

# Influence of Customer's Relation to Customer Value and Implication on Image University and Word of Mouth Student

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**Abstract**—According to the regulation of the minister of education and culture of republic of Indonesia number 109 in 2013 about the provision of distance education, make UT should be ready to compete with other Universities which are most likely organize distance learning system. In connection with that matter, UT should be able to change people's recognition (image), become a quality choice university with good service, through the well – connected student relationships, so that students feel satisfaction and conformity on the value of service which is obtained. By gaining satisfaction, they automatically do positive word of mouth in building the image of UT. The research method that is used, is explanatory survey and data analysis is path analysis using SPSS software. The result of research shows that customer's relation and customer value influence to image and word of mouth of students. Customer's relation significantly influence customer value and it has a great influence. Students rate good category to UT in building good relationships with its students. Customer's relation is done by keeping trust and commitment. The better the relationship built with the customer, the higher customers value. The influence of customer's relation to the image indirectly through customer value has greater influence compared to word of mouth.

**Keywords**—customer's relation; customer value; image; word of mouth

## I. INTRODUCTION

Customers who have experience that fulfill their expectations and feel satisfied with the service they received will have positive attitude towards a product. This customer's attitude will show the purchase process in the future that is by doing re-consumption or telling others.

Satisfaction is very subjective and unique to every customer in universities that provide educational services to customers, in this case is students. Students as customers get satisfaction when getting value from the service provider/supplier/producer of a product (good/services). This value can be a product, service, system, or something that is emotional. If the customer says that the value is a quality product, then satisfaction will occur only if the customers get quality products/goods. If the value is comfort, then the customer will be satisfied if the service provide by the service provider really comfortable. If

the value is cheap price, then the customers will feel satisfied if the seller gives them the most competitive price. Moreover, satisfied customers are also parties who will share their satisfaction with the producer's/service providers. They will even share their feelings and experiences with others who ultimately make the others as new customers. Kotler and Keller explain that word of mouth is communication with verbal involving the customer so customers choose to talk to people others about products, services, and brands [1].

The advantages of distance education systems that have proven to be able to reach large and bulk areas cause the cost to be borne by students also become cheaper. But not only the wide range of systems and the large number of students that became the focus of implementation UT but also the improvement of service quality both academic service and academic administration, they also become the main focus.

Ostergaard and Kristensen in his research on student satisfaction and loyalty in higher education where there is a measurement of customer value using two indicators to evaluate customer value, namely [2]: 1. Evaluating the benefits obtained with time, costs and resources used to obtain perceived educational services 2. The offered study program benefits future careers. In this study to measure customer value used indicators used by Kotler [3]. The dimensions of customer value consist of benefits and costs.

Based on the data of the number of new students FE, FHISIP, FMST and FKIP three times registration, it is known that new students obtain information about UT, mostly from friends, family or relatives. It can be concluded that the new students are having word of mouth process so they are interested to continue their education in UT.

TABLE I. DATA NEW STUDENTS OBTAIN INFORMATION ABOUT UT

No	Registration Period	Information about UT	%
1	2015	From Friends, relatives, and family	52%
2	2016	From Friends, relatives, and family	45%
3	2017	From Friends, relatives, and family	68%

Source: From Srs data

One of the marketing strategies that can be done to maintain or to increase the company's sales is how company can foster better relationship with its existing customers. Customer Relationship Management is becoming increasingly important for all organizations that want to provide better service to their customers. CRM, Basically, is to establish an actual relationship with customers, that can be implemented for the benefit of businessmen and customers. In order for customers to assess their relationship with a company, the company must provide something valuable to them. According to Kotler [3]: 'No matter what is orientation, marketing management's crucial tasks is to create profitable relationships with customers. Until recently, Customer Relationship Management (CRM) has been defined narrowly as a customer database management activity. By this definition, it involves managing detailed information about individual customers and carefully managing customers "touch points" in order to maximize customer loyalty.'

Buchari Alma states that to form a good image of the organization, in order to attract the interest of a number of prospective customers, the company will carry out various strategic efforts known as marketing strategies [4]. The sustainability of the organization depends on the resources it has and what strategies are chosen in empowering internal resources to respond to external threats and opportunities [5]. This opinion is supported by Urban and Star in Eddy which states that the success of an organization in achieving marketing performance depends on the extent to which the organization is able to apply the right marketing strategy to its target consumers [6]. Song and Parry stated that one of the important things that must be considered by leaders is to make a measure or benchmark with the aim of improving organizational performance such as improving marketing performance, and the reputation of the company, which can drive the pace of companies penetrating markets [7]. The strategic marketing perspective places customer value as the core dimension in creating an organization's position and performance [8].

Indrajit, explains that there are 5 dimensions of meaning in universities or institutions in the field of education, namely: the scientific dimension (science and technology), the dimensions of education (higher education), the social dimension (community life), the corporate dimension (education and implementation unit) and ethical dimensions. In the current global conditions [9]. The concept of service must really be considered in educational institutions, because customers here have the right to choose alternatives and determine which services are in the best field of education.

**II. METHOD**

Based on the research objectives, the research method used in the study The influence of customer's relation to customer value and the implication on the image University and Word of Mouth Student, the research method that is used, is explanatory survey and data analysis is path analysis using SPSS software. explanatory survey method is a research method that is done by explaining the causal relationship between variables through testing hypotheses.

**III. RESULTS AND DISCUSSION**

**A. Path Analysis**

1) *Substructure 1:* Based on the data processing obtained data output for substructure 1 as follows:

TABLE II. PATH ANALYSIS SUBSTRUCTURE 1 (CUSTOMER VALUES)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.836 <sup>a</sup>	.699	.696	1.21430

<sup>a</sup> Predictors: (Constant), Customer relation

From the table above can be seen that the coefficient of determination ( $R^2$ ) of 0.699 which means that 69,6% customer value variables can be explained by independent variables in this case is customer relation. Then to test whether there is influence between customer's relation to customer value, it can be seen from test result as follows:

TABLE III. TABLE 3. PATH ANALYSIS SUBSTRUCTURE 1 (INFLUENCE BETWEEN CUSTOMER'S RELATION TO CUSTOMER VALUE)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 <i>Regression</i>	335.737	1	335.737	227.693	.000 <sup>a</sup>
<i>Residual</i>	144.503	98	1.475		
<i>Total</i>	480.240	99			

<sup>a</sup> Predictors: (Constant), Customer's relation

<sup>b</sup> Dependent Variable: Customer value

Based on the calculation SPSS obtained F value of 227,693. Where is the rejection  $H_0$ , if: F value bigger than F table or  $F_0 > F_{\alpha, n-3}$  by taking a significant ( $\alpha$ ) of 5%, then from the distribution table F obtained table value for  $F_{0,05,1.97} = 3,94$ .

Because of 227,693 is bigger than 3,94 and sig F 0.000 then  $H_0$  is refused. It can be concluded that there is influence between customer's relation to customer value as the coefficient of determination ( $R^2$ ) = 0.699 or 69.6% and the influence of out of model variables by 31.4% (error = 0.314). To find out partially customer relationship has significant effect on customer value tested by t test, the result is as follows:

TABLE IV. PATH ANALYSIS SUBSTRUCTURE 1 (PARTIALLY CUSTOMER RELATIONSHIP EFFECT ON CUSTOMER VALUE)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 <i>(Constant)</i>	.709	1.102		.644	.521
<i>Customer Relation</i>	.426	.028	.836	15.089	.000

Dependent Variable: Customer Value

From the calculation result using SPSS Coefficient of path (beta or standardized coefficients) is as follows. The criterion of rejection  $H_0$ , if t value is greater than t table or  $t_0 > t_{\alpha, n-3}$  from the table above can be known beta coefficient = 0.836, obtained t value at 15,089 by taking the level of significance  $\alpha$  of 5%, then the value of t table or  $t_{0.025, 97} = 1,985$  so that,

due t value = 15,089 bigger that t table=1,985, the H0 rejected or in other words customer relation affects customer value of 0.836.

2) *Substructure 2:* Based on the data processing obtained data output for substructure 2 as follows:

TABLE V. PATH ANALYSIS SUBSTRUCTURE 2 (IMAGE)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.903a	.816	.812	.99469

<sup>a</sup>. Predictors: (Constant), Customer value, customer relation

From the table above can be seen that coefficient of determination ( $R^2$ ) of 0.816 which means 81.6% variability image variables can be explained by independent variables, in this case, customer relation and customer value then to test whether there is influence simultaneously between customer's relation and customer value to image, then can be seen from the test result as follows:

TABLE VI. PATH ANALYSIS SUBSTRUCTURE 2 (INFLUENCE SIMULTANEOUSLY BETWEEN CUSTOMER'S RELATION AND CUSTOMER VALUE TO IMAGE)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<i>Regression</i>	424.217	2	212.108	214.377	.000a
	<i>Residual</i>	95.973	97	.989		
	<i>Total</i>	520.190	99			

<sup>a</sup>. Predictors: (Constant), Customer value, customer relation

<sup>b</sup>. Dependent Variable: Image

Based on the calculation SPSS obtained F value of 214,377. Where  $H_0$  rejection criteria, if: F value greater than F table or  $F_0 > F_{\alpha, 1, n-3}$ , by taking a significant level ( $\alpha$ ) of 5%, then from table distribution F obtained table value for  $F_{0,05,1,97} = 3,94$ .

Because 214,377 is bigger than 3.94 and sig F 0.000, then  $H_0$  is rejected, which means, it can be concluded that there is mutual influence between customer relation and customer's value to the image as big as its coefficient of determination ( $R^2$ ) = 0.816 or 81.6% and the influence of variables outside the model is 18.4% (error = 0.184).

To partially test the customer's relation, customer value significantly influence the image tested by t test, the result is as follows:

TABLE VII. PATH ANALYSIS SUBSTRUCTURE 2 (PARTIALLY TEST THE CUSTOMER'S RELATION, CUSTOMER VALUE SIGNIFICANTLY INFLUENCE THE IMAGE)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	<i>(Constant)</i>	-.781	.905		-.863	.390
	<i>Customer Relation</i>	.300	.042	.566	7.120	.000
	<i>Customer Value</i>	.390	.083	.375	4.713	.000

<sup>a</sup>. Dependent Variable: Image

From the calculation result used SPSS coefficient of path (beta or Standardized Coefficients) are as follows:

Criterion rejection of  $H_0$ , if: t value is bigger than t table or  $t_0 > t_{\alpha, 1, n-3}$

- The first beta coefficient = 0.566, obtained t value of 7,120 by taking the level of significance  $\alpha$  of 5%, then t table or  $t_{0,025,97}=1,985.50$ , because of t value = 7,120 is bigger than t table =1,985 then  $H_0$  is rejected or in other words. Customer relation affects the image of 0.566
- The second beta coefficient = 0.375, obtained t value of 4,713 by taking the level of significance  $\alpha$  of 5%, then t table or  $t_{0,025,97}=1,985.50$ , because of t value=4,713 is bigger than t table = 1,985 then  $H_0$  is rejected or in other words customer value affects the image of 0.375.

3) *Substructure 3:* Based on data processing obtained data output for substructure 3 as follows :

TABLE VIII. SUBSTRUCTURE 3 (WORD OF MOUTH)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856a	.732	.727	1.95009

<sup>a</sup>. Predictors: (Constant), Customer value, Customer relation.

From the table 8 above is known that the coefficient of determination ( $R^2$ ) of 0.732 which means that the variability of Word of Mouth variable can be explained by independent variable in this case are customer relation and customer value, then, to test whether is there any effect simultaneously between customer relation and customer value to Word of Mouth, can be seen from the test results as follows:

TABLE IX. SUBSTRUCTURE 3 (EFFECT SIMULTANEOUSLY BETWEEN CUSTOMER RELATION AND CUSTOMER VALUE TO WORD OF MOUTH)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<i>Regression</i>	1009.714	2	504.857	132.758	.000 <sup>a</sup>
	<i>Residual</i>	368.876	97	3.803		
	<i>Total</i>	1378.590	99			

<sup>a</sup>. Predictors: (Constant), Customer value, customer relation

<sup>b</sup>. Dependent Variable: Word of mouth

Based on the calculation SPSS obtained F value of 132,758. Where  $H_0$  rejection criteria, if: F value greater/bigger than F table or  $F_0 > F_{\alpha, 1, n-3}$ , by taking a significant level ( $\alpha$ ) of 5%, then from table distribution F obtained table value for  $F_{0,05,1,97} = 3,94$ .

Because 132,758 is bigger than 3.94 and sig F 0.000, then  $H_0$  is rejected, which means, it can be concluded that there is the effect together between customer's relation and customer value to word of mouth, the coefficient of determination is equal to ( $R^2$ ) = 0.732 or 73.2% and the influence of variable outside the model is 26.8% (error=0.268). To partially test the customer's relation, customer value significantly influence to word of mouth which is tested by t test, the result is as follows:

TABLE X. SUBSTRUCTURE 3 EFFECT BETWEEN CUSTOMER'S RELATION AND CUSTOMER VALUE TO WORD OF MOUTH

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-3.286	1.774		-1.852	.067
	Customer Relation	.539	.083	.625	6.527	.000
	Customer Value	.443	.162	.262	2.732	.007

<sup>a</sup>. Dependent Variable: Word of mouth.

From the calculation result word SPSS coefficient of path (beta or standardized coefficients) are as follows:

Criterion rejection of  $H_0$ , if: t value is bigger than t table or  $t_0 > t_{\alpha, n-3}$

- The first beta coefficient = 0.652, obtained t value of 6,527 by taking the level of significance  $\alpha$  of 5%, then t table or  $t_{0,025,97} = 1,985.50$  because of t value = 6,527 is bigger than t table = 1,985 then  $H_0$  is rejected or in other words, customer relation affects to Word of Mouth of 0.652.
- The second beta coefficient = 0.262, obtained t value of 2,732 by taking the level of significance  $\alpha$  of 5%, then t table or  $t_{0,025,97} = 1,985.50$ , because of t value = 2,732 is bigger than t table = 1,985 then  $H_0$  is rejected or in other words customer value affect to the Word of Mouth of 0.262.

4) *Direct influence and indirect influence*: From result of t test above is known direct influence from each substructure. There is also on indirect effect that is the effect of customer's relation ( $x_1$ ) to the image ( $y_1$ ) through customer value ( $x_2$ ) and the effect of customer's relation ( $x_1$ ) to the word of mouth ( $y_2$ ) through customer value ( $x_2$ ), can be calculated as follows:

**Indirect Effect**

- $IE_{121} X1 \rightarrow X2 \rightarrow Y1 = (0.836) (0.375) = 0.314$
- $IE_{221} X1 \rightarrow X2 \rightarrow Y2 = (0.836) (0.262) = 0.219$

So it can be seen that the influence of Customer's relation to the image indirectly through customer value of 0.314. While the influence of customer's relation to word of mouth indirectly through the customer value of 0.219.

**Direct Effect**

- $DE_{21} X1 \rightarrow X2 = 0.836$

- $DE_{11} X1 \rightarrow Y1 = 0.566$
- $DE_{21} X1 \rightarrow Y2 = 0.652$
- $DE_{12} X2 \rightarrow Y1 = 0.375$
- $DE_{22} X2 \rightarrow Y2 = 0.262$

**IV. CONCLUSION**

This research tries to test how far the influence of customer's relation to customer value implication to open university image and word of mouth of the students. By taking research objects in the unit of distance learning program of Universitas Terbuka Bandung. Based on the results of analysis and discussion in this research. Obtained some important conclusions, these are: (1) Customer's relation and customer value have an effect on image and student's word of mouth (2) Customer relation has significant effect on customer value and it has big effect. Students assessed well to Universitas Terbuka in building good relationship with its students. Customer's commitment is to maintain trust and commitment. The better the relationships built with customers make customers' value higher. (3) The influence of customer's relation to the image indirectly through customer value is greater than the influence of word of mouth.

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