An Investigation into Improving Service Quality Distribution and Perceived Value in the Passenger Loyalty of Low-Cost Airlines in Thailand

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Abstract

Purpose: To study, analyze, and investigate how to improve the service quality distribution and perceived value of passenger loyalty in low-cost airlines in Thailand. **Research Design, data, and methodology:** The data was collected from low-cost airline passengers who had used low-cost airlines within Thailand more than twice in the last 12 months. In total, 632 questionnaires were received, representing 97.32%, and in-depth interviews were done using the semi-structured technique. The key informants were either executives or representatives from 4 low-cost airlines operating in Thailand. We utilized structural modeling techniques to examine the data relevant to the investigation. **Results:** The results show that low-cost airline passengers in Thailand have strong opinions about the perceived value of the passenger loyalty of low-cost airlines within this sector of the Thai air travel industry. The variables were sorted in order of importance and included passenger loyalty, satisfaction, trust, perceived value, and service quality distribution. The relationship between the service quality distribution variables and the significance in relation to passenger loyalty according to low-cost airlines in Thailand showed that service quality distribution had a positive effect on perceived value and that passenger satisfaction has a direct positive effect on passenger loyalty. **Conclusions:** The 8 QPSTL strategy is successful in terms of service quality distribution and passenger satisfaction, therefore it is an important aspect of low-cost airlines in Thailand.

Keywords: Service Quality Distribution, Perceived Value, Passenger Loyalty, Low-cost Airline.

JEL Classification Code: E44, F31, F37, G15

1. Introduction

Thailand has an attractive investment factor due to the demand for international tourism which has a high growth potential. This includes having a terrain that can be made into an air transportation hub in the ASEAN region. Promoting tourism in Asia is causing low-cost carriers in Thailand to engage in business expansion. The airport hub serves 20 airlines in Thailand that have received international Air Operator Certificates (AOC) and 7 airline operators that have received domestic Air Operator Certificates and 4 low-cost airlines. There are 6 airports controlled by the Kingdom's Airport Public Company Limited in Thailand and 23 airports operated by the

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Department of Aviation, totaling 29 airports to support passengers traveling within the different areas in Thailand and to and from other countries.

Currently, there is the capacity to increase the number of flights and passengers both domestically and internationally. The majority of users travel by low-cost airline.

Of the budget airlines that transport passengers on the regular domestic routes, Thai Air Asia has the highest market share with passengers totaling approximately 4.97 million, accounting for 35.7%. followed by Thai VietJet Air carrying 2.41 million passengers, accounting for 17.3%, and Nok Air, carrying 2.23 million passengers, accounting for 16.0%. The aviation business is highly competitive in order to enable it to adapt to the changing economic conditions from the former high fare rates of air travel. This has caused some airlines to charge cheaper fares by cutting some expenses and reducing their procedures and facilities. The flight routes do not take much time to travel. Studies have shown that most passengers choose to fly with low-cost airlines because of their lower fares, compared to full-service airlines (O'Connell & Williams, 2005; Yeoh & Chan, 2011). However, several studies have found that price strategies alone will not be sufficient enough to retain passengers and increase the rate of new passengers for low-cost airlines (Munusamy et al., 2011; Wong & Musa, 2011). In addition, the competition with price strategies may affect the profits of the budget airlines in the long term. However, a low-cost airline is directly related to the service that it provides.

The pandemic situation where there was the emergence of a new strain of coronavirus or COVID-19 started in January 2020. The outbreak began to intensify. The pandemic has spread to many countries around the world, including Thailand. This has widely affected the global economy in both the service and industrial sectors, and one of the most affected businesses is the airline business. This is another business that has made adjustments due to the COVID-19 situation to survive the crisis.

Loyalty is a key factor influencing competitive markets and the budget air travel industry is a perfect example were gaining additional patronage in such a fiercely competitive market can and does affect the viability of operators. The concept of passenger loyalty has been accepted by many researchers (Bandyopadhyay et al., 2005; Sirdeshmukh, 2002). Numerous scholars have conducted passenger loyalty surveys. It puts a lot of emphasis on passenger loyalty but there is very little known about the key factors influencing passenger loyalty such as service quality, perceived value, satisfaction, trust, and loyalty. With this in mind, this study looks at the impact of the factors mentioned that have a major influence on the repeat booking of low-cost airlines by previous travelers.

In Thailand, there was a study done on a low-cost airline business that examined the influence of quality service, price, perceived value, and satisfaction, and how it affected loyalty. Although the quality of the service, price, and satisfaction are essential, studies have overlooked the connection between advantage quality, perception value, achievement, certainty, and allegiance and how they affect budget airlines in terms of emerging infectious diseases. There needs to be more interest in the investigation of improved service quality distribution and perceived value in relation to the passenger loyalty of low-cost airlines in Thailand during the COVID-19 pandemic, which is the focus of this study. Furthermore, this study considers the benefits of low-cost airlines using the 8 QPSTL strategies. All of the above were key and the data results from this study can be applied as guidelines for use by a good budget airline. This research aimed to:

1) study service quality and perceived value in relation to passenger loyalty.

2) determine if service quality, perceived value, satisfaction, and trust have a positive effect on passenger loyalty.

3) investigate improved service quality distribution and perceived value in relation to passenger loyalty.

2. Literature Review

2.1. Low-Cost Airlines

Low-cost airlines sell their fares at budget prices but with fewer luxuries. Passengers are provided with a single standard ticket by the airlines and purchase additional value items. This is a type of airline that focuses on cost leadership rather than the service experience. One cost-cutting strategy is the use of new medium-sized aircraft such as the Airbus A320 or Boeing 737. There are typically direct short and medium-haul routes between destinations and they often use secondary destinations such as smaller airports within a city or smaller towns near major cities, resulting in lower per capita costs that are 50% less, which will come in the form of a lower fare collection. In conclusion, low-cost airlines engage in the aviation business by reducing the cost of flight operations and selling tickets at economical prices, serving only economy class seats. The emphasis on taking off and landing services at secondary airports also reduces the cost of boarding and landing fees (Mehta, 2017).

2.2. Service Quality

The service quality concept states that what happens between the perception and expectations of service users is because the service is intangible, resulting in assessing the

quality of service being more difficult than evaluating product quality. Service quality was measured using tools (Parasuraman et al., 1994) including the SERVQUAL Model. This was used for gap analysis in 1988 and was filtered in 1990 and 1991 to be used as a measure of service quality perception to specifically measure the gap in the form of service quality. Hasan et al. (2019) established the basis of a five-dimensional scale on service quality and examined tangibility, responsiveness, reliability, empathy, and assurance (Kumar, 2019). The researcher established the service quality distribution of tangible reliability, responsiveness, assurance, and empathy for the following factors in order to investigate the importance of service quality in relation to low-cost airline operators within Thailand.

2.3. Perceived Value

It is stated that customer valuation decisions depend on comparing the perceived benefits and the expenses received due to goods or services. Ryu et al. (2012). established that perceived value has a positive effect on client satisfaction. It was also established that perceived value has a positive correlation with customer trust (Forgas-Coll et al., 2014), and that perceived value has a direct influence on loyalty. Canalejo and del Rio (2018) found that perceived value affects the rate of customer rebooking through satisfaction. Forgas-Coll et al. (2014) found that perceived value affects rebooking due to satisfaction and trust. From the study of the relevant literature and research, most researchers measure perceived value by considering the price compared to the quality received, including when adding value to the available products and services. This study considers what is perceived by the airport installations, the professionalism of the personnel, the airline service, monetary cost, non-monetary costs – time and waiting, and additional non-monetary costs – distance, emotional value, and social value.

2.4. Passenger Satisfaction

Customer satisfaction happens immediately when purchasing a service, during the service, and after using the service. This can be verified by the feedback given by the customer and their return to using the service provider or purchase of the item again. Lin and Lekhawipat (2014) showed that satisfaction had a direct effect on the intention to return. Marinkovic et al. (2014) also found that satisfaction has a direct influence on returning. They also discovered that satisfaction correlated with word-of-mouth behavior influences repeat service. Pappas et al. (2014) noted that client approval had a positive effect on reciprocity. Nam et al. (2011) found that satisfaction

mediates the influence of employee behavior on brand loyalty. The expectations and perceptions of a retailer's product offering are the most important drivers of satisfaction and loyalty at leading retailers in Greece (Sarantidou, 2017). Satisfaction can be measured by expectations and in the study, all contacts with the company website were found to be satisfactory and they were satisfied with the company website as well (Ahn & Lee, 2011; Forgas-Coll et al., 2013).

Hasan et al. (2019) noted that most studies conducted on airline service quality have focused on North America, Europe, and Southeast Asian countries. However, there have been a limited number of studies on the emerging markets within Asia, such as India. Therefore, this study considers passenger satisfaction, passenger expectations, and comparisons to the ideal.

2.5. Passenger Trust

Trust has been defined by many scholars. Palvia (2009) defined trust as when the customers feel safe enough to buy products and services. Pavlou and Fygenson (2006) defined trust as the buyer's belief in the seller. Sirdeshmukh et al. (2002) also noted that trust was connected to customer expectations. The service provider should be able to meet the needs of their customers as promised. Berry (2000) concluded that trust was also very important for satisfaction. Trust as a major influence should be noted as considered in Kramer's customer loyalty investigation. Forgas-Coll et al. (2014) agreed that trust relates to loyalty and trust directly influences the loyalty of customers. Trust can be measured using sincerity and honesty, commitment, concerned customer needs, and resources and experience. Yieh et al. (2007) discussed measuring the trust of low-cost airline passengers which can be derived from the expected and true experiences and trust in the employees. Trust is a major factor when choosing a service or product again. Similarly, Kassim and Abdullah (2010) also discussed how trust can have a positive influence on word-of-mouth. Trust is the passenger's confidence in the low-cost carrier, as well as their credibility and honesty. The researchers chose to use a measure of trust. Based on the research related to low-cost airlines, this can be measured by the expected and authentic experiences, and the trust of and in the employees.

2.6. Passenger Loyalty

Law et al. (2022) stated that an attachment to service quality also facilitates customer satisfaction, leading to repurchase intention. They identified brand credibility, product uniqueness, and loyalty programs as the three top dimensions shaping service quality. Hassan and Salem (2021) agreed that service quality has consistently been an

independent predictor of customer satisfaction and retention. Service quality and brand image improve customer satisfaction and loyalty. In conclusion, service quality was found to be a determinant of the passengers' perceived value, trust, satisfaction, and loyalty. Jayakumar et al. (2021) found that finer and improved services will draw passengers from other carriers. Ahn and Lee (2011) found that the key elements for developing emotional loyalty are attitude, satisfaction, trust, and commitment. A good attitude toward the brand will make the consumers loyal to the low-cost airlines. Repeat purchase behaviors measure the level of customer engagement with a service provider; word-of-mouth is a measure of the passengers' repurchase intentions. Behavioral loyalty relates to repurchased word-of-mouth behavior as part of recommending and positively informing other consumers about the airline experience.

3. Hypothesis Development

Various variables can affect passenger loyalty, perceived value, satisfaction, and trust. However, this study only focused on a few variables with the criteria directly involving the intervening and dependent variables. The independent variables used in this study were service quality (X1), perceived value (X2), passenger satisfaction (X3), and passenger trust (X4). The dependent variable was passenger loyalty (Y), where the independent variable either positively or negatively influences the dependent variable. The dependent variable is the variable of primary interest in the research and is influenced by the independent variables (Sekaran & Bougie, 2016). A hypothesis is a tentative statement that is testable and predicts what is expected to be found in the empirical data (Sekaran & Bougie, 2016). Hypothesis testing and the processing and analysis of the collected data was undertaken. This study has examined service quality and perceived value in relation to passenger loyalty for low-cost airlines in Thailand. The reviewed literature, theories, and concepts as part of the model's hypothesis consist of 5 assumptions, as shown in Figure 1.

H1: Service quality has a positive effect on passenger satisfaction.
H2: Service quality has a positive effect on passenger trust.
H3: Service quality has a positive effect on perceived value.
H4: Service quality has a positive effect on passenger loyalty.
H5: Perceived value has a positive effect on passenger satisfaction.
H6: Perceived value has a positive effect on passenger trust.
H7: Perceived value has a positive effect on passenger loyalty.
H8: Passenger satisfaction has a positive effect on passenger loyalty.
H9: Passenger satisfaction has a positive effect on passenger trust.
H10: Passenger trust has a positive effect on passenger loyalty.
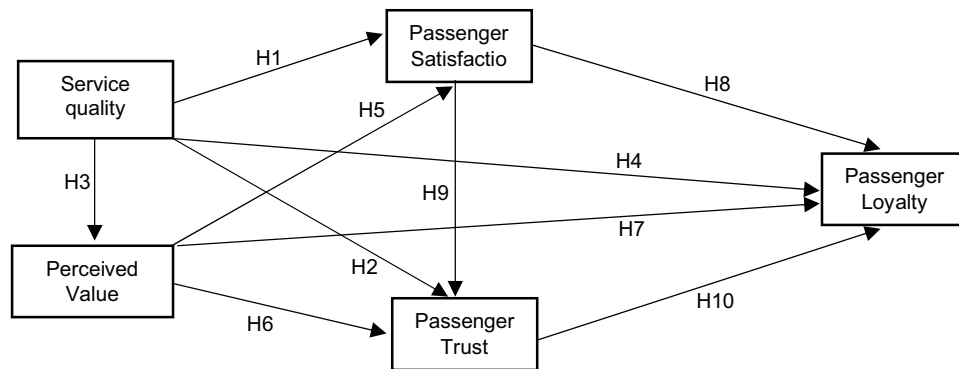
Figure 1: Research Model

Based on Figure 1, the 17 QPSTL strategies are service quality distribution: tangible, reliable, responsive, assurance, and empathy; perceived value: considering perceived by airport installations, aircraft installations, professionalism of the personnel, airline service, and monetary cost; non-monetary costs – time and waiting; and non-monetary costs – distance, emotional value, and social value, passenger satisfaction, passenger trust, and passenger loyalty.

4. Methodology

4.1. Data Collection

The quantitative research that the population was from consisted of passengers who had used low-cost airlines within the last 12 months twice or more.

The researcher considered the appropriateness of the sample group used in the data analysis using a structural

equation model analysis technique (SEM). This research got a total of 632 questionnaires back, accounting for 97.32% of the original sample. There were 123 online questionnaires and 509 questionnaires distributed in the field.

The qualitative research involved key informants who consisted of major executives and the representatives of the 4 low-cost airlines operating in Thailand. The number of informants was consistent with the concept of Macmillan (1971).

4.2. Scale of Measurement

In this study, we examined an extensive literature survey to generate six constructs along with their respective items which were modified for the low-cost airline context. We followed the basic procedures suggested by Kumar and Kumar (2019), Forgas- Cell et al. (2010), Forgas-Coll et al. (2013), and Akamavi et al. (2015) to develop the items using a five-point Likert-type scale. The measurement scale was divided into 5 points; 1. Strongly disagree, 2. Disagree, 3. Neutral, 5. Agree, and 5. Strongly agree (Sivadas & Baker-Prewitt, 2000). Five authorities and advisors evaluated the quantitative research instruments to verify the content validity. The criteria for considering the content validity and the index of an item's objective congruence (IOC) determined that it must be greater than 0.50 (Hair et al., 2010). The IOC of all things was found to be more significant than 0.50. The reliability of the questionnaire, determined using Cronbach's alpha coefficient, was equal to or greater than 0.70, which was accepted (Hair et al., 2010). The results showed that the questionnaire scored between 0.746-0.959, which means that good reliability was obtained.

Basic statistics were used to analyze the data to specify the character of the sample, and the distributive variables were percentage and mean. Standard deviation and Pearson's correlation coefficient were used to examine the relationships between the variables. The volume reduction information or reduced number of research variables was used by the exploratory factor analysis (EFA) to isolate or group together data that may not have previously been grouped previously. This provided statistics for the grouping and confirmatory factor analysis. CFA was used to verify that the components that the indicators developed matched the generated components. The data was analyzed using Structural Equation Modeling (SEM) by considering CMIN-p> 0.05, CMIN/df< 3, GFI, AGFI, CFI> 0.90, and RMSEA< 0.08 (Hair et al., 2010).

4.3. Exploratory Factor Analysis: EFA

The questionnaire was constructed as part of the quantitative research using the literature review, resulting in

60 observational variables for use in the exploratory factor analysis. The results of the extraction communalities study were found to consist of 51 items greater than 0.4 with a value between 0.417- 0.852, indicating that the components can be descriptive (Preuss, 2014). Service quality distribution (SQ): The results of the exploratory component analysis were divided into two components. The variance of the variable (initial eigenvalues) was greater than 1 for all components. The percentage of part variance 1 (SQ1) equaled 55.650%, and element 2 (SQ2) equaled 7.929%. Perceived value: The results of the exploratory component analysis were divided into three components. The variable's variance (initial eigenvalues) was greater than 1 for all components. The percentage of component variance 1 (PV1) equaled 59.541%, element 2 (PV2) was equal to 4.965% and component 3 (PV3) was 4.223%. For the passenger sat faction (PS), passenger trust (PT), and passenger loyalty (PL), the results of the exploratory component analysis were divided into three components. The variable's variance (initial eigenvalues) was greater than 1 for all components. The percentage of component variance one equaled 68.384%, while element 2 equaled 9.540%, and element 3 (PV3) equaled 5.540%.

Table 1: Number of items needed.

Construct Indicators	Number of items	Reliability (α)
Service quality (SQ)	16	0.946
Tangible (SQ1)	9	0.924
Responsiveness (SQ2)	7	0.920
Perceived value (PV)	24	0.971
Convenience (PV1)	9	0.947
Airline service (PV2)	6	0.923
Social value (PV3)	9	0.939
Passenger satisfaction (PS)	3	0.927
Passenger trust (PT)	4	0.920
Passenger loyalty (PL)	4	0.934
Total	51	0.983

Source: Data Processing Results (2022).

Based on Table 1, the results of the measurement question for every observational variable had a Cronbach's Alpha value between 0.920 - 0.983 with every variable having perfect internal consistency.

5. Results

5.1. Descriptive Information

Most passengers of the low-cost airlines in Thailand were female, aged between 18 - 35 years old, with an average income of 15,001 - 20,000 baht per month. The

majority had a Bachelor's degree, were single in terms of relationship status, were traveling on a low-cost airline for personal errands, and normally preferred to travel with Thai Air Asia. They had strong opinions about service quality distribution and its perceived value, as well as how it affects their overall satisfaction, trust, and loyalty.

They also had opinions about the service quality as a whole and considered each factor as having a high level of importance. The factors included the ones that were tangible and responsiveness. Also, there was a high level of opinion about trust and loyalty. The passengers, if satisfied with the service provided, were happy to recommend the carrier to the people that they know.

5.2. Confirmatory Factor Analysis for the Measurement Model (CFA)

CFA, when used in this study, was the method for testing how well the prespecified estimation hypothesis made from estimated factors and factors fitted reality as caught by the information. It is a technique for testing information consistency using models that assign the latent variables under an arrangement of observation variables with indistinguishable reasons from EFA to:

1. Inspect the hidden hypothesis.
2. Analyze and distinguish the segments of the 17 QPSTL strategies.
3. Use it as an instrument to make new variables utilizing the estimation model of the covariance structure as part of the investigation and display of the 8 QPSTL strategies.

CFA was used to either affirm or dismiss biased hypotheses. The motivation behind the factor examination can be accomplished from either an exploratory or confirmatory perspective (Hair et al., 2018).

5.2.1. Summarize the Fit Statistics of the Measurement Model

The confirmatory factor analysis of the service quality distribution factors confirm the model development and perceived value was used to investigate whether the statistics fit the hypothesized measurement model. This influenced the passenger loyalty of low-cost airline passengers in Thailand and enabled the testing of whether the statistics fit the hypothesized measurement model. It was found to be normal compared to the characteristics of the structure (or factor). CFA was also used to validate the measurement patterns to confirm the validity and reliability of the observed variables in each structure (Hair et al., 2018).

Table 2: Summary of how the statistics of investigation fit the measurement model

Measurement model	X^2/df	RMSEA [a]	SRMR [b]	CFI [c]	TLI [d]
	3.08	0.057	0.047	0.930	0.925
The target of the criterion (Hair et al., 2010).	3	< 0.07	< 0.08	> 0.90	> 0.90

*Note: RMSEA = Root mean square error approximation; b SRMR = standardized mean squared; c CFI = comparative fit index; d TLI = Tucker Lewis Index.

Based on Table 2, the results of the statistical summary of the fit of the measurement model were RMSEA = 0.057, SRMR = 0.047, CFI = 0.930, and TLI = 0.925, which are all above the threshold of the model fit index.

5.2.2. Investigation into the Validity and Reliability of the Measurement Model

Overall measurement model fitness was tested. Hu and Bentler's (1999) confirmatory factor assessments of all measurement models were analyzed together to assess their constituent confidence values. The mean of the variance extracted. This was used in conjunction with the Cronbach's alpha value and the KMO and Bartlett spherical (KMO) test.

Table 3: Validity and Reliability of Measurement Model.

Constructs Indicators	α	KMO	CR>0.7	AVE>0.5
SQ1	0.924	0.908	0.960	0.536
SQ2	0.920	0.895	0.953	0.620
PV1	0.947	0.946	0.972	0.629
PV2	0.923	0.865	0.934	0.630
PV3	0.939	0.925	0.966	0.580
PS	0.927	0.754	0.734	0.480
PT	0.920	0.857	0.844	0.576
PL	0.934	0.858	0.926	0.606

Source: Data Processing Results (2022).

Based on Table 3 showing the results of the adjusted model fit indices which were chi-squared = 3168.552, df = 1189, CFI = .932, TLI = 0.927, RMSEA = 0.051, and SRMR = 0.040, they were all above the set criteria. The reliability of the observed variants in each structure was reported using Cronbach's alpha, which qualified (α 0.920– 0. 947). The fit of the data from the KMO and Bartlett samples was used to determine the acceptance measure of the KMO samples for all structures, which ranged from 0.754 – 0.946. Considering the Bartlett's sphericity test, the result was less than 0.05, indicating a good match. For the accuracy and suitability of the tools in this study, the examination of the total confidence of CR latent variables ranged from 0.734 – 0.972. Compared with the standard criteria of Hair et al. (2010), this study used a standardized

procedure to assess the validity of the scale. Each structure exhibited an average isolated variance (AVE) between 0. 480 – 0.630, well above the standard of 0.5 (Fornell & Larcker, 1981), supporting the accuracy of the convergence of the measurements.

5.2.3. Discriminant Validity

An examination of the connection between the independent variables and the service quality distribution,

perceived value, passenger satisfaction, passenger trust, and passenger loyalty factors of low-cost airline passengers in Thailand was conducted. A correlation matrix was used to verify the overall model fit. The validity of the discrimination for every structure in the measurement model was protected by two series of structural checks (Anderson & Lindestad, 1998). The structures were tested to ensure that every structure did not measure concepts that were equivalent to others.

Table 4: Validity and Reliability of the Measurement Model

	SQ1	SQ2	PV1	PV2	PV3	PS	PT	PL
Mean	**4.05**	**43.72**	**4.07**	**3.80**	**4.01**	**4.04**	**3.97**	**4.13**
S.D.	**0.620**	**0.798**	**0.670**	**0.797**	**0.675**	**0.758**	**0.747**	**0.643**
SQ1	(1.000)							
SQ2	0.838	(1.000)						
PV1	0.827	0.786	(1.000)					
PV2	0.817	0.852	0.815	(1.000)				
PV3	0.837	0.813	0.827	0.822	(1.000)			
PS	0.699	0.685	0.679	0.683	0.804	(1.000)		
PT	0.767	0.796	0.789	0.799	0.807	0.801	(1.000)	
PL	0.615	0.592	0.625	0.585	0.701	0.795	0.728	(1.000)

Source: Data Processing Results (2022)

Based on Table 4, the results of the standard deviation and the validity of the discrimination were assessed by comparing the diagonal square root of each AVE with the (off-diagonal) correlation coefficient for each structure in the corresponding row (Fornell & Larcker, 1981). The correlations of each structure showed positive values. The square root of the extracted AVE values were higher than the correlation matrix in the same row and the columns showed that the variables in this study were acceptable for this measurement model and thus supported the validity of the discrimination (Hair et al., 2018).

5.2.4. Reliability Test

Table 5: Cronbach's Alpha Results

Variables	Number of Questions	Cronbach's Reliability (α)
SQ	16	0.946
PV	24	0.971
PS	3	0.927
PT	4	0.920
PL	4	0.934
Total	51	0.983

Source: Data Processing Results (2022).

5.3. The Results of the Structural Model

5.3.1. Standardized Factor Loading, T-value, and R-squared of the Indicators

After analyzing the structural model's standard component weight and standardized factor loading, the

statistical hypothesis testing (t-value) and decision coefficient (R-squared) for all indicators in each structure were determined.

Table 6: Cronbach's Alpha Results.

Construct Indicators	Standardize Factor Loading	t-value	R2
SQ (2nd ordered CFA)			0.839
SQ1 (1st order CFA)	0.921	82.220*	0.844
SQ2 (1st order CFA)	0.911	77.420*	0.834
PV (2nd ordered CFA)			0.826
PV1 (1st order CFA)	0.891	75.603*	0.809
PV2 (1st order CFA)	0.911	81.091*	0.815
PV3 (1st order CFA)	0.911	85.761*	0.854
PS			0.711
PT			0.802
PL			0.669

Source: Data Processing Results (2022).

Based on Table 6, the results of the service quality distribution structure consisted of two indicators with each indicator showing the weight of variance from high to low as follows: SQ (β = 0. 0.921*, R2 = 0. 0.844) and SQ2 (β = 0.911*, R2 = 0.834), respectively. These indicators show the variance of the service quality structure to be 83.9% (R2=0.839). The value perception structure consisted of 3 indicators, each of which weights the variance from high to low: PV2 (β = 0. 0.911*, R2 = 0. 0.815) PV3 (β = 0. 0.911*, R2 = 0. 0.854) and PV1 (β = 0. 0.891*, R2 = 0. 0.809), respectively. These indicators show the variance of the

perceived value structure to be 82.6% (R2 = 0.826). The passenger satisfaction structure consisted of 3 indicators, with each indicator weighting the variance from high to low as follows: PS2 (β = 0. 0.920*, R2 = 0. 0.048), PS2 (β = 0. 0.912*, R2 = 0. 0.829), and PS3 (β = 0. 0.851*, R2 = 0. 0.725), respectively. These indicators show the variance of passenger satisfaction structure to be 71.1% (R^2 = 0.711). Passenger trust structure consisted of 4 indicators, each indicator weighting the variance from high to low as follows: PT3 (β=0. 0.858*, R2 = 0. 0.802), PT2 (β = 0. 0.852*, R2 = 0. 0.825), PT4 (β = 0. 0.847*, R2 = 0. 0.818), and PT1 (β = 0. 0.839*, R2 = 0. 0.708), respectively. These indicators show the structural variability of passenger trust to be 80.2% (R2 = 0.80). The passenger loyalty structure

consisted of 4 indicators, each weighting the variance from high to low as follows: PL4 (β=0. 0.896*, R2 = 0. 0.732), PL2 (β = 0. 0.884*, R2 = 0. 0.781), PL3(β = 0. 0.855*, R2=0. 0.733), and PL1 (β = 0. 0.848*, R2=0. 0.781), respectively.

5.3.2 . Conclusion of the Hypotheses Testing and Full Model Development

The results of this research were studied using service quality distribution, perceived value, passenger satisfaction, and passenger trust and how they influence passenger loyalty.

Table 7: Structural Model Relationships Obtained

Relationship		β	t-value	Hypotheses Supported
Service Quality	→ Satisfaction	-1.733	-1.033	Reject H1
Service Quality	→ Trust	- 0.388	0.411	Reject H2
Service Quality	→ Perceived Value	0.989	108.051*	Accept H3
Service Quality	→ Loyalty	- 0.842	- 0.705	Reject H4
Perceived Value	→ Satisfaction	2.517	1.502	Reject H5
Perceived Value	→ Trust	1.085	1.045	Reject H6
Perceived Value	→ Loyalty	0.970	0.716	Reject H7
Passenger Satisfaction	→ Loyalty	0.494	3.447*	Accept H8
Passenger Satisfaction	→ Trust	0.223	1.729	Reject H9
Passenger Trust	→ Loyalty	0.198	1.748	Reject H10

Source: Data Processing Results (2022).

Based on Table 7, the results show that service quality distribution has a statistically major direct effect on perceived value. The results also exhibit that passenger satisfaction has a statistically major direct effect on passenger loyalty.

Service quality distribution has no direct affect on passenger loyalty. The passenger trust and passenger satisfaction perceived values have no direct effect on passenger trust and passenger loyalty. Passenger trust has no direct affect on passenger loyalty. This research indicates

that the proposed structural model sees the low-cost airline passengers focusing on service quality which influences perceived value and satisfaction, influencing the loyalty of low-cost airline passengers in Thailand which were all statistically significant. The findings also mean that under unusual circumstances, COVID-19 has caused the low-cost airline passengers to focus on service quality distribution, perceived value, and passenger satisfaction, and the variables effect on passenger loyalty only.
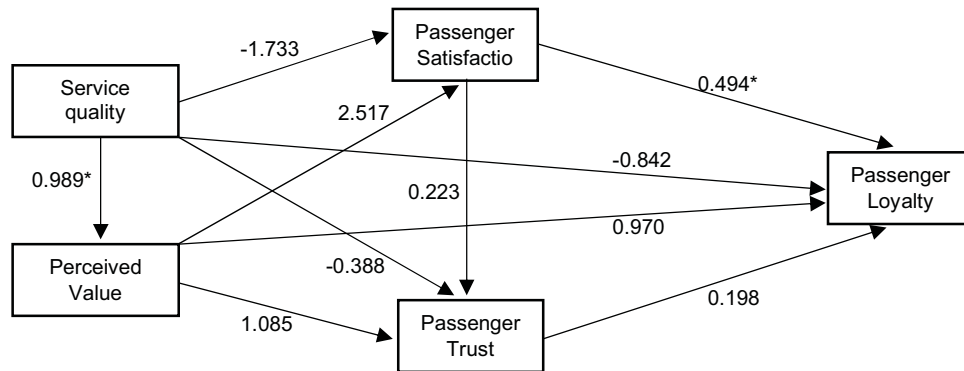

Figure 2: Structural Model

5.3.3. Qualitative Research Results

This research used mixed method research because qualitative research reveals the conceptual differences between passengers and service providers that are to be used as a guideline for summarizing and confirming the results of the quantitative analysis. This leads to the conclusion of further research. The data was collected from the key informants who were significant executives or representatives from the 4 low-cost airlines operating in Thailand. The number of informants was consistent with the concept of Macmillan (1971). We followed the fundamental procedures suggested by Kumar and Kumar (2019), Forgas et al. (2010), Forgas-Coll et al. (2013), and Akamavi et al. (2015) to develop the semi-structured interviews. Five authorities and advisors evaluated the qualitative research instruments to verify the content validity. The criteria for considering the content validity and index of an item's objective congruence (IOC) was that it must be greater than 0.50 (Hair et al., 2010) including the data validation through content analysis, data reduction, data display, creating conclusions, and confirming the results.

The results of the qualitative research found that there was an important emphasis to do with service quality distribution throughout the process of creating value perception. Building trust and satisfaction from the passengers' choice of services relates to a quality of service built through marketing communications and the creation of passenger loyalty. This can be seen from the results of the in-depth interview as follows.

The guidelines for the development of service quality models in the low-cost airlines in Thailand are as follows: 1) Tangible can be divided into (1) ground services with a convenient, uncomplicated ticketing system and a variety of channels and (2) in-flight services for low-cost airlines. By paying attention to the cabin and passenger seats that are wide and comfortable, the flight attendants are ready to always serve. 2) Reliability brings attention to the brand and to the promises made to the passengers through the brand. 3) Responsiveness involves contact channels both via the airline website and call center to solve any booking problems or change tickets easily. 4) Insurance provides the services with a safety system according to the standards of the airline's aviation safety certification (The IATA Operational Safety Audit: IOSA).

Cleanliness, comfort. and punctual service quality were also checked according to the standard. 5) Empathy allows the passengers to choose their own seats from the reservation system. Professional service staff provide courteous service with a smile. Elderly people, pregnant women, or patients with disabilities are looked after by arranging their seats to be in front and providing wheelchairs at no additional charge, as well as always improving passenger care according to various situations.

The benefits process must consider the security standards under the COVID-19 situation.

Perceived value for passengers includes airport facilities designed to place importance on spacious check-in counters and automatic check-in kiosks that help make the check-in system more convenient, allowing for faster service. In terms of aircraft installations, there needs to be a spacious, clean, and comfortable cabin, as well as wide passenger seats with appropriate spacing.

The professionalism of the personnel includes someone who pays attention to safety and is ready to provide services that always solve the problems of passengers in a timely manner according to standards with good human relations, while smiling, being cheerful, and polite. Operators attempt to provide airline services where the flights arrive and depart on time, reducing the problem of delayed flights as much as possible. Free luggage is up to a set weight limit and an additional fee is charged for extra weight and objects. The upper luggage compartment allows partial carry-on. In terms of monetary cost, sales promotions are organized to give special privileges to passengers with special airfare tickets. Special privileges can work together with their business partners such as through the provision of discounts on hotel reservations, restaurants, etc. Non-monetary costs such as time and waiting are reduced by the emphasis on convenient and fast check-in services through various channels such as the check-in counter, automatic check-in at a kiosk, etc. The emotional value keeps the passengers happy from the time that they arrive at the terminal to check-in to the time that they exit out the destination terminal after the fight has reduced all safety concerns. Flight delays and social value put an emphasis on brand image creation and brand promises, improving the service quality in a manner that is suitable for passengers of all ages and genders.

Emphasis is given to creating passenger satisfaction throughout the traveling experience with the low-cost airlines wanting their passengers to be happy and comfortable. This includes the ticketing systems, boarding, and getting off the plane, booking hotels, and itineraries returning them to the airport to board the flight back, and returning them to the passenger's house with the help of their business partners.

Passengers place importance on marketing communications through all channels such as websites, smartphone applications, and social media. All sales promotions must state the time to prevent any discrepancy in the facts. Commitment to service quality and brand value reduces the trip delay rate and any errors in punctuality.

Passenger loyalty programs, such as membership cards for frequent flyers, should be offered to provide discounted fares and privileges. There is a concrete arrangement here to develop a system for building passenger loyalty.

The factors influencing passenger loyalty in budget airlines can be split into 2 concepts: (1) The factor most influencing loyalty is trust resulting from service quality. Perceived value, and satisfaction, are the result of passenger trust. (2) Passenger loyalty is most influenced by passenger satisfaction with the service quality, as well as perceived value and trust.

Other things that are concentrated on when developing budget air operations in Thailand include security systems under the COVID-19 situation, the convenience and speed of service expanding service routes, development of loyalty programs to generate word of mouth, and the return use of services, causing loyalty.

They are also constantly creating updated maintenance systems to keep their aircraft in good condition, reducing flight delays, and supporting the growth of the aviation industry in the future.

5.3.4. Summary Regarding the Comparison of the Quantitative and Qualitative Research

The quantitative results are consistent with service quality distribution being an important factor in relation to perceived value among the passengers of low-cost airline in Thailand. Passenger satisfaction had the most influence when determining the loyalty of the low-cost airline passengers.

The qualitative research results that do not correspond with the quantitative results relates to the service quality distribution variables. Perceived value, passenger satisfaction, and passenger trust are all important influences on the loyalty of low-cost airline passengers in Thailand, which is the perspective of low-cost airline operators in Thailand. However, in terms of the quantitative research results from the point of view of low-cost airline passengers, the results suggest that the factor that influences low-cost airline passenger loyalty in Thailand is passenger satisfaction.

The research results confirmed that passengers value their perceived value of the service quality. The factor that affects passenger loyalty in the COVID-19 situation is passenger satisfaction, which budget airlines must consider and pay attention to. From the perspective of the service provider, the importance of service quality, perceived value, satisfaction, and trust is present but they also believe that the perceived value of service quality under COVID-19 significantly affects the satisfaction among the passengers who choose to repeat their purchase intention and then become loyal.

6. Discussion

Our finding was that service quality distribution is an important aspect of the low-cost-airline industry and that the aim is to make passengers satisfied throughout each traveling experience.

This is confirmed by the research conducted by Kumar and Kumar (2019) who found that companies across all industries face problems concerning to the issue of retaining customers and acquiring satisfaction through service quality management. However, in this intense competition, important questions are raised including how an airline company can satisfy customers at the highest level and improve its service quality distribution to enhance the consumers' purchase intention. A study has been carried out to examine the relationship between the constructs of service quality, passenger satisfaction, and repurchase intentions in the context of low-cost carriers offering their services in India. In accordance with the research by Law et al. (2022), it was found that airline service quality was influenced by the price factor and the perceived value identity of the service, and that the relationships with service quality, safety, and reliability. and marketing promotion management created brand value. Continuing to make improvements in service quality affected the passenger loyalty to the airlines in Lao. Low-cost airline passengers in Thailand should pay more attention to their ground and in-flight service facilities and to the professionalism of their personnel, including their emotional and social values and services.

The research by Han and Hwang (2015) determined that the perception of value of the quality of service, especially the must-haves, has a strong influence regarding the passengers' repeat purchase intention through perceived value and trust. Service environments focus on the airline's signs / symbols / logos, colors / decorative patterns, lighting, and cleanliness which combine to make the passengers able to recognize the value of the airline's capabilities.

Low-cost airlines in Thailand are committed to providing the best quality service to their passengers. Controlling the quality of the service provided throughout the process in a manner that meets the operating costs can create a passenger perception of value. Therefore, service quality has a great influence on the value perception of low-cost airline passengers.

Airlines also pay attention to the ticket price as this can affect the passengers' decision. Providing a service with professionalism, related to both the in-flight and ground service facilities, creates emotional and social values for the passengers.

Maintaining passenger satisfaction is important, especially during the COVID-19 pandemic. The low-cost airline passenger loyalty in Thailand has been increased by passenger satisfaction regarding the health and safety measures undertaken, showing that service quality is the result of perceived value and the passengers' expectations.

Service quality distribution also influences the perceived value among low-cost airline passengers in Thailand. This can be seen from an interview with a staff member from Airline A. He stated that "You can develop a budget airline to become a premium airline, successfully still operating in the budget sector. The brand value is created with the promise given to passengers of service quality, safety, punctuality comfort, cleanliness with a wide passenger seat, and wide cabin."

Staff who provide services on the ground and on the plane with professionalism are also value-added for the airline. Creating value for money is worthwhile. This is consistent with the research by Law et al. (2022) who said that airline service quality is influenced by price factors and perceived value. It also determined that service quality, safety credibility, and the management of marketing promotions leads to good branding.

Solving the specific problems of passengers to create satisfaction in every service process comes under the One Stop Service concept. This is consistent with the research by Hassan and Salem (2021). It was found that low-cost airlines aim to provide the best quality service to their passengers while achieving meaningful profits at affordable prices. While quality of service may be compromised, passenger satisfaction and retention are essential elements for low-cost airlines to maintain, as well as profitability.

With low profit margins, this has proven to be especially true, especially during the period of intermittent travel restrictions during the COVID-19 pandemic. Low-cost airlines often face significant challenges to do with maintaining the highest level of service quality to meet both passenger satisfaction and business survival in the long run.

Service quality affect passenger trust. This can be seen from an interview with an Airline B staff member who emphasized the importance of producing marketing communications through all channels such as websites, social media, and applications on smartphones. This way of presenting the airline information truly makes the passengers feel confident that they are going to have a successful trip while also building trust.

Great importance was also given to building business alliances and the passenger's service connection to determine the rate of the baggage fees. This is consistent with the research by Kumar and Kumar (2019) who found that people are often worried about their baggage at the time of check-in as well as at the time of checking out. Safety during the flight, the quality of the food served during the flight, and the ticket prices charged by the airlines also affect the perception of the guests. If the management want to increase customer satisfaction, all of the variables included in Assurance must be considered. An interview with Airline B on creating passenger loyalty said that good service quality was a way to create an easy, convenient, and uncomplicated ticket booking experience. Similarly, an interview with Airline A's executive manager said that the customer experience management journey was in order to make the passengers intend to use the service repeatedly. Social media marketing can communicate with the concept of Home-to-Home journey as part of the travel experience. This is consistent with the research by Abdullah et al. (2012) who said that attention should be given to improving the ability to perform the promised service accurately. Similarly, importance should also be given to the physical facilities, equipment, and appearance of all involved personnel. Finally, we recommend that the airlines build their trust and confidence in the eyes of their customers through the courtesy of their employees and the enhancement of their knowledge.

Passenger satisfaction has the greatest effect on low-cost airline passenger loyalty in Thailand. As can be seen from an interview with Airline B, the most influential factor is passenger preferences because satisfaction is the destination that leads to passenger loyalty. In terms of service quality, appreciation, and trust are on the path that lead to passenger loyalty. This is consistent with the research by Akamavi et al. (2015). It was found that effective service personnel not only influenced service and price recovery but also boosted passenger confidence. The self-efficacy of the service staff attenuates the bad service experience. Initially, it also increases passenger satisfaction. Structural equation models support the statement that passenger trust has a significant impact on passenger satisfaction. Passenger satisfaction is the most important driver involved in improving passenger loyalty, not price. This study provides new insights into low-cost airline passenger behavior as well as the management and findings regarding positive passenger business relationship management.

7. Conclusions

This paper discusses the factors of successful 8 QPSTL strategies regarding service quality distribution: tangible, responsiveness; perceived value: convenience, airline service, social value, passenger satisfaction, passenger trust, and passenger loyalty; repurchase intention, repurchasing, and word of mouth for budget airlines and the effects of these successful strategies to achieve higher performances. This research aims to 1) study service quality distribution and perceived value in relation to passenger loyalty. 2) examine whether service quality distribution, perceived value, satisfaction, and trust directly affect loyalty, and 3) investigate service quality distribution and perceived value in relation to passenger loyalty.

Interestingly, there are multiple strategies provided by the 8 QPSTL but the most essential two are service quality

distribution and passenger satisfaction. These make up most of the answers to the questions related to successful passenger loyalty during the COVID-19 pandemic.

In addition, as evidenced by the investigation results and the discussion described above, service quality is an important aspect of low-cost airlines who are serving passengers through every flight's welcome service. Service quality distribution has an influence on perceived value among low-cost airline passengers in Thailand. This can be seen from the interview with an Airline A executive who said that you can develop a budget airline to fly as if it were a premium airline by creating brand value where the focus is given to passengers of creating value for money paid.

Satisfaction has the greatest effect on passenger loyalty among the low-cost airlines in Thailand. As commented in an interview with Airline B executives, the most influential factor is passenger preferences because satisfaction leads to passenger loyalty. In terms of service quality distribution, appreciation, and trust are on the path that leads to passenger loyalty.

The qualitative research results are consistent with service quality distribution being an important factor in perceived value felt among the passengers of low-cost airlines operating during the COVID-19 pandemic. Also, passenger satisfaction is the most influential consideration regarding the passenger loyalty of the low-cost airlines in Thailand during the COVID-19 pandemic.

The qualitative research results that do not correspond to the quantitative research results are the service quality distribution variables, perceived value, passenger satisfaction, and trust, all of which are important influences on the loyalty of low-cost airline passengers in Thailand, which is the perspective of low-cost airline operators in Thailand regarding the COVID-19 pandemic. However, the quantitative research results from the point of view of low-cost airline passengers in Thailand suggest that the factor most influencing low-cost airline passenger loyalty in Thailand is passenger satisfaction in terms of the COVID-19 pandemic.

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