



# **THE EFFECT OF E-CHANNEL BANKING ON CUSTOMER SATISFACTION TO IMPROVE LOYALTY OF MANDIRI BANK CUSTOMERS**

**Taufik Arief Hidayat** 

Faculty of Economic, Gunadarma University, Jakarta, Indonesia  
taufikarief94@gmail.com

**Herry Sussanto**

Faculty of Economic, Gunadarma University, Jakarta, Indonesia  
hsussanto@yahoo.com

## **Abstract**

*The rapid development of Information Technology (IT) and globalization supports banks to improve services to customers safely, comfortably and effectively, including through electronic media or known as e-channel banking. E-banking makes it easy for customers to make transactions in terms of time, place and cost. This study aims to determine the effect of e-channel banking on customer satisfaction to increase customer loyalty. The object of this research is Bank Mandiri customers who use e-channel banking to conduct transactions, data collection is done by distributing questionnaires. Data processing is done by path analysis which is divided into two sub-structures. Based on the results of the research conducted, it can be concluded that electronic channel banking has an influence on customer loyalty both directly and indirectly through customer satisfaction.*

*Keywords: Electronic Channel Banking, Customer Satisfaction, Customer Loyalty*

## INTRODUCTION

Banks are industries that have an important role in the economy of a country, because almost all industries must use services from banks both in conducting operations and for venture capital. The rapid development of Information Technology (IT) and globalization supports banks to improve services to customers safely, comfortably and effectively, including through electronic media or known as E-Channel Banking. E-banking makes it easy for customers to make transactions in terms of time, place and cost.

The development of e-banking technology has encouraged a cash society less society. Less cash society is a lifestyle that uses transaction media or electronic money in transactions so there is no need to bring physical money. Less cash society in addition to being able to improve payment systems that are fast, safe and efficient, to accelerate the circulation of economic activity and financial system stability, can also prevent criminal offenses and money laundering.

Indonesia is a country that has a population of 267 million, with the majority of its people in a high age of productivity, this is indicated by the portion of the Y and Z genes of 42%. The large number of people at a young age makes Indonesian people able to receive technological developments, this can be seen from cellphone customers of more than 310 million. But people who have bank accounts are only 36% of the population, and 64% of Indonesians do not have bank accounts.

From this, it can be seen that the level of Indonesian people's trust in banks is still relatively low or information about banking is still very minimal. Banks need to improve facilities and good management systems, to attract public interest in using banking services and to retain customers.

## LITERATURE REVIEW

According to Oktavina in Dahlan Siamat (2014), financial institutions are business entities whose assets are primarily in the form of financial assets or in the form of bills greater than their non-financial assets. Financial institutions can be classified into two classifications, groupings are divided based on their activities in dealing with funds from the public, namely depository financial institutions and non-depository financial institutions.

Depository financial institutions carry out fundraising activities directly from the public in the form of deposits in the form of demand deposits, savings, time deposits or savings deposits with certificates, and provide services in payment traffic (transfers, bill payments, clearing and so on). Included in the group of depository financial institutions are commercial banks

(conventional or sharia) and community-owned banks, only these banks carry out these functions.

Non-depository financial institutions are often also called non bank financial institutions (NBFI) or non depository financial institutions (NDFI). Financial institutions included in this group are all financial institutions whose business activities do not withdraw funds directly to the community as they are done by depository financial institutions or banks (Suryanto in Siamat, 2011).

### **E-Channel Banking**

E-banking is a service that allows bank customers to obtain information, communicate, and conduct banking transactions through electronic media channels such as Automatic Teller Machine (ATM), Electronic Data Capture (EDC) / Point Of Sales (POS), internet banking, SMS banking, mobile banking, phone banking, and video banking. Below are some of the products included in e-banking services.

### **Customer Satisfaction**

Mayangsari (2014) in Engel, et al., 1990 states that customer satisfaction is a post-purchase evaluation where alternatives are selected at least equal to or exceed customer expectations, while dissatisfaction arises if the results (outcomes) do not meet expectations. Mulyanto (2011) in Kotler, et al., 1996 states that customer satisfaction is the level of one's feelings after comparing the performance (or results) that he feels compared to his expectations. From the various definitions above it can be concluded that basically the definition of customer or customer satisfaction covers the difference between expectations and performance or perceived results.

### **Customer Loyalty**

Customer loyalty is a behavior related to the brand of a product, including the possibility of renewing a brand contract in the future, how likely the customer is to change his support for the brand, how likely the customer desires to improve the positive image of a product. If the product is not able to satisfy the customer, the customer will react by means of exit (the customer declares to stop buying the brand or product) and voice (the customer expresses dissatisfaction directly with the company). Customers leave or change their support for the product has an effect on long-term revenue, increasing retention has a significant influence on long-term revenue, and the positive relationship between satisfaction and customer loyalty is getting stronger (Laely, 2016).

## MATERIAL AND METHODS

This study uses two variables, namely, exogenous variables (independent variables) and endogenous variables (dependent variables). The exogenous variable in this study is E-Channel Banking (X1). And endogenous variables in this study are customer satisfaction (Y1) as an intermediary variable, and customer loyalty (Y2) as related variables.

In this study, the object is a facility from e-channel banking services provided by Bank Mandiri. The research subjects are Bank Mandiri customers who transact in Automatic Teller Machine (ATM) e-channel banking, Electronic Data Capture (EDC) / Point of Sales (POS), internet banking, SMS banking, mobile banking, and phone banking in Jakarta North.

In this study the type of data used is primary data, using a questionnaire as a tool for collecting data. The population in the study is North Jakarta people in Indonesia, totaling 1,747,315 people. In determining the number of samples to be used in the study, researchers used Slovin with a tolerance level of 5%.

$$n = \frac{1747315}{1 + 1747315 \cdot [(0.05)]^2} = 399,9$$

From the distribution of the questionnaire carried out 420 results were collected, then will be used in the study. In this study the analytical tool used is path analysis.

## RESULTS

### Simultaneous Influence

#### *The simultaneous effect of electronic channel banking on customer satisfaction (Sub-structure 1)*

Table 1. ANOVA Sub-structure 1

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24545.729	1	24545.729	24707.180	.000 <sup>b</sup>
	Residual	415.269	418	.993		
	Total	24960.998	419			

a. Dependent Variable: Customer\_Satisfaction

b. Predictors: (Constant), E\_Banking

Ho : There is no combined electronic channel banking on customer satisfaction.

Ha : There is a combined electronic channel banking effect on customer satisfaction.

Based on the calculation above, the significance number is  $0.00 < 0.05$  so Ho is rejected and Ha is accepted. This means that there is a joint effect of electronic channel banking on customer satisfaction.

Table 2. Summary Sub-structure 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 <sup>a</sup>	.983	.983	.99673

a. Predictors: (Constant), E\_Banking

The value of R square ( $r^2$ ) is 0.983 or 98.3% (substructure 1). In other words, the variability of consumer satisfaction that can be explained by using the electronic channel banking variable is 98.3%, while the influence of 1.7% is caused by other variables outside of this model such as products, services, prices, and so on.

***The effect of electronic channel banking, and customer satisfaction combined on customer loyalty (Sub-structure 2)***

Table 3. ANOVA Sub-structure 2

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6075.769	2	3037.884	133646.458	.000 <sup>b</sup>
	Residual	9.479	417	.023		
	Total	6085.248	419			

a. Dependent Variable: Customer\_Loyalty

b. Predictors: (Constant), Customer\_Satisfaction, E\_Banking

Ho : There is no influence of electronic channel banking, and customer satisfaction combined on customer loyalty.

Ha : There is an influence of electronic channel banking, and customer satisfaction combined against customer loyalty.

Based on these calculations, the significance number is 0.00 < 0.05 so Ho is rejected and Ha is accepted. That is, there is an influence of electronic channel banking and customer satisfaction in a combination of customer loyalty.

Table 4. Summary Substructure 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 <sup>a</sup>	.998	.998	.15077

a. Predictors: (Constant), Customer\_Satisfaction, E\_Banking

The value of R square ( $r^2$ ) is 0.998 or 99.8% (sub-structure 2). In other words, the variability of consumer loyalty can be explained by electronic channel banking and customer satisfaction by 99.8%, while the effect of 0.2% is caused by other variables outside of this model such as products, services, prices, images and so on.

## Partial Influence

### Sub-structure 1

Table 5. Coefficients Sub-structure 1

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.194	.188		-27.557	.000
	E_Banking	1.998	.013	.992	157.185	.000

a. Dependent Variable: Customer\_Satisfaction

a. Direct influence of electronic channel banking on customer satisfaction.

Ho : There is no effect of electronic channel banking on customer satisfaction.

Ha : There is an influence of electronic channel banking on customer satisfaction.

Based on the calculation above, the significance number is 0.000 < 0.05 so Ho is rejected and Ha is accepted. From the results of hypothesis testing conducted, it shows that electronic channel banking has a positive influence on customer satisfaction.

### Sub-structure 2

Table 6. Coefficients Sub-structure 2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.819	.048		58.903	.000
	E_Banking	.098	.015	.099	6.591	.000
	Customer_Satisfaction	.445	.007	.901	60.143	.000

a. Dependent Variable: Customer\_Loyalty

a. Direct influence of electronic channel banking on customer loyalty.

Ho: There is no influence of electronic channel banking on customer loyalty.

Ha: There is an influence of electronic channel banking on customer loyalty.

Based on the calculation above, the significance number is  $0.000 < 0.05$  so  $H_0$  is rejected and  $H_a$  is accepted. From the results of hypothesis testing conducted, it shows that electronic channel banking has a positive influence on customer loyalty.

b. Effect of customer satisfaction on customer loyalty directly.

$H_0$  : There is no direct effect on customer satisfaction on customer loyalty.

$H_a$  : There is an influence of customer satisfaction on customer loyalty directly.

Based on the calculation above, the significance number is  $0.000 < 0.05$  so  $H_0$  is rejected and  $H_a$  is accepted. From the results of hypothesis testing conducted, it shows that customer satisfaction has a positive influence on customer loyalty.

## Summary



The structural equations for this model are:

Sub-structure 1:  $Y_1 = \beta_{Y1} X_1 + \epsilon_1$

$$Y_1 = 0.992X_1 + 0.017$$

Sub-structure 2:  $Y_2 = \beta_{Y2} X_1 + \beta_{Y2} Y_1 + \epsilon_2$

$$Y_2 = 0.099X_1 + 0.901Y_1 + 0.002$$

### A. Direct Effect or DE

To calculate the direct effect or DE, the following formula is used:

1. Effect of electronic channel banking variables on customer satisfaction.

$$X_1 \rightarrow Y_1 = 0.992$$

2. Effect of electronic channel banking variables on customer loyalty.

$$X_1 \rightarrow Y_2 = 0.099$$

3. Effect of electronic variables on customer satisfaction with customer loyalty.

$$Y_1 \rightarrow Y_2 = 0.901$$

## B. Indirect Effect or IE

To calculate the indirect effect or IE, the following formula is used:

1. Effect of electronic channel banking variables on customer loyalty.

$$X1 \rightarrow Y1 \rightarrow Y2 = (0.992 \times 0.901) = 0.895$$

## C. Total Effect

To calculate the total effect, namely by adding the influence of DE and IE as follows:

1. Effect of electronic channel banking on customer loyalty.

$$(X1 \rightarrow Y2) + (X1 \rightarrow Y1 \rightarrow Y2) = (0.099 + 0.895) = 0.994$$

## CONCLUSION

From the results of the research that has been done can be concluded, that electronic channel banking has an influence on customer loyalty both directly and indirectly through customer satisfaction. In other words, providing good electronic channel banking facilities can provide bank added value in increasing customer loyalty. In Indonesia the majority of the population is in productive age with very high activity, in this case of course the people need facilities or facilities that can provide convenience in conducting transactions so that activities can run effectively and efficiently. Electronic channel banking can provide convenience for people in transactions, one of the most widely used electronic channel banking facilities is mobile-based electronic channel. The number of users of mobile-based electronic channel banking is due to the large level of consumption or mobile phone users in Indonesia. This can be a key for banks in competition and entering the digital banking era.

## REFERENCES

- Laely, Nur. 2016. Analisis Pengaruh Kepercayaan dan Harga Terhadap Loyalitas Pelanggan Dimediasi Kepuasan Pada PT. Telkomsel di Kota Kediri. *JMM17 Jurnal Ilmu Ekonomi dan Manajemen* Vol. 3 No. 2 hal. 61-74.
- Mayangsari, Putri. 2014. Pengaruh Kualitas Pelayanan Administrasi Terhadap Tingkat Kepuasan Mahasiswa Jurusan Administrasi Bisnis Politeknik Negeri Sriwijaya. Skripsi S1. Palembang: Politeknik Negeri Sriwijaya.
- Mulyanto, Edy. 2011. Analisis Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan Pada Bengkel Ajsaka Motor Kudus. Skripsi S1. Semarang: Universitas Diponegoro.
- Oktavina, Kiki. 2014. Analisis Perbedaan Kinerja Keuangan Antara Industri Perbankan dengan Asuransi Yang Terdaftar Di Bursa Efek Indonesia Periode 2010-2012. Skripsi S1. Pekanbaru: Universitas Islam Negeri Sultan Syarif Kasim Riau.
- Suryanto, Tubagus. 2011. Perbandingan Kinerja Keuangan Antara Perusahaan Bank dan Perusahaan Asuransi. Skripsi S1. Yogyakarta: Universitas Sanata Dharma.