Airport Service Quality and Overall Satisfaction

Subjects: Transportation

Contributor: Thitinan Pholsook, Warit Wipulanusat, Poomporn Thamsatitdej, Sarawut Ramjan, Jirapon Sunkpho, Vatanavongs

Ratanavaraha

The novel coronavirus (COVID-19) outbreak has impacted the aviation industry worldwide. Several restrictions and regulations have been implemented to prevent the virus's spread and maintain airport operations. To recover the trustworthiness of air travelers in the new normality, improving airport service quality (ASQ) is necessary, ultimately increasing passenger satisfaction in airports.

Keywords: airport service quality; overall satisfaction; aviation industry; passenger satisfaction

1. Introduction

Airports are one of the crucial parts that drive the aviation industry, so service quality is critical to the operation and management of airports. Airports Council International (ACI) developed the Airport Service Quality (ASQ) program in 2006 to measure passengers' perceptions of airport service quality and passenger satisfaction [1]. ACI regularly surveys and evaluates airport performance based on 34 service attributes divided into eight categories: access, check-in, passport control, security, navigation, facilities, environment, and arrival [2] This becomes a standard indicator of airports' performance worldwide. With nearly 400 participating airports across 95 countries since ACI first introduced the ASQ program, it has become the world's most successful airport passenger satisfaction initiative [3]. Based on data from ASQ's Surveys, ACI World's annual ASQ Awards honor airport excellence in customer experience globally. Survey results are used to determine how well an airport performs in awards [1]. In addition to the ASQ Awards during the pandemic, the Voice of the Customer Recognition program honors airports that have made notable efforts to collect passenger feedback. Airports can gain a distinct understanding of consumer experience through ASQ's departures, arrivals, and commercial surveys [3]. Airports may improve the customer experience, service levels, and non-aeronautical revenue by using the results of the ASQ to gauge passenger satisfaction and find solutions. High customer satisfaction with airport services is necessary to maintain high customer loyalty.

2. Airport Service Quality (ASQ)

Before the coronavirus pandemic, the aviation industry experienced intense competition among airports. The competition occurred in multiple dimensions in both aeronautical and non-aeronautical services. To compete with counterparts, it is better to understand the needs of passengers, airlines, and other stakeholders to improve service quality, the physical environment, and infrastructure. The Airports Council International (ACI) World's Airport Service Quality (ASQ) customer experience provides a 360-degree view of managing the passenger experience at airports and a unique suite of solutions. ACI assists nearly 400 airports worldwide in managing and offering the best customer experience possible based on its demonstrated competence in airports, marketing research, customer experience management, and delivery [4]. The ACI's ASQ program provides management data and research tools required to better understand passenger preferences and views on airport goods and services. Customer experience management is the planning and responding to customer experiences to meet or exceed the customer's expectations, hence increasing customer pleasure, loyalty, and revenue while decreasing service costs. This means that ASQ has been established as a benchmark that assesses air passenger satisfaction while traveling through an airport [5].

To meet international standards, the Airport of Thailand (AOT) has taken part in an ASQ evaluation project implemented by the Airports Council International (ACI) using the same global questionnaire $^{[6]}$. However, conducting only the universal survey might not reflect the actual performance of each airport because the airport's customers have different perceptions of the airport operation $^{[Z]}$, and the airport has different strong and weak points of the service. Therefore, identifying a measurement model of service quality for an individual airport might properly provide direct and effective improvement strategies $^{[Z][\underline{B}][\underline{B}]}$.

The airport is a facility that involves several service stakeholders, including airlines, airport operators, immigration agents, and other service providers in the airport terminal area. The quality of airport services is being measured using a sustainable service process approach, beginning with access to the airport (access), the check-in process at the airline counter (check-in), passport control by immigration officers (passport control) for international departures, security inspection process (security), find your way (wayfinding), airport facilities, airport environment, and arrival services. According to their individual perspectives, scholars use several dimensions to measure airport service quality. However, certain dimensions are utilized by the same scholars, and some even add extra dimensions outside the scope of the ASQ dimension provided ACI. According to systematic review of ASQ dimensions arranged by Usman et al. [10], several researchers employed eight dimensions, the three most commonly used being check-in, airport facilities, and security. The other dimensions are access, airport environment, wayfinding, arrival services, and passport control.

Regarding airport service quality, internal and external evaluations have been necessary for airport management. Yeh and Kuo [I] proposed a fuzzy multi-attribute evaluation model by obtaining information from international travel experts and investigating airport managers and other stakeholders. Fodness and Murray [11] argued that monitoring airport service performance without systematically comprehending passenger expectations may result in an unnecessary effort to improve unimportant service dimensions. This is consistent with a study by Lubbe et al. [12] that confirms the importance of air travelers' voices toward service quality evaluation. Scholars have employed different analysis methodologies to understand passenger needs in each airport service dimension. Bezerra and Gomes [13] applied exploratory factor analysis (EFA) to examine passengers' perceptions of the ASQ dimensions of the Brazilian airport. This study found seven significant service dimensions that affect the ASQ: price, convenience, ambiance, access, check-in, security, and airport facilities. In a subsequent study, the same authors used confirmatory factor analysis (CFA) to confirm that only six key dimensions, excluding price, impacted the overall ASQ [14]. Chonsalasin et al. [15] conducted CFA to develop a measurement model to study passengers' expectations toward Thai airports. The paper derived the measurement model from the research by Pandey $\frac{[16]}{}$. It confirmed that seven dimensions obtained from Pandey $\frac{[16]}{}$ were significant: access, check-in, security, airport facilities, wayfinding, airport environment, and arrival services. Di Pietro et al. $\frac{[17]}{}$ used Bayesian networks to jointly analyze the perceived and provided quality of an airport check-in process, which can be utilized to create novel strategies for enhancing service quality. Farr et al. [18] used Bayesian networks to investigate human and environmental factors to facilitate effective airport wayfinding.

3. Overall Satisfaction

Due to its correlation with brand loyalty and purchase intent, customer satisfaction is essential for businesses [19]. Many studies in the aviation sector reveal the relationship between airport aeronautical and non-aeronautical performance and passengers' airport experiences [20]. Currently, it is evident that non-aviation revenue (NAR) generation is a substantial contributor to the aviation industry's overall economic growth. Graham [21] discovered that airport service quality is vital for travelers and has a significant influence on their journey.

According to ACI World's 2016 research, the greatest method for enhancing NAR is to focus on the customer experience. An increase of 1% in the number of passengers results in an increase of NAR of 0.7% to 1%, as reported by the Airport Service Quality (ASQ) data study, while an increase of 1% in overall passenger satisfaction results in an increase of Nar of 1.5% on average [4]. The voices of customers have become more significant as airports have implemented business management strategies.

Numerous studies have been conducted on the relationship between airport service quality and passenger satisfaction. This research area examines the relationships between airport service quality and latent factors such as airport image, customer satisfaction, and airport loyalty [22][23]. Regarding the ASQ bibliometric analysis of Bakır et al. [24], the SEM methodology utilized by the researchers was the most frequently used method in this research area, concentrating on the correlations between the variables. Multi-criteria decision making (MCDM) approaches, which enable optimal selection in problems with competing criteria, have been utilized in studies to prioritize and compare ASQ dimensions. Aside from the above relationship between ASQ and passenger satisfaction, Liao et al. [25] considered perceived airfare and flight offers. Then, they analyzed overall satisfaction, including alternative attractiveness and switching costs, to determine whether passengers are persuaded to reuse airports. The findings indicated a positive relationship between ASQ and passengers' likelihood of returning to airports.

References

- 1. ACI. ASQ Awards and Recognition. 2022. Available online: https://aci.aero/programs-and-services/asq/asq-awards-and-recognition/ (accessed on 1 July 2022).
- 2. Lee, K.; Yu, C. Assessment of airport service quality: A complementary approach to measure perceived service quality based on Google reviews. J. Air Transp. Manag. 2018, 71, 28–44.
- ACI. Voice of the Customer. 2022. Available online: https://aci.aero/programs-and-services/asq/voice-of-the-customer/ (accessed on 1 July 2022).
- 4. ACI. Airport Service Quality Customer Experience. 2021. Available online: https://aci.aero/programs-and-services/asq/ (accessed on 6 July 2021).
- 5. ACI. Airport Service Quality (ASQ). 2021. Available online: https://aci.aero/customer-experience-asq/ (accessed on 6 July 2021).
- 6. AOT. Customer Satisfaction. 2021. Available online: https://corporate.airportthai.co.th/en/customer-satisfaction/(accessed on 6 July 2021).
- 7. Yeh, C.-H.; Kuo, Y.-L. Evaluating passenger services of Asia-Pacific international airports. Transp. Res. Part E Logist. Transp. Rev. 2003, 39, 35–48.
- 8. Francis, G.; Humphreys, I.; Fry, J. An international survey of the nature and prevalence of quality management systems in airports. Total Qual. Manag. Bus. Excell. 2003, 14, 819–829.
- 9. Bogicevic, V.; Yang, W.; Bilgihan, A.; Bujisic, M. Airport service quality drivers of passenger satisfaction. Tour. Rev. 2013, 68, 3–18.
- 10. Usman, A.; Azis, Y.; Harsanto, B.; Azis, A.M. Airport service quality dimension and measurement: A systematic literature review and future research agenda. Int. J. Qual. Reliab. Manag. 2022, 39, 2302–2322.
- 11. Fodness, D.; Murray, B. Passengers' expectations of airport service quality. J. Serv. Mark. 2007, 21, 492–506.
- 12. Lubbe, B.; Douglas, A.; Zambellis, J. An application of the airport service quality model in South Africa. J. Air Transp. Manag. 2011, 17, 224–227.
- 13. Bezerra, G.C.L.; Gomes, C.F. The effects of service quality dimensions and passenger characteristics on passenger's overall satisfaction with an airport. J. Air Transp. Manag. 2015, 44–45, 77–81.
- 14. Bezerra, G.C.L.; Gomes, C.F. Measuring airport service quality: A multidimensional approach. J. Air Transp. Manag. 2016, 53, 85–93.
- 15. Chonsalasin, D.; Jomnonkwao, S.; Ratanavaraha, V. Measurement model of passengers' expectations of airport service quality. Int. J. Transp. Sci. Technol. 2021, 10, 342–352.
- 16. Pandey, M.M. Evaluating the service quality of airports in Thailand using fuzzy multi-criteria decision making method. J. Air Transp. Manag. 2016, 57, 241–249.
- 17. Di Pietro, L.; Guglielmetti Mugion, R.; Musella, F.; Renzi, M.F.; Vicard, P. Monitoring an airport check-in process by using Bayesian networks. Transp. Res. Part A Policy Pract. 2017, 106, 235–247.
- 18. Farr, A.; Kleinschmidt, T.; Johnson, S.; Yarlagadda, P.; Mengersen, K. Investigating effective wayfinding in airports: A Bayesian network approach. Transport 2014, 29, 90–99.
- 19. Farooq, M.S.; Salam, M.; Fayolle, A.; Jaafar, N.; Ayupp, K. Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. J. Air Transp. Manag. 2018, 67, 169–180.
- 20. Wattanacharoensil, W.; Schuckert, M.; Graham, A. An Airport Experience Framework from a Tourism Perspective. Transp. Rev. 2015, 36, 318–340.
- 21. Graham, A. How important are commercial revenues to today's airports? J. Air Transp. Manag. 2009, 15, 106–111.
- 22. Isa, N.A.M.; Ghaus, H.; Hamid, N.A.; Tan, P.-L. Key drivers of passengers' overall satisfaction at klia2 terminal. J. Air Transp. Manag. 2020, 87, 101859.
- 23. Bezerra, G.C.L.; Gomes, C.F. Determinants of passenger loyalty in multi-airport regions: Implications for tourism destina-tion. Tour. Manag. Perspect. 2019, 31, 145–158.
- 24. Bakır, M.; Özdemir, E.; Akan, Ş.; Atalık, Ö. A bibliometric analysis of airport service quality. J. Air Transp. Manag. 2022, 104, 102273.
- 25. Liao, W.; Cao, X.; Liu, Y.; Huang, Y. Investigating differential effects of airport service quality on behavioral intention in the multi-airport regions. Res. Transp. Bus. Manag. 2022, 45, 100877.

