

# Service Quality and Customer Satisfaction among Domestic Air Passengers in Nepal

**Sabita Karki<sup>1</sup> and Sachita Karki<sup>2</sup>**

<sup>1</sup> Management, Tribhuvan University, Kathmandu, 44600, Nepal

<sup>2</sup> Management, Marymount University, Arlington, Virginia 22207, USA

## Abstract

Service quality is the major factor for airline industry to get success and achieve its goal and objectives. The study aimed to analyze the impact of service quality on customer satisfaction for domestic airlines in Nepal. The study used cross-sectional data collected from 40 passengers out of 50 approached. Survey method was used to collect data which included 32-item scale validated questionnaires from previous studies and SPSS 25.0 was used for data analysis. Findings suggest domestic airlines lacks more on terminal tangibility, empathy and safety of the flight in order to improve the service quality. It is concluded that passengers prefers to travel through domestic airlines and are positive about the service of domestic airlines, although the image is not up to par. The study's findings are anticipated to assist domestic airlines in better understanding the function of many dimensions of service quality in increasing customer satisfaction.

**Keywords:** *Service Quality, Airline Service Quality, AIRQUAL model, passengers' satisfaction, Domestic Airlines Nepal.*

## 1. Introduction

A land-locked country like Nepal, airline industry plays a vital role for the development and economic growth of a nation. In Nepal, the aviation sector started for royal family's convenience in 1958 Devkota et al. (2020) and later it was opened up to the general public as well (Bastola, 2017). The first aircraft of to fly in Nepal was Dougan DC-3 Dakota which belong to Nepal airlines. The expansion of airline industry in Nepal has made import export very easy and people in rural area are able to easily avail the various good and services they need. Despite the emergence of many private domestic airlines companies in Nepal, very few are able to operate with less accidents. With the introduction of democracy in Nepal, many private airlines emerged in accordance with the liberal sky policy (Thapa et al., 2020). A total of 10 domestic airlines operate in Nepal, they are: Nepal Airline Corporation, Gina Airlines, Saurya Airlines, Shree Airlines, Sita Airlines, Summit Air, Simrik Airlines, Tara Air, Yeti Airlines and Yosodhara Airlines operating soon (Longtail-e-media, 2023). The marketing and operating strategy of any airline company shapes the quality of service it provides to the customer. The major concern for airlines in todays' competitive market is to satisfy the customer by providing the qualitative service. But the difficult part is to find out the exact instruments to measure the service quality which shows the exact maximum of customer satisfaction as per their perception. Airlines should prioritize all the dimensions of service quality where luggage handling, assurance and responsiveness are the major dimensions (Manani et al., 2013). Usha and Kusuma (2017) study concludes that airlines enjoy competitive advantage internally and externally when customer perceived better service quality. Many research has been done on domestic airlines internationally but quite a few in Nepal. There is tough competition among domestic airlines in Nepal where each airlines is concerned about customers need and demand while flying. The major concerns of customers while flying are cost, flight schedule and services. Most of the researchers in Nepal have used SERVQUAL dimension to study the service quality of domestic airlines in Nepal. Industry specific SERVQUAL model of service quality, "AIRQUAL MODEL" is used in this research to find out impact of service quality on customer satisfaction of Domestic Airlines. Bari et al. (2001) developed this scale (AIRQUAL) with reference to Parasuraman et al. (1985). This model helps to access participants' view point on airport service, flight schedule, airline service, personnel, price, airline image, reservation service and cabin crew service. The answers to the queries like: industry specific dimensions to evaluate

airline service quality, relationship between airline service quality and passenger satisfaction and the influence of airline service quality on passenger satisfaction is given through this research.

### 1.1 The Research Questions

- What is the relationship between Airline service quality and passenger satisfaction?
- What factor influence does the domestic airline service quality has on passenger Satisfaction?

### 1.2 Objectives of the Study

- To analyze the impact of airline service quality on passengers' Satisfaction for Domestic Airlines in Nepal.
- To assess the factors influencing customer satisfaction towards airline service quality.

### 1.3 Scope and Limitations of the Study

- The scope of the study is limited to domestic airlines in Nepal, and it does not include a comparative analysis among different airlines.
- The research focused solely on domestic airlines in Nepal without exploring how the quality of service varies between different carriers.

## 2. Literature Review

### 2.1 Service Quality

According to Kotler (2003), the quality should start with the passengers' expectations and end with their perspective. Researchers have assessed the service quality by employing a number of methods. In order to quantify service quality, Parasuraman et al. (1985), created a thorough model with ten service quality factors. The same approach was then modified and termed SERVQUAL by Parasuraman et al. (1988), reducing it to five dimensions: (1) tangibles, (2) reliability, (3) responsiveness, (4) assurance, and (5) empathy. It is important to note that SERVQUAL has attracted criticism from some scholars despite being generally accepted and adopted by them (eg; Cronin Jr & Taylor, 1992; Robledo, 2001) since it only compares the perceived quality of service received and customers' opinions. Additionally, 5 Park et al. (2005) contend that specific operations and problems that are unique to the airline industry (such as online ticketing, check-in, luggage allowance, boarding service, and on-board amenities) set the airline industry apart from other service-oriented industries because it received a lot of criticism.

### 2.2 Airqual Model

Bari et al. (2001) introduced a thorough approach for evaluating airline service quality called AIRQUAL in order to address these discrepancies. This AIRQUAL model has five components: tangibles for the airline, tangibles for the terminal, personnel services, empathy, and image. Later, a different study by Nadiri et al. (2008) & Ekiz et al. (2006) evaluated the effect of airline service quality on North Cyprus Airlines' customers' loyalty also used the AIRQUAL scale to validate it. Ekiz et al. (2006) research concluded that airline tangible was the most significant factor related to customer satisfaction whereas Nadiri et al. (2008) study concluded the importance of knowledge of customer perception in order to improve airline service quality. In Pakistan, Ali et al. (2015) conducted a study to measure the relationship between service quality dimensions and customer satisfaction using AIRQUAL scale and structural equation modelling. Ali et al. findings revealed that in Pakistan customers are influenced by all five dimension of AIRQUAL scale whereas, in Malasyia, Farooq et al. (2018) , used same scale to examine the impact of airline service quality on customer satisfaction and revealed that customers are more influenced by personal service, tangibles and images. Their study however included scales that were not a part of AIRQUAL scale totally. Table 3 shows literature matrix, which includes papers reviewed of last five years as well.

## 2.3 Service Quality and Customer Satisfaction

A recent study in Egypt carried out by Abdel Rady (2018), has also used AIRQUAL model to find out the level of customer satisfaction from service quality of Egyptair Airlines and concluded necessity of understanding passengers' perception in order to meet the passengers' expectation and improve service quality. In context of Nepal, many research on service quality and its impact on customer satisfaction has been done till date. Among various 6 papers done on variety of industries in Nepal, a handful of research has been done in the field of airline industry. Biswakarma and Gnawali (2021) study concluded the highest level of operation must be accompanied by tangibility to improve passengers' satisfaction, the same conclusion was drawn by Susilo et al. (2022) adding the importance of empathy to enhance customer satisfaction. Likewise, another study conducted in Nepal by Thapa et al. (2020), indicated that passengers tends to be more satisfied when employees' behavior are more positive but employees are less interested in solving customers' problems. Building upon the logical connections established in the literature review mentioned earlier, which supported the notion that perceived service quality is a precursor to customer satisfaction in the airline industry, previous research conducted in Nepal focused on assessing the service quality of domestic airlines using the SERVQUAL scale rather than the AIRQUAL scale. Therefore, this study is based on the five dimensions of AIRQUAL model.

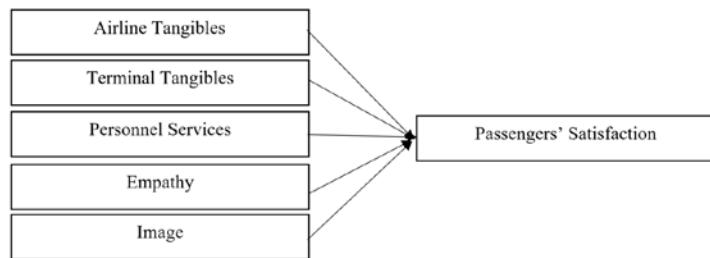


Fig. 1 Conceptual framework.

- Airline tangibles: According to Ali et al. (2015), Airline tangibles encompass the state of aircraft, including the quality of interior and exterior equipment, catering service, seat comfort, and cleanliness.
- Terminal tangibles: Terminal tangibles involve the quality of services which are available at terminal (Ekiz et al., 2006).
- Personal service: It refers to the quality of service delivered by airline's staff (i.e. their attitude and behavior towards customer service) and flight attendants (Boetsch et al., 2011; Ekiz et al., 2006).
- Empathy: In the airline industry, empathy is demonstrated through the provision of hassle-free services that involve handling luggage with care, providing courteous ticketing services, and offering thoughtful compensation plans in case of loss or any other hazards. (Ekiz et al., 2006; Farooq et al., 2018).
- Image: According to Ekiz et al. (2006) an airline's image embraces of its overall perception; value for money; promotional offers and goodwill.

## 3. Research Methodology

### 3.1 Research Design

The study aims to analyze the impact of airline service quality on passengers' Satisfaction and to know the factors influencing customer satisfaction towards domestic airline service quality in Nepal. The study used the quantitative approach with descriptive research design.

### 3.2 Data Collection and Sample

The study is conducted on the basis of primary data. A survey questionnaire was given to respondents who have taken the service of domestic airlines recently. The study used convenience sampling method. The sample size for the study was 40 respondents out of 50 approached. Respondents were approached through survey method.

### 3.3 Nature and Source of Data

The nature of the data used for this study was primary. A survey instrument was adopted from Ekiz et al. (2006) and Westbrook and Oliver (1991), for data collection from passengers of Domestic Airlines of Nepal, which included total of 33 questionnaire. The majority of the questions employed a five-point Likert scale, which is comparable to "1 = strongly disagree", "2 = disagree", "3 = neutral", "4 = agree," And "5 = strongly agree." The study used regression model to analyze the collected data and frequency distribution, mean, and standard deviation for descriptive analysis. Furthermore, to ensure the questionnaire's validity, a pilot study was conducted with the participation of 5 respondents who had recently traveled with Malaysia Airlines.

Table1 provides the reliability estimates (Cronbach's Alpha) for various constructs in the study. The constructs under investigation include Airline Tangibles, Terminal Tangibles, Personnel Services, Empathy, and Image. The Cronbach's Alpha coefficients for each construct demonstrate the internal consistency and reliability of the corresponding set of items. The results indicate satisfactory reliability levels for all constructs, with values ranging from .706 (Image) to .811 (Empathy). Additionally, the overall scale comprising all questions exhibits high internal consistency, as evidenced by a Cronbach's Alpha coefficient of .891. These reliability estimates ensure the robustness of the measurement instruments used in the research and support the validity of the findings.

Table 1: Reliability of constructs

Constructs	Cronbach's Alpha
Airline Tangibles	.801
Terminal Tangibles	.785
Personnel Services	.796
Empathy	.811
Image	.706
All Questions	.891

## 4. Result and Discussion

Table 2 shows that the participation of female respondents was more than that of male respondents (Male=30%, Female=70%). Similarly, 15% respondents' educations were below bachelor, 40% did bachelor and 42% did above bachelor degree. Most of the participant used domestic airlines to visit family and friends. Out of 40 respondents more than 50% were married, just above 40% were unmarried while remaining were divorced.

Table 2: Passengers' demographic attributes

Attributes	Distribution	Frequency	%
Gender	Male	12	30
	Female	28	70
Age	below 20	4	10.0
	20-30	13	32.5
	31-40	13	32.5
	above 40	10	25.0
Education level	Below bachelor	9	22.5
	Bachelor	18	45.0
	Above bachelor	13	32.5
Marital status	Unmarried	17	42.5
	Married	21	52.5
	Divorced/widow	2	5.0
Purpose of travel	Business/Work	6	15.0
	Vacation	8	20.0
	Visiting family and friends	22	55.0
	Other reasons	4	10.0
N=40			

Table 3 presents the descriptive statistics for various variables in the study. The mean values reveal the average responses on a Likert scale, where higher values indicate stronger agreement. Passengers showed agreement with Airline Tangibles, Personnel Services, Empathy, and overall Passenger Satisfaction. However, they disagreed with statements related to Terminal Tangibles and Image.

Table 3: Descriptive statistics

Variables	Mean	Std. Deviation	Result
Airline Tangibles	4.01	.502	Agree
Terminal Tangibles	2.09	.895	Disagree
Personnel Services	3.87	.332	Agree
Empathy	2.87	.952	Agree
Image	2.02	.462	Disagree
Passenger Satisfaction	3.90	.735	Agree

The regression equation model:

$$Y = 2.88 + 0.411X_1 + 0.246X_2 + 0.074X_3 + 0.398X_4 + 0.106X_5 + e_t$$

Where,

Y=customer satisfaction,

$X_1$ =Airline Tangibles,

$X_2$ =Terminal Tangibles,

$X_3$ =Personnel Services,

$X_4$ =Empathy,

$X_5$ =Image,

$e_i$ =error term.

$\alpha=2.88$ ,  $\beta_1=0.411$ ,  $\beta_2=0.246$ ,  $\beta_3=0.074$ ,  $\beta_4=0.398$ ,  $\beta_5=0.106$  are the regression coefficient of respected independent variables.

Table 4: Regression results

R	R Square	SEE	F	Sig
.710	.501	.863	98.336	.000
(Constant)	$\beta$	SE	T	.000
	2.88			
Airline Tangibles	.411	.114	4.233	.000
Terminal Tangibles	.246	.053	0.897	.355
Personnel Services	.074	.0758	3.562	.000
Empathy	.398	.065	4.528	.000
Image	.106	.07	0.185	.201

Table4 shows that 50.1% of passengers' satisfaction is explained by five dimensions of service quality. The F-statistic (98.336,  $p < .001$ ) demonstrates the overall statistical significance of the model. Among the independent variables, Airline Tangibles, Personnel Services, and Empathy, were found to significantly influence customer satisfaction ( $p < .05$ ). However, Terminal Tangibles and Image did not show a statistically significant effect on customer satisfaction ( $p > .05$ ).

Suresh et al. (2017) concluded that customers are more satisfied with tangible services followed by responsiveness, reliability, empathy and assurance in Indian domestic airlines. When assessing the impact of service quality on customer satisfaction airline tangibles seems to effect customer satisfaction whereas terminal tangible does not seems to have effect on customer satisfaction. Thapa et al. (2020) revealed that reliability does not impact on customer satisfaction in context of Nepal. Findings of this study have shown that better quality of aircrafts and terminal tangibles leads to enhanced customer satisfaction in airline industry. These findings are in line with the previous studies in this field. For example, Ali et al. (2015) and Nadiri et al. (2008) also observed that quality of terminal tangibility have a high influence on passengers' satisfaction. Farooq et al. (2018) found that personal service, tangibles, and image play a significant role in influencing customer satisfaction. According to the Ahmad et al. (2023), personnel service has a substantial impact on customer satisfaction. In the context of Nepal, factors such as airline tangibles, personnel service, and empathy were found to have an impact on customer satisfaction, while image and terminal tangibles had limited influence. These findings align with studies conducted by Bakir (2023) and Scheffler (2018), where all dimensions were shown to positively impact customer satisfaction. Furthermore, the positive responses regarding personal service, clear cabin announcements, and willingness of cabin crew to assist passengers, signify the importance of courteous and effective communication during flights. Terminal tangibility emerged as a significant factor, with respondents expressing dissatisfaction with the lack of sufficient shops and effective signs. Addressing these concerns can contribute to enhanced terminal experiences and subsequently improve overall customer satisfaction. Additionally, the negative perception of the airline's image, particularly concerning outdated

plane designs, highlights the importance of maintaining a modern and appealing brand image to meet customer expectations. Domestic airlines have some qualities, such as clean plane seats, prompt personal service, and swift baggage processing, according to the results. However, there are several issues to be concerned about. Addressing these issues is critical for increasing passenger happiness and long-term loyalty.

## 5. Conclusions

By using the AIRQUAL model, the study contributes to the existing literature on service quality in the airline industry. The study confirms the importance of various dimensions of service quality, such as tangibles, empathy, and image, in influencing customer satisfaction. This adds to the body of knowledge on service quality and customer satisfaction in the airline industry, particularly in the context of domestic airlines in Nepal. The study has significant implications for domestic airlines in Nepal. The findings suggest that improving service quality is crucial for enhancing customer satisfaction. Specific areas requiring attention include terminal tangibility, empathy, and flight safety. The study emphasizes the need for domestic airlines to enhance the terminal experience. Passengers expressed dissatisfaction with the lack of sufficient shops and effective signs in the terminal, suggesting that enhancing these terminal tangibles can contribute to improved customer satisfaction. Additionally, the negative perception of the airline's image, particularly concerning outdated plane designs, highlights the importance of maintaining a modern and appealing brand image to meet customer expectations. The study revealed that airline tangibles, personnel services, and empathy significantly influenced customer satisfaction. Passengers showed agreement with these dimensions of service quality, indicating that factors such as clean plane seats, prompt personal service, and swift baggage processing contribute to increased passenger happiness and long-term loyalty. These findings are consistent with previous studies in the field, which have also observed the high influence of terminal tangibility on passengers' satisfaction. The regression analysis showed that 50.1% of passengers' satisfaction is explained by the five dimensions of service quality. This demonstrates the overall statistical significance of the model and highlights the importance of considering multiple factors when assessing customer satisfaction in the airline industry. The study implicates addressing issues related to terminal tangibility and image, while focusing on improving airline tangibles, personnel services, and empathy, can lead to enhanced customer satisfaction in the airline industry. These findings align with previous research and emphasize the importance of providing a modern and appealing brand image, as well as delivering high-quality services throughout the passenger journey. By addressing these factors, airlines can increase passenger happiness and foster long-term loyalty.

## References

Abdel Rady, H. (2018). Measuring airline service quality using airqual model: A study applied to egyptair. *International Journal of Heritage, Tourism and Hospitality*, 12(1), 271– 290. [https://doi.org/https://doi.org/10.21608/IJHTH.2018.31517](https://doi.org/10.21608/IJHTH.2018.31517)

Ahmad, W., Waheed, A., Arif, F., Jafar, R. M. S., & Fatima, N. (2023). Exploring the linkage between service quality and customer satisfaction in the chinese air industry during the covid-19 pandemic. *International Journal of Electronic Customer Relationship Management*, 14 (1), 1–19.

Ali, F., Dey, B. L., & Filieri, R. (2015). An assessment of service quality and resulting customer satisfaction in pakistan international airlines: Findings from foreigners and overseas pakistani customers. *International Journal of Quality & Reliability Management*, 32(5), 486–502. [https://doi.org/https://doi.org/10.1108/IJQRM-07-2013-0110](https://doi.org/10.1108/IJQRM-07-2013-0110)

Bakır, M. (2023). The relationship between service quality and customer satisfaction in the airline industry: A meta-analysis study. In *Measuring consumer behavior in hospitality for enhanced decision making* (pp. 230–250). IGI Global.

Bari, S., Bavik, A., Ekiz, H., Hussain, K., & Toner, S. (2001). Airqual: A multiple-item scale for measuring service quality, customer satisfaction, and repurchase intention. *HOS- 414 Graduation Project (Thesis)*, 1–104.

Bastola, D. P. (2017). Analysis of the aviation industry as a growth sector of economy: A study of nepali aviation industries. *International Journal of Advanced Research and Publications*, 1 (2), 70–75.

Biswakarma, G., & Gnawali, A. (2021). Service quality of domestic airlines in the face of covid-19 in nepal. *International Journal of Scientific Research and Management*, 9 (2), 2061–2171. <https://doi.org/https://doi.org/10.18535/IJSRM/V9I2.EM04>

Boetsch, T., Bieger, T., & Wittmer, A. (2011). A customer-value framework for analyzing airline services. *Transportation Journal*, 50(3), 251–270. <https://doi.org/https://doi.org/10.5325/TRANSPORTATIONJ.50.3.0251>

Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of marketing*, 56 (3), 55–68. <https://doi.org/https://doi.org/10.1177/002224299205600304>

Devkota, N., Paudel, U. R., & Bhandari, U. (2020). Tourism entrepreneurs' expectation from the provincial government in touristic city—pokhara, nepal. *Journal of Hospitality and Tourism Insights*, 3 (3), 329–351.

Ekiz, E., Hussain, K., & Bavik, A. (2006). Perceptions of service quality in north cyprus national airline.

Farooq, M. S., Salam, M., Fayolle, A., Jaafar, N., & Ayupp, K. (2018). Impact of service quality on customer satisfaction in malaysian airlines: A pls-sem approach. *Journal of Air Transport Management*, 67, 169–180. <https://doi.org/https://doi.org/10.1016/J.RTBM.2014.04.001>

Kotler, P. (2003). *Marketing management*. Prentice Hall. [https://books.google.com.ng/books?id=BW%5C\\_DQgAACAAJ](https://books.google.com.ng/books?id=BW%5C_DQgAACAAJ)

Longtail-e-media. (2023). Complete list of domestic airlines in nepal: Updated in 2023. <http://www.nepaltrekkinginhimalaya.com/pages/list-of-domestic-airlines-in-nepal>

Manani, T. O., Nyaoga, R. B., Bosire, R. M., Ombati, T. O., & Kongere, T. O. (2013). Service quality and customer satisfaction at kenya airways ltd. *European Journal of Business and Management*, 5, 170–179.

Nadiri, H., Hussain, K., Ekiz, E. H., & Erdogan, S. (2008). An investigation on the factors influencing passengers' loyalty in the north cyprus national airline. *The TQM Journal*. <https://doi.org/https://doi.org/10.1108/17542730810867272>

Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of service quality. 1988, 64(1), 12–40.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41–50.

Park, J. W., Robertson, R., & Wu, C.-L. (2005). Investigating the effects of airline service quality on airline image and passengers' future behavioural intentions: Findings from australian international air passengers. *Journal of Tourism Studies*, 16(1), 2–11.

Robledo, M. A. (2001). Measuring and managing service quality: Integrating customer expectations. *Managing Service Quality: An International Journal*, 11(1), 22–31. <https://doi.org/https://doi.org/10.1108/09604520110379472>

Scheffler, J. (2018). The relationship of service quality and customer satisfaction in the airline industry and the moderating effect of the airline type.

Suresh, S., Balachandran, T., & Sendilvelan, S. (2017). Empirical investigation of airline service quality and passenger satisfaction in india. *International Journal of Performativity Engineering*, 13(2), 109.

Susilo, A., Abadi, M. K. R., Sahroni, A., & Afif, M. (2022). The influence of service quality towards customer satisfaction on garuda airline of yogyakarta international airport on pandemic covid-19. *Al Tijarah*, 8(1), 1–14.

Thapa, S., Devkota, N., & Paudel, U. R. (2020). Effect of service quality on customer satisfaction of domestic airlines in nepal. *Quest*, 2 (2), 240–250. <https://doi.org/https://doi.org/10.3126/qjmss.v2i2.33285>

Usha, P., & Kusuma, E. (2017). A study on survive quality and passenger satisfaction on air india services. *International Journal of Advance Research, Ideas And Innovations In Technology*, 3 (4),534–546.

Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of consumer research*, 18(1), 84–91.