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The Effect of Product Quality and Services on Customer Satisfaction and Customer Loyalty Product Support of PT Trakindo Utama Zona Pekanbaru

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ABSTRACT

Understanding the factors that influence customer loyalty is very important for the company, because the customer loyalty has an important dimension in supporting the achievement of sales targets, including are repurchases, retention and referrals dimension. For five years since 2012, spare parts and services sales in Trakindo Utama Pekanbaru zone has been decreased significantly. In year of 2012 sales of spare parts and services reached USD 10.3 million, but in year of 2016 fell significantly only reached USD 3.8 million. The research was conducted in Trakindo Utama Pekanbaru zone by using survey method. Respondents consisted of 108 customers given 20 statements containing the statement of the customer quality variable, the service quality variable, the customer satisfaction variable and customer loyalty variable. From 108 questionnaires distributed, 78 questionnaires were filled in completely and returned to the researchers. From the research result indicated that variables of service quality have positive and significant effect to customer satisfaction. Product quality and service quality have positive and significant influence to customer loyalty. And variable intervening of customer satisfaction have a positive and significant effect to customer loyalty. From result of research indicate that influence of customer satisfaction to customer loyalty more significant rather than the variable of product quality and service quality.

Keywords: Product quality, service quality, customer satisfaction and customer loyalty.

INTRODUCTION

The position of the customer is a very important factor because the customer is the user of the goods and services the company has produced. The customer is an individual or group who buys a physical product or service by considering various factors such as price, quality, place, service and so on based on the customer's own decision. Therefore, it is important for companies to always understand the factors that influence customer satisfaction in order to build customer loyalty. Customer loyalty is an important asset for the company in an effort to retain customers (customer retention) and ensure the continued sale of the company's products.

PT Trakindo Utama is one of the leading National companies in Indonesia engaged in the sale of goods and services in the heavy equipment industry with the Caterpillar trademark. Caterpillar itself is the largest producer of heavy equipment in the world based in the United States. Broadly speaking, PT Trakindo Utama's product line is grouped into 2 (two) categories, namely Prime Product consisting of machine, engine, used equipment, and rental products and Product Support consisting of spare parts and services.

As a world-class provider of heavy equipment solutions, excellent service is a commitment that has been maintained by PT Trakindo Utama in an effort to advance all customers spread throughout Indonesia. PT

Trakindo Utama Pekanbaru zone is one of the operating zones in the northern part of Sumatra. However, during the last five years from 2012 to 2016, sales of Pekanbaru zone product support have decreased significantly. Both in terms of sales volume and the percentage contribution to total sales. In 2012 the value of sales product support amounting to USD 10.3 million, down significantly in 2016, totaling USD 3.8 million. This research will examine the effect of product quality and service quality on customer satisfaction and loyalty in using PT Trakindo Utama's product support.

Product quality

Product (product) is anything that can be offered to the market to get attention, bought, used, or consumed that can satisfy desires or needs (Kotler and Keller, 2012) while product quality is the ability of a product to demonstrate its function, this includes the overall durability, reliability, accuracy, ease of operation, and product repairs, as well as other product attributes (Kotler and Armstrong, 2012). According to Garvin as quoted by Mowen and Minor (2008) there are eight dimensions of product quality that are considered as attributes of an item that are evaluated by consumers, namely:

1. Performance, which is the appearance or performance of the main functions of the product.
2. Features (Features), namely a number of additional attributes that complete the product function.
3. Reliability (Reliability), i.e. the possibility that a product will not be damaged or fail in a certain period of time.
4. Durability, which is the age or durability of the product.
5. Easy to repair (Service ability), namely the ease of products to be repaired and personal services that are appropriate, reliable, and on time.
6. Aesthetics, which is how the product looks, feels, and sounds.
7. Conformance to specification, i.e. the level of conformity of the product with the promised specifications.
8. Perceived quality, which is a combination of all categories that are the influence of brand image and other intangible factors that influence consumer perceptions about quality.

Service Quality

Service quality is very dependent on three things: systems, technology and people. The human factor holds the biggest contribution so that service quality is more difficult to imitate compared to product quality and price. The company's success in providing quality services to its customers, achieving high market share, and increasing the company's profit is very much determined by the approach used. According to Lovelock (2011) service quality is the expected level of excellence and control over excellence to meet customer desires.

According to Kottler and Keller cited by Tjiptono (2014), five dominant factors or determinants of service quality are:

1. Tangible, which is in the form of physical appearance, equipment and a variety of visible material that can be judged well.
2. Empathy, the willingness of employees to establish relationships, good communication, personal attention and understanding of the customer's individual needs.
3. Responsiveness, the willingness and ability of employees to provide services quickly and responsively. The readiness of employees to meet the desires of consumers responsively and friendly.
4. Reliability, the ability to provide services immediately, accurately, consistently and satisfactorily.
5. Assurance, which includes the knowledge, competence, courtesy and trustworthiness of the staff regarding the promise given, free from danger, risk or doubt.

Customer satisfaction

Customer satisfaction has become a central concept in marketing theory and practice, and is one of the important goals for business activities. According to Kotler & Keller (2012), Satisfaction is a person's feelings of pleasure or disappointment that the result of comparing a product's perceived performance or outcome to expectations. If the performance falls short of expectations, the outcome is dissatisfied. If it matches expectations, the customer is satisfied or delighted. If the performance is less than expectations, the customer will be disappointed and if in accordance with expectations consumers will feel satisfied. Customer satisfaction is very dependent on customer expectations. Therefore, the customer satisfaction strategy must be preceded by a detailed and accurate knowledge of customer expectations. Customer expectations can sometimes be controlled by the company. More often, producers are unable to control their expectations. This is what makes customer satisfaction dynamic.

According to Irawan (2008) there are five main drivers or factors of customer satisfaction, namely:

1. Product quality
   This product quality is a global dimension and there are at least 6 elements of product quality are performance, durability, features, reliability, consistency, and design.
2. Price
   For sensitive customers, low prices are usually an important source of satisfaction because they will get high value for money. This price component is relatively unimportant for those who are not price sensitive. For the retail industry, this price component is really important and its contribution to satisfaction is relatively large.
3. Service quality
   Service quality is very dependent on three things: systems, technology and people. This human factor holds a contribution of around 70%. Not surprisingly, satisfaction with service quality is usually difficult to imitate.
4. Emotional factor
   For some lifestyle-related products, such as cars, cosmetics, clothing, the fourth factor of customer satisfaction, which is relatively high emotional factors.
5. Ease
   The fifth factor is related to the cost and ease of getting the product or service. Customers will be more satisfied if it is relatively easy, convenient and efficient in getting products or services.

Customer loyalty

According to Gremler and Brown (Hasan, 2008) that customer loyalty is a customer who not only repurchases an item or service, but also has a commitment and a positive attitude towards the company, for example by recommending others to buy. According to Kotler (2012), consumer loyalty is a repurchase made by a consumer because of a commitment to a brand or company. Kotler and Keller (2012) state customer loyalty as A commitment to rebuy or repatronize a preferred product or service or commitment to repurchase or repurchase a preferred product or service.

Broadly speaking, loyalty consists of two dimensions, that is the behavioral dimension and the attitude dimension.

1. Behavioral Dimensions

The behavioral dimension of loyalty refers to aspects of consumer behavior (for example, repeated purchases) that are directed towards specific trademarks or services over time (Bowen and Shoemaker, 1998; Naumann and Giel, 1995).

2. Dimensions of Attitude

According to Gremler and Brown (1997), the attitude dimension of loyalty includes the desires and preferences of a consumer. Five items used to measure loyalty include: talking positive things about the company; recommend the company to others; encourage others to do business with the company; consider the company as the first choice in the future; and do more business with that company in the future.

As the previous research, as conducted by Aryani & Rosinta (2010), stated that service quality significantly influences service quality. The strongest dimensions in explaining successive service quality are, (1) Reliability, (2) Responsiveness, (3) Assurance, (4) Empathy, and (5) Tangibility. Burhan (2017) through his research at the Semen Padang Hospital Polyclinic states that service quality has a positive and significant effect on patient satisfaction, patient satisfaction has a positive and significant effect on patient loyalty. Service quality has a positive and significant effect on patient loyalty, and service quality has a positive and significant effect on patient loyalty.

Conceptual Framework

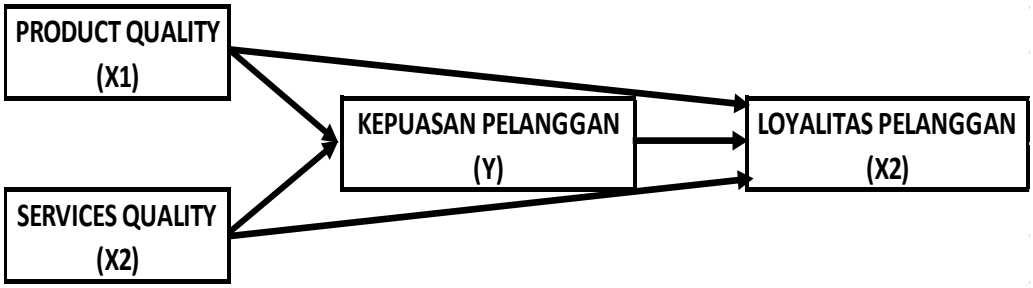

Figure 1. Conceptual Framework

Hypothesis

1. Product quality has a positive and significant effect on customer satisfaction.
2. Service quality has a positive and significant effect on customer satisfaction.
3. Product quality has a positive and significant effect on customer loyalty.
4. Service quality has a positive and significant effect on customer loyalty.
5. Customer satisfaction provides a positive and significant impact on customer loyalty.
6. Product quality and service quality through intervening variable customer satisfaction together affect customer satisfaction.

RESEARCH METHOD

This type of research based on the method used is correlational research and based on the type of data used is qualitative research. The population in this study is the customers of PT TrakindoUtamaPekanbaru zone who use 108 Caterpillar spare parts and repair services in the Pekanbaru and surrounding areas as many as 108 people. For samples using all populations. Data collection techniques using questionnaire media that are measured using a Likert scale. Testing data uses multiple regression data analysis techniques with the help of SPSS software version 22.

RESULT & DISCUSSION

Normality test

Table 1. Structural Residual Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		78
Normal Parameters[a]	Mean	.0000000
	Std. Deviation	.42088807
Kolmogorov-Smirnov Z		1.359
Asymp. Sig. (2-tailed)		.150
a. Test distribution is Normal.		

Based on Table 1 the results of data processing that have been carried out on structure 1 for normality test using Kolmogorov-Smirnov (KS) one sample that the residual data gives a sig value of 0.150 which is above the alpha error value of 0.05, it can be concluded that the results of testing the data are normally distributed.

Test Simultaneously (Test F)

Table 2. Test Results F of the Independent Variables Against Bound Variables Simultaneously for structure 1

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	32.245	2	16.123	88.649	.000[a]
	Residual	13.640	75	.182		
	Total	45.886	77			
a. Predictors: (Constant), Services Quality, Product Quality						
b. Dependent Variable: Consumer Satisfaction						

From Table 2 it can be assessed that F_{count} is 88,649 indicating the calculated F value (88,649)> from F_{Tabel} (3,120) and the significance level of the F test is 0,000 (p <0.05) then Ho is rejected and Hi is accepted. Means there is a significant influence on product quality (X1), service quality (X2) on customer satisfaction (Y) simultaneously.

Table 3. F Test Results of the Customer Satisfaction Variables on Loyalty variables Simultaneously

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.890	1	39.890	173.899	.000[a]
	Residual	17.433	76	.229		
	Total	57.324	77			
a. Predictors: (Constant), Customer Satisfaction						
b. Dependent Variable: Consumer Loyality						

From Table 3, it can be assessed that F_{count} is 173,889 indicating the calculated F value (173,899)> from F_{Tabel} (3,120) and the significance level of the F test is 0,000 (p <0.05) then Ho is rejected and Hi is accepted. Means that there is a significant influence of customer satisfaction on customer loyalty (Z) simultaneously.

Table 4. F Test Results of the Independent Variables on Variables Simultaneously bound to structure 2

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41.251	3	13.750	63.306	.000[a]
	Residual	16.073	74	.217		
	Total	57.324	77			
a. Predictors: (Constant), Customer Satisfaction, Product Quality, Services Quality						
b. Dependent Variable: Customer Loyalty						

From Table 4, it can be assessed that F_{count} is 63.306 indicating the calculated F $_{value}$ (63.306)> from F_{Tabel} (3.120) and the significance level of the F test is 0.000 (p <0.05) then Ho is rejected and Hi is accepted. Means there is a significant influence on product quality (X1), service quality (X2) and customer satisfaction (Y) on customer loyalty (Z) simultaneously.

Based on the F test (simultaneous test) for the 2 (two) structural forms 2 conditions, namely:

1. Customer loyalty is influenced by customer satisfaction, while customer satisfaction is influenced by product quality and service quality.
2. Customer loyalty is directly influenced by product quality, service quality and customer satisfaction.

From the two models / conditions it can be concluded that customer loyalty is influenced by customer satisfaction first (F_{count} = 173.889), while customer satisfaction is influenced by product quality and service quality (F_{count} = 88.664). If referring to model 2 gives the effect of $_{Fcount}$ of 63.306 whose value is smaller than the first condition.

Partial Test (t Test)

Table 5. Partial Test Results (t Test) for Structure 1

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.191	.328		-.581	.563
	Product Quality	.223	.115	.200	1.948	.055
	Services Quality	.788	.121	.671	6.530	.000
a. Dependent Variable: Customer Satisfaction						

Based on Table 5, the t test is explained as follows:

Hypothesis 1 test (H1)

Analysis of the effect of product quality variables (X1) on customer satisfaction variables (Y): because $t_{count} < t_{Table}$ (1.948> 1.991) it can be said that the product quality variable (X1) has no positive and significant effect on customer satisfaction decision variables (Y) then Ho accepted and H1 rejected

Hypothesis Test 2 (H2)

Analysis of the effect of service quality variables (X2) on customer satisfaction variables (Y): because $t_{count} > t_{Table}$ (6,530 <1,991), in addition to the sig value of 0,000 (<0.05) it can be said that the service quality variable (X2) influences significant to the customer satisfaction variable (Y) then Ho is rejected and H2 is accepted, meaning there is a significant influence between the variable service quality (X2) on the customer satisfaction variable (Y).

Table 6. Partial Test Results (t Test) for Structure 2

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.479	.360		-1.332	.187
	Product Quality	.176	.128	.141	1.368	.175
	Services Quality	.194	.165	.148	1.173	.245
	Customer Satisfaction	.681	.126	.609	5.393	.000
a. Dependent Variable: Customer Loyalty						

Hypothesis 3 test (H3)

Analysis of the effect of product quality variables (X1) on customer loyalty variables (Z): because $t_{count} > t_{Table}$ (1.368> 1.991), it can be said that the product quality variable (X1) has no positive and significant effect on customer loyalty variables (Z) then Ho is accepted and H3 is rejected, other than that the value of sig in the Table is 0.175 (> 0.05) so that it meets Ho acceptance requirements, meaning there is no significant influence between the product quality variable (X1) on the customer loyalty variable (Z).

Hypothesis 4 test (H4)

Analysis of the effect of service quality variables (X2) on customer loyalty variables (Z): because $t_{count} > t_{Table}$ (1.173 <1.991), it can be said that the product quality variable (X2) has no positive and significant effect on customer loyalty variables (Z) then Ho is accepted and H4 is rejected, other than that the value of sig in Table is 0.245 (> 0.05) so that it meets Ho's acceptance requirements, meaning that there is no significant effect between service quality variables (X2) on customer loyalty variables (Z).

Hypothesis 5 test (H5)

Analysis of the influence of customer satisfaction variables (Y) on customer loyalty variables (Z): because $t_{count} > t_{Table}$ (5.393> 1.991), it can be said that the customer satisfaction variable (Y) has a positive and significant effect on customer loyalty variables (Z) then Ho is rejected and H5 accepted, besides that the value of sig in the Table is 0,000 (<0.05) so that it meets the rejection requirement Ho, it means that there is a significant influence between the service quality variable (Y) on the customer loyalty variable (Z).

Table 7. Partial Test Results (t Test) for Structure 3

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.051	.296		.172	.864
	Customer Satisfaction	.932	.071	.834	13.187	.000
a. Dependent Variable: Customer Loyalty						

Hypothesis test 6 (H6)

Analysis of the influence of customer satisfaction variables (Y) on customer loyalty variables (Z): because $t_{count} > t_{Table}$ (13,187> 1,991), it can be said that the customer satisfaction variable (Y) has a positive and significant effect on customer loyalty variables (Z) then Ho is rejected and H6 accepted. The sig value in the Table is 0,000 (<0.05) so it meets the Ho rejection requirement, meaning that there is a significant influence between the customer satisfaction variable (Y) on the customer loyalty variable (Z).

Multiple Linear Regression

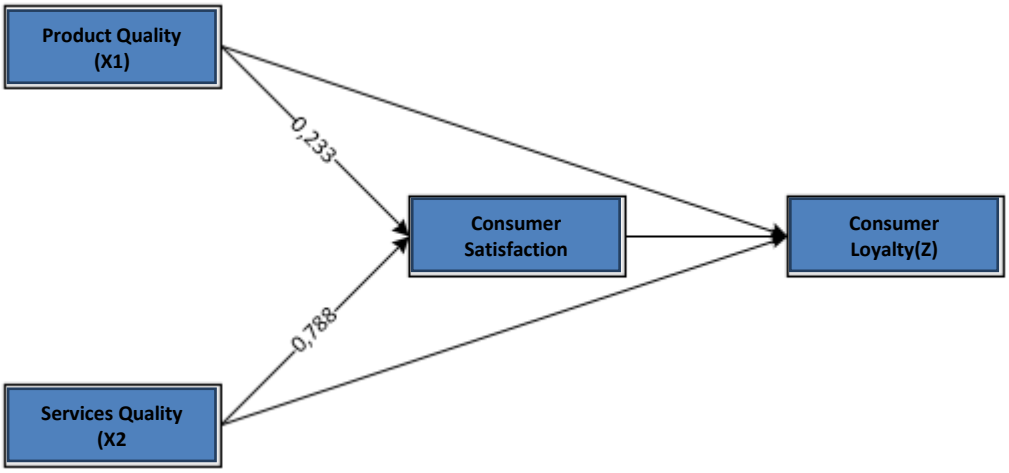

Figure 2. Correlation Values in Structure 1

Based on the pattern or form of influence, it can be concluded that the most influential effect on customer satisfaction is service quality of 0.788.

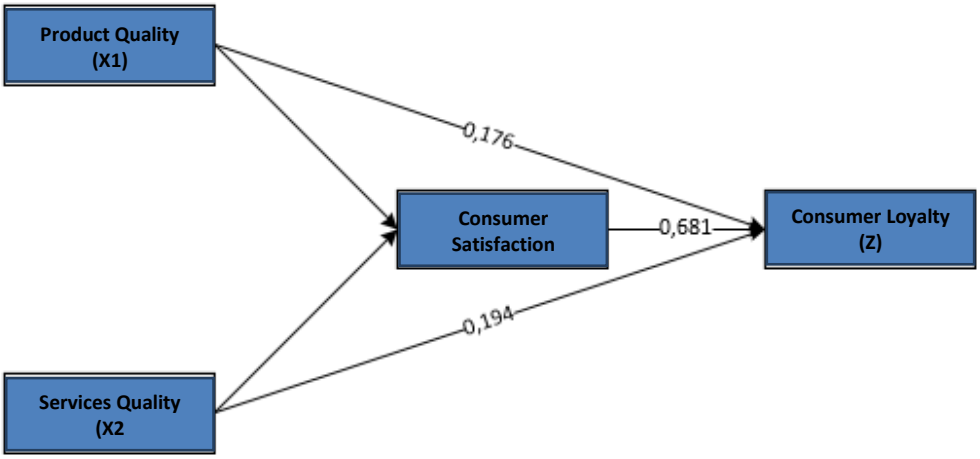

Figure 3. Correlation Values in Structure 2

Based on the pattern or form of influence, it can be concluded that the most influential on customer loyalty is customer satisfaction of 0.681.

Coefficient of Determination R^2

In Table 9 obtained the coefficient of determination (R Square) of 0.695. This shows that the magnitude of X1 (product quality), X2 (service quality to Y (loyalty) is 69.5%. This means that 69.5% of the dependent variable can be explained by product quality and service quality variables, while the remaining 30.5 % is explained by other independent variables not examined in this study.

Table 9 Coefficient of Structural Determination I

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838[a]	.703	.695	.42646
a. Predictors: (Constant), Services Quality, Product Quality				
b. Dependent Variable: Customer Satisfaction				

Table 10 Coefficient of Structural Determination II

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848[a]	.720	.708	.46605
a. Predictors: (Constant), Customer Satisfaction, Product Quality, Services Quality				

In Table 11 obtained the coefficient of determination (R Square) of 0.708. This shows that the magnitude of X1 (product quality), X2 (service quality to Z (loyalty) is 70.8%. This means that 70.8% of the dependent variable can be explained by the independent variable, while the remaining 29.2% is explained by the variable Other freedoms that were not examined in this study.

CONCLUTION

Based on the analysis and testing of data that has been described, the following conclusions can be drawn:

1. Product quality does not significantly influence customer satisfaction.
2. Service quality has a significant effect on customer satisfaction.
3. Product quality does not significantly influence customer loyalty.
4. Service quality does not significantly influence customer loyalty.
5. Product quality and service quality through customer satisfaction variables significantly influence customer loyalty.
6. Customer satisfaction significantly influences customer loyalty in using product support

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