounting system applied in the industrial sector lacks the necessary elements to disclose the carbon footprint. Additionally, the correlation between company size and the displacement matrix is weak and statistically insignificant, with a correlation coefficient of 0.20, indicating no relationship between company size and household displacement (Yas, H., Mardani, A., & Alfarttoosi, A., 2020).

From the analysis of the calculated F-value (11.8), which is greater than the table value of (4.19) at the 0.05 significance level, this means there is a statistically significant effect between carbon footprint disclosure guidelines and the displacement matrix at the 5% significance level, with a confidence level of 95%. The coefficient of determination ($R^2$=0.32) indicates that the carbon footprint disclosure guidelines can explain 32% of the changes in the displacement matrix. The remaining 78% is due to other factors not included in the regression model (Aboelazm, K.S., Dganni, K.M., Tawakol, F., & Sharif, H., 2024). The slope coefficient for the regression angle is (B=0.61). Hence, the secondary hypothesis, which states that there is a significant relationship between carbon footprint disclosure guidelines and the displacement matrix, is accepted. The results obtained can be reinforced through Table 1-3 and Figure 1-4, which show the increase in the number

of displaced persons from their governorates according to the emissions and pollution associated with the presence of companies that do not disclose their carbon footprint (Yas, H., Dafri, W., Sarhan, M. I., Albayati, Y., & Shwedeh, F., 2024).

## 4. Pre-, in-, and post airline services

To gain a comprehensive understanding of airline service delivery, it is essential to analyze the customer experience at each stage of the travel journey (pre-flight, flight, and post-flight). This research is built on extant literature to develop a theoretical model that examines the impact of each phase on passenger satisfaction, and subsequently, on loyalty (Şimşek, Kübra, and Orkun Demirbağ, 2017). The three service dimensions (pre-flight, in-flight, and post-flight) are characterized by unique service features that affect customers' perceptions of quality (Elyat, M. N., Al Bayati, N. Y., Al Baloushi, N. A., Sarhan, M. I., Marks, A. A., Khudhair, H. Y., & Allouzi, A. S., 2024). For instance, in the pre-flight stage, departure punctuality is a key factor in customer fulfilment. The turnaround process at airports is complicated, including aircraft cleaning, baggage management, and coordination of boarding activities, all of which need to be done effectively. These are often uncontrollable variables. However, the airline's handling of them is a measure of its ability as an operation. The efficiency of the staff in boarding, assigning seats, and directing customers to their seats can impact perception even before the flight takes off. Findings reveal that the smaller the disparity between passengers' expectations and their experiences, the higher the degree of satisfaction (Min, Hokey, and Hyesung Min, 2015).

The in-flight component of the air travel experience is based on direct and prolonged contact between two principal actors: the passengers and the crew members (Allouzi, A.S., 2024). This stage begins when the passenger boards the plane and ends when the passenger deplanes. Certain satisfaction/dissatisfaction drivers may be related to the perceived level of courtesy, politeness, or professionalism of cabin crew, quality of on-board announcements, and the availability of services, such as beverages, catering, in-flight entertainment, and comfort. Specifically, full-service carriers can at least provide services that meet passengers' expectations in terms of cleanliness, seating comfort, and meal preference (Hahn, Singh, Liu, and Chen, 2017). For example, passengers having dietary restrictions anticipate that their special meal orders, if placed during the booking process, will be met without delay (Büyüközkan, Gülçin, 2020). Since passengers spend some considerable time in the congested environment of an airplane, high-quality service during this stage can be crucial in determining overall perception (Parasuraman & Grewal, 2000). Furthermore, the general research results reveal that the flight attendants' interpersonal service encounters have direct impacts on passengers' satisfaction, particularly the personal/emotional interaction with the service provider. The confidence, identity, and trust provided by airline staff are key to delivering customer satisfaction and loyalty. While on board, quality is measured based on comfort maximization, problem-solving, and friendly service. Chang, Yu-Hern, and Chung-Hsing Yeh (2002) posit that airlines that consistently convey these attributes are likely to increase passengers' perceived value of their services (Yas, H., Mardani, A., Albayati, Y.K., Lootah, S.E., & Streimikiene, D., 2020).

The post-flight stage is dedicated to the passenger experience after alighting from a flight. This phase includes baggage handling efficiency and staff support in cases of delayed or missed connections. Additionally, the passenger's experience is influenced by loyalty programs, flyer benefits, and quality of communications during service disruption (Hahn et al., 2017). Post-flight service quality has a vital influence on customers' final evaluation of the travel experience and their inclination to select the same carrier in the future. An important element determining the attitude of passengers for all levels of service is price sensitivity (Khudhair, H. Y., & Mardani, A., 2021). Highly price-sensitive passengers tend to place price ahead of service quality, and are willing to sacrifice service provisions in favour of a lower price (Parasuraman & Grewal, 2000). These passengers are less affected by service improvements and more influenced by cost enhancements. As a moderator, price consciousness affects the way passengers judge service quality and the extent to which they let this affect satisfaction. Where there is intense price sensitivity, service quality is often perceived with less value, and the positive link between service excellence and customer satisfaction may be weakened (Monoarfa, et. al., 2020). Therefore, carriers targeting price-sensitive markets need to find an optimal compromise between cost-cutting and acceptable service levels. On the other hand, customers who prioritize quality over price tend to judge airline service based on quality, demanding higher levels of service and attention to detail. Their purchase decisions are primarily based on the perceived level of service they expect to receive, including premium seating, meal choice, the courteousness of the staff, and the overall in-flight experience (Kirmani & Rao, 2000). The relationship between service quality and satisfaction is stronger in this leg, as satisfaction is a significant determinant of loyalty. Better service to this segment could result in brand loyalty and significant publicity (Shwedeh, F., Yas, N., & Abdijabar, Z., 2024).

Many researchers have found that satisfaction mediates the relationship between service quality and loyalty. This link has been studied in several industry contexts, but evidence for how it operates in the airline industry is minimal. The evidence demonstrates that if passengers are happy pre-flight, in-flight, and post-flight, they are more likely to be brand loyal, a repeat customer, and will refer others to the airline. Service strategies to attract quality and price-sensitive customers are therefore required. Overall, each stage in the airline service process contributes differently to overall passenger experience (Yas, H., Jusoh, A., Nor, K.M., Jovovic, N., Delibasic, M., 2022).

## 5. Discussions

The SERVQUAL model is widely used to measure service quality in many airline companies. The model has received significant recognition, and former researchers have utilized it to measure service quality across various industries. There is a high reliability of AIRQUAL elements, such as tangible personnel and customer satisfaction. The items in the mentioned dimensions fit well together and can be applied to measure the service quality perceptions of airline customers. Having the correct and proper service quality analysis criteria is an essential part of the work by researchers. Applying the proper standards and sensible techniques of evaluation ensures the execution of exact and accurate service quality evaluation, and it shortly discusses the satisfaction level and service quality offered to customers. Regarding the effect that the service quality has on airline passenger satisfaction, most of the AIRQUAL elements indicate a positive association with passenger satisfaction. Personnel are a significant satisfaction creator since they are the main point of contact that the customer has with the company, and are an essential part of producing and delivering service. Adopting the most appropriate model plays a huge role in the survival of airline companies and their growth.

## 6. Recommendations and future research

Referring to the empirical application, there is no benchmarking of service quality in most airline companies. It is recommended that companies develop a diagnostic tool and conduct benchmarking with other competing airlines to measure their performance. The

AIRQUAL model, in its adoption in the airline industry, serves as a standardization tool to understand the trend in the customers' perception of the performance of airlines. It can also serve as an input in developing an effective marketing program to raise customer satisfaction. Building on the insights from focus group discussions and rigorous mathematical analysis to define the relative essence of criteria, and examining the reliability and validity of measurement instruments, helps develop a comprehensive and empirical framework for measuring airline service quality. This enables an accurate demonstration of the service's qualification status and identifies areas for improvement. Still, the investigations concerning the ATIQUAL and SERVQUAL models are relatively young, and hence, there has not been enough evidence for the models to be effectively applied. As a result, the models require further revision to address any remaining gaps that may not have been covered in the study.

The review here assists the researcher in avoiding the issues found in former service quality models in constructing their frameworks for evaluation. The study's practical outcomes provide essential information for making informed strategic decisions to enhance airline service quality and help airline leaders develop a framework for accurate monitoring and improvement in key areas. Future research should focus on assessing and including the various concepts and criteria used by various models to suit the airline industry. This is because some concepts and models might be more effective than others.

# 7. Conclusion

The purpose of this research was to develop a deeper understanding of service quality within the airline industry and to improve existing service quality measurement frameworks, including SERVQUAL. However, some of these models have been criticized for their limited transferability and validity in modelling dynamic customer expectations, spurring the design of more dedicated models like the AIRQUAL. The study results emphasise that sustainable competitive advantage in the airline industry is highly related to the firms' abilities to meet or exceed customers' expectations continually. The relationship among service quality, customer satisfaction, and loyalty should be investigated along the whole passenger journey, including pre-flight, in-flight, and post-flight periods. In order to be competitive, airlines need to adopt accurate, flexible, and contextually relevant frameworks for assessing service quality. These types of models enable companies to measure and improve performance, respond to customer needs, and build a loyal customer base in a competitive and service-oriented industry.

# References

[1] Abdel Rady, Hussein. "Measuring Airline Service Quality Using AIRQUAL Model: A Study Applied to Egyptair." International Journal of Heritage, Tourism and Hospitality 12.1 (2018): 271-290. https://doi.org/10.21608/ijhth.2018.31517.

[2] Aboelazm, K. (2022). The Role of Digital Transformation in Improving the Judicial System in the Egyptian Council of State: An Applied Study from a Comparative Perspective. Journal of Law and Emerging Technologies, 2(1), 11-50. https://doi.org/10.54873/jolets.v2i1.41.

[3] Aboelazm, K. (2023). The Debatable Issues in the Rule of Law in British Constitutional History and Its Influence on the Egyptian Constitutions. International Journal of Doctrine, Judiciary and Legislation, 4(2), 521-568.

[4] Aboelazm, K. S. (2021). The constitutional framework for public policy in the Middle East and North Africa countries. International Journal of Public Law and Policy, 7(3), 187-203. https://doi.org/10.1504/IJPLAP.2021.118325.

[5] Aboelazm, K. S. (2022). E-procurement in the international experience: an approach to reduce corruption in administrative contracts in Egypt. International Journal of Procurement Management, 15(3), 340-364. https://doi.org/10.1504/IJPM.2022.122570.

[6] Aboelazm, K. S. (2023). Policies and Legal Framework of Involving Small and Medium Enterprises in Administrative Contracts in Egypt: Dynamics and Influences. International Journal of Public Law and Policy, 9(1), 61-74. https://doi.org/10.1504/IJPLAP.2023.127316.

[7] Aboelazm, K. S. (2023). THE DEVELOPMENT OF THE PRESIDENT'S AUTHORITIES IN THE EGYPTIAN CONSTITUTIONS. Russian Law Journal, 11(2), 365-376. https://doi.org/10.52783/rlj.v11i2.883.

[8] Aboelazm, K. S. (2023). The legal framework and policies for sustainable administrative contracts in Egypt: reality and challenges. International Journal of Public Law and Policy, 9(2), 111-129. https://doi.org/10.1504/IJPLAP.2023.130011.

[9] Aboelazm, K. S. (2023). The Role of Judicial Review on the Acts of Sovereignty in Egypt. Central European Management Journal, 31(1), 485-495.

[10] Aboelazm, K. S. (2023). The success of the E-voting to Enhance the Political Engagement: A Comparative Study. Journal of Law and Sustainable Development, 11(11), e1732-e1732. https://doi.org/10.55908/sdgs.v11i11.1732.

[11] Aboelazm, K. S. (2024). a. Using E-Tenders in the United Arab Emirates to Enhance Transparency and Integrity, Kurdish Studies, 12 (1), 106–117. https://doi.org/10.1504/IJPM.2023.10060187.

[12] Aboelazm, K. S. (2024). Supreme Constitutional Court review of the legislative omission in Egypt in light of international experiences. Heliyon, 10(17). https://doi.org/10.1016/j.heliyon.2024.e37269.

[13] Aboelazm, K. S. (2024). The role of judicial review in the settlement of state contract disputes. Corporate Law & Governance Review, 6(3), 122-134. https://doi.org/10.22495/clgrv6i3p13.

[14] Aboelazm, K. S. (2025). A new era of public procurement: Critical issues of procuring artificial intelligence systems to produce public services. International Journal of Law and Management, (ahead-of-print). https://doi.org/10.1108/IJLMA-06-2024-0208.

[15] Aboelazm, K. S. (2025). An inevitable dialogue of professional ethics–an enlightenment perception of upholding professional ethics in public procurement jobs. Journal of Public Procurement, (ahead-of-print). https://doi.org/10.1108/JOPP-06-2024-0066.

[16] Aboelazm, K. S. (2025). The Judicial Constitutional Review for the Legislative Omission: A Comparative Study. Krytyka Prawa, 316. https://doi.org/10.7206/kp.2080-1084.766.

[17] Aboelazm, K. S., & Afandy, A. (2019). Centralization and decentralization of public procurement: Analysis for the role of General Authority for Governmental Services (GAGS) in Egypt. Journal of Advances in Management Research, 16(3), 262-276. https://doi.org/10.1108/JAMR-05-2018-0049.

[18] Aboelazm, K. S., & Ramadan, S. A. (2023). Transformation to E-Public Procurement in the United Arab Emirates in the Light of the UNCITRAL Model Law. Journal of Law and Sustainable Development, 11(8), e1499-e1499. https://doi.org/10.55908/sdgs.v11i8.1499.

[19] Aboelazm, K. S., Dganni, K. M., Tawakol, F., & Sharif, H. (2024). Robotic judges: a new step towards justice or the exclusion of humans?. Journal of Lifestyle and SDG Review, 4(4). https://doi.org/10.47172/2965-730X.SDGsReview.v4.n04.pe02515.

[20] Aboelazm, K. S., Ibrahim, E., Sharif, H., & Tawakol, F. (2025). Policies of Civil Service Leadership Reform in Egypt and the United Arab Emirates in Light of the United Kingdom's Experience. Journal of Lifestyle and SDGs Review, 5(2), e03304-e03304. https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe03304.

[21] Aboelazm, K. S., Obeidat, M. A., Tawakol, F., Alfil, N. Z., & Ul Haq, F. H. I. (2025). Ameliorating Public Procurement Performance: Green Public Procurement Policies Within a Legislative Framework. Corporate Law and Governance Review, 7(2), 21. https://doi.org/10.22495/clgrv7i2p2.

[22] Aboelazm, K. S., Tawakol, F., Dganni, K. M., & AlFil, N. Z. (2024). Public-Private Partnership: A New Policy to Ameliorate the Quality of Public Utility Services to the Public. Journal of Lifestyle and SDG Review, 4(4). https://doi.org/10.47172/2965-730X.SDGsReview.v4.n04.pe02509

[23] Aboelazm, K. S., Tawakol, F., Ibrahim, E., & Ramadan, S. A. (2025). The Legal Framework for BOT Contracts in Egypt and the United Arab Emirates. Journal of Lifestyle and SDGs Review, 5(2), e03286-e03286. https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe03286.

[24] Aboelazm, K. S., Tawakol, F., Ibrahim, E., & Sharif, H. (2025). Improving Public Sector Procurement Methods in International Practices: a Comparative Study. Journal of Lifestyle and SDGs Review, 5(2), e03287-e03287. https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe03287.

[25] Albayati, Y. K., Allouzi, A. S., Abdalaziz, M. M. O., Al-Ali, M., & Yas, H. (2025). Development of a sustainable society and economy based on knowledge in the United Arab Emirates. International Journal of Innovative Research and Scientific Studies, 8(2), 854. https://doi.org/10.53894/ijirss.v8i2.5340.

[26] Albayati, Y. K., Allouzi, A. S., Abdalaziz, M. M. O., Al-Ali, M., & Yas, H. (2025). Development of a sustainable society and economy based on knowledge in the United Arab Emirates. International Journal of Innovative Research and Scientific Studies, 8(2), 854. https://doi.org/10.53894/ijirss.v8i2.5340.

[27] AlKhamaiseh, M. A., Allouzi, A., & Karima, K. R. I. M. (2025). The adequacy of the UAE Commercial Law in 2023 in regulating artificial intelligence as a subject of the contract. Research Journal in Advanced Humanities, 6(1), 1-12.

[28] Allouzi, A. S. (2024). Digital justice and its impact on the functioning of procedural rivalry in UAE law. Research Journal in Advanced Humanities, 5(4), 300-315. https://doi.org/10.58256/4f8zyx55.

[29] Allouzi, A. S. (2024). Mediation and conciliation centers and their impact on resolving legal disputes in the UAE "Under Federal Law No. 17 of 2016 and its amendment No. 5 of 2021". Journal of Infrastructure, Policy and Development, 8(10), 6703. https://doi.org/10.24294/jipd.v8i10.6703.

[30] AlLouzi, A. S., & Alomari, K. M. (2023). Adequate legal rules in settling metaverse disputes: Hybrid legal framework for metaverse dispute resolution (HLFMDR). International Journal of Data & Network Science, 7(4). https://doi.org/10.5267/j.ijdns.2023.8.001.

[31] Allouzi, A. S., & Yas, N. (2024). Procedural aspects of civil liability for nuclear damages in UAE law. Journal of Infrastructure, Policy and Development, 8(9), 6705. https://doi.org/10.24294/jipd.v8i9.6705.

[32] Allouzi, A.S., Alomari, K.M., Maghaydah, S. (2024). Enhancing game classification systems with machine learning: A comparative study on techniques and legal implications. International Journal of Data and Network Science, 8 (4), pp. 2319-2332. https://doi.org/10.5267/j.ijdns.2024.5.024.

[33] Atalık, Özlem, Mahmut Bakır, and Şahap Akan. "The role of in-flight service quality on value for money in business class: a logit model on the airline industry." Administrative Sciences 9.1 (2019): 26. https://doi.org/10.3390/admsci9010026.

[34] Boin, Arjen, Sanneke Kuipers, and Werner Overdijk. "Leadership in times of crisis: A framework for assessment." International Review of Public Administration 18.1 (2013): 79-91. https://doi.org/10.1080/12294659.2013.10805241.

[35] Büyüközkan, Gülçin, et al. "A combined group decision making based IFCM and SERVQUAL approach for strategic analysis of airline service quality." Journal of Intelligent & Fuzzy Systems 38.1 (2020): 859-872. https://doi.org/10.3233/JIFS-179454.

[36] Chang, Yu-Hern, and Chung-Hsing Yeh. "A survey analysis of service quality for domestic airlines." European Journal of Operational Research 139.1 (2002): 166-177. https://doi.org/10.1016/S0377-2217(01)00148-5.

[37] Dafri, W., Yas, N., Salem, O., Khalifa, A. A., & AlLouzi, A. S. (2025). Policies and laws governing digital customer and government services in the Emirates. International Journal of Innovative Research and Scientific Studies, 8(4), 1161-1172. https://doi.org/10.53894/ijirss.v8i4.8038.

[38] Dissanayake, D. M. R., and R. A. S. Weerasiri. "The impact of perceived effectiveness of celebrity endorsement on perceived brand personality." Journal of Accounting & Marketing 6.3 (2017): 1-9.

[39] Elyat, M. N., Al Bayati, N. Y., Al Baloushi, N. A., Sarhan, M. I., Marks, A. A., Khudhair, H. Y., & Allouzi, A. S. (2024). IMPACT OF INTELLECTUAL PROPERTY RIGHTS AND TECHNOLOGICAL FACTORS ON INFORMATION SECURITY. Journal of Infrastructure, Policy and Development, 8(8), 6303. https://doi.org/10.24294/jipd.v8i8.6303.

[40] Etemad-Sajadi, R., Way, S. A., and Bohrer, L. (2016). Airline passenger loyalty: The distinct effects of airline passenger perceived pre-flight and in-flight service quality. Cornell Hospitality Quarterly, 57(2), 219-225. https://doi.org/10.1177/1938965516630622.

[41] Gambo, Musa Kasuwar Kuka. "Service quality and customer satisfaction among domestic air passengers in Nigeria." International journal of business and management studies 8.2 (2016): 32-49.

[42] Gupta, Himanshu. "Evaluating service quality of the airline industry using the hybrid best-worst method and VIKOR." Journal of Air Transport Management 68 (2018): 35-47. https://doi.org/10.1016/j.jairtraman.2017.06.001.

[43] Gures, Nuriye, Seda Arslan, and Sevil Yucel Tun. "Customer expectation, satisfaction, and loyalty relationship in the Turkish airline industry." International Journal of Marketing Studies 6.1 (2014): 66. https://doi.org/10.5539/ijms.v6n1p66.

[44] Hahn, A., Singh, R., Liu, C. C., and Chen, S. (2017, April). Brilliant contract-based campus demonstration of decentralized transactive energy auctions. In 2017, IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT) (pp. 1-5). IEEE. https://doi.org/10.1109/ISGT.2017.8086092.

[45] Hahn, Adam, et al. "Smart contract-based campus demonstration of decentralized transactive energy auctions." 2017 IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT) IEEE, 2017. https://doi.org/10.1109/ISGT.2017.8086092.

[46] Hapsari, Raditha, Michael D. Clemes, and David Dean. "The impact of service quality, customer engagement, and selected marketing constructs on airline passenger loyalty." International Journal of Quality and Service Sciences (2017). https://doi.org/10.1108/IJQSS-07-2016-0048.

[47] Ibrahim, E., Sharif, H., & Aboelazm, K. S. (2025). Electronic Fraud in the United Arab Emirates Legislation. Journal of Lifestyle and SDGs Review, 5(2), https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe04040.

[48] Ibrahim, E., Sharif, H., & Aboelazm, K. S. (2025). Legal Confrontation of the Cyber Blackmail: a Comparative Study. Journal of Lifestyle and SDGs Review, 5(2), e04039-e04039. https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe04039.

[49] Khudhair, H. Y., & Mardani, A. (2021). The Major Issues Facing Staff in the Islamic Banking Industry. International Journal of Economics and Management Systems, 6.

[50] Khudhair, H. Y., Jusoh, A., Mardani, A., & Nor, K. M. (2019). A conceptual model of customer satisfaction: Moderating effects of price sensitivity and quality seekers in the airline industry. Contemporary Economics, 13(3), 283.

[51] Khudhair, H. Y., Jusoh, A., Mardani, A., Nor, K. M., & Streimikiene, D. (2019). Review of scoping studies on service quality, customer satisfaction, and customer loyalty in the airline industry. Contemporary Economics, 375-386.

[52] Khudhair, H. Y., Jusoh, A., Nor, K. M., & Mardani, A. (2021). Price sensitivity as a moderating factor between the effects of airline service quality and passenger satisfaction on passenger loyalty in the airline industry. International Journal of Business Continuity and Risk Management, 11(2-3), 114-125. https://doi.org/10.1504/IJBCRM.2021.116274.

[53] Khudhair, Harith Yas, et al. "Quality Seekers as Moderating Effects between Service Quality and Customer Satisfaction in the Airline Industry." International Review of Management and Marketing 9.4 (2019): 74. https://doi.org/10.32479/irmm.8144.

[54] Kirmani, A., and Rao, A. R. (2000). No pain, no gain: A critical review of the literature on signaling unobservable product quality. Journal of Marketing, 64(2), 66-79. https://doi.org/10.1509/jmkg.64.2.66.18000.

[55] Kirmani, Amna, and Akshay R. Rao. "No pain, no gain: A critical review of the literature on signaling unobservable product quality." Journal of Marketing 64.2 (2000): 66-79. https://doi.org/10.1509/jmkg.64.2.66.18000.

[56] Leninkumar, V. (2019). Antecedents of customer satisfaction. Archives of business research, 7(6), 62-76.

[57] Leninkumar, V. (2019). Customer Perceptions of Service Quality in the Banking Sector. Archives of Business Research, 7(8).

[58] Min, Hokey, and Hyesung Min. "Benchmarking the service quality of airlines in the United States: an exploratory analysis." Benchmarking: an International Journal (2015). https://doi.org/10.1108/BIJ-03-2013-0029.

[59] Monarda, T., O. Usman, and T. Tausyanah. "The implication of AIRQUAL and brand credibility on passengers' satisfaction in the airline industry." Management Science Letters 10.15 (2020): 3655-3662. https://doi.org/10.5267/j.msl.2020.6.028.

[60] Munoz, C., Laniado, H., and Córdoba, J. (2019). Modeling air travelers' experience based on service quality stages related to airlines and airports. Modern Applied Science, 13(11), 37-53. https://doi.org/10.5539/mas.v13n11p37.

[61] Namukasa, Juliet. "The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry." The TQM Journal (2013). https://doi.org/10.1108/TQM-11-2012-0092.

[62] Newton, J., and Kusmierczyk, E. (2011). Teaching second languages for the workplace, 175, 135-148.

[63] Parasuraman, A., and Grewal, D. (2000). The impact of technology on the quality-value-loyalty chain: a research agenda. Journal of the academy of marketing science, 28(1), 168- https://doi.org/10.1177/0092070300281015.

[64] Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. Journal of Marketing, [online] 49(4), pp.41–50. https://doi.org/10.2307/1251430.

[65] Park, Eunil, et al. "Determinants of customer satisfaction with airline services: An analysis of customer feedback big data." Journal of Retailing and Consumer Services 51 (2019): 186-190. https://doi.org/10.1016/j.jretconser.2019.06.009.

[66] Rahim, A. Ganiyu. "Perceived service quality and customer loyalty: The mediating effect of passenger satisfaction in the Nigerian Airline Industry." International journal of management and economics 52.1 (2016): 94-117. https://doi.org/10.1515/ijme-2016-0029.

[67] Rosen, C. (2019). Our Pets, Ourselves. The Hedgehog Review, 21(1), 42-52.

[68] Saeed, M. D., & Khudhair, H. Y. (2024). MANAGING COMPLEXITY AND STAKEHOLDER DYNAMICS IN LARGE-SCALE INFRASTRUC-TURE PROJECT, International Journal on Technical and Physical Problems of Engineering, 16(1), pp. 265–276.

[69] Shwedeh, F., Yas, N., & Abdijabar, Z. (2024). The impact of intellectual property rights and the level of information sensitivity on information security in the United Arab Emirates. Journal of Infrastructure, Policy and Development, 8(8), 6303. https://doi.org/10.24294/jipd.v8i8.6303.

[70] Şimşek, Kübra, and Orkun Demirbağ. "Modeling service quality, customer satisfaction, and behavioral intentions in the airline industry: A SEM approach." The Journal of International Scientific Research 2.6 (2017): 11-29. https://doi.org/10.23834/isrjournal.341694.

[71] Tanomsin, Peeticha, and Chenin Chen. "Factors affecting customer satisfaction and loyalty towards low-cost airlines in Thailand." International Journal of Accounting, Finance and Business 3.7 (2018): 104-114.

[72] Wilson, Nicholas. "The impact of service quality and brand image on customer loyalty in the Indonesian airline industry." Jurnal Manajemen Indonesia 18.3 (2018): 222-234.

[73] Yas, H., Aburayya, A., & Shwedeh, F. (2024). Education Quality and Standards in the Public School and the Private School: A Case Study in Saudi Arabia. In Artificial Intelligence in Education: The Power and Dangers of ChatGPT in the Classroom (pp. 563-572). Cham: Springer Nature Switzerland https://doi.org/10.1007/978-3-031-52280-2_35.

[74] Yas, H., Alkaabi, A., ALBaloushi, N. A., Al Adeedi, A., & Streimikiene, D. (2023). The impact of strategic leadership practices and knowledge sharing on employees' performance. Polish Journal of Management Studies, 27. https://doi.org/10.17512/pjms.2023.27.1.20.

[75] Yas, H., Dafri, W., Sarhan, M. I., Albayati, Y., & Shwedeh, F. (2024). Universities' Faculty Perception of E-learning Tools: Filling the Gaps for Enhanced Effectiveness. In Artificial Intelligence in Education: The Power and Dangers of ChatGPT in the Classroom (pp. 573-588). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-52280-2_36.

[76] Yas, H., Jusoh, A., Nor, K.M., Jovovic, N., Delibasic, M. (2022). IMPACT OF AIRLINE SERVICE QUALITY ON PASSENGER SATISFACTION AND LOYALTY: MODERATING INFLUENCE OF PRICE SENSITIVITY AND QUALITY SEEKERS | ORO LINIJŲ PASLAUGŲ KOKYBĖS SVARBA KELEIVIŲ PASITENKINIMUI IR LOJALUMUI: JAUTRUMO KAINAI IR KOKYBĖS SIEKIANČIŲJŲ ĮTAKA, 21(3), pp. 120–150.

[77] Yas, H., Jusoh, A., Streimikiene, D., Mardani, A., Nor, K. M., Alatawi, A., & Umarlebbe, J. H. (2021). The negative role of social media during the COVID-19 outbreak. International Journal of Sustainable Development and Planning, 16(2), 219-228. https://doi.org/10.18280/ijsdp.160202.

[78] Yas, H., Mardani, A., & Alfarttoosi, A. (2020). The major issues facing staff in the Islamic banking industry and their impact on productivity. Contemporary Economics, 14(3), 392. https://doi.org/10.5709/ce.1897-9254.412.

[79] Yas, H., Mardani, A., Albayati, Y. K., Lootah, S. E., & Streimikiene, D. (2020). The positive role of the tourism industry in Dubai, United Arab Emirates. Contemporary Economics, 14(4), 601.

[80] Yas, N., Dafri, W., Yas, H., & Shwedeh, F. (2024). Effect of e-Learning on Servicing Education in Dubai. In Artificial Intelligence in Education: The Power and Dangers of ChatGPT in the Classroom (pp. 623-639). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-52280-2_40.

[81] Yas, N., Salem, O., AlLouzi, A. S., Abdalaziz, M. M. O., Marks, A., & Al-Jumaili, A. (2025). Civil liability and misuse of electronic communication means via websites: An analytical study in light of the law and policies of the United Arab Emirates. Humanities, 6(1).