

EFFECT OF CUSTOMER RELATIONSHIP MANAGEMENT (CRM) TOWARDS CUSTOMER'S LOYALTY VIA CUSTOMER'S SATISFACTION AND CUSTOMER'S TRUST ON UD.XXX

Cindy F Tingkir¹, Christina W Utami²

Universitas of Ciputra Surabaya
INDONESIA

Emails: ¹cindytingkir@gmail.com, ²whidyautami@ciputra.ac.id

ABSTRACT

UD. Xxx is a company that deals with the construction industry. Due to the rise in population, there will be an increasing demand in housing which in turn will lead to an increase in demand of construction materials. Observing such phenomenon, the researcher analyzes the effect of CRM towards Customer's Loyalty via loyalty and the trust of customers towards UD. Xxx. This research is aimed to understand the effect of CRM towards Customer's Loyalty via Customer's Satisfaction and Customer's Trust on UD Xxx. This research has a sample pool of 40 people which satisfies the criteria that they are customers of UD Xxx who deals with the company on a monthly basis. Variables used for this research consists of variable eksogen (CRM), variable intervening (customer's satisfaction and customer's trust) and variable endogen (customer's loyalty). Partial least square structural equation modeling (SEM-PLS) will be the chosen analyzing method for this research. The result of SEM-PLS shows that there is a significant effect of CRM (X1) on Customer's Satisfaction (X2) and Customer's Trust (X3), Customer's Satisfaction (X2) on Customer's Trust (X3) and lastly Customer's Satisfaction (X2) and Customer's Trust (X3) on Customer's Loyalty (Y1) on UD Xxx.

Keywords: Customer Relationship Management, Customer's Satisfaction, Customer's Trust, Customer's Loyalty

INTRODUCTION

In the recent years it has been noticed that there is a high density of population in some provinces due to the continuously increasing population. This can be supported by the data obtained from BPS which shows that since 2010 there is an increase in population density by 3.5% from the initial 49.8% to 53.3%. This increase in density is not only limited to the East Java region but it's also spread out evenly throughout Kalimantan, Bali, Sulawesi and its surroundings. With the constant growth in population within Indonesia annually, the demand for housing has increased. The need for housing is a basic necessity for human beings and they shall try to fulfill it (Sinaga, 2013). This will have a direct effect on the construction business which will continue to affect the construction industry. As stated by Ketua Asosiasi Arsitek

Indonesia that the ceramic industry and architecture is dependent on one another since without the industry then innovation and creativity would not be achievable by architects and contractors. This is further supported by the housing growth data which shows that there is an increase in the amount of housing in Surabaya. Based on the data obtained from Urbanindo the number of properties in Surabaya has been on the rise since August 2012. In May 2012, there as 250 units of housing that's on the market. This amount later increased to 475 by September 2012 and by January 2013 this amount has further increased to 900 units. With the rise in housing being build, the sale of ceramic has increased and is expected to continue to rise. The sales revenue has been steadily increasing since April till August. In April the revenue was 1.864.000.000, and this amount increased to 1.878.000.000 in July and in August it further increased to 2.279.500.000.

To be able to sustain and continuously increase sales, UD. Xxx needs to implement CRM strategy since consumer loyalty can be formed via a good relationship between consumer and the company. Every company that wishes to sustain and grow has to be able to create consumer loyalty. Therefore, the writer will proceed to research about CRM which affect consumer loyalty via consumer's satisfaction and consumer's trust.

LITERATURE REVIEW

Lovelock and Writz (2011) explains that CRM represents the whole process about the relationship that is formed and maintained with a consumer which has to be taken as a gateway to build consumer's loyalty. The main aim in CRM is to improve the long term growth and profit of a company via understanding better the habits of a specific consumer for the characteristic and expectation of every consumer varies (Ibrahim, et al, 2012).

Long and Khalafinezhad (2012) states that "Four critical element of CRM are to be examined in this study. These elements are interaction management, relationship development, customer service and employee's behavior" which can be broken down as follows:

1. Relationship and Interaction Management
A company is willing to form a stable relationship with its consumers to understand how and when consumers are willing to interact.
2. Relationship Development with Customer
This study involves the study on process and structure of the relationship between consumer and company. The most important activity to achieve the company's objectives and relationship development is known as the monitoring of the relationship management process such as service or complaint management.
3. Quality of Customer Service
The quality of service has a positive effect on consumer's satisfaction and that consumer's satisfaction has a significant effect on consumer's loyalty and in turn the profitability of the company.
4. Behavior of the employee against customer
An employee that is able to confirm the organization's behavior is more likely to strengthen the connection between the consumer and the company.

H1: CRM has a positive effect on consumer's satisfaction
H2: CRM has a positive effect on consumer's trust
Consumer's satisfaction is an important factor that needs to be fulfilled by a

company since a company is more likely to have a bigger market share if it is able to meet the consumer's demands. Consumer's satisfaction is defined as an individual perspective towards the performance of a specific product or service that can be linked with the satisfaction gained from it (Sciffman and Kanuk in Erawan, 2012).

Based on Wilkie in Loekito (2013), consumer's satisfaction constitutes of an emotional response which evaluates the experience obtained on a specific product or service. The positive feeling gained by the consumer that interact with the product or service while using or after using the service or product can be defined as consumer's satisfaction (Bachtiar, 2011)

Hence it can be summarized that consumer's satisfaction refers to the feeling that is gained due to the fulfillment of need or demand of consumer.

Based on Dutka's theory in Saidani and Arifin (2012), the indicators of consumer's satisfaction can be seen from:

1. Attributes related to product
These are attributes that is related to the product such as the value gained from price, satisfaction obtained via product's capability and benefits obtained from product.
2. Attributes related to service
Related to service attributes such as the promised warranty, the process of completing service and delivery and the process of solving problems that happens.
3. Attributes related to purchase
Related to attributes from the decision of whether or not to purchase by the producer. This refers to the ease in obtaining information on the product, the hospitality of the employee and the effect of a company's reputation.

H3: Consumer's satisfaction has a positive effect on consumer's trust

Consumer's trust usually develops due to their evaluation on the quality of product or service based on what they see, understand or feel. Therefore, it is crucial for a company to improve customer's trust towards the company.

Consumer's trust is defined as the confidence a party has towards the means and attitude of another party (Sirdesmukh in Maima, 2012). According to Mayer, et al in Armayanti (2012) that consumer's trust refers to the willingness of a party to accept risk from the action of another party based on the belief that the party will provide an important action for the party that trusted them, apart from the capability to over watch and control the actions of the party that is being trusted upon. Mcknight, et al in Armayanti (2012) states that there are two indicators of consumer's trust which is:

1. Trusting Belief
Refers to the extent to which a trustor feels confident in believing that a trustee is trustworthy. It also refers to the perceptions that a consumer has on a producer whereby the producer has a characteristic that will benefit the consumer.

2. Trusting Intention

This is something that is done on purpose whereby a person is willing to depend on another in a situation. This can occur privately and directly towards another.

H4: Consumer's satisfaction has a positive effect on consumer's loyalty

Customer's loyalty is former through a learning process and is resulted due to experience by the consumer based on previous dealings with the company. Consumer's loyalty is defined as a condition whereby consumer has a positive attitude towards a specific product, commitment towards the specific product and has plans to continue its purchase in the future (Mowen and Minor in Ratna, 2010).

Sumargo and Lie (2012) defines consumer's loyalty as the degree of dependence by a consumer towards a specific brand, company or supplier, based on a positive character and is reflected by repeated purchases. It can be concluded that consumer's loyalty is a direct measurement of a customer's dependence that can be measured via consumer's commitment to constantly perform business transactions with a company in the long run.

Based on the two definitions above, it can be concluded that the two indicators to measure and explain consumer's loyalty (Buttle, 2013) are:

1. Behavioral Loyalty

The behavior in purchase which shows how frequent a consumer visits a store or purchases a specific product.

2. Attitudinal Loyalty

It refers to the emotional components such as faith and feeling. H5: Consumer's trust has a positive effect on consumer's loyalty

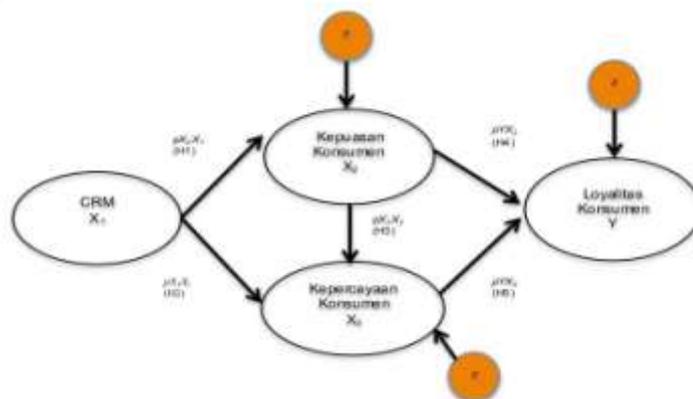


Figure 1. Analytical Model

RESEARCH METHODS

The analysis technique used for this research is one that is quantitative. SEM-PLS method is used where PLS is a method to scrutinize relationship between latent variables. It is also used to confirm an existing theory (Ghozali and Latan, 2012). A casual research is done to obtain

proof on the cause and effect relationship in between variables that are to be investigated. In the above model, the exogenous variable (X) refers to Customer Relationship Management, the intervening variable refers to consumer's trust and consumer's satisfaction. The endogenous variable, (Y), refers to consumer's loyalty.

The data sample consists of 40 person meets the criteria of, being a customer of UD Xxx and has made repeated purchases with the company and that the customer is located in Surabaya, is used. This data will then be processed using the tool SMART-PLS. The analysis using PLS applies two important stages which is outer model an inner model. The data from outer model is evaluated to confirm its validity and credibility. This stage consists of (Chin, et al, 2010;14):

1. Reflective Outer Model

The reflective outer model consists of three factors that will be tested which are, convergent validity, discriminant validity and reliability. The table is as follows:

Table 1. Summary of reflective outer model evaluation

Criteria	Parameter	Rule of Thumb
Convergent Validity	→Loading Factor	>0.50
	→AVE	>0.50
	→Communality	>0.50
Discriminant Validity	→Cross Loading	>0.70
Criteria	Rule of Thumb	
Cronbach's Alpha	>0.60	
Composite Reliability	>0.70	

2. Formative Outer Model

The formative outer model has two factors that need to be measured which are, outer weight and multicollinearity. The table is as follows:

Table 2. Summary of formatif outer model evaluation

Criteria	Rule of Thumb
Significant Weight	>1.96 (Significant Level 5%)
Multicollinearity	VIF <10

3. Inner Model

Inner model has two factors that need to be tested which are r-square and effect size f^2 . The results are as follows:

Table 3. Inner Model

Criteria	Rule of Thumb
R-Square	semakin tinggi nilai r-square maka akan semakin signifikan pengaruh yang
Effect of size f^2	0.02, 0.015, 0.35 (lemah, moderate, kuat)

4. Hypothesis Test

The test of hypothesis used is one that has a significant level of 5% and the t-value has to be >1.96.

Table 4. Hypothesis Test

Criteria	Rule of Thumb
Significant (2-tailed)	t-value >1.96 (Significant Level 5%)

RESULT AND DISCUSSION

The descriptive statistic from CRM variable shows that the lowest standard deviation lies in X1.6 (promo updates). The descriptive statistic from the variable of consumer's satisfaction shows that X2.8 (ready stock information) has the lowest standard deviation. Descriptive statistic from the third variable which is consumer's trust shows that X3.5 (executing advice) has the lowest standard deviation. The fourth descriptive statistic variable which is consumer's loyalty has the lowest standard deviation on Y1.4 (directly conveying complains). Hence, it can be seen that the whole indicators with the lowest standard deviation on every variable can be said to be more homogenous if compared to other indicators on their respective variables. The Model Analysis of SEM-PLS used in this research is as follows:

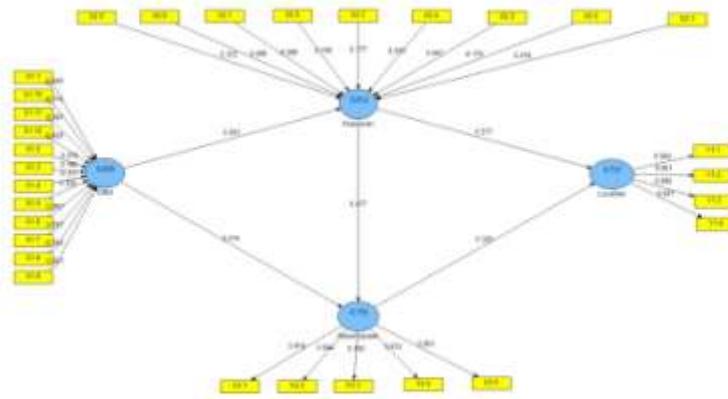


Figure 2. Analysis Model of SEM-PLS

SEM-PLS analysis tests has 3 stages which are outer model, inner model, and hypothesis. This research begins with the test of outer reflection and the results are as follows:

Table 5. Outer Model Convergent Validity

Variable	Indicator	<i>Outer Loading</i>	Evaluation Model
Trust	X3.1	0.816	Good
	X3.2	0.844	Good
	X3.3	0.792	Good
	X3.4	0.872	Good
	X3.5	0.801	Good
Loyalty	Y1.1	0.840	Good
	Y1.2	0.861	Good
	Y1.3	0.888	Good
	Y1.4	0.801	Good

Table 5 shows that the score of outer loading as a whole is above 0.7 which shows that each and every variable has a good measuring compatibility.

Table 6. AVE and communalities

Variable	AVE
Trust	0.681
Loyalty	0.719

Table 7. Communalities

Variable	Communalities	Conclusion
Trust	0.681	Good
Loyalty	0.710	Good

Table 6 and table 7 shows that the score from AVE & Communalities exceeds the critical score of 0.5 so those variables can be applied in this research. Following that, the discriminant validity can be discussed by looking at the scores of cross loading in this research.

Table 8. Cross loading

Indicator	Trust	Loyalty
X3.1	0.816	0.740
X3.2	0.844	0.641
X3.3	0.792	0.623
X3.4	0.872	0.720
X3.5	0.801	0.626
Y1.1	0.705	0.840
Y1.2	0.683	0.861
Y1.3	0.680	0.888
Y1.4	0.698	0.801

Table 8 shows that the scores of the indicators exceed the critical value of 0.7 which can be said that the indicators have fulfilled the required conditions. Next, we will proceed with the reliability test which is the test using cronbach alpha, composite reliability and outer loading. The table are as follows:

Table 9. Cronbach alpha & composite reliability

Variable	Composite Reliability	Cronbach Alpha
Trust	0.914	0.883
Loyalty	0.911	0.870

Table 9 shows that the scores from cronbach’s alpha and composite reliability have scores that exceed its critical value which is 0.7 which means that it is acceptable. In the reliability test there is one more measurement that needs to be presented which is outer loading. The outer loading from the research is as follows:

Table 10. Outer loading

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T-Statistics (O/STERR)
X3.1 Trust	<- 0.815970	0.812468	0.035741	0.035741	22.830365
X3.2 Trust	<- 0.843988	0.843313	0.019120	0.019120	44.140481
X3.3 Trust	<- 0.791504	0.785963	0.040118	0.040118	19.729520
X3.4 Trust	<- 0.872224	0.867789	0.029995	0.029995	29.078706
X3.5 Trust	<- 0.800785	0.797501	0.035196	0.035196	22.752276
Y1.1 Loyalty	<- 0.840472	0.840672	0.021021	0.021021	39.983131
Y1.2 Loyalty	<- 0.861002	0.859847	0.023584	0.023584	36.507749
Y1.3 Loyalty	<- 0.888297	0.880824	0.032731	0.032731	27.139460

Y1.4 Loyalty	<- 0.800896	0.791323	0.056828	0.056828	14.093286
-------------------------	-------------	----------	----------	----------	-----------

Table 10 shows the whole result of t-statistic from each and it can be observed that the scores for each and every variable exceeds that of 1.96 which means that the indicator is valid and can be used. The next step would be to test for outer formative by looking at outer weight and multicollinearity.

Table 11. Outer Weight & Multicollinearity

Variable	Indicator	<i>t-statistic</i>
<i>CRM</i>	X1.1	4.926
	X1.2	2.936
	X1.3	3.410
	X1.4	5.979
	X1.5	4.626
	X1.6	4.230
	X1.7	3.451
	X1.8	2.844
	X1.9	4.553
	X1.10	3.559
	X1.11	3.127
	X1.12	3.911
	X2.1	4.037
	X2.2	3.162
	X2.3	4.088
	X2.4	3.025
	X2.5	2.687

Satisfaction	X2.6	2.034
	X2.7	3.368
	X2.8	7.436
	X2.9	6.188
Variable	Indicator	<i>t-statistic</i>
	Indicator	VIF
	X1.1	2.852
	X1.2	4.508
	X1.3	1.545
	X1.4	2.037
	X1.5	3.835
	X1.6	2.642
	X1.7	4.795
	X1.8	1.731
	X1.9	2.511
	X1.10	1.589
	X1.11	3.721
	X1.12	5.759
	X2.1	2.456
	X2.2	2.478
	X2.3	3.630
	X2.4	2.490
	X2.5	1.966
	X2.6	4.352

	X2.7	3.322
	X2.8	2.097
	X2.9	2.079

On Table 11 it can be seen that the scores obtained after being processed by SMART-PLS that each and every formative indicator in outer weight fulfills convergent validity and each indicator in multicollinearity has VIF score which is lower than 10 which means that it can be used for the next analysis.

The third step is to test inner model by looking at r-square and effect size f^2 , and the results are as follows:

Table 12. R-square score

Variable	R-Square
Satisfaction	0.812
Trust	0.755
Loyalitas	0.757

Table 12 shows the effect of exogenous variable on endogenous variable, where the higher the value of R-square would means that it has a much higher significant effect (Ghozali, 2012).

Next would be to test effect size f^2 . The result of the test can be shown in the table below:

Table 13. Effect size f^2

Variable	R-Square (Included)	R-Square (Excluded)	f-Square
Effect Size on the Variable Trust			
CRM	0.755	0.744	0.045
Satisfaction	0.755	0.734	0.086
Effect Size on the Variable Loyalty			
Satisfaction	0.757	0.666	0.374
Trust	0.757	0.733	0.099

Table 13 shows that CRM and consumer satisfaction has a low impact on the component of consumer's trust. It follows that the variable, consumer's satisfaction, has a strong impact on the variable, consumer's loyalty. It can also be seen that the variable consumer's trust has a low impact on consumer's loyalty.

The final step that needs to be done on the research of SEM-PLS is to test the hypothesis and it can be shown below:

Table 14. Coefficient Score Estimation of T-statistic

Hipotesis	Hubungan	Koefisien	t-statistic	Keterangan
1	CRM → Kepuasan Konsumen	0.901	37.391	Signifikan
2	CRM → Kepercayaan Konsumen	0.414	3.439	Signifikan
3	Kepuasan Konsumen → Kepercayaan Konsumen	0.477	3.851	Signifikan
4	Kepuasan Konsumen → Loyalitas Konsumen	0.577	7.933	Signifikan
5	Kepercayaan Konsumen → Loyalitas Konsumen	0.325	4.515	Signifikan

Table 14 shows the relationship of t-statistic among other variables. The hypothesis that is obtained can be represented as:

There is a significant effect between CRM on consumer's satisfaction
 There is a significant effect between CRM on consumer's trust

There is a significant effect between consumer's satisfactions on consumer's trust
 There is no significant effect between consumer's satisfactions on consumer's loyalty
 There is a significant effect between consumer's trust on consumer's loyalty

CONCLUSION

Result from the analysis on the effect of CRM on consumer's loyalty via consumer's satisfaction and consumer's trust using UD Xxx as a medium can be concluded as follows:

1. CRM has a significant effect on consumer's satisfaction and consumer's trust.
2. Consumer's satisfaction has a significant effect on consumer's trust.
3. Consumer's satisfaction and consumer's trust has a significant effect on consumer's loyalty.
4. A few suggestions were given to the firm, UD Xxx, so as to increase their productivity by:
 - a) Based on the result of the questionnaire, the delay in updating promotions and new products on the website leads to the decrease in consumer's trust towards UD Xxx. Hence an employee will be assigned to update promotions and new products immediately when a promotion or the launch of a new product has been announced. By doing so, news on the latest promotions and products can be made known to the consumer while they are making transactions.
 - b) It needs to be understood that service provided among consumers cannot be equal throughout. Hence, UD Xxx needs to implement consumer pyramid in treating

one consumer from another. To begin, the company needs to sort each and every consumer to their respective group within the pyramid. Upon doing so, employees will be given training on how to handle consumers from each respective groups. These special treatment is given to consumers that has become a frequent buyer for a longer period of time (committed) and consumers that has made a bigger transaction needs to be treated differently than those consumers that has just begin purchasing from the company. This is done so as to make the consumer feels that they are given more attention hence increasing CRM. One of the method undertaken by UD Xxx is to give birthday presents/gifts during the consumer's birthday.



Figure 3. Customer Pyramid

REFERENCES

- Sinaga. 2013. Pengaruh Kinerja Keuangan Terhadap Perubahan Harga Saham Pada PT. Bakrieland Development Tbk. Universitas Pendidikan Indonesia. Jurnal Emba. Vol 2(2), 659-770. 2013.
- Lovelock, C., & Writz, J. 2011. Service Marketing: People, Technology, Strategy. 7th Edition. New Jearsey: Pearson.
- Long, S.C., & Khalafinezhad, R. 2012. 'Customer Satisfaction and Loyalty: A Literature Review in The Prospective of Customer Relationship Management', Journal of Applied Business and Finance Researches. Vol 1(1), 06-13. 2012.
- Ibrahim, et al. 2010. Manajemen Pemasaran. Yogyakarta: BPFE.
- Bachtiar, M. 2011. Kepuasan Pasien Ditinjau Dari Kualitas Pelayanan Perawatan Rumah Sakit Yasin Watampoe. Yogyakarta: UII.

- Erawan, H. 2012. Hubungan Persepsi Terhadap Store Atmosphere Dengan Kepuasan Konsumen Ritel Indomaret di Medan. Medan: Universitas Sumatera Utara.
- Saidani, B., & Arifin. S. 2012. Pengaruh Kualitas Produk dan Kualitas Layanan Terhadap Kepuasan Konsumen dan Minat Beli pada Ranch Market. *Jurnal Riset Manajemen Sains Indonesia*, Vol 3(1).2012.
- Maima, K. H. 2012. Analisa Pengaruh Kepercayaan Pelanggan dan Kualitas Pelayanan Terhadap Sikap Pelanggan dan Implikasinya Terhadap Keputusan Pembelian Ulang. Semarang: Universitas Diponegoro.
- Armayanti, N. 2012. Gambaran Kepercayaan Konsumen Terhadap Pembelian Melalui Media Internet. Sumatera: Universitas Sumatera Utara.
- Ratna. 2010. Pengaruh Citra Produk Terhadap Loyalitas Pelanggan Supermarket. Sumatera: Universitas Sumatera Utara.
- Sumargo, Y., & Lie, C. 2012. 'The Influence of Customer Relationship Management On Customer Loyalty in JW Marriot Hotel Surabaya', *Jurnal Manajemen dan Kewirausahaan*. Vol 14(2). 2012.
- Buttle, F. 2013. *Customer Relationship Management Concepts and Technologies*. Oxford: Elsevier.
- Ghozali, I., & Latan, H. 2012. *Partial Least Squares: Konsep, Teknik, dan Aplikasi Menggunakan Program SmartPLS 2.0 M3*. Semarang: Badan Penerbitan Universitas Diponegoro.
- Chin et al. 2010. A partial least squares latent variable model approach for measuring interaction effects: results from a monte carlo simulation study and an electronic mail emotion. *Information Systems Research*, 14, pp 353-363.