
**THE INFLUENCE OF SERVICE QUALITY TOWARD SALES OF TICKET AND MEMBERSHIP
(Case study: Garuda Indonesia Airline)**

*PENGARUH KUALITAS LAYANAN TERHADAP PENJUALAN TIKET DAN KEANGGOTAAN (STUDI
KASUS: PESAWAT GARUDA INDONESIA)*

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Abstract: Transportation has become one of the most important services for supporting people's daily activities. One of transportation that exist in the whole world is airplane. Garuda Indonesia as one of airline in Indonesia should be focus on service quality. The aim of this research is to analyze the influence of service quality toward sales of ticket and membership of Garuda Indonesia. The analysis method that used in this research is Time Series Regression. Tangible, reliability, responsiveness, assurance and empathy are the independent variables of this research. While, dependent variables of this research are sales of ticket and membership. The population of this research is airplane in Indonesia and the sample of this research is Garuda Indonesia Airline. The result of this research shows that based on F test, all independent variables (tangible, reliability, responsiveness, assurance and empathy) have simultaneous influence on sales of ticket and membership. While, based on T test the independent variable that influences sales of ticket partially is tangible and independent variables that influence membership partially are tangible, responsiveness and empathy. Based on time series regression result, independent variable that has significant value less than 5% (<0.05) influence on sales of ticket and membership are tangible, reliability and assurance.

Keywords: *Service Quality, Sales of Ticket, Membership, Time series Regression*

Abstrak: Transportasi menjadi salah satu jasa yang sangat penting untuk mendukung aktivitas masyarakat sehari-hari. Salah satu transportasi yang ada diseluruh dunia adalah pesawat terbang. Garuda Indonesia adalah salah satu pesawat di Indonesia yang harus fokus terhadap kualitas pelayanan. Tujuan dari penelitian ini adalah untuk menganalisa pengaruh dari kualitas pelayanan terhadap penjualan tiket dan keanggotaan pada Garuda Indonesia. Metode analisa yang digunakan pada penelitian ini adalah Regresi Rangkaian Waktu. Variabel independen pada penelitian ini adalah Tangible, reliability, responsiveness, assurance and empathy dan variable dependen pada penelitian ini adalah penjualan tiket dan keanggotaan. Populasi dari penelitian ini adalah seluruh pesawat di Indonesia dan sampel penelitian ini adalah Pesawat Garuda Indonesia. Berdasarkan hasil uji F, seluruh variabel independen mempengaruhi penjualan tiket dan keanggotaan secara simultan. Sedangkan, berdasarkan uji T, variable independen yang mempengaruhi penjualan tiket secara parsial adalah tangible dan variable independen yang mempengaruhi keanggotaan secara parsial adalah tangible, responsiveness dan empathy. Berdasarkan hasil Regresi Rangkaian Waktu, variable independen yang mempengaruhi penjualan tiket dan keanggotaan dengan nilai signifikan dibawah 5% (<0.05) adalah tangible, reliability dan assurance.

Kata kunci: *Kualitas Pelayanan, PenjualanTiket,Keanggotaan,RegresiRangkaianWaktu*

INTRODUCTION**Research Background**

Globalization encourages business to be more competitive. A competitive situation pushes business managers to better design a strategy in order to survive in the competition. The situation also applies in transportation sector. Transportation has become one of the most important services for supporting people's daily activities. There are many kinds of transportation that is available, namely, land transportation, marine transportation, and even air transportation. We airplane for air transportation.

Nowadays airplane is not a luxury transportation anymore since there are many airlines offering tickets at the lower price so as to give an opportunity to all people from lower-class, middle-class and upper-class to use the airplane. Besides price, however, nowadays customer select the airplane based on the service that provided by airplane from pre-flight to post-flight service. Considered by that, many airlines both domestic airlines and foreign airlines in Indonesia trying to improve their services day by day in order to satisfy the customer. In order to keep their customers, airlines must become increasingly sophisticated about understanding their customers' expectations in an effort to maintain the quality of service their passengers demand. To do so, airline management must understand the critical success factors of service quality. Service quality in business activities involves five dimensions namely tangibles include the physical facilities, equipment and personal appearance; reliability include the ability to perform the promised service dependably and accurately; responsiveness include willingness to help customers and provide service; assurance include knowledge and courtesy of employees and their ability to gain trust and confidence; and empathy include providing individualized attention to the customers. Zeithaml V., Leonard B., and Parasuraman A., (1988).

Therefore, PT. Garuda Indonesia as one of airline in Indonesia should be focus on service quality and customer satisfaction. Since, customer is one of important asset for the development of a company. There an issue about cost competition among the airlines in Indonesia doesn't deterred Garuda Indonesia to stick to their identity as a full service carrier which is an airline that focuses on providing a wide range of pre-flight and onboard services, including different service classes, and connecting flights, O'Connell (2005).

In the airlines, profit could be increase if sales of tickets increase as well. In order to maximize the service performance, Garuda gives full of service by providing facilities such as lobby lounge and member cards (GarudaMiles). GarudaMiles is a customer loyalty program in the form of a membership card of Garuda Indonesia, which is intended as a form of appreciation to loyal passengers.

Research Objective

The purpose of this research is to analyze the influence of service quality toward sales of ticket and membership of Garuda Indonesia Airline.

THEORETICAL FRAMEWORK**Marketing**

According to Kotler and Keller (2013) Marketing is the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society in large.

Service Concept

Edvardsson (1998), refer to the service concept as the prototype for service and define it as the "detailed description of what is to be done for the customer (what needs and wishes are to be satisfied) and how this is to be achieved".

Quality Concept

Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. We can say that the seller has delivered quality whenever the seller's product or service meets or exceeds the customer's expectation. (Kotler and Keller, 2006).

Service Quality

In marketing research, a popular approach to service quality is a model of SERVQUAL (Service Quality) developed by Parasuraman, A., Zeithalm (1988), ten service quality dimensions was determined. The dimensions are Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding/Knowing, and Tangibles.

Airline Ticket Sales

According to Achamad Basah R (1999) ticket is a proof agreement on air transport services. According to Desky (2001) ticket can be divided into two types such as domestic ticket and international ticket. Domestic ticket is a ticket that someone used to a flight in domestic, while international ticket is a ticket that someone used to a flight abroad.

Membership

Membership is an admission as customer join in a business organization or group formally and recognized. The importance is the fact that customers will be one individual or member of the company (Gronroos, 2000).

Previous Research

Mesay Sata Shanka with the title: *Measuring Service Quality in Ethiopian Airlines*. The aim of this paper is to investigate the relationship between airline service quality, passengers' satisfaction and loyalty towards Ethiopian Airlines. SERVQUAL model was used to measure the perceptions and expectations of passengers' on the services received from Ethiopian Airlines. The five dimensions of SERVQUAL, i.e. reliability, assurance, tangibility, empathy and responsiveness were used to measure the service quality of Ethiopian Airlines. According to the findings of this study, the passengers were dissatisfied with all five dimensions of service quality.

Kalthom, et al with the title: *Measuring the Service Quality of Airline Services in Malaysia*. The perception of Malaysian consumers of the quality of airline services was examined in this study using the SERVQUAL measurement. The results of the study indicate that the most significant factors in Malaysian customers' perception of service quality are Empathy, Tangibles and Assurance.

Nadia Hanum Amiruddin with the title: *Price, Service Quality and Customer Loyalty: A Case Of Air Asia*. This research aimed to study the relationship between service quality and price towards customer loyalty in the Air Asia services. For this study, the survey method was used as instrument for collecting data. A mall intercept was the method of data collection used by researchers where passengers at the arrival and departure halls of LCCT were given the questionnaire. Based on this research, the result indicates that there are significant relationship between service quality towards customer loyalty and price towards customer loyalty.

Conceptual Framework

Figure 1. Conceptual Framework

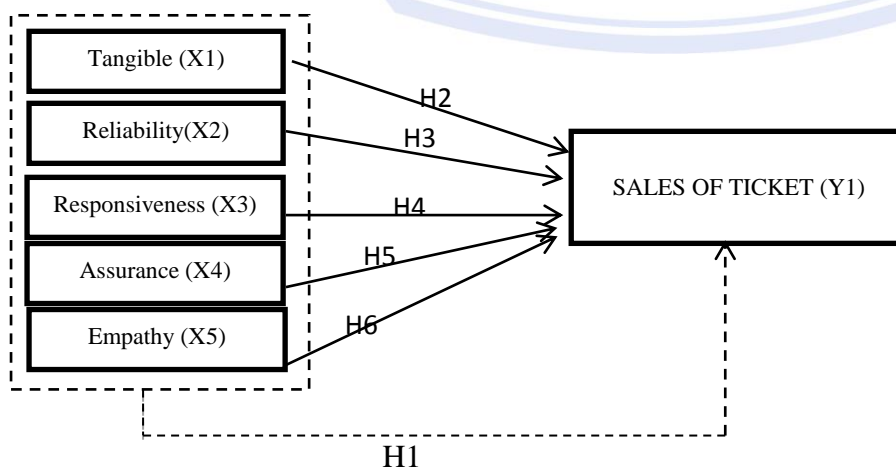
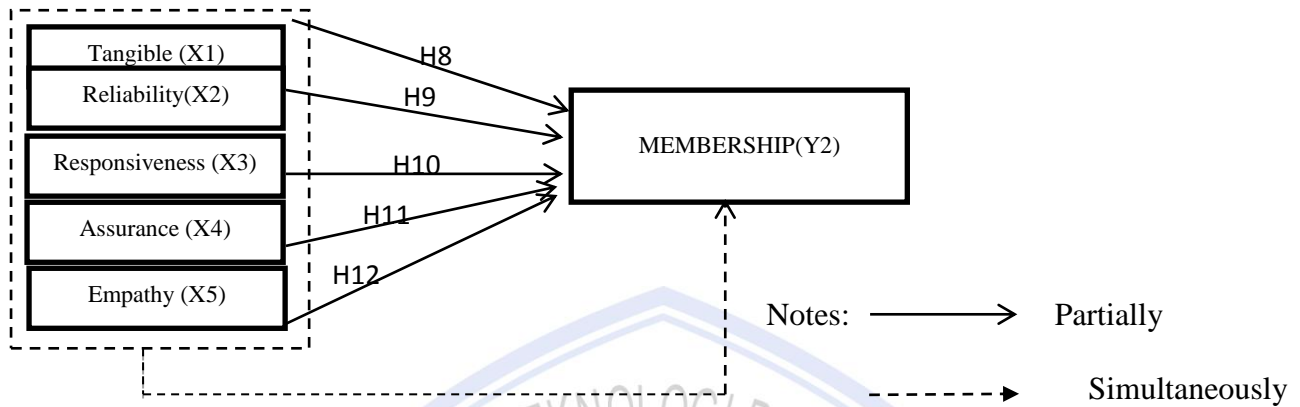


Figure 2. Conceptual Framework

Source: Data Prrocessed, 2016

RESEARCH METHOD

Type of Research

The types of this research are quantitative research. Aliaga and Gunderson (2002), quantitative research is explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (impaticular statistic).

Place and Time of Research

The study was conducted in PT. Garuda Indonesia Airline from July – October 2016

Research Procedures

1. Choose the research topic
2. Compose the statement
3. Find journals, articles, and books that related to this research in order to complete the theoretical framework
4. Obtain the data that needed in this research
5. Collect information about the company
6. Doing analysis the data.
7. Writing result

Population and Sample

Population is the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran and Bougie, 2010). The population of this research is airplanes in Indonesia. The sample of this research is Garuda Indonesia Airline.

Data Collection Method

The source of data for this research was predominantly from secondary sources. However, the secondary data for this research is audited annual reports of PT. Garuda Indonesia during year 2006 to 2015. And the other sources like literature from various books, journals, and another websites related to this research were also used as a source of secondary data.

Operational Definition of Research Variable

1. **Tangible** Representiing the service physically. This indicator was represented by the number of fleet and fleet age.
2. **Reliability** Delivering promised service dependably and accurately. This indicator was represented by the ratios of on time performance.

3. **Responsiveness** Being willing to help customer and provide prompt service. This indicator was represented by the customer feedback (complaint, compliment, suggestion).
4. **Assurance** Employee knowledge and courtesy and the ability of the firm and its employee to inspire trust and confidence. This indicator was represented by the number of employee with education base.
5. **Empathy** Good communication personalized attention, and understanding of customer needs. This indicator was represented by the customer satisfaction index.

Data Analysis Method

Time Series Regression

Time series is a sequence of observations on some phenomenon observed at regular intervals. Those intervals may correspond to the passage of calendar time (e.g. annual, quarterly, monthly data) or they may reflect an economic process that is irregular in calendar time (such as business daily data). Time series regression is a statistical method for predicting a future response based on the response history (known as autoregressive dynamics) and the transfer of dynamics from relevant predictors. Time series regression is commonly used for modeling and forecasting of economic, financial, and biological systems.

Models used in a time series context can often be grouped into those sharing common features. The static model is:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \varepsilon_t$$

Y_1 = Sales of ticket

Y_2 = Membership

β_0 = Intercept

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = The regression coefficient of each variable

X_{1t} = Tangible (total fleet, fleet age)

X_{2t} = Reliability

X_{3t} = Responsiveness (complaint, compliment, suggestion)

X_{4t} = Assurance

X_{5t} = Empathy

ε_t = error term

Classical Assumption Test

Normality Test

Normality test aims to test the regression model whether the dependent variable with several independent variables has a normal distribution or not (Sekaran, 2006).

Multicollinearity

The purpose is to test the assumption of multicollinearity in the regression model whether there is a correlation between the independent variables. (Malhotra, 2007).

Heteroscedasticity

Heteroscedasticity implies that the variances (i.e. the dispersion around the expected mean of zero) of residual are not constant, but that they are different for different observations. (Gupta, 2000).

Autocorrelation

Autocorrelation test is to know whether any correlation between variables in t period with variables in prior period ($t-1$). Autocorrelation test is to see whether or not there is a high correlation between the free variables, if there is a correlation then there is a problem called autocorrelation (Sekaran, 2005)

Hypothesis Testing

F Test

The F test is used to determine the whole effect of independent variables to a dependent variable. This test is done by comparing the F value with F table. The level of significance is 5% ($\alpha=0.05$), if F value is greater than F table. H_0 is rejected and H_1 is accepted.

T Test

The T test is used to determine the effect of each independent variable to dependent variable individually, considering the other variables remain constant. This test done by comparing the T value and T table if T value is greater than T table H_0 is rejected and H_1 is accepted the value off done by T test formula.

RESULT AND DISCUSSION**Time Series Regression**

For the first section, the researcher was analyzed the influence of five independent variables (tangible, reliability, responsiveness, assurance, empathy) toward the first dependent variable (sales of ticket). The equation as follow:

$$Y_1 = \beta_0 + \beta_1(\text{tangible}) + \beta_2(\text{reliability}) + \beta_3(\text{responsiveness}) + \beta_4(\text{assurance}) + \beta_5(\text{empathy}) + \varepsilon_t$$

Based on the information that given by SPSS that there was insufficient data for this analysis by the five independent variable. It means the data that provided by Garuda Indonesia was insufficient. There was no result such as ANOVA and Regression Coefficients table. So the researcher decided to eliminate one by one the data that represent the independent variables.

$$Y_1 = -3270796.779 + 149577.779 X_{1t} + 97967.085 X_{2t} - 80470.228 X_{3t}$$

Equation above was equation of the analysis of tangible, reliability and responsiveness toward sales of ticket. Based on the coefficient table there is only one independent variable that has significant value less than 5% (<0.05) that is tangible with the significant value 0.016.

$$Y_1 = -44556267.042 + 67267.176 X_{1t} + 351465.026 X_{2t} + 3870.707 X_{4t}$$

Equation above was equation of the analysis of tangible, reliability and assurance toward sales of ticket. Based on the coefficient table there is only one independent variable that has significant value less than 5% (<0.05) that is assurance with the significant value 0.023.

$$Y_1 = -219337781.478 + 2647229.852 X_{2t} + 821999.198 X_{3t}$$

Equation above was equation of the analysis of reliability and responsiveness toward sales of ticket. Based on the coefficient table there is only one independent variable that has significant value less than 5% (<0.05) that is assurance with the significant value 0.005.

For the second section, the researcher was analyzed the influence of five independent variables (tangible, reliability, responsiveness, assurance, empathy) toward the second dependent variable (membership). The equation as follow:

$$Y_2 = \beta_0 + \beta_1(\text{tangible}) + \beta_2(\text{reliability}) + \beta_3(\text{responsiveness}) + \beta_4(\text{assurance}) + \beta_5(\text{empathy}) + \varepsilon_t$$

Based on the information that given by SPSS that there was insufficient data for this analysis by the five independent variable. It means the data that provided by Garuda Indonesia was insufficient. There was no result such as ANOVA and Regression Coefficients table. So the researcher decided to eliminate one by one the data that represent the independent variables.

$$Y_2 = 287364.372 + 8307.951 X_{1t} - 100.167 X_{2t} - 29188.728 X_{3t} + 10.573 X_{4t}$$

Equation above was equation of the analysis of tangible, reliability and responsiveness toward membership. Based on the coefficient table there is only one independent variable that has significant value less than 5% (<0.05) that is tangible with the significant value 0.022.

$$Y_2 = -3268414.457 + 29340.615 X_{2t} - 24076.487 X_{3t} + 283.533 X_{4t}$$

Equation above was equation of the analysis of reliability, responsiveness and assurance toward membership. Based on the coefficient table there is only one independent variable that has significant value less than 5% (<0.05) that is assurance with the significant value 0.035.

$$Y_2 = -10766620.580 + 130705.677 X_{2t} + 24300.989 X_{3t}$$

Equation above was equation of the analysis of reliability and responsiveness toward membership. Based on the coefficient table there is only one independent variable that has significant value less than 5% (<0.05) that is reliability with the significant value 0.004.

Classical Assumption Test

Normality

Normality test can be identified by using graph of P-P Plot. The data will distribute normally if the value of P-P Plot is near the diagonal line of the graph.

Figure 3. P.Plot

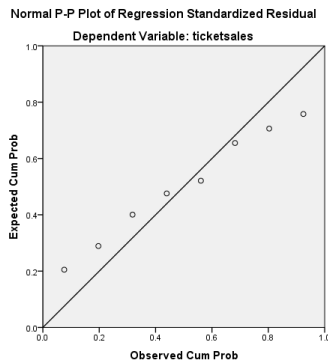
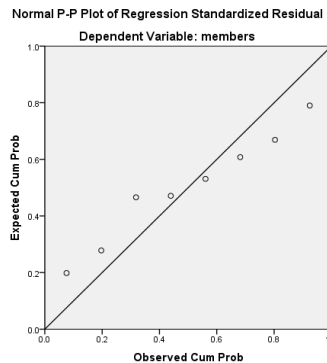


Figure 4. P.Plot



The distributions of residual points are around the normal line presented in the figure above. It shows that the dots are spreading near the diagonal line and follow the direction of the diagonal line. It happens because the points residual come from data with normal distribution. Therefore it can be concluded that the data is distributed normally.

Multicollinearity

The multicollinearity problem shows through the collinearity statistics, in the tolerance and variance inflated factors (VIF) table. If the tolerance value is more than 0.10 and the VIF value is less than 10, it indicates that there is no multicollinearity.

Table 1. Collinearity Statistics

Model	Coefficients ^a							
	Unstandardized Coefficients		Standardized Coefficients		T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1 (Constant)	-	82912823.613			-1.434	.288		
	118856992.281							
totalfleet	115903.555	45165.663	.627	2.566	.124	.077	13.009	
ontime	442929.891	337395.746	.146	1.313	.320	.371	2.696	
complaint	85212.344	174923.419	.133	.487	.674	.062	16.125	
employees	1503.000	2393.380	.200	.628	.594	.045	22.076	
custsatisf	907513.462	904736.011	.218	1.003	.421	.097	10.268	

a. Dependent Variable: ticketsales
 Source: Data Processed, 2016

Table 2. Collinearity Statistics

Model	Coefficients ^a						Collinearity	
	Unstandardized Coefficients		Standardized Coefficients		T	Sig.	Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1 (Constant)	-	2291563.702			-4.192	.052		
	9606184.948							
totalfleet	11117.646	1248.299	1.186	8.906	.012	.077	13.009	
ontime	17803.173	9325.021	.116	1.909	.196	.371	2.696	
complaint	12061.787	4834.574	.370	2.495	.130	.062	16.125	
employees	-136.750	66.149	-.359	-2.067	.175	.045	22.076	
custsatisf	99111.496	25005.302	.469	3.964	.058	.097	10.268	

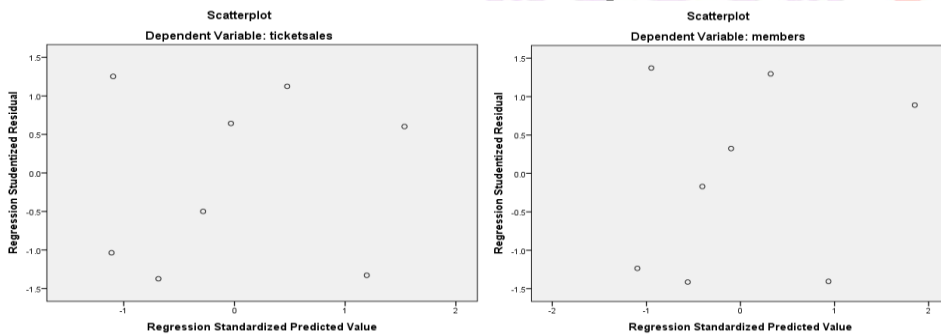
a. Dependent Variable: members

Source: Data Processed, 2016

Tables above shows that only one independent variable that has tolerance value that more than 0.10 which is one time performance (reliability) 0.371, while other independent variables have tolerance value less than 0.10 which are total fleet (tangible) is 0.077, complaint (responsiveness) is 0.062, employees (assurance) is 0.045 and customer satisfaction (empathy) is 0.097. There is also only one independent variable that has VIF value than less than 10 which is on time performance (reliability), while other independent variables have VIF value more than 10 which are total fleet (tangible) is 13.009, complaint (responsiveness) is 16.125, employees (assurance) is 22.076 and customer satisfaction (empathy) is 10.268. So, the results of the tolerance and VIF value show that this research is indicated that there is no multicollinearity.

Heteroscedasticity

Heteroscedasticity occurs if there are dots which form a certain pattern regularly as waves. Homoscedasticity occurs if there are no certain patterns, and the dots spread above and below 0 of the Y-axis.



Figures above shows that the patterns of the dots are not forming certain pattern or waves and the dots are spreading above and below the zero point of Y-axis. So, there is no heteroscedasticity in this regression model.

Autocorrelation

Autocorrelation can be tested by using the Durbin-Watson statistic techniques, which test whether residual that adjacent is correlated or not. If the result is $du < d < 4-du$ then there is no autocorrelation.

Table 3. Durbin Watson Table

N	k=5	
	dL	dU
10	0.243	2.822

Based on table above with n =10, K = 5 independent variables, du = 2.822.

Source: *Data Processed, 2016*

Table 4. Durbin Watson Result

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.995 ^a	.991	.968	1527742.01479	2.317

a. Predictors: (Constant), custsatisf, ontime, totalfleet, complaint, employees

b. Dependent Variable: ticketsales

Source: *Data Processed, 2016*

Durbin Watson Result

Table above shows that the result of Durbin Watson value is 2.317 and du is 2.822. So, here is the result:

$$du < d < 4-du$$

$$2.822 < 2.317 < 1.178$$

Table 5. Durbin Watson Result

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.999 ^a	.997	.990	42224.08542	2.647

a. Predictors: (Constant), custsatisf, ontime, totalfleet, complaint, employees

b. Dependent Variable: members

Source: *Data Processed, 2016*

Table above shows that the result of Durbin Watson value is 2.647 and du is 2.822. So, here is the result:

$$du < d < 4-du$$

$$2.822 < 2.647 < 1.178$$

The result shows that the value of Durbin Watson count is more than value of Durbin Watson table, and the value of Durbin Watson table is less than 4 minus value of Durbin Watson table. Therefore, there is no autocorrelation in this regression model.

Hypothesis Testing

Hypothesis testing consists of F-Test and T-Test. F-Test is used to determine the simultaneous effect of all independent variables to dependent variable, and T-Test is used to determine the partial effect of each independent variable to dependent variable.

(F Test)**Table 6. Level of Significance****F Table with 5% Level of Significance**

df1 df2	1	2	3	4	5
1	161	199	216	225	230
2	18.51	19.00	19.16	19.25	19.30
3	10.13	9.55	9.28	9.12	9.01

Source: Stanford, 2016

Table 7. F Count

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	503293428543611.560	5	100658685708722.310	43.127	.023 ^b
	Residual	4667991327534.285	2	2333995663767.143		
	Total	507961419871145.900	7			

a. Dependent Variable: ticketsales

b. Predictors: (Constant), custsatisf, ontime, totalfleet, complaint, employees

Source: Data Processed, 2016

F count is 43.127 and F table is 19.30. Therefore, F count (43.127) > F table (19.30). Since F count is more than F table, Ho is rejected and Ha is accepted. So it can be concluded that tangible, reliability, responsiveness, assurance, and empathy simultaneously influence sales of ticket.

Table 8. F Count

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1303721014343.819	5	260744202868.764	146.249	.007 ^b
	Residual	3565746779.680	2	1782873389.840		
	Total	1307286761123.500	7			

a. Dependent Variable: members

b. Predictors: (Constant), custsatisf, ontime, totalfleet, complaint, employees

Source: Data Processed, 2016

F count is 146.249 and F table is 19.30. Therefore, F count (146.249) > F table (19.30). Since F count is more than F table, Ho is rejected and Ha is accepted. So it can be concluded that tangible, reliability, responsiveness, assurance, and empathy simultaneously influence membership.

T Test

The T-Test is used to see partial influence of each independent variable on the dependent variable. The hypothesis testing in this test will be:

- t count > t table then H0 is rejected and Ha is accepted.
- t count < t table then H0 is accepted and Ha is rejected.

Table 9. T Count

Model	Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
1 (Constant)	-118856992.281	82912823.613			-1.434	.288
totalfleet	115903.555	45165.663	.627		2.566	.124
ontime	442929.891	337395.746	.146		1.313	.320
complaint	85212.344	174923.419	.133		.487	.674
employees	1503.000	2393.380	.200		.628	.594
custsatisf	907513.462	904736.011	.218		1.003	.421

a. Dependent Variable: ticketsales

Source: Data Processed, 2016

Table 4.112 shows that

1. The t count for Tangible (X1) = 2.566 and since the level of significance is 5% (0.05) then the t table is 2.131. The result is $t_{count} = 2.566 > t_{table} = 2.131$. Since the t count is more than t table then H0 is rejected and H2 is accepted. It means that variable tangible (X1) did significantly influence sales of ticket (Y1) partially.
2. The t count for Reliability (X2) = 1.313 and since the level of significance is 5% (0.05) then the t table is 2.131. The result is $t_{count} = 1.313 < t_{table} = 2.131$. Since the t count is less than t table then H0 is accepted and H3 is rejected. It means that variable Reliability (X2) did not significantly influence sales of ticket (Y1) partially.
3. The t count for Responsiveness (X3) = 0.487 and since the level of significance is 5% (0.05) then the t table is 2.131. The result is $t_{count} = 0.487 < t_{table} = 2.131$. Since the t count is less than t table then H0 is accepted and H4 is rejected. It means that variable Responsiveness (X3) did not significantly influence Sales of Ticket (Y1) partially
4. The t count for Assurance (X4) = 0.628 and since the level of significance is 5% (0.05) then the t table is 2.131. The result is $t_{count} = 0.628 < t_{table} = 2.131$. Since the t count is less than t table then H0 is accepted and H5 is rejected. It means that variable Assurance (X4) did not significantly influence Sales of Ticket (Y1) partially
5. The t count for Empathy (X5) = 1.003 and since the level of significance is 5% (0.05) then the t table is 2.131. The result is $t_{count} = 1.003 < t_{table} = 2.131$. Since the t count is less than t table then H0 is accepted and H6 is rejected. It means that variable Empathy (X5) did not significantly influence Sales of Ticket (Y1) partially.

The result shows that there is one independent variable (tangible) partially influence sales of ticket (Y1). While four others independent variables (reliability, responsiveness, assurance and empathy) did not partially influence sales of ticket (Y1). So, hypothesis 2 is accepted and hypothesis 3,4,5 and 6 are rejected.

Table 10. T Count

Model	Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
1 (Constant)	-9606184.948	2291563.702			-4.192	.052
totalfleet	11117.646	1248.299	1.186		8.906	.012
ontime	17803.173	9325.021	.116		1.909	.196
complaint	12061.787	4834.574	.370		2.495	.130
employees	-136.750	66.149	-.359		-2.067	.175
custsatisf	99111.496	25005.302	.469		3.964	.058

a. Dependent Variable: members

Source: Data Processed, 2016

Table 4.113 shows that

1. The t_{count} for Tangible (X1) = 8.906 and since the level of significance is 5% (0.05) then the t_{table} is 2.131. The result is $t_{count} = 8.906 > t_{table} = 2.131$. Since the t_{count} is more than t_{table} then H0 is rejected and H8 is accepted. It means that variable tangible (X1) did significantly influence membership (Y2) partially

2. The t_{count} for Reliability (X2) = 1.909 and since the level of significance is 5% (0.05) then the t_{table} is 2.131. The result is $t_{\text{count}} = 1.909 < t_{\text{table}} = 2.131$. Since the t_{count} is less than t_{table} then H0 is accepted and H9 is rejected. It means that variable Reliability (X2) did not significantly influence Membership (Y2) partially.
3. The t_{count} for Responsiveness (X3) = 2.495 and since the level of significance is 5% (0.05) then the t_{table} is 2.131. The result is $t_{\text{count}} = 2.495 > t_{\text{table}} = 2.131$. Since the t_{count} is more than t_{table} then H0 is rejected and H10 is accepted. It means that variable Responsiveness (X3) did significantly influence Membership (Y2) partially.
4. The t_{count} for Assurance (X4) = -2.067 and since the level of significance is 5% (0.05) then the t_{table} is 2.131. The result is $t_{\text{count}} = -2.067 < t_{\text{table}} = 2.131$. Since the t_{count} is less than t_{table} then H0 is accepted and H11 is rejected. It means that variable Assurance (X4) did not significantly influence Membership (Y2) partially.
5. The t_{count} for Empathy (X5) = 3.964 and since the level of significance is 5% (0.05) then the t_{table} is 2.131. The result is $t_{\text{count}} = 3.964 > t_{\text{table}} = 2.131$. Since the t_{count} is more than t_{table} then H0 is rejected and H12 is accepted. It means that variable Empathy (X5) did significantly influence Membership (Y2) partially.

The result shows that there are three independent variables (tangible, responsiveness and empathy) partially influence membership (Y2). While two others independent variables (reliability and assurance) did not partially influence membership (Y2). So, hypothesis 8, 10 and 12 are accepted and hypothesis 9 and 11 are rejected.

Discussion

This research aims to find out the influence of five elements of service quality (tangible, reliability, responsiveness, assurance and empathy) toward sales of ticket and membership in airline industry (case study Garuda Indonesia Airline) by using time series regression analysis. Below are discussion and explanation from the result of this research. The sample of this research is data by Garuda Indonesia Airline that have been audited in recent 10 years.

Tangible was represented by total fleet and fleet age of Garuda Indonesia Airline. Based on the result from time series analysis, total fleet significantly influenced Sales of Ticket (Y1) with the significant value such as 0.016, 0.011, 0.003, 0.049, 0.025, 0.001, 0.003, 0.000, 0.024 and 0.009. It can be explained that, if Garuda Indonesia add more fleets every year means that there are more passengers that could be carried by Garuda Indonesia. Total fleet also significantly influenced Membership (Y2) with the significant value such as 0.022, 0.028, 0.016, 0.017, 0.003, 0.001, 0.000, 0.006 and 0.008. It can be explained that, if Garuda add more fleets every year and there are more passengers carried by Garuda Indonesia means that there are more passengers want to experience the advantage of being a member of GarudaMiles that provided by Garuda Indonesia. Based on the result, the first independent variable of this research which is tangible has significant influence toward Sales of Ticket (Y1) and Membership (Y2). It can be seen from T test that proves this variable has significant influence toward Sales of Ticket (Y1) and Membership (Y2) partially. This variable is the first influencing variable in this research that influences Sales of Ticket (Y1) and Membership (Y2).

Reliability was represented by on time performance by Garuda Indonesia. Based on the result from time series regression, reliability significantly influenced Sales of Ticket (Y1) with significant value 0.005 and reliability also significantly influenced Membership (Y2) with the significant value 0.004. It means that if the on time performance of Garuda Indonesia is increase then the Sales of ticket and members of GarudaMiles are increase as well. Based on the result from T test, reliability did not significantly influence Sales of Ticket (Y1) and Membership (Y2) partially.

Responsiveness was represented by customer feedback that divided by three feedback, they are complaint, compliment and suggestion. Based on the result from time series analysis, this variable did not significantly influence Sales of Ticket (Y1) and Membership (Y2). It can be explained that the more complaint, the less the number of ticket sold and the less the number of GarudaMiles members. Based on the result from T

test, responsiveness has significant influence toward Membership (Y2) partially, but this variable did not significant influence toward Sales of Ticket (Y1).

Tangible was represented by total fleet and fleet age of Garuda Indonesia Airline. Based on the result from time series analysis, total fleet significantly influenced Sales of Ticket (Y1) with the significant value such as 0.016, 0.011, 0.003, 0.049, 0.025, 0.001, 0.003, 0.000, 0.024 and 0.009. It can be explained that, if Garuda Indonesia add more fleets every year means that there are more passengers that could be carried by Garuda Indonesia. Total fleet also significantly influenced Membership (Y2) with the significant value such as 0.022, 0.028, 0.016, 0.017, 0.003, 0.001, 0.000, 0.006 and 0.008. It can be explained that, if Garuda add more fleets every year and there are more passengers carried by Garuda Indonesia means that there are more passengers want to experience the advantage of being a member of GarudaMiles that provided by Garuda Indonesia.

Assurance was represented by number of employees of Garuda Indonesia Airline. Based on the result from time series analysis, assurance significantly influenced Sales of Ticket (Y1) with the significant value such as 0.023, 0.072, 0.021, 0.043, 0.003, 0.002, 0.001, 0.000, and 0.014. This variable also significantly influenced Membership (Y2) with the significant value such as 0.035, 0.020, 0.043, 0.042 and 0.001. It can be explained that, the more employees that have competence and credibility in giving service to the customers, the more the number of sales of ticket and GarudaMiles members. Based on the result from T test, assurance did not significantly influence Sales of Ticket (Y1) and Membership (Y2) partially.

Empathy was represented by customer satisfaction index of Garuda Indonesia Airline. Based on the result from time series analysis, empathy did not significantly influence Sales of Ticket (Y1) and Membership (Y2). Based on the result from T test, empathy has significant influence toward Membership (Y2) partially, but this variable did not significant influence toward Sales of Ticket (Y1).

Sales of ticket is the first dependent variable in this research. Sales of ticket was represented by number of passenger carried. Based on the result from F test, all independent variables (tangible, reliability, responsiveness, assurance and empathy) simultaneously influence membership. There is only one independent variable that partially influence sales of ticket, that it tangible. Membership is the second dependent variable of this research. Membership was represented by the number of GarudaMiles of Garuda Indonesia. GarudaMiles is frequent flyer program that owned by Garuda Indonesia Airline. Based on the result from F test, all independent variables (tangible, reliability, responsiveness, assurance and empathy) simultaneously influence membership. Unfortunately, there are not all the independent variable partially influence membership. The independent variables that partially influence membership are tangible, responsiveness, empathy.

CONCLUSION AND RECOMMENDATION

Conclusions

The conclusions drawn from this research are as follows:

1. Based on F test, all independent variables (tangible, reliability, responsiveness, assurance and empathy) have simultaneous influence on sales of ticket of Garuda Indonesia airline because all independent variables have significant value less than 5% (< 0.05) and F count is larger than F table ($43.127 > 19.30$).
2. Based on F test, all independent variables (tangible, reliability, responsiveness, assurance and empathy) have simultaneous influence on membership of Garuda Indonesia airline because all independent variables have significant value less than 5% (< 0.05) and F count is larger than F table ($146.249 > 19.30$).
3. Based on T test, not all independent variables in this research influence sales of ticket of Garuda Indonesia partially. The independent variable that partially influenced sales of ticket was tangible which have significant value less than 5% (< 0.05) and the Tcount of independent variable is larger than Ttable (X1: $2.566 > 2.131$), While four other independent variable has Tcount that less than Ttable (X2: $1.313 < 2.131$), (X3: $2.131 > 2.131$), (X4: $0.628 < 2.131$), (X5: $1.003 > 2.131$), means that reliability, responsiveness, assurance and empathy did not influence sales of ticket partially.
4. Based on T test, not all independent variables in this research influence membership of Garuda Indonesia partially. The independent variables that partially influence membership are tangible, responsiveness, empathy, which have significant value less than 5% (< 0.05) and the Tcount of each independent variable is larger than Ttable (X1: $8.906 > 2.131$), (X3: $2.495 > 2.131$), (X5: $3.964 > 2.131$). While two other independent variable has Tcount that less than Ttable (X2: $1.909 < 2.131$), (X4: $-2.067 < 2.131$), means that reliability and assurance did not influence membership partially.
5. Based on time series regression result, not all independent variable in this research has significant influence on membership and sales of ticket. Independent variable that has significant value less than 5% (< 0.05) influence on

membership are tangible, reliability and assurance. Independent variable that has significant value less than 5% (<0.05) influence on sales of ticket are also tangible, reliability and assurance.

Recommendations

Some recommendations are considered important to address those results. They are as follows:

1. Based on T test, reliability which was represented by on time performance did not influence both dependent variables partially. The researcher suggest that Garuda Indonesia should improve the on time performance in order to satisfy the customer which means will impact on the number of tickets sold and number of GarudaMiles members.
2. Since tangible which was represented by total fleet and fleet age did significantly influence on Sales of Ticket and Membership, the researcher suggest that Garuda Indonesia keep in providing new fleet with younger age every year. It is also can impact on the customer trust to flight with Garuda Indonesia more and more.

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