

## ANALYSIS OF THE EFFECT OF E-SERVICE QUALITY ON SATISFACTION CUSTOMERS OF PT BANK TABUNGAN NEGARA (PERSERO) TBK PEMATANG SIANTAR BRANCH OFFICE

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### Abstract

*The decrease in the number of BTN Mobile Banking users of BTN Pematang Siantar Branch Office customers needs to be analyzed, so that the cause of the decrease in BTN Mobile Banking users will be known. This study aims to test and analyze the effect of e-service quality on customer satisfaction of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office. The population of this study was all customers of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office, both individual customers, debtors and payroll customers who used BTN Mobile Banking in the period from January to March 2023, totaling 7,023 customers. The sample in this study was 380 people. The analysis technique used was Multiple Linear Regression Analysis. The results of statistical tests showed that efficiency, reliability, fulfillment, privacy partially influenced customer satisfaction of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office. The results of simultaneous tests showed that efficiency, reliability, fulfillment, privacy simultaneously influenced customer satisfaction at PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.*

**Keywords:** *E-Service Quality, Satisfaction*

### 1. INTRODUCTION

The current industrial revolution 4.0 has made major changes in the field of technology that have caused changes in various other fields. Currently, the system is directed to digital form through the use of the internet in all organizations, both from government, transportation, education, economy, and others. The COVID-19 pandemic in Indonesia was first detected on March 2, 2020, accelerating the transformation of digital use. This has an impact on changes in behavior in the banking world, especially bank customers or consumers in the social interaction section. This practically makes the role of digital services very necessary for carrying out banking transactions in Indonesia. In order to fulfill the needs of consumer services, especially customers in banking, in order to maintain consumer loyalty, the quality of service in fulfilling consumer satisfaction in a company, especially banking, offers the best services or services in order to fulfill customer satisfaction.

Satisfaction according to the Indonesian Dictionary is satisfied, feeling happy, about (things that are satisfying, pleasure, relief and so on). Satisfaction can be interpreted as a feeling of satisfaction, a feeling of pleasure and relief of a person due to consuming a product or service to get a service. According to Kotler and Keller (2016) consumer satisfaction is a feeling of pleasure or disappointment of a person that arises after comparing the work of the product that is thought to the expected performance. According to Kotler & Keller (2016) service quality is a form of consumer assessment of the level of service received with the level of service expected. If the service received or felt is in accordance with what is expected, then the quality of service is perceived as good and satisfying. Therefore, service quality tends to aim to meet consumer satisfaction with the services offered in companies or banks. However, before loyal consumers, consumers must first be satisfied with the performance of the service carried out by an organization (Sangadji and Sopiah, 2013). Changes in services towards digitalization will affect satisfaction with the quality of service in banking. In order to compete and survive, banks are required to have good services that can meet the needs and desires of customers.

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Consumer satisfaction can be increased through one of the factors of service quality that can be provided electronically or via the internet, generally called e-service quality. E-service quality is a broader form of service quality with internet media that connects sellers and buyers to fulfill shopping activities effectively and efficiently (Aquailano et al., 2020). According to Tjiptono (2017), e-service quality is a form of service quality that is very comprehensive and integrative because it has relevant dimensions and can fulfill the need to evaluate the quality of electronic services as a whole. Research conducted by Aquilano et al. (2019), that e-service quality plays an important role in shaping consumer satisfaction, besides that it is also closely related to creating profits for the company, that the results of the study show a positive influence of e-service quality on consumer satisfaction. The better the e-service quality provided by the company, the higher the satisfaction felt by consumers.

**2. LITERATURE REVIEW****A. Customer Satisfaction**

Consumer satisfaction is a feeling of pleasure or disappointment that arises after comparing the performance of a product that is thought to be against the expected performance (Satryawati, 2018). Consumer satisfaction has a causal relationship with employee satisfaction and understanding the role of employee satisfaction is very important in this context (Kurdi et al., 2020). Meanwhile, according to Pasuraman (Ordanini et al., 2014) stated that consumer satisfaction is a consumer's feeling towards a type of service that they receive. Satisfaction is an emotional state, their post-purchase reactions can be anger, dissatisfaction, joy or pleasure. Companies continue to improve consumer satisfaction because of its direct relationship with consumer loyalty, market share and profits. Customer satisfaction is an important factor especially for service companies. Because for service companies, customer satisfaction is a reference for the company's success in providing services to consumers. To achieve customer satisfaction, companies must provide optimal service according to consumer expectations. Satisfied consumers will become consumers of the company and will have a positive impact on the survival of the company.

**B. E-Service Quality**

Service quality is the result of consumer assessment of how far the difference between expectations and reality is felt from a service they receive from a service provider (company), whether the assessment is partial or overall. Service quality is a measure of how well the level of service provided by the company is able to match consumer expectations (Dennisa & Santoso, 2016). According to Dennisa & Santoso (2016), e-service quality is the overall assessment and evaluation of consumers towards the excellence and services provided in e-commerce. The assessment of e-service quality was conducted because previous research showed that more than 60% of online purchasers stopped transacting before completing their transactions due to factors including lack of security levels in the system, unexpected costs, incomplete information about products and services.

Service quality is directly measured by the friendliness of the seller meeting directly with the buyer, unlike the quality of electronic services. The quality of electronic services is measured by the convenience provided by the company through the internet media or the company's website. E-service quality has a significant role in influencing many aspects of e-commerce including consumer trust in e-commerce companies. According to Rowley (2006) actions, efforts or performances whose delivery is mediated by information technology are the definition of electronic services. Service quality is important because it will have a direct impact on the company's image. When consumers are satisfied with the services provided by the company, it will increase consumer loyalty to the company. Service quality and consumer satisfaction are factors in the success of a company to achieve competitive advantage (Sawitri, Yasa & Jawas, 2013). The satisfaction experienced by consumers continuously will create a sense of trust in the company which will form loyalty from a consumer. A good relationship between a consumer and a company can be seen from the loyalty given by the consumer to the company.

### **C. Hypothesis**

Based on the phenomena from the theoretical basis that has been put forward previously, the hypotheses in this study are as follows:

1. Efficiency has a positive and significant effect on Customer Satisfaction of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.
2. Reliability has a positive and significant effect on Customer Satisfaction of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.
3. Fulfillment has a positive and significant effect on Customer Satisfaction of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.
4. Privacy has a positive and significant effect on Customer Satisfaction of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.

## **3. IMPLEMENTATION METHOD**

### **1. Research Design**

The method used in this study is using a survey method, where the author distributes questionnaires for data collection. The approach used in this study is a quantitative approach. According to Sugiyono (2019) quantitative research is defined as a research method based on the philosophy of positivism, used to research certain populations or samples, data collection using research instruments, data analysis is quantitative or statistical, with the aim of testing the established hypothesis.

The research approach used is associative research. According to Sugiyono (2019) associative research is a formulation of a research problem that is intended to ask about the relationship between two or more variables. In this study, the variables that will be known are the causal relationship arising from the independent variables, namely Efficiency, Reliability, Fulfillment, Privacy towards Customer Satisfaction of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.

### **2. Population and Sample**

According to (Ghozali, 2017) population is the entire research subject. If you want to research all the elements in the research area, then the research is a population research. Population is all objects, all symptoms and all events of the events that will be selected must be in accordance with the problem to be studied (Sugiyono, 2019). The population of this study is all customers of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office, both individual customers, debtors and payroll customers who use BTN Mobile Banking in the period from January to March 2023, totaling 7,023 customers.

### **3. Data collection technique**

The data required or collected for analysis purposes include primary data and secondary data. So in this study the data used in data collection is primary data collected directly through a questionnaire consisting of question items distributed to users at PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.

### **4. Variable Measurement Scale**

The measurement scale of the variables used in this study uses intervals that function to measure variable indicators that produce ordinal data. The interval scale is used to measure attitudes, opinions, and perceptions of people or groups of people about this social phenomenon that has been specifically determined by researchers (Sugiyono, 2017).

### **5. Validity Test**

According to Sekaran and Bougie (2016) validity test is used to measure how accurately respondents are asked for information in the questionnaire. The Validity Test used in this study aims to

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test the validity of the questionnaire. Validity shows the extent to which a measuring instrument is accurate and precise in carrying out its measuring instrument function. The test uses 2 sides with a significance level of 0.05 if the calculated r is greater than the table r then the instrument or statement items are significantly correlated with the total score (declared valid), and vice versa if the calculated r is smaller than the table r is declared invalid. Validity testing will be carried out on 30 customers where these 30 respondents are outside the research sample.

**6. Classical Assumption Test**

The use of multiple linear regression as a data analysis tool requires a classical assumption test. The classical assumption test used in this study includes normality and multicollinearity tests. While the autocorrelation test and heteroscedasticity test are not used, because generally cases of autocorrelation and heteroscedasticity only occur in time series data (Sekaran and Bougie, 2016:51).

**7. RESULTS AND DISCUSSION**

**A. Respondent Characteristics**

The population of this study was all customers of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office, both individual customers, debtors and payroll customers who used BTN Mobile Banking in the period from January to March 2023, totaling 7,023 customers. The sample used was 380 samples. The characteristics of the respondents in this study can be described as follows:

**1. Respondent Profile Based on Gender**

**Table 4.1 Respondents by Gender**

| Age   | Number of Respondents | Percentage |
|-------|-----------------------|------------|
| Man   | 172                   | 45.3%      |
| Woman | 208                   | 54.7%      |
| Total | 380                   | 100.0%     |

*Source: Primary Data (processed), 2024*

Based on the presentation in Table 4.1, it is known that all respondents were male, namely 172 people and female, namely 208 people.

**2. Respondent Profile Based on Age**

**Table 4.2 Respondents by Age**

| Age         | Number of Respondents | Percentage |
|-------------|-----------------------|------------|
| 20-29 Years | 112                   | 29.5%      |
| 30-39 Years | 196                   | 51.6%      |
| 40-49 Years | 54                    | 14.2%      |
| >50 Years   | 18                    | 4.7%       |
| Total       | 380                   | 100.0%     |

*Source: Primary Data (processed), 2024*

Based on the presentation of Table 4.2, it is known that respondents aged 20 to 29 years were 112 people or 29.5%, aged 30 to 39 years were 196 people or 51.6%, aged 40 to 49 years were 54 people or 14.2%, and aged over 50 years were 18 people or 4.7%.

**3. Respondent Profile Based on Status**

**Table 4.3 Respondents Based on Status**

| Status          | Number of Respondents | Percentage |
|-----------------|-----------------------|------------|
| Not married yet | 84                    | 22.1%      |
| Marry           | 296                   | 77.9%      |



|              |            |               |
|--------------|------------|---------------|
| <b>Total</b> | <b>380</b> | <b>100.0%</b> |
|--------------|------------|---------------|

Source: Primary Data (processed), 2024

Based on table 4.3, it can be seen that respondents with unmarried status were 84 people or 22.1% and married status were 296 people or 77.9%.

#### 4. Respondent Profile Based on Education

**Table 4.4 Respondents Based on Education**

| Education          | Number of Respondents | Percentage    |
|--------------------|-----------------------|---------------|
| SENIOR HIGH SCHOOL | 31                    | 8.2%          |
| Diploma            | 74                    | 19.5%         |
| Bachelor           | 252                   | 66.3%         |
| Postgraduate       | 23                    | 6.1%          |
| <b>Total</b>       | <b>380</b>            | <b>100.0%</b> |

Source: Primary Data (processed), 2024

Based on Table 4.4, it is known that out of 380 respondents. Based on education, respondents with high school education were 31 people or 8.2%, respondents with diploma education were 74 people or 19.5%, respondents with undergraduate education were 252 people or 66.3%, and respondents with postgraduate education were 23 people or 6.1%.

#### 5. Respondent Profile Based on Length of Time as a Customer

**Table 4.5 Respondents Based on Length of Time as Customers**

| Long Time As A Customer | Number of Respondents | Percentage    |
|-------------------------|-----------------------|---------------|
| < 1 year                | 72                    | 18.7%         |
| 1-3 years               | 70                    | 18.4%         |
| 4-5 years               | 106                   | 27.9%         |
| >5 years                | 133                   | 35.0%         |
| <b>Total</b>            | <b>380</b>            | <b>100.0%</b> |

Source: Primary Data (processed), 2024

Based on Table 4.5, it is known that out of 380 respondents. Based on the length of time as a customer, less than 1 year as many as 72 people or 18.7%, 1 to 3 years as many as 70 people or 18.4%, 4 to 5 years as many as 106 people or 27.9%, and more than 5 years as many as 133 people or 35.0%.

### B. Classical Assumption Test

#### 1. Normality Test Results

**Table 4.6 Normality Test – One Sample Kolmogorov-Smirnov Test**  
**One-Sample Kolmogorov-Smirnov Test**

|                                  |                | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N                                |                | 380                     |
| Normal Parameters <sup>a,b</sup> | Mean           | .0000000                |
|                                  | Std. Deviation | .26381161               |
| Most Extreme Differences         | Absolute       | .062                    |
|                                  | Positive       | .058                    |
|                                  | Negative       | -.062                   |
| Test Statistics                  |                | .062                    |
| Asymp. Sig. (2-tailed)           |                | .189c                   |

a. Test distribution is Normal.

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b. Calculated from data.

c. Lilliefors Significance Correction.

Source: SPSS Output Results

Table 4.6 shows that the significance value of the normality test is 0.189 or  $> 0.05$ , meaning that the residual data is normally distributed. According to Sekaran and Bougie (2016:58), data is said to be normal if it has a significance value  $> 0.05$ .

**C. Descriptive Research Data**

**1. Descriptive Variables of Customer Satisfaction**

**Table 4.8 Respondents' Perceptions of Customer Satisfaction Variables**

| No      | Statement  | Alternative Answers |    |    |     |     | Average |
|---------|--|---------------------|----|----|-----|-----|---------|
|         |  | STS                 | TS | KS | S   | SS  |         |
| 1.      | In general I am satisfied using the application<br>BTN Mobile Banking in transactions                  | 0                   | 6  | 49 | 184 | 141 | 4.21    |
| 2.      | I am satisfied with the performance of the BTN Mobile Banking application product                      | 0                   | 0  | 15 | 227 | 138 | 4.32    |
| 3.      | I am satisfied with the BTN Mobile Banking application service   | 0                   | 0  | 76 | 153 | 151 | 4.19    |
| 4.      | The performance expectations of the BTN Mobile Banking application are very good                       | 0                   | 0  | 30 | 192 | 158 | 4.33    |
| 5.      | BTN Mobile Banking application service expectations are very good                                      | 0                   | 0  | 25 | 225 | 130 | 4.27    |
| 6.      | The reality is that the BTN Mobile Banking application is in accordance with the perceived performance | 0                   | 0  | 79 | 155 | 146 | 4.17    |
| 7.      | The reality is that the BTN Mobile Banking application is in accordance with its services              | 0                   | 0  | 34 | 192 | 154 | 4.31    |
| Average |  |                     |    |    |     |     | 4.26    |

Source: 2024 data (processed).

Based on Table 4.8, it can be seen that the average value of Customer Satisfaction is 4.26. The average value of 4.26 is between (4.20-5.00), meaning that the respondents' perception of the question items related to Customer Satisfaction is Very Good.

**2. Descriptive Variable E-Service quality**

**Table 4.9 Respondents' Perceptions of E-service Quality Variables**

| No                | Statement | Alternative Answers |    |    |   |    | Average |
|-------------------|-----------|---------------------|----|----|---|----|---------|
|                   |           | STS                 | TS | KS | S | SS |         |
| <b>Efficiency</b> |           |                     |    |    |   |    |         |

| No                 | Statement  | Alternative Answers |    |     |     |     | Average     |
|--------------------|--|---------------------|----|-----|-----|-----|-------------|
|                    |  | STS                 | TS | KS  | S   | SS  |             |
| 1.                 | I find it easy to use the BTN Mobile Banking application   | 0                   | 0  | 42  | 177 | 161 | 4.31        |
| 2.                 | I feel that the BTN Mobile Banking Application has a fast response   | 0                   | 0  | 48  | 173 | 159 | 4.39        |
| 3.                 | Navigation on BTN Mobile Banking makes it easy for me to find services   | 0                   | 0  | 51  | 183 | 146 | 4.35        |
| 4.                 | I feel that the information on BTN Mobile Banking is in accordance with my goals.                                  | 0                   | 0  | 60  | 189 | 131 | 4.18        |
| 5.                 | It's quite easy to sign out and sign back in to BTN Mobile Banking.  | 0                   | 0  | 62  | 186 | 132 | 4.18        |
| <b>Average</b>     |  |                     |    |     |     |     | <b>4.24</b> |
| <b>Reliability</b> |  |                     |    |     |     |     |             |
| 6.                 | I feel the BTN Mobile Banking application is functioning as it should  | 0                   | 0  | 21  | 202 | 157 | 4.35        |
| 7.                 | When using BTN Mobile Banking, there are never any problems when transferring finances.                            | 3                   | 3  | 64  | 134 | 176 | 4.25        |
| 8.                 | Navigation on BTN Mobile Banking makes it easy for me to find services (such as shopping, checking balances, etc.) | 0                   | 6  | 76  | 110 | 188 | 4.26        |
| 9.                 | BTN Mobile Banking has accurate service results (account balances match their values)                              | 0                   | 3  | 123 | 115 | 139 | 4.02        |
| 10.                | BTN Mobile Banking is responsive and fast in responding to customers   | 0                   | 3  | 124 | 114 | 139 | 4.02        |
| <b>Average</b>     |  |                     |    |     |     |     | <b>4.18</b> |

**Fulfilment**

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| No             | Statement   | Alternative Answers |    |    |     |     | Average     |
|----------------|---|---------------------|----|----|-----|-----|-------------|
|                |   | STS                 | TS | KS | S   | SS  |             |
| 11.            | I feel the performance of the BTN Mobile Banking application in terms of content looks interesting      | 0                   | 0  | 3  | 129 | 248 | 4.64        |
| 12.            | Ease of using banking services on BTN Mobile Banking  | 0                   | 0  | 36 | 109 | 235 | 4.52        |
| 13.            | The use of BTN Mobile Banking is in accordance with the promised performance                            | 0                   | 0  | 42 | 93  | 245 | 4.53        |
| 14.            | The BTN Mobile Banking application can be downloaded via the Play Store/App Store                       | 0                   | 0  | 39 | 100 | 241 | 4.53        |
| 15.            | BTN Mobile Banking makes it easy to check balances and transfer between BTN Bank and other banks        | 0                   | 0  | 44 | 108 | 228 | 4.48        |
| <b>Average</b> |   |                     |    |    |     |     | <b>4.54</b> |
| <b>Privacy</b> |   |                     |    |    |     |     |             |
| 16.            | BTN Mobile Banking guarantees customer's personal information   | 0                   | 0  | 45 | 174 | 161 | 4.30        |
| 17.            | Guarantee transactions using BTN Mobile Banking   | 1                   | 0  | 3  | 148 | 180 | 4.32        |
| 18.            | Registration and deletion of BTN Mobile Banking can be done via BTN Bank ATM machines or Contact Center | 0                   |    | 46 | 163 | 171 | 4.32        |



| No                     | Statement   | Alternative Answers |    |    |     |     | Average     |
|------------------------|---|---------------------|----|----|-----|-----|-------------|
|                        |   | STS                 | TS | KS | S   | SS  |             |
| 19.                    | I feel that the BTN Mobile Banking application keeps my transaction activities confidential | 0                   | 0  | 48 | 160 | 172 | 4.32        |
| 20.                    | BTN Mobile Banking guarantees transactions and personal data security within 24 hours       | 0                   | 0  | 56 | 156 | 168 | 4.29        |
| <b>Average</b>         |   |                     |    |    |     |     | <b>4.31</b> |
| <b>Overall Average</b> |   |                     |    |    |     |     | <b>4.35</b> |

Source: Primary Data, 2024 (processed).

Based on Table 4.9, it can be seen that the average value of e-service quality is 4.35. The average value of 4.35 is between (3.41-4.19), meaning that the respondents' perception of the question items related to e-service quality is Very Good.

#### D. Multiple Linear Regression Results

**Table 4.10 Results of Regression Analysis Coefficients<sup>a</sup>**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. | Collinearity Statistics |       |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
|       |            | B                           | Std. Error | Beta                      |       |      | Tolerance               | VIF   |
| 1     | (Constant) | .742                        | .115       |                           | 6,458 | .000 |                         |       |
|       | X1         | .324                        | .038       | .359                      | 8,515 | .000 | .373                    | 2,677 |
|       | X2         | .337                        | .043       | .319                      | 6,931 | .000 | .238                    | 4,203 |
|       | X3         | .280                        | .039       | .207                      | 4,138 | .000 | .358                    | 2,792 |
|       | X4         | .125                        | .043       | .145                      | 2,923 | .004 | .269                    | 3,713 |

a. Dependent Variable: Y

Source: Processed Primary Data, 2024

Thus, the results of the statistical calculations can be written as a multiple linear regression equation as follows:

$$Y = 0.742 + 0.324 (X1) + 0.337 (X2) + 0.280 (X3) + 0.125 (X4)$$

From the results of the regression equation above, the results of the research are as follows:

- The constant value is 0.742, meaning that if the E-service quality variable has a value of zero or constant, then the Customer Satisfaction variable will have a positive value of 0.742.
- The regression coefficient of the effect of efficiency of 0.324 explains that every increase in efficiency will increase customer satisfaction by 0.324, meaning that there is a positive influence of the efficiency variable on customer satisfaction.
- The regression coefficient of the influence of reliability of 0.337 explains that every increase in reliability will increase customer satisfaction by 0.337, meaning that there is a positive influence of the reliability variable on customer satisfaction.

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- d. The regression coefficient of the influence of fulfillment of 0.280 explains that every increase in fulfillment will increase customer satisfaction by 0.280, meaning that there is a positive influence of the fulfillment variable on customer satisfaction.
- e. The regression coefficient of the influence of privacy of 0.125 explains that every increase in privacy will increase customer satisfaction by 0.125, meaning that there is a positive influence of the privacy variable on customer satisfaction.

**DISCUSSION**

The result of dividing the Mean Square regression with the Mean Square residual obtained a calculated F value of 1466.523 with a probability significance value limit of 0.000. While the F table value at a significant level of 5% and 283.283 is 2.713. Thus, the calculated F value (1466.523) is greater than the F table (2.713) so that a decision can be taken, namely accepting the alternative hypothesis (Ha) and rejecting the Ho hypothesis, meaning that the E-service quality variables together have an effect on customer satisfaction.

From the SPSS output results obtained Adjusted R Square is 0.749. The Adjusted R Square value of this amount explains, the role of the E-service quality variable in influencing customer satisfaction is 0.749 or 74.9%. While the rest (residual value) of the role of the variable is 0.251 or 25.1% influenced by other variables not involved in this study. The regression coefficient of the effect of efficiency of 0.324 explains that every increase in efficiency will increase customer satisfaction by 0.324, meaning that there is a positive effect of the efficiency variable on customer satisfaction. The efficiency variable affects customer satisfaction because customers consider or feel that the BTN Mobile Banking application has a fast response and is easy to use the BTN Mobile Banking application. The ease of use and fast response of the BTN Mobile Banking application have an impact on customer satisfaction in using BTN Mobile Banking.

**A. Managerial Implications**

Based on the research results, the managerial implications of the research are as follows:

- a. For the efficiency variable, the lowest average value was obtained on the information availability indicator with service products. The addition of other banking products and services can be a concern for BTN management in order to provide clear information regarding the usefulness of the BTN Mobile Banking application, the most important role of frontliners or Customer Service staff to try harder in delivering and educating customers, that to facilitate cashless banking activities (non-cash) in a certain amount can use BTN Mobile Banking in order to create a digital ecosystem in accordance with its goals and needs.
- b. For the reliability variable, the lowest average value was obtained on the application responsiveness indicator. This can be a concern for BTN Bank management in order to improve application response. Network disruptions or even slow application responses will have an impact on customer dissatisfaction. As a form of education for BTN Mobile Banking customers, it is expected that frontliners or Customer Service staff and BTN employees can know the standard knowledge related to alternatives, if there is a network disruption to one of the telecommunications providers, they can use other telecommunications providers or services.
- c. For the Fulfilment variable, the lowest average value was obtained for the target accuracy indicator. This can be a concern for BTN management to improve transfer services in larger amounts in accordance with the principle of prudence and practical balance checking. Balance checking and transfers can be done with just a fingerprint (fingerprint matching) or face-ID authentication (face matching), without having to enter a password or PIN (Personal Identification Number) to make it easier for customers to enter the application. The use of BTN Mobile Banking in a more practical way can be carried out early education by frontliner staff or Customer Service that BTN Mobile Banking can use the fast track feature (quick login) available on the initial display of BTN Mobile Banking.

- d. For the privacy variable, the lowest average value was obtained on the application access indicator. This can be a concern for BTN management to improve application security by guaranteeing transactions and personal data security 24 hours a day, 7 days a week. Services such as purchasing electricity tokens, postpaid electricity payments, insurance payments, electronic money top-up services and others can be done at any time. Where transaction security and reliability in maintaining customer privacy are an inseparable unit when explaining account opening or registering for the BTN Mobile Banking application.

## 8. CONCLUSION

### Conclusion

Based on the discussion of the research results presented in the previous section, the following conclusions can be drawn:

- a. The results of the study prove that e-service quality (efficiency, reliability, fulfilment, privacy) is a factor causing an increase in the number of customers of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office, this is known from the respondents' answers where the respondents' perception of e-service quality is Very Good.
- b. The results of statistical tests show that efficiency, reliability, fulfillment, and privacy partially influence customer satisfaction at PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.
- c. The results of simultaneous testing show that efficiency, reliability, fulfillment, and privacy simultaneously have an effect on customer satisfaction at PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office.

### Suggestion

Based on the research results, the suggestions that can be given are:

1. E-service quality (efficiency, reliability, fulfilment, privacy) is a factor causing the increase in the number of customers of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office. This can be a concern for the management of PT Bank Tabungan Negara (Persero) Tbk Pematang Siantar Branch Office to be able to maintain the existing e-service quality and even improve it, so that customer satisfaction increases.
2. For the efficiency variable, the lowest average value was obtained on the information availability indicator with service products. This can be a concern for BTN management to provide clear information about the usefulness of the BTN Mobile Banking application so that customers can use it according to its purpose.
3. For the reliability variable, the lowest average value was obtained on the application responsiveness indicator. This can be a concern for BTN management in order to improve application response. Network disruptions or even slow application responses will have an impact on customer dissatisfaction.
4. For the fulfillment variable, the lowest average value was obtained for the target accuracy indicator. This can be a concern for BTN management to improve transfer and balance checking services. Balance checking and transfers can be done with just a fingerprint or face-ID authentication (matching with the face), without having to enter a password or email to make it easier for customers to enter the application.
5. For the privacy variable, the lowest average value was obtained on the application access indicator. This can be a concern for BTN management to improve application security by guaranteeing transactions and personal data security within 24 hours. Services such as purchasing electricity tokens and others can be done at any time.
6. For further research, it is hoped that other variables can be added that can influence customer satisfaction.

**ANALYSIS OF THE EFFECT OF E-SERVICE QUALITY ON SATISFACTION CUSTOMERS OF PT BANK TABUNGAN NEGARA (PERSERO) TBK PEMATANG SIANTAR BRANCH OFFICE**

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