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Article

Elevating brand loyalty: Deciphering the impact of airline service quality and customer satisfaction in Bangkok's aviation industry: Case study low-cost airlines

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Abstract: This research investigates the relationship between the quality of airline services, customer satisfaction, and brand loyalty with low-cost airlines in Bangkok's aviation business. It uses structural equation modeling (SEM) to examine the replies of 521 passengers. The study demonstrates a robust and favorable correlation between the quality of service and customer satisfaction, with a direct impact coefficient of 0.961. Furthermore, service quality directly (0.708) and indirectly (0.284) impact brand loyalty. These impacts are mediated by customer satisfaction, which directly affects brand loyalty with a correlation of 0.296. The model explains 92.3% and 99.0% of the variation in customer satisfaction and brand loyalty, respectively, suggesting a robust and reliable match. The demographic study reveals that the predominant group of participants consists of well-educated, middle-income women who regularly use airline services. These results highlight the importance of service quality in improving customer satisfaction and promoting brand loyalty among travelers. Airlines should emphasize the ongoing enhancement of service quality and customer satisfaction to sustain their competitive edge. This research enhances the existing body of knowledge by emphasizing the intermediate function of customer satisfaction and presenting detailed observations relevant to Bangkok's aviation industry, providing guidance for infrastructural development and investment. It also offers practical suggestions for managing service quality and implementing customer retention strategies.

Keywords: service quality; low-cost airlines; brand loyalty; infrastructural development

1. Introduction

The COVID-19 pandemic has significantly impacted the worldwide aviation sector, causing considerable changes in operating practices and passenger expectations. This impact is particularly notable in Bangkok, where aviation is crucial to the economy (Maneenop and Kotcharin, 2020). With the escalation of the pandemic, airlines in Bangkok were confronted with the pressing task of guaranteeing passenger safety in the context of heightened concerns about infection (WHO, 2020). To address this, stringent safety protocols were promptly implemented to ensure secure travel and uphold public confidence (Garaus and Hudáková, 2022). The measures implemented included improved cleaning processes, compulsory mask usage, seating arrangements that ensured social distancing, health exams before boarding, contactless services, and

better air filtration systems (CNN, 2020; Reuters, 2020; The Point Guy, 2020). Although these actions have been essential in dealing with immediate health issues, they have also caused substantial disruptions in service delivery, impacting customer views of service quality.

The demand for air travel in Bangkok experienced a significant decrease due to stringent travel restrictions, compulsory quarantines, and widespread apprehension about getting the virus. As a result, airlines had to modify their operational capacity and flight schedules (Dunford et al., 2020; Kungwola, 2023). The developments have unavoidably altered the airline service environment, expanding the definition of service excellence to include efficient safety management and traditional service measures. Exploring this previously unexplored aspect of service quality is essential since it considerably impacts customer happiness and loyalty, particularly during the pandemic.

This study examines the effects of COVID-19 safety measures and changes in service dynamics on customer satisfaction and brand loyalty in Bangkok's airline industry. The objective is to determine whether safety and service quality improvements have contributed to maintaining or even increasing customer loyalty amidst these difficult circumstances. This research aims to contribute to the academic literature and provide practical insights for airlines seeking to improve their competitive advantage and market share in a post-pandemic environment by utilizing the SERVQUAL model. This inquiry is vital because it deals with maintaining a careful balance between strict safety protocols and excellent service standards to cultivate strong consumer loyalty to the brand. This is a critical issue for airlines as they navigate the intricate dynamics of recovering from the pandemic and restoring customer confidence.

1.1. Research objectives

1) To assess the impact of airline service quality dimensions on customer satisfaction in Bangkok's aviation industry.
2) To evaluate the role of customer satisfaction in enhancing customer brand loyalty to airlines in Bangkok.
3) To identify and analyze potential strategies that airlines in Bangkok can adopt to improve service quality and customer satisfaction, thereby fostering greater customer brand loyalty.

1.2. Research questions

1) How does airline service quality influence customer satisfaction among passengers utilizing airlines in Bangkok?
2) What is the relationship between customer satisfaction and brand loyalty in Bangkok's aviation sector?
3) Does customer satisfaction mediate the relationship between airline service quality and customer brand loyalty in Bangkok's aviation industry?

1.3. Research hypothesis

- H_1: Airline service quality has a positive direct influence on customer

satisfaction.

- H_2: Airline service quality has a positive direct influence on brand loyalty.
- H_3: Customer satisfaction has a positive direct influence on brand loyalty.
- H_4: Airline service quality has a positive indirect influence on brand loyalty via customer satisfaction.

2. Literature review

2.1. The concept and theory of airline service quality

Airline service quality is crucial for airlines to maintain their competitive edge in the aviation industry (Brady and Cronin, 2001). The concept of airline service quality refers to passengers' overall experience with the airline, from booking their tickets to arriving at their destination. The theory of airline service quality is based on the understanding that the quality of service an airline provides significantly impacts customer satisfaction, brand loyalty, and, ultimately, the airline's success. The concept is often measured using on-time performance, baggage handling, cabin cleanliness, in-flight amenities, and customer service (Oliver, 1980). One of the primary theories of airline service quality is the SERVQUAL model. This model identifies five service quality dimensions: reliability, responsiveness, assurance, empathy, and tangibles. These dimensions assess an airline's overall quality of service (Lippitt et al., 2023).

2.2. SERVQUAL model

The SERVQUAL model, created by marketing scholars Valarie Zeithaml, Leonard Berry, and A. Parasuraman in 1988, is a fundamental framework for evaluating the quality of service and customer satisfaction in many sectors, such as aviation. The model initially consisted of ten dimensions: tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding, and access. However, it has been refined to focus on five key aspects that effectively measure service quality. These sources have contributed to the refinement of the model: Bhasin (2022), Berry et al. (1990), Lee and Kim (2022), Parasuraman et al. (1985), and Zeithaml (1988). The relationship between the quality of airline services and customer satisfaction is significant for building loyalty in Bangkok's highly competitive aviation market. This region is influenced by cultural values, such as hospitality, which significantly impact customer expectations and perceptions (Huang, 2023; Wongcharoenkul and Suntrayuth, 2023). Research consistently shows that enhancing the SERVQUAL dimensions results in increased customer satisfaction. This emphasizes the direct influence of service attributes, such as in-flight comfort and staff responsiveness, on passenger contentment (An and Noh, 2009; Chen and Chang, 2005; Limberger et al., 2021; Sultan and Wong, 2010).

Furthermore, the COVID-19 pandemic has introduced an additional aspect to this situation, where health and safety protocols have become essential for ensuring client contentment. Airlines that successfully adopt and convey these procedures will likely sustain or enhance consumer satisfaction during difficult periods, fostering brand loyalty amidst increased health concerns (CNN, 2020; Garaus and Hudáková, 2022; Reuters, 2020).

Therefore, this literature highlights the crucial significance of complete service quality in influencing customer happiness and loyalty in Bangkok's aviation business. This implies that airlines must adjust to conventional service standards and emerging safety requirements to succeed after the pandemic.

2.3. The concept of customer satisfaction

Customer satisfaction in the airline business is a complex concept that has received significant attention in academic research, especially in Bangkok's aviation sector. This literature study explores the many aspects of customer satisfaction and their impact on the industry.

Various aspects, such as service quality, pricing, safety, and convenience, impact customer satisfaction in the airline business (Chen and Chang, 2005; Sultan and Wong, 2010). The distinctive cultural and economic environment significantly influences consumer expectations and views within Bangkok's specific setting. For example, the intense focus on hospitality and service in Thai culture might raise passengers' standards for the politeness and attention of airline crew (Wongcharoenkul and Suntrayuth, 2023). The study has centered on the association between the quality of service and customer satisfaction. Research shows that increased perceived service quality levels result in better customer satisfaction (Aksoy et al., 2020; Parasuraman et al., 1988). Seating comfort, in-flight amenities, and the speed of check-in and boarding operations are essential aspects that determine satisfaction in Bangkok's aviation business (Kim et al., 2021).

The COVID-19 pandemic has brought forth new aspects of consumer satisfaction, with a particular emphasis on health and safety protocols (Ahmad et al., 2023). Airlines that have effectively adopted and conveyed safety rules, including expanded cleaning processes and social distancing measures, have managed to maintain or even boost consumer satisfaction in these problematic circumstances (CNN, 2020; Garaus and Hudáková, 2022).

Moreover, the significance of technology in augmenting client satisfaction has been progressively important. Using digital platforms for booking, check-in, and customer support has enhanced convenience and effectiveness, increasing satisfaction levels (Wong and Kao, 2009). Many elements, such as service quality, cultural expectations, safety concerns, and technical improvements, impact customer satisfaction in Bangkok's aviation business. These factors interact in a complicated manner to shape the overall level of customer satisfaction. Comprehending and dealing with these elements is essential for airlines operating in this area to improve customer satisfaction and brand loyalty.

2.4. The concept of brand loyalty

Brand loyalty is crucial in determining airline profitability and competitiveness, especially in Bangkok's dynamic and culturally diverse aviation sector. This literature study examines the notion of brand loyalty and the factors that influence it within a particular industrial context.

Brand loyalty in the airline business is defined by customers consistently choosing to fly with a particular airline and having a favorable opinion of that airline's

brand. The elements that impact it include customer satisfaction, perceived value, service quality, and brand image (Aaker, 1991; Oliver, 1999). In Bangkok's extremely competitive aviation industry, airlines aim to cultivate brand loyalty by providing superior service quality and assuring customer satisfaction (Kim et al., 2021).

Studies have shown that customer satisfaction is crucial in determining brand loyalty within the airline business. Content customers are more inclined to demonstrate brand loyalty behaviors, such as making repeated purchases, spreading good word-of-mouth, and resisting moving to rivals (Aksoy et al., 2020; Chen and Chang, 2005). Within the aviation industry in Bangkok, delivering a service experience that is culturally sensitive and beyond customers' expectations may significantly improve satisfaction and, as a result, foster brand loyalty (Chaisawat, 2007).

The perception of a brand, known as brand image, is crucial in influencing brand loyalty. An influential and optimistic brand image has the potential to establish emotional connections and confidence, resulting in increased levels of allegiance (Baloglu and McCleary, 1999; Keller, 1993). Airlines operating in Bangkok can strengthen their brand image and develop brand loyalty among local and international customers by capitalizing on the city's reputation as a bustling and inviting destination.

The emergence of digital technology has brought forth new aspects of brand loyalty (Azhari et al., 2023). Airlines rely heavily on social media and online platforms to effectively connect with consumers, establish brand communities, and strengthen brand loyalty by utilizing individualized interactions and focused marketing efforts (Buhalis and Law, 2008; Wong and Kao, 2009).

Overall, brand loyalty in Bangkok's aviation business is shaped by an intricate combination of elements, such as customer satisfaction, brand perception, and digital interaction. To retain a competitive advantage in the dynamic airline industry, airlines must comprehend and effectively tackle these aspects to foster customer brand loyalty.

2.5. The concept of low-cost airlines

The emergence of low-cost airlines has dramatically transformed global aviation by offering more cost-effective travel alternatives. Research on this subject outlines some essential characteristics that distinguish low-cost carriers (LCCs) from typical full-service airlines (Bachwich and Wittman, 2017). This review will examine these distinctive principles, utilizing various scholarly sources to clarify how low-cost airlines can retain reduced ticket prices while still profitable.

Cost structure: One of the main distinctions between low-cost and standard airlines is their cost structures. Low-cost airlines generally have reduced operating costs due to improved aircraft utilization, decreased personnel expenses, and simplified pricing structures without additional amenities. Low-cost carriers (LCCs) can provide considerably cheaper ticket pricing by reducing costs related to additional services (O'Connell and Williams, 2005).

Route and network strategy: Low-cost carriers prioritize point-to-point networks over the hub-and-spoke architecture commonly employed by traditional airlines. This approach circumvents the intricacy and expenses linked to significant transportation centers and enables more straightforward connections between cities. In addition, low-

cost carriers (LCCs) sometimes choose to operate in secondary airports that are less crowded. These airports usually offer lower landing fees and less air traffic, resulting in shorter ground time and more efficient aircraft use (Hu et al., 2024).

Pricing strategy: Pricing is a crucial factor that sets things apart. Budget airlines frequently utilize assertive pricing tactics encompassing fees for supplementary amenities such as luggage, expedited boarding, and onboard meals. The a la carte pricing model enables passengers to select and pay for certain services based on their preferences, potentially resulting in reduced expenses for the traveler (Wu et al., 2024).

Fleet homogeneity: Low-cost carriers (LCCs) often gain advantages by maintaining a uniform fleet of only one or two specific aircraft types. Standardization streamlines maintenance lowers spare parts expenses and enables more flexible scheduling. Additionally, it facilitates more convenient training for pilots and cabin personnel, significantly reducing operational expenses (Mantin et al., 2024).

Service offering: Low-cost airlines provide limited in-flight services instead of full-service carriers. Passengers accept lower ticket rates at the expense of not receiving free in-flight meals, having restricted onboard entertainment options, and experiencing less legroom. Nevertheless, some budget airlines have recently implemented premium services or levels that provide extra luxuries at a higher price, combining the low-cost approach with some aspects of conventional service (Liu et al., 2024).

Operational efficiency: Utmost importance for low-cost carriers (LCCs), as seen by their ability to achieve fast turnaround times and maintain high aircraft utilization rates. Low-cost airlines aim to maximize the time their aircraft spend in the air to generate as much income as possible (Rahn et al., 2024).

Market demographics: Low-cost carriers (LCCs) typically focus on distinct consumer demographics compared to full-service airlines. They mostly appeal to cost-conscious travelers, such as younger passengers, leisure travelers, and small-business owners, who are more inclined to favor affordability over convenience or comfort (Gualini et al., 2024).

In conclusion, this study's conceptual framework was meticulously crafted, drawing on comprehensive theories and established concepts (see **Figure 1**).

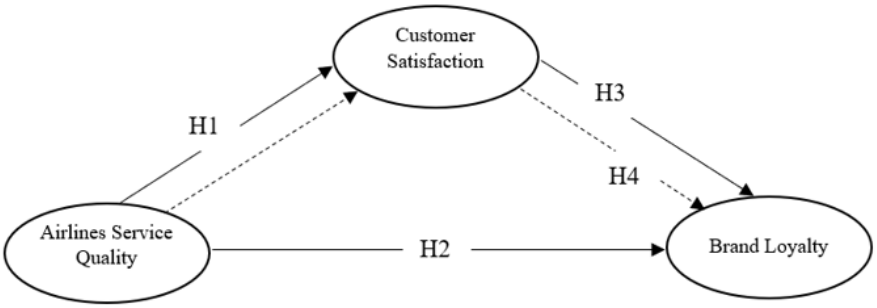

Figure 1. Conceptual framework.

3. Research methodology

The researchers studied customers who regularly used low-cost airlines, namely Air Asia, Nok Air, Thai Lion Air, and Vietjet Air, all based in Bangkok, Thailand. The

population is unknown. The sample size for the population was calculated using the G*Power software program, resulting in a total of 521 individuals. The effect size is 0.3, the statistical power is 0.95, and the degrees of freedom (df) are determined using the formula [NI(NI + 1)/2 − NP], where NI is equal to 13, and NP is equal to 29. By substituting these numbers into the equation, the computation simplifies to 13 multiplied by the sum of 13 and 1, divided by 2, and then subtracted by 29. This yields a result of df = 62, as Schumaker and Lomax (2010) stated. The study used Structural Equation Modeling (SEM) using AMOS licensed software version 24 to illustrate the significant influence of airline service Quality, Customer Satisfaction, and brand loyalty on customers in Bangkok, Thailand.

This study used stratified random sampling (Ghosh, 1958) to choose a sample size of 521 from four airlines. The researchers separated the sample equally among the four airlines, resulting in 131 questionnaires per airline. We sent the research assistants to survey customers who regularly used low-cost airlines at Don Mueang Airport in Bangkok, Thailand (Condition of regularly more than five times yearly).

3.1. Research design

The questionnaire was carefully crafted to correspond with essential elements derived from the SERVQUAL model and relevant literature, specifically targeting tangibles, reliability, responsiveness, assurance, and empathy. These factors are directly associated with customer satisfaction and loyalty. The items for each construct were designed to measure distinct aspects of airline service quality (see **Table 1**). A Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used to quantify the responses. The questionnaire was subjected to pilot testing using a representative sample to ensure it was clear, reliable, and valid. This process resulted

Table 1. The synthesized variables.

Variable	Latent variables	Observed variables
Independent Variables (Exogenous Variable)	Airlines Service Quality (Parasuraman et al., 1988; Oliver, 1980)	In-flight Service Quality (AS1)
		Ground Service Quality (AS2)
		Flight Operation Quality (AS3)
		Price Fairness (AS4)
		Assurance (AS5)
Independent Variables (Endogenous Variable)	Customer Satisfaction (Parasuraman et al., 1985; Sultan and Wong, 2010)	Customer Expectations (CS1)
		Cultural Factors (CS2)
		Service Recovery (CS3)
		Frequency of Use (CS4)
Dependent variable (Endogenous Variable)	Brand Loyalty (Oliver, 1980)	Recent Purchase Activity (BL1)
		Repurchase Intention (BL2)
		Intention to Stay (BL3)
		Recommendation Intention (BL4)

in future improvements being made depending on the input received. The meticulous questionnaire design guarantees the precise assessment of the desired variables and aligns with the theoretical framework outlined in the literature. It specifically

investigates the influence of different aspects of service quality on customer satisfaction and loyalty in the aviation sector. Prior to performing the primary survey, a preliminary investigation was carried out using 30 questionnaires to evaluate the dependability. The findings indicated a Cronbach's alpha coefficient of 0.914.

3.2. Data collection

The study was issued to a heterogeneous group of passengers who regularly avail themselves of services offered by numerous airlines operating within Bangkok's aviation industry. The respondents were chosen using a stratified selection technique to guarantee that the four leading low-cost airlines identified in the survey were adequately represented. Each participant was instructed to contemplate their experiences from the previous year and provide distinct feedback regarding their interactions with each airline. Participants were explicitly directed to report the number of flights they had taken with each airline, classifying their usage frequency into predetermined ranges: 5–6 times a year, 7–8 times annually, 9–10 times annually, and beyond ten times annually. Throughout the study period from November 2023 to January 2024, data was gathered utilizing a questionnaire.

4. Result

The demographic analysis of this research indicated that most participants were females, comprising 283 individuals or 54.3% of the sample. The male population consisted of 213 individuals, accounting for 40.8%. In contrast, the LGBTQI+ community constituted a lower percentage, with 25 individuals or 4.7%. The education background of the majority, consisting of 315 individuals, is a Master's degree, which accounts for 60.4%. A total of 181 individuals, accounting for 34.7%, have a Bachelor's degree. 25 individuals have completed postgraduate studies, which accounts for 4.7% of the total. Most individuals, accounting for 52.9%, earn a monthly income between 1001 and 1250 US. Dollar. This is followed by 23.9% of persons who earn between 976 and 1000 US. Dollar. Per month. Additionally, 14.3% of individuals earn between 830 and 975 US. Dollar. Per month, while 8.6% earn 1250 US. Dollar or higher. The job title primarily consists of 321 individuals, accounting for 61.6%. General staff comprises 125 individuals, or 23.9% of the total, while 75 individuals, or 14.3%, did not specify their preferred job title. The term "frequently used" refers to a frequency of 5–6 times per year for 392 individuals, which accounts for 75.2% of the total. Additionally, 85 individuals use it 7–8 times per year. The percentage of persons who engage in the activity 9–10 times a year is 16.3%, while the percentage of individuals who engage in the activity 6.3% is 33 individuals. Additionally, the percentage of individuals who engage in the activity more than ten times yearly is 2.1%, corresponding to 11 individuals.

Firstly, the researcher examines the associations between the observed variables and presents the findings in **Table 2**.

Table 2. Correlation matrix.

		SI	SR	SRE	SA	SE	CI	CG	CF	CP	LR	LRE	LI	LRC
SQ1	Pearson Correlation	1	0.902	0.925	0.912	0.881	0.866	0.895	0.778	0.876	0.928	0.901	0.863	0.919
	Sig. (2-tailed)	-	0.000	0.000	0.000	0.003	0.000	0.000	0.021	0.000	0.000	0.000	0.001	0.000
SQ2	Pearson Correlation	-	1	0.876	0.853	0.841	0.851	0.868	0.762	0.842	0.895	0.860	0.833	0.908
	Sig. (2-tailed)	-	-	0.000	0.002	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.002	0.000
SQ3	Pearson Correlation	-	-	1	0.921	0.900	0.857	0.882	0.751	0.875	0.926	0.902	0.855	0.909
	Sig. (2-tailed)	-	-	-	0.000	0.000	0.000	0.000	0.026	0.000	0.000	0.000	0.000	0.000
SQ4	Pearson Correlation	-	-	-	1	0.888	0.842	0.891	0.804	0.882	0.916	0.902	0.881	0.901
	Sig. (2-tailed)	-	-	-	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SQ5	Pearson Correlation	-	-	-	-	1	0.806	0.836	0.700	0.816	0.865	0.859	0.833	0.859
	Sig. (2-tailed)	-	-	-	-	-	0.000	0.000	0.035	0.004	0.000	0.000	0.002	0.000
CS1	Pearson Correlation	-	-	-	-	-	1	0.900	0.849	0.881	0.860	0.861	0.844	0.894
	Sig. (2-tailed)	-	-	-	-	-	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CS2	Pearson Correlation	-	-	-	-	-	-	1	0.874	0.924	0.918	0.861	0.858	0.893
	Sig. (2-tailed)	-	-	-	-	-	-	-	0.000	0.000	0.000	0.000	0.000	0.000
CS3	Pearson Correlation	-	-	-	-	-	-	-	1	0.852	0.803	0.735	0.762	0.786
	Sig. (2-tailed)	-	-	-	-	-	-	-	-	0.000	0.000	0.011	0.013	0.000
CS4	Pearson Correlation	-	-	-	-	-	-	-	-	1	0.930	0.829	0.807	0.858
	Sig. (2-tailed)	-	-	-	-	-	-	-	-	-	0.000	0.000	0.000	0.000
BL1	Pearson Correlation	-	-	-	-	-	-	-	-	-	1	0.910	0.868	0.920
	Sig. (2-tailed)	-	-	-	-	-	-	-	-	-	-	0.000	0.002	0.000
BL2	Pearson Correlation	-	-	-	-	-	-	-	-	-	-	1	0.918	0.952
	Sig. (2-tailed)	-	-	-	-	-	-	-	-	-	-	-	0.000	0.000
BL3	Pearson Correlation	-	-	-	-	-	-	-	-	-	-	-	1	0.953
	Sig. (2-tailed)	-	-	-	-	-	-	-	-	-	-	-	-	0.000
BL4	Pearson Correlation	-	-	-	-	-	-	-	-	-	-	-	-	1
	Sig. (2-tailed)	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2 illustrates Pearson correlation coefficients that measure the relationship between factors associated with airline service quality, customer satisfaction, and brand loyalty. These coefficients range from +1 (indicating a perfect positive correlation) to −1 (indicating a perfect negative correlation). The correlations between the variables are positive and statistically significant (Sig. = 0.000, N = 521), suggesting that if one variable grows, the other variable also increases. Nevertheless, the high coefficients (with the majority over 0.800 and several approaching or surpassing 0.900) indicate the possibility of multi-collinearity. In order to tackle this issue, it is advisable to compute the Variance Inflation Factor (VIF) and Tolerance for each variable to evaluate the presence of multi-collinearity. All variables were tested for VIF values of less than five in this research and tolerance values of more than 0.05. This indicates that all variables exhibit non-multicollinearity (Frost, 2023). The robust associations suggest that enhancing service quality will likely boost customer satisfaction and brand loyalty in this group of 521 respondents.

Table 3 presents a structural equation modeling (SEM) analysis examining the

relationships between airline service quality, customer satisfaction, and brand loyalty (see **Figure 2**). The table is divided into two sections, with customer satisfaction and brand loyalty as the dependent variables. For the independent variable, airline service quality (ASQ), the table shows the total effects (TE), direct effects (DE), and indirect effects (IE) on both customer satisfaction and brand loyalty. The values represent standardized coefficients:

Table 3. The result of the structural equation model.

Dependent variables	**Customer satisfaction**			**Brand loyalty**		
Independent variable	**TE**	**DE**	**IE**	**TE**	**DE**	**IE**
Airline service quality	0.961	0.961	-	0.992	0.708	0.284
Customer satisfaction	-	-	-	0.296	0.296	-
R-square	0.923			0.990		

χ^2 =52.269, df = 37, χ^2/df =1.413, p = 0.049, GFI = 0.977, AGFI = 0.943, CFI = 0.998, TLI = 0.996, RMSEA = 0.036, RMR = 0.002, NFI = 0.994.

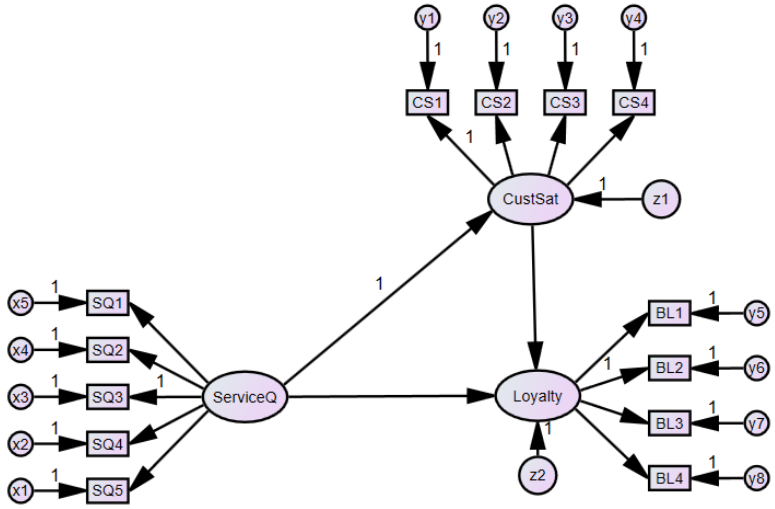

Figure 2. Structural equation modeling.

Figure 3. The result of the structural equation model.

ASQ has a powerful direct effect on customer satisfaction (TE = 0.961, DE = 0.961), indicating that improvements in service quality are highly likely to increase customer satisfaction. ASQ also has a total solid effect on brand loyalty (TE = 0.992), with a direct effect (DE = 0.708) and an indirect effect (IE = 0.284) through customer satisfaction. This suggests that service quality influences brand loyalty directly and indirectly via customer satisfaction. Customer satisfaction directly affects brand

loyalty (DE = 0.296), indicating that higher customer satisfaction contributes to increased brand loyalty (see **Figure 3**).

The *R*-square values show the proportion of variance explained in the dependent variables: The model explains 92.3% of the variance in customer satisfaction and 99.0% of the variance in brand loyalty, indicating a perfect fit.

χ^2 (chi-square) = 52.269 with 37 degrees of freedom (df), resulting in a χ^2/df ratio of 1.413, which is within the acceptable range (usually below 3 or 5). The *p*-value of 0.049 indicates statistical significance since it is lower than the threshold of 0.05. This is supported by the large sample size of over 200, as suggested by Hair et al. (2010). Therefore, the *p*-value is not serious. GFI (Goodness of Fit Index) = 0.977 and AGFI (Adjusted Goodness of Fit Index) = 0.943, close to 1, indicating a good fit. CFI (Comparative Fit Index) = 0.998 and TLI (Tucker-Lewis Index) = 0.996, both close to 1, suggesting an excellent fit. RMSEA (Root Mean Square Error of Approximation) = 0.036, below the threshold of 0.05, indicating a good fit. RMR (Root Mean Square Residual) = 0.002, very close to 0, indicating a good fit. NFI (Normed Fit Index) = 0.994, close to 1, indicating a good fit.

Overall, the results suggest that airline service quality has a strong positive impact on customer satisfaction and brand loyalty, with customer satisfaction also directly influencing brand loyalty (see **Table 4**). The model demonstrates an excellent fit to the data, supporting the hypothesized relationships.

Table 4. Summarizes the hypotheses.

Hypothesis	Description	Summarizes
H_1	Airline Service Quality has a positive direct influence on Customer Satisfaction.	Accepted
H_2	Airline Service Quality has a positive direct influence on Brand loyalty	Accepted
H_3	Customer Satisfaction has a positive direct influence on Brand loyalty	Accepted
H_4	Airline service quality has a positive indirect influence on brand loyalty via customer satisfaction.	Accepted

5. Conclusion

In this study, participants were primarily female participants, the majority of whom had Master's degrees and had monthly wages ranging from 40,001 to 45,000 Baht. Most participants were regular travelers who use airline services 5–6 times a year. The SEM study demonstrated a robust positive correlation between airline service quality and customer satisfaction, as well as between customer satisfaction and brand loyalty. More precisely, airline service quality directly impacted customer satisfaction (with a standardized coefficient of 0.961) and both direct and indirect impacts on brand loyalty, resulting in a total impact of 0.992. Customer satisfaction directly impacted brand loyalty, as shown by a standardized coefficient of 0.296. The model accounted for 92.3% of the variability in customer satisfaction and 99.0% in brand loyalty, suggesting a very accurate match. The chi-square test and goodness-of-fit indices such as GFI, AGFI, CFI, TLI, and additional fit metrics, including RMSEA, RMR, and NFI, proved the model is adequate.

This research aimed to investigate the influence of airline service quality on customer satisfaction and brand loyalty in Bangkok's aviation business. The results suggest that the quality of airline service considerably impacts customer satisfaction.

All aspects of service quality have a favorable effect on passengers' perceptions and experiences. Specifically, the impact of airline service quality on customer satisfaction was significant, underscoring the need to maintain exceptional service standards.

Moreover, the study uncovered a direct correlation between customer satisfaction and brand loyalty, indicating that contented consumers are more inclined to demonstrate brand loyalty toward an airline. This highlights the critical importance of customer satisfaction in increasing brand loyalty and suggests that airlines should emphasize strengthening satisfaction levels to retain customers.

The research also investigated the intermediary function of customer satisfaction in the correlation between service quality and customer brand loyalty. The findings verified that customer satisfaction functions as a mediator, signifying that the influence of service quality on brand loyalty is partly transmitted via satisfaction. Hence, airlines should prioritize tactics that optimize service quality and customer satisfaction to cultivate stronger customer brand loyalty.

Therefore, the study emphasizes the interdependence between airline service quality, customer satisfaction, and brand loyalty within Bangkok's aviation business. To build customer brand loyalty, airlines should implement strategies emphasizing the development of service quality and enhancing customer satisfaction. Using this strategy, the airline may establish a mutually beneficial cycle of positive feedback, resulting in advantages for both passengers and the company, thus securing a competitive advantage in the market.

6. Discussion

This study provides insight into the complex correlation between airline service quality, customer satisfaction, and brand loyalty in Bangkok's aviation business. Our study supports the importance of service quality in affecting customer satisfaction, which is consistent with the study by Zahraee et al. (2023), which said that customer satisfaction is the crucial aspect of the airline industry, as outlined in the conceptual framework presented by Parasuraman et al. (1988). The strong correlation between airline service quality and customer satisfaction, as shown by the standardized coefficient of .961, emphasizes the need for airlines to maintain exceptional standards across all aspects of service in order to meet and beyond passenger expectations.

Our study confirms the strong correlation between customer satisfaction and brand loyalty, consistent with earlier research by Ahmad et al. (2023), Gazi et al. (2024) and Lee and Kim (2022). This emphasizes the crucial role of customer satisfaction in cultivating brand loyalty. Our research expands on this knowledge by showing that customer satisfaction directly impacts brand loyalty and mediates service quality and brand loyalty. The mediation effect indicates that airlines may indirectly boost customer brand loyalty by improving service quality and increasing customer satisfaction.

The demographic analysis offers more insights into the characteristics of the study's participants, primarily female, well-educated, and frequent travelers. An accurate demographic profile is essential for comprehending the distinct requirements and preferences of the consumer base, which may guide focused service enhancements.

The examination of structural equation modeling (SEM) provides further evidence for the expected correlations since the model explains a substantial percentage of the variability in customer satisfaction (92.3%) and brand loyalty (99.0%). The goodness-of-fit indices, such as GFI, AGFI, CFI, TLI, RMSEA, RMR, and NFI, demonstrate that the model fits the data very well, confirming the strength of the postulated associations.

Although the exact relationships are expected to apply to full-service carriers, there may be differences in customer expectations due to the more extensive services and higher prices offered by these airlines. This suggests that the specific factors contributing to customer satisfaction may vary (Doganis, 2006; O'Connell and Williams, 2005). Therefore, full-service airlines may need to prioritize broader service features, such as improved in-flight services and individualized customer care, to fulfill their consumers' elevated expectations.

Given these discoveries, airlines in Bangkok's aviation sector should emphasize ongoing service quality enhancement and concentrate on tactics that amplify client pleasure. By using this strategy, companies may cultivate stronger consumer brand loyalty and establish a distinct advantage over their competitors in the market. Imroz (2023) suggested that the service quality and brand loyalty programs on airline travel could bring the airline business back from the crisis affected. This research emphasizes the interdependence of airline service quality, customer satisfaction, and brand loyalty within Bangkok's aviation business. The results emphasize the need for airlines to prioritize enhancing the quality of service and improving customer satisfaction as crucial tactics to cultivate customer brand loyalty and gain a competitive advantage in the market.

7. Novelty and contribution

This study makes a significant contribution to the field of service management by enhancing our understanding of airline service quality, customer happiness, and brand loyalty in Bangkok's aviation sector. Using structural equation modeling (SEM), this study examines the complex relationships between service quality, satisfaction, and loyalty, focusing on Bangkok, a significant Southeast Asian hub. The regional focus is essential because it enhances the global discussion on airline service quality by providing detailed insights relevant to an emerging market. This addresses a significant gap in the existing literature.

The research reaffirms the importance of customer satisfaction in the relationship between service quality and loyalty. Additionally, it presents a unique empirical proof of how this relationship functions within Bangkok's cultural and economic context. This enhanced comprehension aids in the improvement of current customer behavior models by demonstrating how specific elements impact the overall principles of service excellence. The study's results provide strong evidence that improving the quality of service to meet the specific needs of different demographic groups, especially the leading group of highly educated, middle-income women who frequently travel by air, can significantly increase customer happiness and loyalty. Additionally, the demographic analysis provides a pioneering viewpoint by defining and describing the leading consumer group in Bangkok's aviation sector, providing

airlines with practical insights to tailor their services. Adopting a customized strategy is crucial for cultivating more robust client connections and bolstering brand allegiance in a highly competitive setting.

This research provides a complex analytical framework that expands the use of the SERVQUAL model and assists airlines in making strategic decisions. The strategy offers a thorough plan for enhancing service delivery in the aviation business, which is closely tailored to meet consumer expectations and regional attributes. This approach prioritizes customers' needs and preferences, making it more customer-focused. This development is crucial for academic scholars and industry practitioners looking to comprehend and apply efficient service quality solutions in various market environments.

8. Suggestion for further research

1) Further research might explore the influence of other factors on the correlation between service quality, satisfaction, and brand loyalty. For example, analyzing the impact of perceived value, trust, and customer expectations might provide a more thorough comprehension of the elements influencing customer brand loyalty.
2) Conducting longitudinal research provides valuable insights into the dynamic evolution of the relationships between service quality, satisfaction, and brand loyalty. This is especially relevant when examining how these relationships are influenced by industry changes or external factors such as economic fluctuations or global events like the COVID-19 pandemic.
3) Comparing the results of Bangkok's aviation sector with those of other areas or nations might assist in identifying cultural or geographical disparities in consumer expectations and perceptions of service quality.
4) As airline services become more digitalized, future studies might investigate the effect of digital platforms and technologies on customer satisfaction and brand loyalty. This might include research on the efficacy of mobile apps, online check-in services, and social media involvement.
5) This study is currently focused on quantitative research. However, it would be beneficial to incorporate qualitative research methods such as interviews or focus groups in the future. These methods would provide a deeper understanding of the factors that influence customer satisfaction or brand loyalty and the specific aspects of service quality that passengers value the most.
6) Examining the influence of airlines' environmental and social sustainability policies on customer satisfaction and brand loyalty might be relevant, considering the increasing consumer demand for sustainable travel choices.

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