

# **THE INFLUENCE OF ICT-BASED CUSTOMER VALUE CREATION PERFORMANCE AND CUSTOMER WIN BACK PERFORMANCE ON CUSTOMER TRUST OF MOBILE TELECOMMUNICATION SERVICE COMPANIES IN INDONESIA**

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## **Abstract**

*This study aims to determine the effect of ICT-based Value Creation Performance and Customer Winback Performance on Customer Trust simultaneously and partially in the case of e-money on cellular operators in Indonesia. The result of Structural Equation Modelling test showed that ICT-based Value Creation Performance and Customer Winback Performance significantly and positively affect the Customer Trust whether partial or simultaneous. This result demonstrated that the amount of customer intimacy depends on ICT-based value creation that*

*is happening where the ICT-based value creation performance are growth, it will lead to the increase of customer trust and an increasing of Customer Winback Performance (CWP) will lead to increasing of customer trust.*

*Keywords: Value Creation Performance, ICT, Customer Winback Performance, Customer Trust, E-Money, Cellular Operator*

## INTRODUCTION

Telecommunication business has been one of the key industries in modern economy. Nowadays, in telecommunication industry, the profit from conventional voice services is not enough to survive. Therefore, beside conventional voice services, the industry develops *Mobile value added services* becoming one strategy that improves the profit (Anckar & D'Incau, 2002). Mobile value added services provided by mobile telecommunication provider can be classified into four groups, those are information, communication, transaction, and entertainment. These classification are used in almost all of service providers (Kuo et.al., 2003).

In the existing market, there are so many products with various excellence and value offered by competitors. It makes difficult for the company to get market share from competitors. In this conditions, the role of marketer is heavier because the change can happens anytime, whether the change in customer side such as taste as well as the customers' psychological aspects, social, and culture.

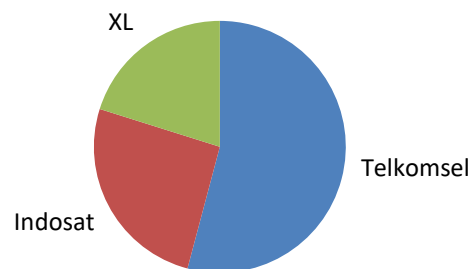
Customers will measure everything they sacrificed to get something and will measure anything they get if buying products in terms of quantity, quality, and other benefits side such as sacrifice of manpower, time, and money to be spent. Indeed, customers will not precisely and accurately measure customer value, but they will act based on perceived value (Suharno, 2010).

Telecommunications operator is currently losing 15-20% of their customers per month, customers who are not loyal will reduce millions in the gained revenue and profits. Therefore, a better alternative is to make efforts to maintain existing markets, one of which is to increase customer loyalty. In addition, the price of SIM cards (starterpack) is getting cheaper, where the selling price is below the value of pulses inside to attract new customers. In fact, the number SIM-cards sales does not reflect the number of customer, because the customer often then not re-use the SIM card when there is no more credit inside the card.

To prevent 'churn numbers' phenomenon in order to retain existing customers, the prepaid card manufacturers need to formulate a loyalty program conducted to grow customer

loyalty. Top Brand Index data may reflect the number of cellular subscribers in Indonesia and reflects the loyalty of consumers in using GSM cellular cards in Indonesia. The data below shows the Top Brand Index of Simpati, XL, and Mentari card which means a decrease in the level of consumer loyalty as a result of product and service quality so that it affects the decrease of customer satisfaction and as well as affecting the level of cellular card loyalty in Indonesia. In 2015, the market share of Telkomsel is 54%, Indosat is 26%, and XL Axiata is 20%. The number of customers of the top 3 operators is shown in the graphic below.

Figure 1. The number of top 3 GSM cellular in 2015



Source: Top Brands Index

Mitchael (2006) summarized the research results of related to the value of the claim that the delivery of superior value to customers that is creating value for the customer will affect the desire to purchase and customer retention. Meanwhile, Bishop, Paul & Magicks (2002) explained that the competitive advantage will increase if the company is able to increase value creation.

The development of information and technology particularly the development of e-Commerce or e-Money in telecommunication industry is an innovative service that allows customers to conduct financial transaction as purchases at merchants, payment of bills, recharging, money transfer via mobile phones by registering in advance. At this time, the e-Money that has been developed in some of mobile operator is Tcash (Telkomsel), XL *tunai* (XL), *Dompetku* (Indosat), *Uangku* (Smartfren), and FlexiCASH (flexi). e-Money began known to the public primarily for small payments, but the frequency of use is high. The use of electronic money is very effective and efficient for the transportation payment such as train, bus, parking, toll, Fast food, and so forth.

According to the data from the Indonesian Cellular Telecommunications Association, here are the data of GSM-, CDMA, WIMAX and LTE-based operators:

Table 1. The list of operators providing e-Money

No	Product Name	Operator	Technology
1	Tcash	Telkomsel	Server base
2	Dompetku	Indosat	Server base
3	Fleksi cash, i-Vas Card	Telkom	Server base
4	XL Tunai	XL	Server base

Source: Indonesian Cellular Telecommunications Association

BI records the use of electronic money in 2010 that reached 26.4 million transactions or increased as 51.4% compared to 2009. The transaction value reached 707,7 billion rupiahs or increased as 36.3% compared to 2009. Although it just launched in April 2007, the amount of money electronics has reached about 7.9 million cards in 2010. The launched electronic money nowadays is chip base such as prepaid card and server base such as electronic money that can be accessed through cellphone.

This study aims to examine a scale that measures the relationship between ICT-based value creation performance and customer winback performance that affects customer trust.

## Methodology

### Research design & approach

The nature of this research is descriptive and verificative. Descriptive research is a research that aims to obtain a description of the characteristics of variables, those are Value Creation Performance, Customer Winback Performane, and Customer Trust. Descriptive analysis is only done up to description level. Because this is descriptive and verificative research conducted through data collection in the field, the method used is descriptive survey and explanatory survey method, so the type of investigation is causality method.

### Population and sampling

The population of this study is the user of e-money of the four operators offering e-money services. The sampling method is stratified random sampling amounting 200 respondents of sample.

### Data collection instrument and procedure

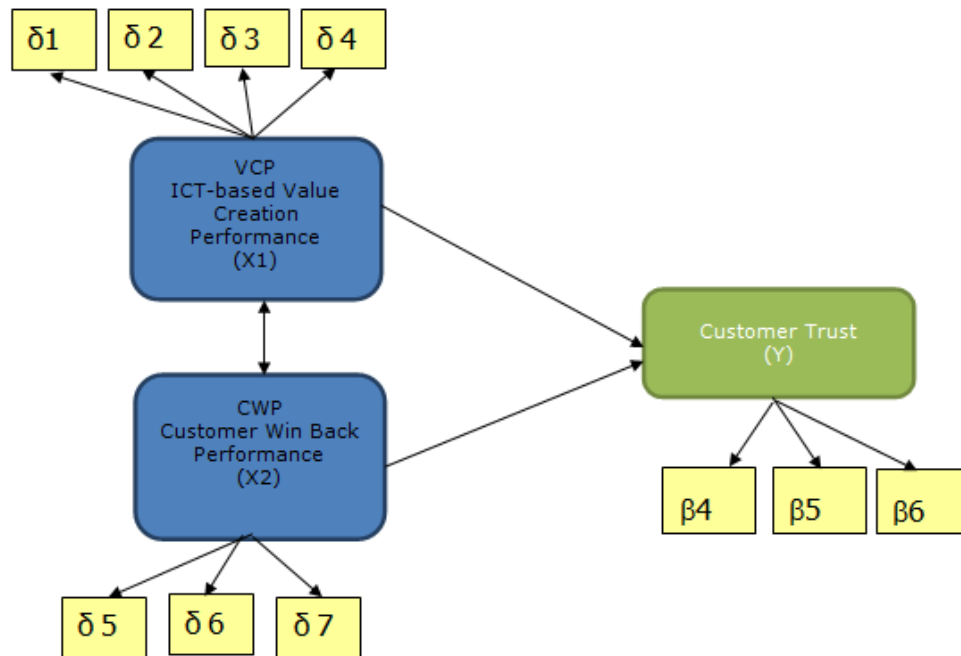
Because it involves public opinion, this research uses survey method through questionnaire. The survey was conducted in several stages, namely: 1) Determine the research problem 2) Make a survey design 3) Develop survey instrument 4) Determine sample 5) Conduct pre-test

6) Collect the data 7) Examine the data (editing) 8) Encodes the data 9) Data entry 10) Processing and analysis of data 11) Data interpretation 12) Make conclusions and also recommendations.

### Analytical Approach

This study uses Structural Equation Modeling (SEM) analysis to determine the magnitude of the effect of ICT-based Value Creation Performance (VCP) and Customer Winback Performance (CWP) to Customer Trust, either simultaneously and partially.

Figure 2. Model of the influence of performance value creation on ICT and performance of customer winback to customer trust of mobile telecommunication service operator company in Indonesia



## RESULTS AND DISCUSSION

### The Value of R Square ( $R^2$ )

This value indicates the ability of exogenous constructs in explaining the variation of endogenous constructs. There are 3 (three) criteria of value, namely: 0.67 means High, 0.33 means Moderate, and 0.19 means Weak. The result of R-square value calculation on the structural model in this study is shown in Table 2.

Table 2. The Value of *R-square*

Variable	<i>R-square</i>
ICT-based Value Creation Performance (VCP)	
Customer Winback Performance (CWP)	
Customer Trust	0.774

### Estimation of Path Coefficient

The generated value or t-count value is then compared with t-table. If the value of t-count > t-table (1.96) at the significance level (5%), the estimation of path coefficient is significant. The result of path coefficient calculation on the structural model in this study is shown in the following table.

Table 3. The Value of Path Coefficients

Path Coefficients	Path Coefficients	t Statistic	H <sub>0</sub>	Conclusion
ICT-based Value Creation Performance (VCP) -> Customer Trust	0.423	7.602	Rejected	Significant
Customer Winback Performance (CWP) -> Customer Trust	0.151	2.378	Rejected	Significant

Based on the path coefficient values shown in Table 3 above, it can be seen that:

- ICT-based Value Creation Performance (VCP) significantly affects Customer Trust, indicated by positive value of path coefficient (0.423) and the value of t-count (7.602) that is larger than t-table (1.972).
- Customer Winback Performance (CWP) significantly affects Customer Trust, indicated by positive value of path coefficient (0.151) and the value of t-count (2.378) that is larger than t-table (1.972).

### Effect Size ( $f^2$ )

Effect size was conducted to determine the change in endogenous constructs value. The interpretation of the value of  $f^2$  specifically 0.15; 0.22 and 0.35 with the latent exogenous variables have little, moderate, and large effect. The result of the calculation using XLSTAT2014 is shown in Table 4 below.

Table 4. The Value of *Effect Size* ( $f^2$ )

Endogenous Construct	Exogenous Construct	The Value of <i>Effect Size</i> ( $f^2$ )
Customer Trust	ICT-based Value Creation	0.287
	Performance (VCP)	
	Customer Winback	0.028
	Performance (CWP)	

As shown in Table 4 above, it can be interpreted that:

- ICT-based Value Creation Performance (VCP) has moderate substantive effect on Customer Trust, while Customer Winback Performance (CWP) has a little substantive effect on value changes in Customer Trust construct.

### Goodness of Fit (GoF)

This test was conducted to validate the overall model which is a combination between inner model and outer model. According to Yamin and Kurniawan (2011), the value of GoF is between 0-1 with the interpretation of this value : 0.1 (GoF minor), 0.25 (GoF moderate), and 0.36 (large GoF) The result of calculation using XLSTAT2014 is shown in Table 5 below.

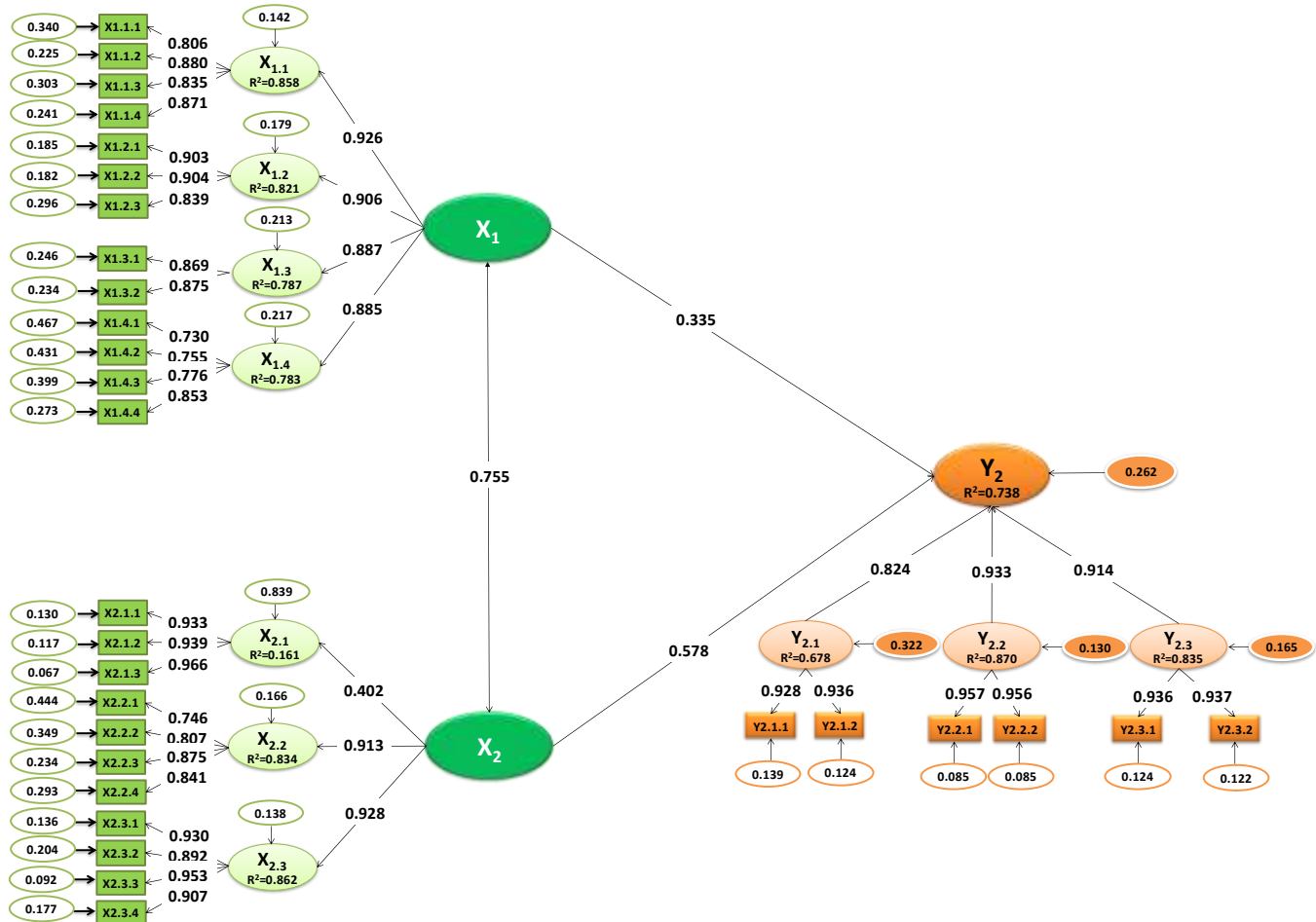
Table 5. Goodness of Fit Model

	GoF	Critical ratio (CR)
Outer model	0.997	26.313
Inner model	0.894	101.890

The result of the calculation above shows the value of Goodness of Fit (for both Inner model and Outer model) is very high, those are 0.894 and 0.997. GoF value (for both models Outer model and Inner model) shows that the model built, both the measurement model and inner model, is very good in general.

The calculation result of path diagram of the effect of ICT-based Value Creation Performance (VCP) and Customer Winback Performance (CWP) on Customer Trust, either partially or simultaneously, is shown in Figure 3 below.

Figure 3. The Effect of ICT-based Value Creation Performance (VCP) and Customer Winback Performance (CWP) on Customer Trust partially or simultaneously



### Simultaneous Hypothesis :

$H_0$ : ICT-based Value Creation Performance (VCP) and Customer Winback Performance (CWP) have no effect on Customer Trust simultaneously;

$H_1$ : ICT-based Value Creation Performance (VCP) and Customer Winback Performance (CWP) have effect on Customer Trust simultaneously;

To test the simultaneous hypothesis, we use statistical F-test and the result is shown in Table 6.

Table 6. The Result of Simultaneous Hypothesis Testing

Hypothesis	R <sup>2</sup>	F	F-table	Conclusion
ICT-based Value Creation Performance (VCP) and Customer Winback Performance (CWP) have effect on Customer Trust simultaneously	0.774	229.127	3.041	Significant ( $H_0$ is rejected)



Based on the result of simultaneous hypothesis testing above, the value of F-count (229.127) is greater than the value of F-table (3,041). It indicates that  $H_0$  is rejected, so it can be concluded that there is significant effect of ICT-based Value Creation Performance (VCP) and Customer Winback Performance (CWP) on Customer Trust simultaneously.

### Partial Hypothesis 1:

#### The Effect of ICT-based Value Creation Performance (VCP) on Customer Trust

$H_0$  : ICT-based Value Creation Performance (VCP) has an effect on Customer Trust;

$H_1$  : ICT-based Value Creation Performance (VCP) has no effect on Customer Trust;

The result of partial hypothesis 1 is shown in Table 7 below:

Table 7. The Effect of ICT-based Value Creation Performance (VCP) on Customer Trust

Variable	E	t-count	t-table ( $\alpha = 5\%$ )	Conclusion
ICT-based Value Creation Performance (VCP)	0.423	7.602	1.972	<b>Significant</b> ( $H_0$ is rejected)

According to table 7 above, ICT-based Value Creation Performance (VCP) significantly affects Customer Trust, where the value of t-count is greater than t-table or  $7.602 > 1.972$  ( $H_0$  is rejected). The effect of ICT-based Value Creation Performance (VCP) to Customer Trust is positive with coefficient of 0.423 or ICT-based Value Creation Performance (VCP) has a direct effect of 17.9% ( $(0.423 \times 0.423) \times 100\%$ ).

### Partial Hypothesis 2:

#### The Effect of Customer Winback Performance (CWP) on Customer Trust

$H_0$  : Customer Winback Performance (CWP) has an effect on Customer Trust;

$H_1$  : Customer Winback Performance (CWP) has no effect on Customer Trust;

The result of partial hypothesis 2 is shown in Table 8 below:

Table 8. The Effect of Customer Winback Performance (CWP) on Customer Trust

Variable	The Coeff. of Effect	t-count	t-table ( $\alpha = 5\%$ )	Conclusion
Customer Winback Performance (CWP)	0.151	2.378	1.972	<b>Significant</b> ( $H_0$ is rejected)

According to the table 8 above, *Customer Winback Performance* (CWP) significantly affects Customer Trust, where the value of t-count is greater than t-table or  $2.378 > 1.972$  ( $H_0$  is rejected). The effect of *Customer Winback Performance* (CWP) to Customer Trust is positive with coefficient of 0.578 or *Customer Winback Performance* (CWP) has a direct effect of 2.3%  $((0.151) \times (0.151) \times 100\%)$ .

## DISCUSSION

The concept of trust become a popular issue in marketing with the advent of relational orientation in marketing activities. Trust is seen as the basis in the relationship with the consumer. Consumer satisfaction will lead to trust. According to Kotler (2014), customer satisfaction is one of measurement tool to look at a company's competitiveness. In this study, ICT-based value creation and customer winback performance performance affect customer trust in the case of e-money products in cellular operators in Indonesia.

Based on the results of statistical calculation, it is understood that the customer makes an evaluation based on the benefits received, the sacrifices made (cost), as well as alternative choice of similar brand that finally influences the customer trust. Value creation performance and customer winback performance significantly and positively affect the customer trust, either partially or simultaneously.

## CONCLUSION

Based on the discussion before, the conclusion of this study is as follows:

- ICT-based Value Creation Performance (VCP) significantly affects on customer intimacy. This finding shows that the amount of customer intimacy depends on ICT-based value creation that is happening where the ICT-based value creation performance are growth, it will lead to the increase of customer trust
- Customer Winback Performance (CWP) significantly affects on customer intimacy. This finding shows that the customer trust depend on Customer Winback Performance (CWP). An increasing of Customer Winback Performance (CWP) will lead to increasing of customer trust

## SUGGESTIONS

- Based on the findings, the author suggests several matters related to the practical implications that can be understood as an input, including that to win the trust of consumers, mobile operators need to create a program based on the technology, service, and uniqueness. It would be more precise than competing in a tariff war that would lead to churn and customer transition.

- In terms of academic, this research is still very open to be developed further, considering the phenomenon in the telecommunications market, mobile operators, and a large number of users in Indonesia. Relevant research related to the study can be extracted from consumer behavior regarding the purchasing decisions of the technologies offered and usage tariff.

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