

# The Effect of AIRQUAL on Customer Satisfaction and Word of Mouth at Garuda Indonesia Airline

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**ABSTRACT:** This study aims to examine the effect of AIRQUAL (Airline Tangible, Terminal Tangible, and Empathy) on Customer Satisfaction and Word of Mouth at Garuda Indonesia airline. It applies a quantitative method where random samples were respondents who have flown with Garuda Indonesia airline to or through Terminal 3 Soekarno-Hatta Airport Jakarta, Indonesia. Data processing was performed using Structural Equation Modeling with SPSS 23.0 for Mac and AMOS for Windows software. The results showed that airline tangible and empathy were proven to affect customer satisfaction, while terminal tangible did not affect customer satisfaction. Statistical tests also showed that customer satisfaction had a positive effect on word of mouth.

*Keywords:* airline tangible, terminal tangible, empathy, customer satisfaction, word of mouth

## 1 INTRODUCTION

The development of air transportation is growing from year to year, indicated by the amount of air traffic. Air transportation in Indonesia can carry from passengers to goods. With an average increase of 15 percent per year in the last ten years, the amount of the increase is quite significant (<https://ekonomi.kompas.com/>). The increasing mobility needs of the Indonesian people are in line with the development of a growing number of air transportation modes. This development indeed aims to increase the effectiveness of time in traveling.

The air transportation mode has the characteristics of high speed and can penetrate throughout the territory that cannot be reached by other modes of transportation. For example, in Papua, there are cities in remote areas that can only be reached by air transportation. The development of the national air transport industry is strongly influenced by the geographical conditions of the region as an archipelagic country. Therefore, air transportation contributes an essential role in strengthening political life, economic development, social culture, and security & defense. (<https://id.wikibooks.org/>).

Another reason for the development of air transportation in Indonesia is the emergence of new metropolitan cities that have become business centers;

thus, airlines are needed for fast accessibility to these cities (<https://www.cnnindonesia.com>).

There are two classes of aviation services in Indonesia, namely the LCC (Low-Cost Carrier) and FSA (Full Service Airlines). In the LCC category, Lion Air ranks first in the largest number of flights, while in the FSA group, Garuda Indonesia has the highest number of passengers. This research will discuss further an airline from the FSA class. FSA airlines always offer full services at relatively high ticket prices. By offering tickets that are relatively expensive and promising full service, it is hoped that consumers will feel satisfied and a positive Word of Mouth (WOM) will occur.

In the conceptual model of Service Quality on airlines, the concept of Airline Service Quality is used, which in its measurement uses aspects of Airline Tangible, Terminal Tangible, and Empathy.

One Airline Tangible example for Garuda Indonesia is a cleaning process of the inside of an aircraft to maintain comfort and satisfy its customers (<http://pekanbaru.tribunnews.com/>). As for the example of the Tangible Terminal, in Terminal 3 Soekarno Hatta Airport Jakarta Indonesia, Garuda Indonesia maximizes lounge capacity and adding check-in counters so that more passenger capacity can be accommodated. Moreover, iMATE (i-Millennial Airport Travel Experience Lounge), AirSport Arena

that provides online gameplay facilities, a premium capsule hotel under the Digital Airport Hotel brand until Heliport City are available to be used by passengers. (<https://angkasapura2.co.id>). While the Empathy aspect is the willingness of service companies to provide personal attention to each customer (Parasuraman et al, 1988:23).

According to the previous study by Suki (2014), there is a relationship between airline service quality variables on customer satisfaction and word of mouth based on geographical segments, namely in Malaysia. Meanwhile, according to Leong, (2015), tangible has a significant effect on customer satisfaction. This is supported by Prayag (2007), who observed that tangibility is an essential factor of customer satisfaction in AIRQUAL and Sahapraya & Theingi (2009) also stated that tangible, as an AIRQUAL construct, can create customer satisfaction and foster word of mouth.

Research conducted by Suki (2014) stated that airline tangible does not significantly influence customer satisfaction. This is contrary to research conducted by Leong (2015), which found that airline tangible has a significant effect on customer satisfaction. This study will discuss the gaps obtained from the statements of the two studies.

Moreover, the supporting journal also said that empathy has no significant effect on customer satisfaction. This is feasible because consumers' perceptions are not well understood by airlines or airlines are less able to provide personal attention to each consumer, whereas the reference journal said that empathy has a significant influence on customer satisfaction. This is supported by research conducted by Ali (2015), who scrutinized that empathy is the strongest predictor of customer satisfaction. So from some research findings, this study aims to examine the effect of AIRQUAL on customer satisfaction and word of mouth at Garuda Indonesia airline.

**2 RESEARCH METHODS**

This study used primary data collection obtained from compiling a questionnaire and then conducting survey activities by distributing structured and easily understood questionnaires to people who have flown with Garuda Indonesia airline and used Terminal 3 Soekarno Hatta airport services. The level and scale used in this study were interval levels, i.e., measurement levels that have the same distance and clear difference on the scale. Alternative answers provided for interval levels are based on a numerical scale of 5-point Likert Scale, which was done by assessing

a series of statements based on adjectives measured in five levels of scale. The sampling technique used was non-probability sampling with a purposive sampling method, namely sampling technique based on considerations or assessments related to the characteristics appropriate to be sampled (Zikmund, 2009:396). Primary data processing obtained from research respondents using SEM (Structural Equation Models), which is a statistical model that intends to describe the relationship among several variables, Hair et al (2010:20).

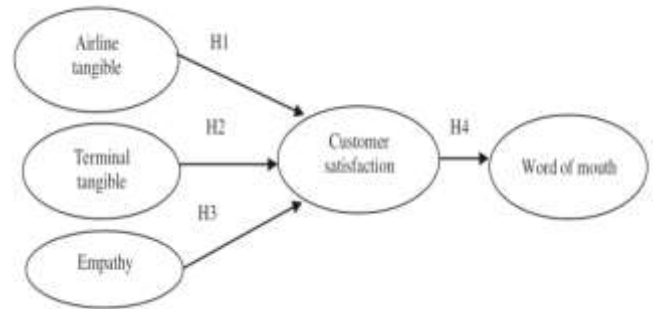


Figure 1. Research Model

The hypotheses to be tested in this study are as follows:

- H1: Does Airline Tangible have a positive effect on Customer Satisfaction in Garuda Indonesia airline customers.
- H2: Does Tangible Terminal have a positive effect on Customer Satisfaction in Garuda Indonesia airline customers.
- H3: Does Empathy have a positive influence on Customer Satisfaction in Garuda Indonesia airline customers.
- H4: Does Customer Satisfaction have a positive influence on Word of Mouth in Garuda Indonesia airline customers.

**3 RESULTS AND DISCUSSIONS**

Data obtained from 150 questionnaires were tested for validity and reliability. After the data was valid and reliable, it has then proceeded descriptively.

Table 1. Demographic Profile of Respondents

Gender	Frequency	Percentage
Male	81	54.00%
Female	69	46.00%
Age	Frequency	Percentage
18-26 years old	40	26.67%
27-35 years old	32	21.33%
36-45 years old	45	30.00%
>45 years old	33	22.00%
Education level	Frequency	Percentage
High	41	27.33%

*Cont.*

school/Equivalent		
Diploma	42	28.00%
3/Diploma		
4/Bachelor		
Master	47	31.33%
PhD	20	13.34%
Frequency of fly- ing the airline in the past year	Frequency	Percentage
1-2 times	44	29.33%
3-4 times	50	33.33%
5-6 times	25	16.67%
7 times and above	31	20.67%

Respondents were mostly male, dominated by the age of 36-45 years old, having an education level of master's degree, and the flight frequency of 3-4 times in the past year.

Table 2. Mean and Standard Deviation of Airlines Tangible

No.	Statements	Mean	SDev
ATANG1	The aircraft is clean and looks modern	4.42	0.668
ATANG2	The quality of food served is good	4.29	0.689
ATANG3	The aircraft toilet is clean	4.28	0.646
ATANG4	The aircraft seats are clean	4.32	0.535
Total		4.43	0.634

Source: Research data, processed

Variable of Airlines Tangible at Garuda Indonesia Airline is perceived well by respondents. The conditions inside the aircraft and seating are perceived to be clean, good quality food is served, and toilets are also clean.

Table 3. Mean and Standard Deviation of Terminal Tangible

No.	Statements	Mean	SDev
TTANG1	Cleanliness of the airport toilets	4.25	0.761
TTANG2	Number of shops in airport is sufficient	3.96	0.713
TTANG3	Parking spaces in airport are sufficient	4.08	0.690
TTANG4	The airport capacity is sufficient to accommodate passengers	4.27	0.642
TTANG5	Effective air-conditioning in airport	4.28	0.636
Total		4.17	0.688

Source: Research data, processed

Variable of Tangible Terminal is also perceived good with a total value of 4.17 where the highest indicator is effective air-conditioning in the airport and the lowest perception is the number of shops in the airport is sufficient.

Variable of Empathy has an average of 4.14, where Garuda Indonesia has relatively timely flight

schedules; good care paid to passengers 'luggage, and provides compensation for loss or disaster.

Table 4. Mean and Standard Deviation of Empathy

No.	Statements	Mean	SDev
EMP1	Timely flight schedules for departures and arrivals	4.19	0.659
EMP2	Compensation for loss or disaster	3.98	0.823
EMP3	Good care paid to passengers' luggage	4.25	0.623
Total		4.14	0.702

Source: Research data, processed

Table 5. Respondents' Responses Regarding the Word of Mouth Variable

No.	Statements	Mean	SDev
WOM1	I say something positive about the airline to others	4.46	0.652
WOM2	I recommend the airline to people who ask my advice	4.49	0.588
WOM3	I encourage friends and family to fly with the airline	4.44	0.700
Total		4.46	0.647

Source: Research data, processed

After using Garuda Indonesia Airline services, the Word of Mouth aspect was perceived positively, meaning that respondents were willing to say positive things about Garuda Indonesia Airline recommend or encourage others to fly with Garuda Indonesia.

Table 6. Respondents' Responses Regarding Customer Satisfaction Variable

No.	Statements	Mean	SDev
SAT1	My satisfaction with the airline has increased	4.42	0.658
SAT2	My impression of this airline has improved	4.46	0.682
SAT3	I now have a more positive attitude towards the airline	4.45	0.681
Total		4.44	0.674

Source: research data, processed

Respondents expressed their satisfaction with the services provided by Garuda Indonesia with a total value of 4.44, where the highest indicator is good impression improvement towards the airline.

Table 7. AVE and CR Variables

Variable	$\sum$ std loading	$\sum$ (std loading <sup>2</sup> )	$\sum$ error	CR	AVE
Airline Tangible	1.387	0.970	1.030	0.651	0.485
Terminal Tangible	2.390	1.442	2.558	0.691	0.361
Empathy	1.881	1.190	1.810	0.662	0.397
Word of Mouth	2.348	1.844	1.156	0.827	0.615
Cust.Sat	2.427	1.977	1.023	0.852	0.659

Table 8. Goodness-of-Fit Indices of Structural Model

Goodness-of-Fit	Goodness-of-Fit Criteria	Result	Remarks
CMIN/DF	CMIN/DF ≤ 3	1.805	Good fit
RMSEA	RMSEA ≤ 0.08	0.074	Good fit
GFI	GFI ≥ 0.90	0.855	Marginal fit
CFI	CFI ≥ 0.90	0.883	Marginal Fit
TLI	TLI ≥ 0.90	0.860	Marginal Fit

Based on the summary of Table 9, it can be seen that Airline Tangible has an influence on Customer Satisfaction with a Critical Ratio of 2.502 and an Estimate value of 0.427. This first hypothesis is significant with a probability level of  $P \leq 5\%$ . These results indicate that Airline Tangible has a significant effect on Customer Satisfaction, but the hypothesis of this study is not supported by previous studies conducted by Suki (2014). The results of this study are supported by previous researches by Jafari et al (2016), Ali et al. (2015), Prayag (2007) which stated that Airline Tangible has a significant positive relationship on Customer Satisfaction. In addition, a study conducted by Leong et al (2015) said that airlines need to ensure the physical condition of the aircraft because it is an essential aspect for consumers to be able to feel a satisfying trip. Therefore, it can be said that the better the Airline Tangible perception of Garuda Indonesia consumers, the higher the Customer Satisfaction perception of Garuda Indonesia Airline.

Table 9. Summary of Hypothesis Testing Results

Path	Estimate	CR	p-Value
H1 ATANG → SAT	0.427	2.502	0.012
H2 TTANG → SAT	-0.270	-1.884	0.060
H3 EMP → SAT	0.448	2.709	0.007
H4 SAT → WOM	0.774	7.363	***

The second hypothesis of H2 is the Tangible Terminal on Customer Satisfaction has a Critical Ratio of -1.884 and an Estimate value of -0.270. This second hypothesis is not significant, with a probability level of  $P > 5\%$ . These results indicate that the Tangible Terminal is not significant to Customer Satisfaction, so the hypothesis of this study is supported by previous research conducted by Suki (2014) and Jafari et al (2016). According to Suki (2014), Airline Tangible does not significantly affect Customer Satisfaction, meaning customer satisfaction is not significant if determined by terminal capacity, parking capacity, number of shops, trolley availability, waiting room comfort, effective air-conditioning in the airport, and a reliable security system. As such, it can be said that the Tangible Terminal at Terminal 3 Soekarno-Hatta Airport does not affect Customer Satisfaction at Garuda Indonesia Airline users.

The third hypothesis shows a significant level with a probability of  $P \leq 5\%$ . These results indicate that Empathy has a significant effect on Customer Satisfaction so that the hypothesis of this study is supported by previous research conducted by Suki (2014) but contrary to the study of Jafari & Bazaee (2016) which stated that there is no empathic effect on customer satisfaction. A study conducted by Suki (2014) concluded that customer satisfaction on airlines occurs through punctuality of departures and arrivals, compensation for loss or disaster, and good care paid to passengers' luggage.

Empathy has a significant effect on Customer Satisfaction that is supported by several studies of Abdullah (2007), Ali et al (2015), Ariffin et al (2010) and Prayag (2007). As such, it can be said that the better the empathy performed by Garuda Indonesia Airline, the higher the Customer Satisfaction of Garuda Indonesia consumers.

Furthermore, the results show that Customer Satisfaction has a positive effect on Word of Mouth with a Critical Ratio of 7.363 and an Estimate value of 0.774. So this research hypothesis is supported by previous research conducted by Suki (2014), which stated that an increase in customer satisfaction gives a better impression on the airline and makes consumers have a better attitude towards the airline company.

According to research conducted by Suki (2014), consumers encourage their friends to continue flying with the airline. This shows that consumers give a positive impression of the airline to others so that it can be said that the higher the customer satisfaction of Garuda Indonesia Airline, the better the word of mouth of the airline customers.

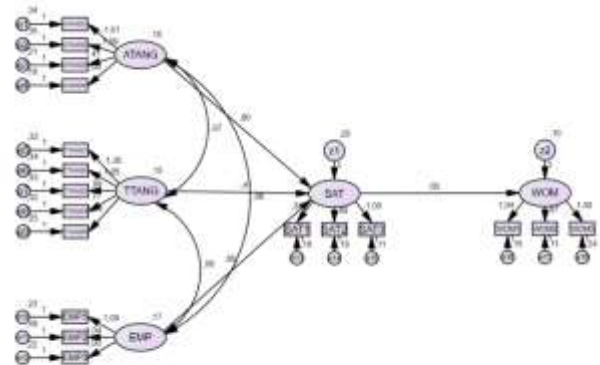


Figure 2. Structural Model

#### 4 CONCLUSIONS

Based on the results of research and statistical tests conducted in the previous chapter, it is concluded that from the four hypotheses that have been tested using Structural Equation Model (SEM) analysis with AMOS software, there were three significant hypotheses proven to have an influence and support previous journals while one hypothesis had no influence. The hypotheses summary is as follows:

- a) Airline Tangible had a significant effect on Customer Satisfaction in Garuda Indonesia airline customers.
- b) Tangible Terminal had no significant effect on Customer Satisfaction in Garuda Indonesia airline customers.
- c) Empathy had a significant effect on Customer Satisfaction in Garuda Indonesia airline customers.
- d) Customer Satisfaction had a significant effect on Word of Mouth in Garuda Indonesia airline customers.

Recommendations from the results of this study are that Garuda Indonesia Airline should pay more attention and continue to improve Airline Tangible, for example, aircraft equipped with sophisticated technology, the quality of food served is good, the aircraft air conditioners must be good, the aircraft seats clean and comfortable, the aircraft's interior well cared for, and kept the toilet clean. Then, for Empathy variables, for example, on-time arrivals and departures, providing transportation from the airport to the city, a compensation scheme for lost goods communicated, baggage adequately was taken care of, and the number of flights is sufficient to meet consumer demand. While recommendations for further research can be carried out on other airlines, with different types (FSA or MSA) because the object of this study was only Garuda Indonesia Airline.

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