

## THE ROLE OF INTERNET BANKING FACILITIES AND SYSTEM QUALITY ON CUSTOMER SATISFACTION AT PT BCA TBK.

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**Abstract:** This study aims to examine the effect of internet banking facilities and system quality as accounting information systems on customer satisfaction, partially or simultaneously. The data used is primary data in the form of questionnaire, with a total sample of 60 respondents from Bank BCA KCP Taman Semanan Indah, Kalideres, West Jakarta. The data analysis techniques used are multiple linear regression, classical assumption testing, and hypothesis testing. The results show that internet banking facilities (X1) and system quality (X2) have an effect on customer satisfaction (Y), both partially and simultaneously. The adjusted R square value is 51.7%, which means that the customer satisfaction variable is influenced by internet banking facility and system quality variables, various factors can impact the remaining part.

**Keywords:** internet banking facilities, system quality, customer satisfaction

### INTRODUCTION

Banks channel capital from individuals who cannot economically use it to those who can make it more productive for societal benefit. Competition in the banking industry is getting tighter; so companies that are able to survive are companies that have the skills to continuously increase consumer loyalty as a key factor in competition. Electronic banking technology is currently an important phenomenon and will persist along with innovative developments in information technology (Uddin et al., 2016). Simon & Thomas (2016) explained that the

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flexibility of internet banking greatly affects customer satisfaction because customers are able to use internet banking easily, and it is personalized.

The presence of the internet as a technological development helps banks to improve performance and provides convenience for customers in making transactions so as to increase customer satisfaction; and in turn customers become loyal and increase profits for banks (Rahman et al., 2017). The effectiveness of bank information system technology will be a key factor in determining its success, which will continue to be widely developed to meet the business interests of the bank and its customers. One of the e-banking services that is now a mainstay of a bank is internet banking, which is the activity of running a business or banking activities via the internet with programs provided by banks. Internet banking is the result of financial technology in the most up-to-date era. The primary goal of internet banking is to make it easier for customers to conduct banking transactions without having to visit bank offices and deal with bank officials. If the performance is below expectations, consumers are dissatisfied. Another benefit of the internet besides giving customers a sense of convenience is saving time and costs (Oluoch, 2017). Companies that can establish and maintain client loyalty will be successful in the long run. According to Kasmir (2017), services are actions taken by a person or organization to satisfy consumers, coworkers, and leaders. The main factor in satisfying needs is quality; it cannot be separated from the products or services produced by the company. This automation process tendency will continue in the coming years, in line with the development of the national banking system as an institution that the public trusts to carry out its function as a financial intermediary institution. The Covid-19 epidemic that shook business activities in Indonesia prompted banks to innovate in order to provide banking facilities and good online services, which resulted in changes in the transaction style of banking consumers. Based on this context, the researchers intend to investigate the impact of internet banking services and system quality as an accounting information system on customer satisfaction, either separately or concurrently.

### **Effect of Internet Banking Facilities on Customer Satisfaction**

Internet banking is a bank service provided through an internet network that utilizes technological intelligence where customers can carry out internet-

based mobile transactions. Customer satisfaction is the result of differences between customer expectations and the performance felt by the customer. Customer satisfaction is a response to customer behavior in the form of an after-purchase evaluation of a product or service that is perceived (product performance) compared to customer expectations. Satisfaction is the feeling of happiness, relief, fullness, and so on because the person's desire has been fulfilled. So satisfaction is a matter of contentment, pleasure, relief, and so on (Kotler & Keller, 2018). The better the internet facilities provided, the higher the customer satisfaction. Monalisa & Suryani (2013) proved that internet banking facilities have a significant effect on customer satisfaction. The results of research by Khumaini et al. (2022) stated that internet banking service facilities have a positive and significant effect on customer satisfaction at Bank Syariah Mandiri KC Tangerang. The above descriptions can form the following hypothesis:  
H1: Internet banking facilities affect customer satisfaction

### **Effect of System Quality on Customer Satisfaction**

Information system quality focuses on the performance of information system components, measuring how well the hardware capabilities, software, people, procedures, databases, communication networks, data, activities, networks and technology of the information systems produce information for users (Relubun et al., 2019). System quality refers to the information processing system used or the relationship between the characteristics of the system, and the successful implementation of the system. Therefore the system to be implemented must be of high quality, so that users feel comfortable in using and utilizing the system. Sugiarto & Rokhman (2018) explained that system quality has an effect on customer satisfaction; that shows the quality of information systems has an effect on customer satisfaction. The descriptions above can form the following hypothesis:  
H2: System quality affects customer satisfaction

### **Effect of Internet Banking Facilities and System Quality on Customer Satisfaction**

Internet banking is a form of bank service through internet applications and networks to facilitate and provide satisfaction to its customers. Information

system quality focuses on the performance of information system components, namely how well the capabilities of hardware, software, people, procedures, databases, communication networks, data, activities, networks and technology of information systems produce information for users (Relubun et al., 2019). Customer satisfaction is the level or state of a person’s feeling, which is the result of a comparison between performance evaluations or end results in relation to customer expectations, so good facilities and service quality can increase customer satisfaction (Hasianna, 2017). Research conducted by Muhtadi et al. (2020) showed that service quality and facilities have a significant impact on customer satisfaction of Mudharabah Al Barakah Savings customers at Banjarmasin Branch Office of Bank Kalsel Sharia. The descriptions above can form the following hypothesis:

H3: Internet banking and system quality simultaneously affect customer satisfaction

METHOD

Conceptual Framework

The independent variables used in this study are internet banking and the quality of its system, while the dependent variable used is customer satisfaction in using internet banking services.

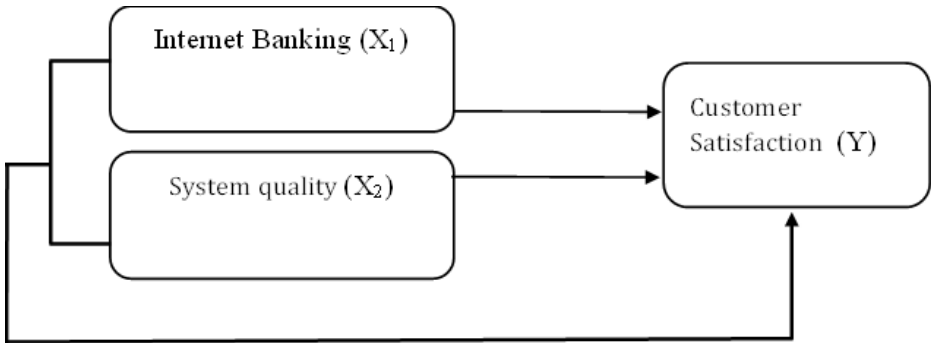


Figure 1 Conceptual Framework

Population and Sample

Primary data is employed as a source of information. Customers of the Bank BCA Semanan Indah Sub-Branch Office submitted a list of questions in the form of questionnaires to 60 respondents between March and May 2022. Survey method is employed in this study as a quantitative approach. A quantitative approach is one that explains problems by numerical tests, which are subsequently examined to draw conclusions. This study used a cross-sectional approach, which is a study that is only conducted on a single sample and population over a specific time period. In this descriptive study, a single cross-sectional survey is used to determine the elements that influence customer satisfaction during a single study period, and the measurement technique used is a Likert scale.

Data Analysis Unit

This research used a cross-sectional approach, which is a study that is conducted in a specific time period on various samples and populations. The aim of using cross sectional in this descriptive study is to know the factors that influence customer satisfaction during just one study period, as measured by a Likert scale.

Table 1 Likert Scale

No.	Answer Category
1	Strongly Disagree (DS)
2	Don't Agree (DA)
3	Agree (A)
4	Strongly Agree (SA)

Understanding how to gather data to be studied with the goal of operationalizing research concepts into research variables and measuring them is the fundamental concept of variable definition and measurement. Variables are any form that researchers decide to study and measure in accordance with the research provisions in order to acquire information from the results (Sugiyono, 2021). Using SPSS 23.0 for Windows, this study used analytical procedures such as validity tests, reliability tests, normality tests, multicollinearity tests, heteroscedasticity tests, autocorrelation tests, multiple linear regression, partial tests, and simultaneous tests.

RESULTS

Test of Validity

Validity check is used to evaluate the level validity of the questionnaire. The questionnaire is considered valid if the *r* calculated is greater than *r* table value and is positive. Because in this study there were 60 respondents with a standard error limit of 5%, the *r* table value is 0.254.

Reliability Test

This test is used to test the extent to which a measuring instrument can be trusted to be used again in the same study. If the variable has a Cronbach Alpha greater than 0.60 then it is considered reliable.

Table 2 Reliability Test

Variable	Cronbach's Alpha	Information
Internet Banking Facilities	0,978	Reliable
System Quality	0,947	Reliable
Customer Satisfaction	0,972	Reliable

Reliability testing shows the Cronbach Alpha coefficients for all variables, which are all more than 0.600. Therefore, it is concluded that all the variables are reliable.

Normality Test

The Kolmogorov-Smirnov value of 0.74 means that the data is regularly distributed. The significance level is 0.074 ( $0.011 > 0.05$ ), indicating that the data is normally distributed.

Multicollinearity Test

Table 3 Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	11.144	5.717		1.949	.056		
Internet Banking Facilities	.350	.078	.455	4.473	.000	.791	1.263
System Quality	.590	.150	.401	3.941	.000	.791	1.263

a. Dependent Variable: Customer Satisfaction

The tolerance value for the independent variables is 0.791; all independent variables have tolerance values of 0.10, indicating that there is no correlation between the independent variables. According to the VIF results, all independent variables have a VIF value of 10, indicating that there is no multicollinearity among the independent variables.

### Heteroscedasticity Test

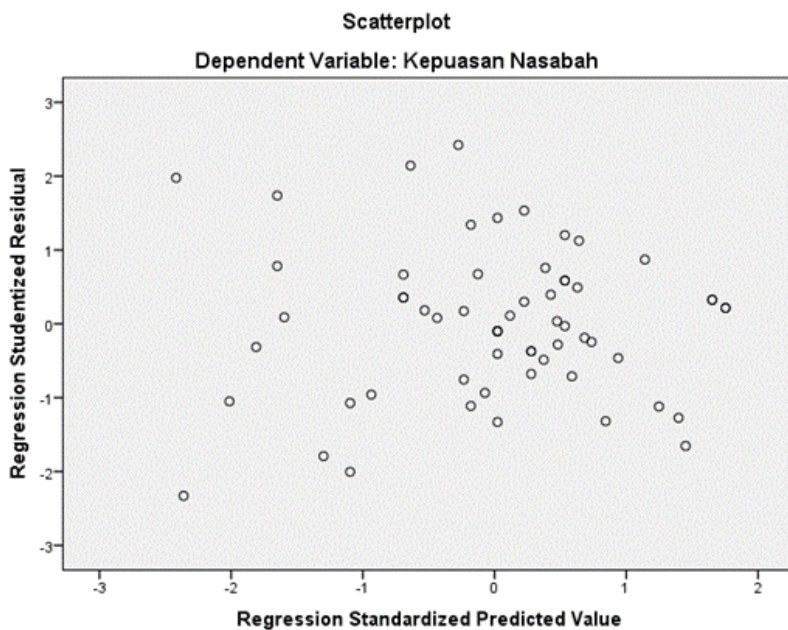


Figure 2 Scatter Plot Graphic Heteroscedasticity Test

Through this figure, it can be concluded that the points are randomly and evenly distributed above and below the Y axis at number 0. This shows that there is no heteroscedasticity.

### Coefficient of Determination Test ( $R^2$ )

Based on the regression calculation, it is found that the coefficient of determination is 0.517. This means that around 51.7% of the customer satisfaction factor is influenced by internet banking facilities and system quality, the rest are influenced by other factors.

F-Test

Table 4 F-Test

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2152.539	1	2152.539	39.754	.000 <sup>b</sup>
	Residual	3140.461	58	54.146		
	Total	5293.000	59			

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Internet banking facilities

The significance value of the influence of online banking and system quality on customer satisfaction is  $0.00 < 0.05$  and  $f \text{ calculated } 39.754 > f \text{ table value } 3.61$ , as shown in the table above. This demonstrates that  $H_{o3}$  is rejected but  $H_{a3}$  is accepted.

t-Test

Table 5 t-Test

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.144	5.717		1.949	.056
	Internet Banking Facilities	.350	.078	.455	4.473	.000
	System Quality	.590	.150	.401	3.941	.000

a. Dependent Variable: Customer Satisfaction

The results of the t-test show that the significance value of the role of internet banking (X1) on customer satisfaction (Y) is 0.000, which is less than 0.05. In addition, the t-calculated value of 4.473 is greater than the t-table value of 2.002. Thus,  $H_{o1}$  is rejected and  $H_{a1}$  is accepted; this means that internet banking facilities have a significant influence on customer satisfaction. Likewise with system quality (X2) on customer satisfaction (Y), which shows a significance value of 0.000, which is less than 0.05 and a t-calculated of 3.941, which is greater than the t-table value of 2.002. Thus,  $H_{o2}$  is rejected and  $H_{a2}$  is accepted. Therefore, system quality also has a significant effect on customer



satisfaction. These results are in line with previous research by Trisnawati & Fahmi (2017), which showed that the quality of electronic services affects customer satisfaction; so banks need to increase the comfort and safety of using their facilities.

## **DISCUSSION**

### **Effect of Internet Banking Facilities on Customer Satisfaction**

The first hypothesis states that internet banking facilities have a significant effect on customer satisfaction. The partial test results show that the internet banking facility variable has a significant impact on customer satisfaction, with  $t\text{-calculated} > t\text{-table}$  ( $4.473 > 2.002$ ). The regression coefficient for internet banking facilities is 0.350, indicating a positive relationship between internet banking facilities and customer satisfaction. If it is assumed that the other independent variable (system quality) has a value of 0, then every increase in internet banking facilities by 1 unit will increase the value of the accounting information system by 0.350. This finding is the same as research conducted by Monalisa & Suryani (2013). This proves that internet banking features have a significant impact on customer satisfaction.

### **Effect Of System Quality on Customer Satisfaction**

The second hypothesis states that system quality has an influence on customer satisfaction, and it is stated to be significant. Partial testing shows that the system quality factor has a significant influence on customer satisfaction. Since  $t\text{-calculated} > t\text{-table}$ , ( $3.941 > 2.002$ ), and with a regression coefficient of 0.590, there is strong evidence that the system quality has a positive impact towards customer satisfaction. If it is assumed that the other independent variable, namely internet banking facilities, has a value of 0, then every 1 unit increase in the system quality factor will increase customer satisfaction by 0.590. This finding is consistent with the results of research by Sugiarto & Rokhman (2018), which showed that system quality greatly influences customer satisfaction.

## **Effect of Internet Banking Facilities and System Quality on Customer Satisfaction**

The third hypothesis states that internet banking facilities and system quality have a significant impact on customer satisfaction. The test results show that the two factors have a significant impact simultaneously on customer satisfaction. In addition, the test results also show that the role of internet banking and system quality have simultaneous impact on customer satisfaction, with a significance value of  $0.00 < 0.05$  from  $f$  calculated  $39.754 > f$  table value  $3.16$ . This is in line with Hasianna (2017), which stated that good facilities and service quality can increase customer satisfaction.

## **Conclusions, Limitations and Suggestions**

Based on research and analysis regarding the impact of internet banking service quality on customer satisfaction using a questionnaire at Bank BCA Semanan Indah Branch, West Jakarta, it can be concluded that internet banking facility variable has a significant influence on customer satisfaction. In addition, system quality variables also have a significant influence on customer satisfaction. Overall, the test results show that internet banking and system quality simultaneously affect customer satisfaction. From the research results, service quality is a factor that influences customer satisfaction, so this needs to be considered carefully by bank management, such as by formulating strategies to improve the quality of internet banking services, which will also have an impact on increasing the number of customers and company profits.

This study only has two independent variables and one dependent variable. The research was only conducted at 1 BCA branch, while there are many other branches that have not been studied, and questionnaires were distributed to only 60 respondents during less than 1 semester. It is suggested that future researchers add additional variables and expand the area coverage, such as covering more BCA branch offices.

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