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).

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%     |

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
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 |

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 |

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 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 |

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.

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 |

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 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 |

Table 7. AVE and CR Variables

| Variable          | Σ|std loading | Σ|(std loading)^2 | Σ|error | CR | AVE |
|-------------------|---|------------|-----------------|-----|-------|-----|-----|
| Airline           | 1.387 | 0.970 | 1.030 | 0.651 | 0.485 |
| Tangible          | 2.390 | 1.442 | 2.558 | 0.691 | 0.361 |
| Terminal          | 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 |
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 ≤ 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 third hypothesis shows a significant level with a probability of P ≤ 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.

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

| Goodness-of-Fit Criteria | Goodness-of-Fit | 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 |

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.

REFERENCES

Abdullah, k., Abd.Manaf, N.H & Mohd.Noor, K Noor. 2007. Measuring The service Quality of Airline Services in Malaysia. Journal of Economics and Management 15’(1):1-29.

Ali, F., Dey, B.L. & Filieri, R. 2015. An assessment of service quality and resulting customer satisfaction in Pakistan international airlines: findings from foreigner and overseas Pakistani customers. International Journal of Quality and Reliability Management 32: 486–502.

Ariffin, A.A.M., Salleh, A.H.M., Asziz, N.A & Asbudin, A.A. 2010. Service Quality and Satisfaction for Low-Cost Carriers. International Review of Business Research Paper 6(1): 47-56.

Hair, J.F., Black, W.C., Babin, B. J. & Anderson, R.E. 2009. Multivariate data analysis. Upper Saddle River, NJ: Prentice Hall

Jafari, M. & Bazaee, G. 2016. Evaluating the Effects of Customers Service Quality in International Airlines (Case Study of Mahan Airline International Flights Passengers). International Journal of Humanities and Cultural Studies. Special issue April 1630-1644.

Leong, L.Y., Hew, T.S., Lee, V.H., & Ooi, K.B. 2015. An SEM Artificial Neural Network Analysis of The Relationships between SERVPERF, Customer Satisfaction and Loyalty Among Low-Cost and Full Service Airline. Expert Systems with Applications 42:6620-6634

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. 1988. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing 64:12-40

Prayag, G. 2007. Assessing international tourists’ perceptions of service quality at Air Mauritius. International Journal of Quality & Reliability Management 24 (5): 492-514.

Saha, G.C. & Theingi. 2009. Service quality, satisfaction, and behavioral intentions: a study of low-cost airline carriers in Thailand. Managing Service Quality 19(3): 350-372.

Suki, N.M. 2014. Passenger satisfaction with airline service quality in Malaysia: a structural equation modeling approach. Research in Transportation Business and Management 10: 26–32.

Zikmund, W. G., Babin, B. J., Carr, J. C. & Griffin, M. 2009. Business Research Methods (8th edition). USA: South-Western College Publishing.

https://ekonomi.kompas.com/read/2016/11/03/14000726/pada.2025.penduduk.indonesia.diperkirakan.tembus.284.5.juta.jiwa, accessed on September 30, 2019

https://id.wikibooks.org/wiki/Moda_Udara, accessed on September 30, 2019

http://pekanbaru.tribunnews.com/2017/08/02/garuda-indonesia-pekanbaru-gelar-bersih-bersih-pesawat, accessed on September 30, 2019

https://www.cnbcindonesia.com/ekonomi/20180504105238-92-295639/aktivitas-bisnis-menggeliat-penumpang-udara-global-melonjak, accessed on September 30, 2019.

https://www.angkasapura2.co.id/id/informasi/siaran-pers/detail/lebih-dari-sekedar-bandara-terminal-3-soekarno-hatta-kini-punya-coworking-space-premium, accessed on September 30, 2019