# Analysis of the Influence of BSB Mobile Application user Experience on Customer Loyalty with Satisfaction as an Intervening Variable

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## A R T I C L E   I N F O

## ABSTRACT

The purpose of this study was to examine if the independent variable of user experience affects the dependent variable, namely customer loyalty, which is mediated through customer satisfaction as an intervening variable. This is a quantitative study with a sample size of 100 respondents based on Hair's Theory in the research population consisting of customers who use the Bank Sumsel Babel Mobile Application. Hypothesis testing demonstrates that user experience has a positive and significant effect on customer satisfaction, with a sig. value $0.000<0.005$ and a t value of 13.003. Furthermore, the user experience variable is recognized to have a positive and significant on customer loyalty with a sig. value $0.001<0.005$ and a t value of 3.554. Then it was discovered that customer satisfaction had a positive and significant on the customer loyalty variable, with a sig. value $0.000<0.05$ and a t value of 4.436. Simultaneously, customer satisfaction has been shown to significantly and positively mediate the influence of the link between user experience and customer loyalty.

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## 1.  INTRODUCTION

The large growth of banks in Indonesia has led to intense competition in getting customers. Banking companies will always prioritize innovation in product and service development. One of the banks that follows the development and development of information technology is PT Bank Pembangunan Daerah Sumatera Selatan and Bangka Belitung which is a regional bank whose largest shares are owned by the regional government of South Sumatra and Bangka Belitung. Bank Sumsel Babel is one of the developing regional banks in Indonesia, offering various service products as a derivative of e-banking services that are easily accessible to banks and customers, one of which is mobile banking.

The quality of quality banking products is very important in shaping customer satisfaction, but it is also closely related to bank profitability. The higher the quality of banking service products, the higher the satisfaction felt by customers (Marzuki, et.al., 2021). Mobile banking facilities have good

service quality and a close relationship with customer satisfaction, and provide motivation for long-term relationships with customers (Basri, 2019).

Knowing the needs of users allows mobile banking service providers to build products that will help companies grow. All of this is the result of awareness of the importance of User Experience in the use of mobile banking that can attract and retain users (Asfari, 2019). With a positive customer experience with the products and services provided, it will provide a level of satisfaction that results in customer loyalty. Bank Sumsel Babel, which is a banking service industry, must focus on customer satisfaction and loyalty to improve the quality of banking services. Based on download data viewed in early October 2022 totaling 100,000 downloads and 1000 samples taken, 423 negative reviews were found related to user experience issues. So that Bank Sumsel Babel needs to pay attention to complaint reviews so that it can improve the quality of the user experience of the Bank Sumsel Babel Mobile application.

Research conducted by Widjieanto, (2021) shows that there is a positive relationship between user experience and customer loyalty. When someone increasingly believes that technology can be used easily or with minimal effort, that person's interest in using technology will also increase. Based on research conducted by Tiara (2020), there is a significant influence between customer experience and customer satisfaction. The results of research conducted by Bhattacharya, et.al., (2019) show that customer experience in online shopping significantly affects customer satisfaction when shopping online. The results of research conducted by Parera et.al., (2021) related to customer loyalty from the ease of using mobile banking found that customers who are easy to use M-Banking get satisfaction and customers who are satisfied with the use of M-Banking will cause loyalty to the bank. Research conducted by Japrianto (2020) which results in that the intervening variable of user satisfaction (customer statisfaction) strengthens the relationship between user experience and customer loyalty. Based on the results of previous research, the Bank Sumsel Babel company must be observant in seeing what factors must be considered to maintain the quality of mobile banking services that have an impact on customer loyalty in order to get satisfaction when transacting and continue to use Bank Sumsel Babel mobile banking services.

## 2.    RESEARCH METHOD

The type of research conducted by researchers is qualitative descriptive research. This research will discuss the effect of user experience on the Bank Sumsel Babel mobile banking application to then find strategies in increasing user satisfaction with the Bank Sumsel Babel digital bank application so as to achieve the level of customer loyalty to Bank Sumsel Babel. The population in this study were customers who used the Bank Sumsel Babel Mobile application totaling 100 people who were sampled as a whole. The types of data in this study are quantitative and qualitative obtained from two sources, namely primary data and secondary data. Primary data in this study were obtained directly from users of the Sumsel Babel bank m-banking application in Palembang City in the form of questionnaire results. Secondary data such as books, library references, scientific journals, official websites and other online sources. The analysis technique uses descriptive analysis, quantitative analysis in the form of validity and reliability tests, classical assumption tests, simple regression analysis tests, multiple linear regression analysis tests, t tests, coefficient of determination ($R^2$) and mediation tests (sobel tests) with the help of SPSS software.

## 3.    RESULTS AND DISCUSSIONS

### 3.1  Data Quality Test
a. Validity Test : All question items from variables X, Y, Z have a p value > $\alpha$ (0.05), which means they are valid.
b. Reliability Test : All question items from variables X,Y,Z have a Cronbach's Alpha value > 0.60, which means reliable (accurate / stable).
### 3.2  Classical Assumption Test
1. Normality Test

From the results of the normality test for model I and model II, it is known that the sig value. > 0.05, meaning it shows that the data is normally distributed.

2. Heteroscedasticity Test

From the results of the heteroscedasticity test of model I and model II, it is known that all variables have a sig value. > 0.05, meaning that the regression model used does not occur heteroscedasticity.

3. Multicollinearity Test

From the results of the multicollinearity test in model II, it is known that all independent variables, namely User Experience (X1) and Customer Satisfaction (X2), have a tolerance value> 0.10 and a VIF value < 10. This means that there is no multicollinearity in the data.

### 3.3 Hypothesis Test

### a.    Model I

### Simple Regression Analysis

The test results can be presented in the following table:

**Table 1.** Simple Regression Analysis Results

**Coeficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4,993 | 2,177 | | 2,294 | ,024 |
| | User Experience | ,738 | ,057 | ,796 | 13,003 | ,000 |

a. Dependent Variable: Customer Satisfaction

Source: Processed by Researchers (2022)

Based on the regression results in table I, the regression equation model in the study is formulated as follows:

$$Y1 = \alpha + \beta 1X + e$$

Customer Loyalty = 4,993 + 0,796 + e  User Experience

The above equation can explain several points as follows:

a.    Standard Error shows data of 0.057, meaning that if there is a deviation, the deviation is 0.057.

b.    User Experience has a coefficient of 0.796 with a positive direction. The coefficient value of 0.796 indicates that if the user experience is increased by one level, then customer loyalty will also increase by 0.796 assuming the other independent variables remain.

### 2.    Test t

The t-test analysis was conducted to determine whether the independent variables individually affect the dependent variable. The significance level used in this study is 0.05 ($\alpha$ = 5%). In this model 1 regression analysis, it can be seen that the partial test (t test) of the effect of the user experience variable (X) on the customer satisfaction variable (Z) with hypothesis 1 = It is suspected that the user experience of the Sumsel Babel M-Banking application has a significant effect on customer satisfaction. And it is known from the research results in Table 1, the sig. value for the effect of X on Z is 0.000 <0.05 and the value of | titung | = | 13.003 | > 1.984 (t table), so it can be concluded that $H_1$ is accepted which means that user experience partially affects customer satisfaction at Bank Sumsel Babel.

### 3.    Coefficient of Determination ($R^2$ )

The Coefficient of Determination ($R^2$) is used to measure the ability of the model to explain the variation in the dependent variable. The results of the coefficient of determination show that the adjusted r square coefficient of determination is 0.629, which means that the effect of the independent variable X on the dependent variable (Z) is 62.9%. while the remaining 37.1% is influenced by other variables not examined.

### 4.    Model II

### 1.    Multiple Regression Analysis Results

Multiple regression analysis is carried out to determine whether or not there is a relationship between the independent variable and the dependent variable. The regression results in the study can be seen in the following table.

**Table 2.** Multiple Linear Regression
**Coeficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2,006 | ,887 | | 2,261 | ,026 |
| | User Experience | ,132 | ,037 | ,369 | 3,554 | ,001 |
| | Customer Satisfaction | ,178 | ,040 | ,460 | 4,436 | ,000 |

a. . Dependent Variable: Customer Loyalty

Source: Processed by Researchers (2022)

Results Based on the regression results in table II, the regression equation model in the study is formulated as follows:

$$Y2 = \alpha + \beta1\,X1 + \beta2\,X2 + e$$
$$Y2 = 2.006 + 0.369\ X1 + 0.460\ X2 + 0,887$$

From the above equation can explain several points as follows:
1. The constant α of 2.006 indicates that if the user experience and customer satisfaction variables are 0 (no change up or down), then Bank Sumsel Babel customer loyalty has a value of 2.006.
2. User Experience has a coefficient of 0.369 with a positive direction indicating a unidirectional relationship between user experience (X1) and the Customer Loyalty variable (Y). If the user experience increases, then customer loyalty also increases. The coefficient value of 0.369 indicates that if the user experience is increased by one level, customer loyalty will also increase by 0.369, assuming that the other independent variables remain.
3. User satisfaction has a coefficient of 0.460 with a positive direction indicating a unidirectional relationship between the customer satisfaction variable (X2) and the customer loyalty variable (Y). If customer satisfaction increases, then customer loyalty will increase. The coefficient value of 0.460 means that if customer satisfaction is increased by one level, customer loyalty will increase by 0.460 units assuming other independent variables remain constant.

**2. Partial Test Results (t Test)**

The t test was performed on the model II equation with a significance level of 0.05 (α = 5%). Acceptance and rejection of the hypothesis in this second model regression analysis can be seen in the t test of the effect of the user experience variable (X) and customer satisfaction (Z) on the customer loyalty variable (Y) by testing the hypothesis as follows:
a. Hypothesis 2 = It is suspected that the user experience of the Sumsel Babel M-Banking application has a significant effect on customer loyalty.
b. Hypothesis 3 = It is suspected that customer satisfaction of M-Banking Sumsel Babel application users has a significant effect on customer loyalty.
From the results of research in 2, the following can be seen:
1. Testing the second hypothesis (H2) the effect of user experience on customer loyalty can be seen from the significance value of the effect of X1 on Y is 0.001 <0.05 and the value of | tcount | = | 3.554 | > 1.984 (ttable) so it is concluded that H2 is accepted.
2. Testing the third hypothesis (H3) customer satisfaction of Sumsel Babel M-Banking application users affects customer loyalty which can be seen through the significance value of the effect of X2 on Y is 0.000 <0.05 and the value of | titung | = | 4.436 | > 1.984 (ttabel) so it can be concluded that H3 is accepted which means customer satisfaction partially affects customer loyalty. 2.

**3. Determination Test Results (R²)**

The results of the coefficient of determination in table 4.20, show the adjusted r square coefficient of determination of 0.609, which means that the effect of the independent variable X on the dependent variable (Y) is 60.9%. while the remaining 39.1% is influenced by other variables not examined.

**4. Mediation Test**

The mediation test was conducted to see the effect of the user experience variable (X) on the customer loyalty variable (Y) which was mediated by the customer satisfaction variable (Z) by conducting the sobel test on hypothesis 4 = It is suspected that the Sumsel Babel M-Banking

application User Satisfaction mediates the relationship between user experience and customer loyalty. In this study, the sobel test was carried out by conducting regression analysis on equation I and equation II as follows.

**a.  Equation I**

Based on the regression results in table I, equation I is formulated as follows:

$$Z = α + β1\ X + e$$
$$Z = 4{,}993 + 0{,}796 + e$$

From this equation, it is known that the path between the independent variable and the dependent variable (α) has a value of 4.993 and the standard coefficient a of the user experience variable is 0.796.

**b.  Equation II**

Based on the regression results in table II, equation II is formulated as follows:

$$Y = α + β1\ X1 + β1\ X2 + e$$
$$Y = 2{,}006 + 0{,}369 + 0{,}460 + e$$

From this equation, it can be seen that the intervening variable path with the dependent variable (b) gets a value of 0.369 and the standard coefficient b of the customer satisfaction variable is 0.460.

Furthermore, the sobel test is carried out by testing the strength of the indirect effect of the independent variable (X) on the dependent variable (Y) through the mediating variable (Z). The indirect effect of X to Y through Z can be found by doing the following calculations.

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2\ Sb^2}$$
$$= \sqrt{0{,}738^2 0{,}057^2 + 0{,}178^2 0{,}040^2 + 0{,}057^2\ 0{,}040^2}$$
$$= \sqrt{0{,}000871 + 0{,}00010 + 0{,}0000051}$$
$$= 0{,}029$$

After getting the standard error value of the indirect effect of the indirect effect of X to Y through Z of 0.029, then the results of the sobel test significance value can be determined as t = 4.529. This shows that customer satisfaction is able to mediate user experience on customer loyalty, so it can be concluded that H4 is accepted.

**3.4  Discussions**

1.  The Effect of User Experience on Customer Satisfaction

Based on the partial test results in the table, the user experience variable on the customer satisfaction variable has a sig value. 0.000 <0.05 and a t value of 13.003, and tends in a positive direction. So it can be concluded that H1 is accepted, which means that user experience partially affects customer satisfaction at Bank Sumsel Babel.

2.  The Effect of User Experience on Customer Loyalty

Judging from the partial test results for the effect of user experience on the customer loyalty variable is 0.001 <0.05 and the t value is 3.554, and tends to be positive. so it can be concluded that H2 is accepted which means that user experience partially has a significant effect on customer loyalty at Bank Sumsel Babel.

3.  The Effect of Customer Satisfaction on Customer Loyalty

It is known from the partial test results on the customer satisfaction variable on the customer loyalty variable is 0.000 <0.05 and the t value is 4.436, and tends to be positive. so it can be concluded that H3 is accepted which means that customer satisfaction partially affects customer loyalty at Bank Sumsel Babel.

4.  The Effect of User Experience on Customer Loyalty with Customer Satisfaction as an Intervening Variable

Based on the calculation of the significance of the sobel test (t), it can be seen that the t value of 4.529 is greater than the absolute z standard value of 1.96 with a significance level of 5%. This shows that customer satisfaction can operate as a mediator (mediate) between user experience and customer loyalty. So it can be concluded that H4 can be accepted, which means that customer satisfaction can mediate the relationship between user experience and customer loyalty at Bank Sumsel Babel.

## 4. CONCLUSION

Based on the results of research conducted by researchers regarding the analysis of the influence of the user experience of the bank sumsel babel mobile application on customer loyalty with customer satisfaction, the results is the user experience of the BSB Mobile application has a significant effect on customer satisfaction. User experience has a significant effect on Bank Sumsel Babel customer loyalty. Customer satisfaction of BSB Mobile application users has a significant effect on Bank Sumsel Babel customer loyalty. Customer satisfaction can mediate the relationship between user experience and Bank Sumsel Babel customer loyalty.

## REFERENCES

Ali Marzuki, Luis Marnisah, & Siti Komariah Hildayanti. (2021). Pengaruh Brand Image, Produk, Pelayanan Dan Promosi Terhadap Kepuasan Nasabah Pt. Bank Negara Indonesia (Persero) Tbk Kcp Bayung Lencir. Integritas Jurnal Manajemen Profesional (IJMPro), 2(1).

Afifah Vivi, Ayi Wahid, & Heri Sutrisno. (2022). Meningkatkan Kepuasan Pengguna BRI Mobile di DKI Jakarta. Jurnal IKRAITH-INFORMATIKA, 6(2).

Asfari. 2019. Peran User Experience Dalam Financial Technology. Artikel. Medium.Com.

Basri, A. I. (2019). Pengaruh Kualitas Layanan terhadap Kepuasan dan Loyalitas Nasabah Bank Pengguna E-Banking. Bisman, 2(1).

Bhattacharya, A., Srivastava, M., & Verma, S. (2019). Customer Experience in Online Shopping: A Structural Modeling Approach. Journal of Global Marketing, 32(1).

Cahyani. 2021. Pengaruh Kemudahan dan Kualitas Pelayanan Terhadap Loyalitas Nasabah Pengguna Echannel Dengan Kepuasan Sebagai Variabel Intervening Pada BSI KCP Ponorogo Cokroaminoto. Skripsi. Institut Agama Islam Negeri Ponorogo

Fadlan. (2018). Fadlan, 2018 Pengaruh Presepsi Kemudahan terhadap Penggunaan Mobile Banking.

Febrianta, A., & Indrawati, I. (2016). Pengaruh Kualitas Layanan Mobile Banking terhadap Kepuasan Nasabah Bank BCA di Kota Bandung. E-Proceeding of Management, 3(3).

Japarianto Edwin, & Bagas Wahyu Nugroho. (2020). ANALISA CUSTOMER EXPERIENCE TERHADAP CUSTOMER LOYALTY MELALUI CUSTOMER SATISFACTION PADA MASKAPAI PENERBANGAN GARUDA INDONESIA. Jurnal Strategi Pemasaran, 7(1).

Kasmir, K. (2017). Analisis Laporan Keuangan (10th ed.). PT Rajawali Pers.

Khaira, et al. (2020). Analisis Pengalaman Pengguna pada Aplikasi Mobile Banking dengan Metode UX Curve (Studi Kasus : BRI Mobile Banking) Zero Order Basin View project HEMOCS-Head Movement Control System View project. http://j-ptiik.ub.ac.id

Kotler, Et Al. 2009. Manajemen Pemasaran / Philip Kotler, Kevin Lane Keller.Penerjemah, Bob Sabran. Editor, Adi Maulana, Wibi Hardani. Edisi 13. Erlangga.

Tiara Monica, Erlina Rufaidah, dan Yon Rizal. 2020. Pengaruh Kualitas Pelayanan, Pengalaman Pelanggan, Dan Kemudahan Penggunaan Terhadap Kepuasan Pelanggan. Jurnal Edukasi Ekobis, Volume 8, No. 1.

Parera, N. O., Susanti, E., & Artikel, I. (2021). Loyalitas Nasabah Dari Kemudahan Penggunaan Mobile Banking Info Artikel Abstrak. In International Journal of Digital Entrepreneurship and Business (IDEB) (Vol. 2, Issue 1). https://ejournal.jic.ac.id/ideb/

Wicaksono, D. P. 2020. Evaluasi User Experience E-Supply Chain Pada Area Distribusi Jasa Pengiriman Dengan Metode Ux Honeycombs. Skripsi. Universitas Muhammadiyah Malang.

Widjieanto. (2021). Widjieanto, 2021, Analisa Pengaruh User Experience Terhadap Costumer Loyalty dengan Trust sebagai Variabel Intervening pada Aplikasi Digital Payment Dana.