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THE EFFECT OF SELF SERVICE TECHNOLOGY (SST) AND APPLICATION FEATURES ON SATISFACTION WITH THE USE OF MOBILE BANKING BY BSI IN UIN NORTH SUMATRA STUDENTS

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ABSTRACT

This study investigates the effects of Self-Service Technology (SST) and Application Features on user satisfaction in using BSI Mobile banking among students at the State Islamic University of North Sumatra. Employing a quantitative approach with associative analysis, the study utilized purposive sampling to select 100 respondents from a population of 23,671 students. Data were collected via an online questionnaire using Google Forms and analyzed with SPSS Version 25. The results indicate that both SST and Application Features partially have a positive and significant effect on user satisfaction. Simultaneously, SST and Application Features together significantly influence user satisfaction. The coefficient of determination (Adjusted R^2) is 0.548, indicating that 54% of the variance in user satisfaction can be explained by SST and Application Features, while 46% is influenced by other factors not examined in this study. These findings provide practical insights for BSI to enhance mobile banking satisfaction by improving both technological aspects and application functionalities.

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1. INTRODUCTION

The banking industry has now shown rapid growth triggered by technological improvements. This change is evident in the way banks operate when transacting. According to the Indonesian Payment System Association (ASPI), before 2000, transactions could only be made when consumers came to the office and met face-to-face with banking employees. So that the rapid improvement of technology provides new opportunities for the banking industry to support customer satisfaction, especially through services mobile banking [1].

Mobile banking facilitates customers to carry out banking activities without the need for cash from financial applications. With mobile banking, customers can transact easily at any time just by using their mobile phones [2]. This is due to the fact that people are now reluctant to take the time to carry out various bank procedures manually, so that the use of mobile banking considered more efficient and effective and saves time for customers [3]. In addition, the fact that almost everyone now has smartphone android, the use of banking applications has become easier and allows everyone to use it [4].

However, the increasing use of mobile banking it is also followed by high expectations from users for service performance both in terms of speed, system reliability, and personal data security. When these expectations are not met, users tend to feel dissatisfied and even lose trust in the services they are using [5]. This may have an impact on the intention to stop using mobile banking, and switch to other alternatives that are considered safer

and more convenient. A number of cases in recent years show how fragile user satisfaction is when services experience interruptions or security threats.

In September 2023, many users reported failure to top-up or transactions through BNI Mobile banking with the appearance of the code error such as "MBANK_ERROR". The bank said that the problem occurred due to the improvement in service quality, with some transactions disrupted while other services continued to run normally [6]. In addition, fraud through fake applications or links that resemble BCA Mobile was rampant. customers are required to enter their login data, PIN, and OTP to process a fake "transaction cancellation" and end up losing funds [7]. Some victims in Indonesia also suffered losses due to being deceived by parties claiming to be Shopee admins, then asking for data mobile banking sacrifice for the purpose of refund fake, so their money is lost [8]. The case of digital transactions was also found that digital transactions at DBS experienced double-charge for some customers. The bank responded by issuing a refund and admitting that there was a system bug that was the root cause [9].

In addition, SWAP mode transactions fraud it is also very unsettling for service users mobile banking, where SIM swap mode allows the perpetrator to master the victim's number and access the account mobile banking without authorization. This practice leads to significant loss of funds. Some cases even involve mobile providers [10].

In all of these cases, there is a gap between users' expectations of the service and the real experience they experience. This phenomenon is very relevant to be analyzed through the perspective of Expectation Confirmation Theory (ECT) developed by Bhattacherjee (2001). This theory states that the user has an initial expectation of service quality. After using the service, the user evaluates the actual performance. If performance is as expected (confirmation), then the user is satisfied and will continue to use the service. However, if the performance is below expectations (negative disconfirmation), then the level of satisfaction decreases and the intention to continue using it will decrease. In the context of the cases mobile banking above, users experience negative disconfirmation consequences of the system error, fraud, and technical glitches. When expectations for safe, fast, and reliable services are not met, what happens is an increase in their decision to stop using the service and a decrease in the level of satisfaction of service users mobile banking aforementioned.

Customer satisfaction itself is interpreted as a sense of satisfaction that arises when customers compare the results of service work received with expectations [12]. This satisfaction is considered long-term investment for bank companies in the face of increasingly tight competition among banks. Therefore, it is important for bank companies to create a satisfying experience for customers, in order to increase their loyalty. In an effort to always improve customer satisfaction, Bank Syariah Indonesia always carries out various optimization activities in several services such as Self Service Technology (SST) and app features.

Curran in Lithuania (2022) reveals that Self Service Technology (SST) is a type of facial recluse technology that provides consumers with the possibility of creating services on their own, where customers are directly involved in the use of the service. The demand for consumer satisfaction has become common in the business field, especially in the field of services, especially islamic banking, which is required to provide very high service compared to competitors in order to realize customer satisfaction [14].

Moreover application features are elements that exist in a product designed to make it unique and attractive to users [15]. Nowadays in-app features are needed by everyone. When consumers are satisfied with the features of the application they use, a strong relationship will be formed between the consumer and the service provider [16]. Consumers can view similar products in different ways based on a comparison of the features they have, including how complete the feature is, the level of sophistication, or uniqueness shown by a feature on a product than with features on other products.

Table 1. Comparison between features mobile banking by BSI with mobile banking from competitor banks

Category	Mobile banking by BSI	Competitors (Jenius, Bank Jago, BCA Mobile, Livin)
UI/UX	Feels dense, lots of submenus, lacks intuitive	Minimal, modern, easy to navigate UI (Jenius, Jago)
Service stability	Frequent errors and interruptions	Less down, more consistent
CS response	Old, often have to go to the branch	Fast via chat/in-app, more efficient
Islamic features	There is zakat, e-mas, Juz Amma	Generally there are no specific Islamic features
Transfer fees	Cheap transfer (~Rp2,500)	Some digital banks are even free of transfer fees
User ratings	Play Store 3.7 / App Store 4.1	Generally between 4.5–4.6

Based on table 1 above, it can be seen that although mobile banking by BSI offers unique advantages such as Islamic features and low transfer fees, it still lags behind other leading digital banks in terms of UI/UX, service stability, CS responsiveness, and user satisfaction. Complaints about slow applications, low ratings, and frequency of interruptions are indications that BSI needs to strengthen technical aspects, user experience, and customer support in order to be on par with digital banking competitors in Indonesia.

Previously, through the results of interviews that have been carried out by researchers on a number of UIN North Sumatra students who are mobile banking users from BSI, it was found that there are several problems experienced by students as BSI users who provide financial services for them. The problems faced in this study related to customer dissatisfaction when using self service technology services occurred in February 2025 yesterday, there was maintenance on mobile banking by BSI which was felt en masse by its users, including UINSU students. The error in the mobile banking by BSI application that occurred for many days made users upset because of the constraints of financial transactions at that time and had a great impact on students who were migrating because their finances were completely stored in the mobile banking application. Even though BSI has appealed to use their latest mobile banking application, beyond, but it is still nil, its use is still unreliable as a replacement for the previous mobile banking by BSI. The disruption shows that mobile banking by BSI is not yet fully stable and ready to serve customers optimally as a self service technology.

It is not only self service technology services that are an obstacle when using mobile banking from BSI. The UINSU student emphasized that mobile banking by BSI often experiences system disruptions that make users complain about failed transactions, balances deducted without confirmation, and non-real-time account mutations. In addition, mobile banking by BSI has a less intuitive application interface, features that are missing after updates, and slow customer service responses, further strengthening the impression that mobile banking by BSI has application features that are still somewhat inferior to the quality provided by mobile banking from other banks is a factor that greatly affects the satisfaction of its users. The security aspect is still questionable, because it does not fully support biometric or two-factor authentication. As a result of these various problems, mobile banking by BSI has a relatively low user rating compared to other mobile banking applications in Indonesia, reflecting the inequality between the desires and facts felt by customers.

The research gap in this study, namely on research Mahmuda et al. (2023) explain self service technology have a significant impact on consumer satisfaction. Ability self service technology in creating customer satisfaction is caused by the dependence of users in using technology to run their own business independently so that they no longer need the help of others. The same is true for research Latif & Priyanti (2024) explain Self Service Technology has a positive and significant influence on consumer satisfaction. Maximum Self Service Technology given in the findings shown from Tamaruddin et al. (2020) Found Self Service Technology In fact, it does not have a real influence on customer satisfaction who uses the service Mobile banking. This is because there are still many shortcomings in the self service technology like Mobile banking which is not always compatible for all types of smartphones so there are limitations of inaccessible features. In line with research Kho (2017)which Self Service Technology does not affect user satisfaction. In research Farhan et al. (2024), it was found that application features are able to have a positive and significant influence on customer satisfaction. The findings are based on the findings Khotijah et al. (2023), which the app's features affect user satisfaction. However, the two previous studies are not in line with the research Saragih & Siregar (2025) What explains that the application service features actually do not affect consumer satisfaction. The same is true for research Hapizah & New (2024), the app's service features also did not show a significant influence on the app's user satisfaction.

Therefore, the finding of inconsistencies in some previous research results, researchers feel the need to carry out further studies to find out which research results are supportive. As well as the existence of problems in the field based on the results of interviews with UIN North Sumatra students related to the use of Mobile banking, therefore, the researcher decided to conduct further empirical testing on the satisfaction of using Mobile banking with the research title "The Influence of Self Service Technology (SST) and Application Features on the Satisfaction of Using Mobile banking by BSI to UIN North Sumatra Students".

Mobile Banking Usage Satisfaction Theory

Kotler & Keller (2020) stating that satisfaction is a feeling that arises in a person, whether it is a sense of pleasure or disappointment, which arises due to the comparison between the work of the product and the results felt with the desires possessed. From Asti & Ayuningtyas (2020), consumer satisfaction can be interpreted as providing overall value from customers to the usability of the product. This assessment is based on something received versus something expected. Consumer satisfaction will be realized if the needs and expectations of consumers can be met optimally, especially if the services and products provided have the best quality. On the other hand, if the service and product itself do not meet the expected quality standards or are not able to meet consumer expectations, then there can be dissatisfaction with the services and products provided [27].

Minkiewicz et al. (2011) stated that there are 5 indicators of customer satisfaction in using Mobile banking, including:

1. Pleasure due to experience
2. Based on wishes
3. Consistency in line with results
4. Reception of service work
5. Informing the other party back

Self Service Technology (SST) Teory Mobile Banking

In general self service technology it is described as a technology that facilitates consumers by carrying out transactions or services on their own, similar to services provided in real life. Examples of its application include online systems, Mobile banking which are usually based on mobile phones or other digital devices (Phone Banking), and Internet Banking (Wicaksono et al. in Arnita et al., 2023). Lupiyoadi (2020) states that Self Service Technology is an innovation that gives consumers the possibility to provide services on their own and not depend on workers. For example, bank services through Internet Banking. According to Tamaruddin et al. (2020), Self Service Technology refers to innovations that can make it possible for customers to carry out transactions or receive services on their own, similar to services that are usually provided from bank officers directly.

According to Lupiyoadi (2020) There are several indicators that can illustrate Self Service Technology, which includes:

1. Functionality, namely the self service technology feature, is here to provide convenience for users in accessing technology and meeting their various needs.
2. Enjoyment, which refers to the experience and benefits felt by customers when using a certain system or technology.
3. Security/privacy, i.e. related to the individual aspects of the customer, self service technology systems manage the personal data they have to improve the user experience.
4. The design, i.e. the overall design of self service technology reflects an attractive aesthetic, with a beautiful shape and arrangement of the device.
5. Guarantee, which guarantees freedom from risks and doubts, provides security and comfort for users when using it.
6. Convenience, namely easy access to the services offered by the company, is one of the main advantages for customers.
7. Customization, i.e. this technology is articulated as the ability to understand the wants and needs of customers, as well as develop services through collaboration with them.

Feature Theory of Mobile Banking Applications

A feature is a specific characteristic or use that exists in an object or way of working. The feature serves as a tool that shows the difference between the company's products and the products of competitors. One of the most appropriate methods to compete is to make early users who launch the latest features that are valuable [21]. Deep mobile banking, features are various things that customers can do through the banking application. Service mobile banking It offers a number of features, including balance information, transaction history, bill payments, interest rates, and information about nearby unit offices or ATMs. In addition, there are also transaction features in the form of remittances, deposits, and others [22].

The various indicators applied in measuring application features mobile banking Among them are [31]:

1. Applicability to application access regarding services or products
2. Diversity of features in transaction services
3. Service innovation

2. RESEARCH METHODS

This research was prepared to apply quantitative research with associative analysis. Sugiyono (2022) reveals that the quantitative approach is a method based on concrete data and used in research involving samples and populations. Data collection in the form of numbers calculated through statistical analysis as a tool to test the hypothesis proposed. Meanwhile, the causal associative method is an approach that focuses on the cause-effect relationship applied in analyzing the influence or correlation between independent (free) and dependent (bound) variables in a study (Scott, 2022).

Population is the totality of subjects or objects that have characteristics and various qualities that the researcher determines for research needs, before finally being concluded [33]. Therefore, the population for this research was determined to be 23,671 students from the official campus website called Sipandai.

The sample is partial in some of the existing characters of the population and was applied to this research [33]. To determine the number of samples, this study applies the slovin equation with the following calculations:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{23.671}{1 + 23.671(0,1)^2} = 99,579$$

Based on this calculation, the results were obtained by 99,579 people so that it was rounded up with the number of 100 students. Sampling applies the purposive sampling, where this sampling technique is a sample selection technique according to a number of considerations (Scott, 2022). The consideration is that the prospective respondent is a Strata 1 (S1) UIN-SU student as an application user Mobile Banking from Bank

Syariah Indonesia. The technique in data collection in this research applies a questionnaire in the form of a link Google Form which will be distributed to respondents for 1 week and then the collected data can be processed by platform Software IBM SPSS ver. 25.

3. RESULT AND ANALYSIS

Statistics Descriptive

Sugiyono (2022) stated that the descriptive statistical analysis technique is one of the various techniques applied in analyzing data using the way of displaying data that has been collected and is not inferred with a general nature (generalization). Using this method, we can find out the value of independent and dependent variables. The analysis provides the first description for each variable studied, where data about each variable can be known through the average value (mean), maximum and minimum values, and standard deviation [34].
The following are the results of the descriptive statistical testing in the study, which are as follows:

Table 2. Statistics descriptive

	N	Minimum	Maximum	Mean	Hours of deviation
Self Service Technology (SST)	100	21	35	30.86	3.467
App Features	100	10	35	31.46	4.031
Usage Satisfaction	100	21	35	30.63	3.527
Valid N (listwise)	100				

Source: SPSS Data Processing Version 25 (2025)

From table 2 above, it can be described that application features are the most able to provide customer satisfaction compared to the Self Service Technology (SST) variable. Self Service Technology (SST) in BSI's mobile banking service shows that this self-service technology has provided a relatively stable user experience among customers. To increase the effectiveness of Self Service Technology (SST), it is necessary to strengthen the system more reliable, increase the responsiveness of the application, and improve the aspect of ease of use. That way, this self-service technology can really be a practical and efficient solution in digital banking activities for all user segments.

Test Instruments

Sugiyono (2022:166) stated that the research instrument is the use of tools in evaluating events that occur both in the context of measuring natural and social phenomena. These tests include validity and reliability testing. In this study, testing the validity and realism of the statement items was carried out by distributing research questionnaires to 30 respondents, namely UIN-SU students, but excluding research samples.

Validity Test

Validity test refers to the accuracy and precision of a measuring instrument with a general research term known as validity or validity. Measurement tools need to be able to calculate something that should be measured. If the tool meets these criteria, it can be declared as valid or valid. To determine the validity, it is necessary to make a comparison between the calculated value and the rtable value of the Pearson Product Moment [34].

The results of the validity test on all statement items in the research variable are as follows:

Table 3. Validity test results

Variabel	Statement item	r_{hitung}	r_{tabel}	Information
Self Service Technology (SST) (X_1)	X1.1	0,668	0,361	Valid
	X1.2	0,735		Valid
	X1.3	0,557		Valid
	X1.4	0,758		Valid
	X1.5	0,804		Valid
	X1.6	0,712		Valid
	X1.7	0,628		Valid
Application features (X_2)	X2.1	0,819	0,361	Valid
	X2.2	0,910		Valid
	X2.3	0,798		Valid
	X2.4	0,928		Valid
	X2.5	0,892		Valid
	X2.6	0,885		Valid
	X2.7	0,913		Valid

Variabel	Statement item	r_{hitung}	r_{tabel}	Information
Usage satisfaction (Y)	Y.1	0,935	0,361	Valid
	Y.2	0,931		Valid
	Y.3	0,887		Valid
	Y.4	0,937		Valid
	Y.5	0,868		Valid
	Y.6	0,917		Valid
	Y.7	0,842		Valid

Source: SPSS Data Processing Version 25 (2025)

From the results of the validity test listed in Table 3, it is known that all statement items for three variables, namely Self Service Technology (SST) (X_1), Application Features (X_2), and User Satisfaction (Y) obtained a calculated value above the table (0.361). Therefore, it was concluded that all the items of the statement were declared valid and applied as instruments in this study.

Reliability Test

This test refers to the consistency of the measuring tool applied and the stability of each time, meaning that this test is a measurement capacity in giving similar results when used at different times. Therefore, the ability of the measuring tool is the main estimate to ensure that the findings remain reliable. Thus, researchers need to ensure that the measuring instrument used has a high level of reliability [34].

The results of the reliability test on all statement items on the research variables are as follows:

Table 4. Reliability test results

Variabel	Cronbach's alpha	Alpha value	Information
Self Service Technology (SST) (X_1)	0,811	> 0,6	Reliabel
App features (X_2)	0,951	> 0,6	Reliabel
Usage satisfaction (Y)	0,962	> 0,6	Reliabel

Source: SPSS Data Processing Version 25 (2025)

From the results of the reliability test shown in Table 4, it can be seen that all statement items on the variables Self Service Technology (SST), Application Features, and User Satisfaction have a Cronbach's Alpha number of more than 0.6. This explains that all of the statement items are said to be reliable and can be reapplied as a measurement tool in this research.

Classic Assumption Test

The classical assumption test has the purpose of evaluating the feasibility of the regression model to be applied and explaining the data obtained following the normal distribution. In the test, there are various aspects tested, namely normality, multicollinearity and heteroscedasticity testing (Priyatno, 2022).

Normality Test

By Ghozali (2021:196), this test aims to see and test whether in the regression model, the inhibiting variable or the residual value is distributed noral. The data will be considered authentic in statistical testing by applying the SPSS version 25 device with the One Sample Kolmogorov-Smirnov Test method.

The following test results are shown in the following table:

Table 5. Normality test results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Hours of deviation	2.36663694
Most Extreme Differences	Absolute	.123
	Positive	.074
	Negative	-.123
Test Statistic		.123
Asymp. Sig. (2-tailed)		.001c
Exact Sig. (2-tailed)		.087

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
Source: SPSS Data Processing Version 25 (2025)

From the results of this test which was carried out applying the Kolmogorov-Smirnov test, as shown in Table 4 above, the result of the sign listed in the Exact Sig (2-Tailed) column was more than 0.05. These results explain that the data in this research is distributed normally.

Multicollinearity Test

Ghozali (2021:157), explained that the purpose of this multicollinearity test is to see if there is an independent variable correlation in the regression model. In the regression variable, it can be stated well if there is no uniform relationship between independent variables. In testing the existence of multicollinearity, we can observe the value of Tolerance and Variable Inflation Factor (VIF).

The results of this test are shown in the following table:

Table 6. Multicollinearity Test Results

Coefficients							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Itself.	Tolerance	BRIGHT
(Constant)	5.105	2.375		2.149	.034		
Self Service Technology (SST)	.431	.078	.424	5.524	.000	.789	1.267
App Features	.389	.067	.444	5.791	.000	.789	1.267

a. Dependent Variable: Usage Satisfaction

Source: SPSS Data Processing Version 25 (2025)

From the results of the multicollinearity test presented in Table 5 above, it is explained that the VIF value for the variables Self Service Technology (SST) (X_1) and Application Features (X_2) is recorded < 10 and the Tolerance value for the variables Self Service Technology (SST) (X_1) and Application Features (X_2) < 0.1. Therefore, it is concluded in this study that the free variable does not have a correlation, so that the assumption of the regression model related to the absence of symptoms of multicollinearity is met.

Heterokedasticity Test

This test aims to see if there is an unequal result for the variance of the residual between one observation and another observation in the regression model. The presence of heteroscedasticity indicates that the regression model is not ideal. A regression model can be considered good if there is no heteroscedasticity or is homoscedastic in nature (Ghozali, 2021:178). In this study, to estimate heteroscedasticity, the Glejser test was applied.

The following test results are shown in the table below, which is as follows:

Table 7. Heterokedasticity test results

		Unstandardized coefficients		Standardized coefficients		
	Model	B	Std. Error	Beta	t	Itself.
1	(Constant)	.645	1.391		.464	.644
	Self Service Technology (SST)	.035	.046	.087	.767	.445
	App Features	.006	.039	.016	.143	.886

a. Dependent Variable: Abs_RES

Source: SPSS Data Processing Version 25 (2025)

From the results of the heteroscedasticity test presented in Table 7 above, the sign value for the variable Self Service Technology (SST) (X_1) and Application Features (X_2) was more than 0.05. This means that it is concluded that the regression model is free by the indication of heteroscedasticity.

Multiple Linear Regression Test

Sugiyono (2022) Explain the analysis of multiple linear regression, which is a regression technique that involves one dependent variable and two more independent variables. In addition, the analysis aims to identify the correlation between independent and dependent variables so that we can see whether each independent variable has a positive impact and vice versa on dependent variables when something changes [36].

Table 8. Multiple linear regression test results

		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Itself.
1	(Constant)	5.105	2.375		2.149	.034
	Self Service Technology (SST)	.431	.078	.424	5.524	.000
	App Features	.389	.067	.444	5.791	.000

a. Dependent Variable: Usage Satisfaction

Source: SPSS Data Processing Version 25 (2025)

The multiple regression equation in this study can be described and described as follows:

$$Y = 5.105 + 0.431\ X_1 + 0.389\ X_2 + e$$

1. The constant value (α) obtained is 5.105 with a positive direction. This explains that if there is Self Service Technology (SST) (X_1) and Application Feature (X_2) in Mobile Banking by BSI, there will be an increase in user satisfaction among UIN North Sumatra students.
2. For the coefficient b1 (X_1), a value of 0.431 was obtained which also indicates a positive direction. This explains that Self Service Technology (SST) (X_1) has a positive effect on User Satisfaction (Y). So, if there is an increase of 1% in Self Service Technology (SST), then the satisfaction of using Mobile Banking by BSI for UIN North Sumatra students will increase by 43.1 units.
3. At the coefficient b2 (X_2), a value of 0.389 was obtained which indicated a positive direction. This indicates that Application Features (X_2) also have a positive effect on User Satisfaction (Y). Therefore, it is interpreted that if there is a 1% increase in the Application Features, then the satisfaction of using Mobile Banking by BSI for UIN North Sumatra students will increase by 38.9 units.

Uji Hypothesis

Partial Test (T-Test)

The t-test or also called partial testing is a tool applied to identify whether an independent variable has a real and partial influence on the dependent variable (Scott, 2022). Ghozali (2021) stated that the implementation of the T-test was applied by making a comparison of the results of T-Count and T-Table. According to the percentage point of the distribution t, it is known that the value of the sign. In this research, namely (α) = 5% with an error rate (df) = (n-k) where df = 100-3 = 97, so that the NLAI T-table was obtained which was worth 1.984

The results of this test are shown in the following table:

Table 9. Partial test results (T-Test)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Itself.
1	(Constant)	5.105	2.375		2.149	.034
	Self Service Technology (SST)	.431	.078	.424	5.524	.000
	App Features	.389	.067	.444	5.791	.000

a. Dependent Variable: Usage Satisfaction

From the results of the partial test (t-test) shown in Table 9 above, it can be described that:
Self Service Technology (SST) (X_1) found $a_{\text{tvalue of}}$ 5.524 > a table of t-values (1.984) which means it has a positive effect and a sign value of 0.000 < 0.05 which means it has a significant influence. Therefore, it was concluded that Ha was accepted and H0 was rejected, where Self Service Technology (SST) had a positive and significant influence on the Satisfaction of Using Mobile Banking by BSI in UIN North Sumatra Students.

The Application Feature (X_2) found a value of $t_{\text{calculated}}$ (5.791) > $t_{\text{of the table}}$ (1.984) which means it has a positive effect and a sig value of 0.000 < 0.05 which means it has a significant effect. Therefore, it was concluded that Ha was accepted and H0 was rejected, which the Application Feature had a positive and significant effect on the Satisfaction of Using Mobile Banking by BSI for UIN North Sumatra Students.

Simultaneous Test (F Test)

According to Sugiyono (2022), the simultaneous test has the purpose of determining the three independent variables with simultaneous having a real influence on the dependent variables. Based on the percentage point of the distribution F, it is known that the sign value in this research is (α) = 5% with an error rate of df1 = k-1 and df2 = nk, where df = 3-1 = 2 while df = n-k = 100-3 which is 97, so that f-table is obtained with a value of 3.09.

The results of this test are shown in the following table:

Table 10. Simultaneous test results (F-Test)

ANOVA

Model		Sum of Squares	df	Mean Square	F	Itself.
1	Regression	676.814	2	338.407	59.199	.000
	Residual	554.496	97	5.716		
	Total	1231.310	99			

a. Dependent Variable: Usage Satisfaction

b. Predictors: (Constant), Application Features, Self Service Technology (SST)

Source: SPSS Data Processing Version 25 (2025)

From the results of the simultaneous testing (F test) shown in Table 10, it was found that the value of $F_{\text{calculated}}$ (59.199) > $F_{\text{of the table}}$ (3.09) which means it has a positive effect and the sign value of 0.000 < 0.05 which means it has a significant effect. It was concluded that Ha was accepted and H0 was rejected, where Self Service Technology

(SST) and Application Features had a positive and significant influence on the Satisfaction of the Implementation of Mobile Banking by BSI for UIN North Sumatra Students.

Coefficient of Determination Test (R2)

The coefficient of determination, which is generally symbolized by R^2 and is applied to measure the magnitude of the impact of the bound pad-free variable [36]. In this study, the analysis carried out was multiple regression. In looking at the value of the determination coefficient, it is used Adjusted R Square, with a value of more or less than zero to one value is small, indicating that the capacity of various independent variables to explain the diversity of dependent variables has limitations. Conversely, if the value points to one, it indicates that various independent variables can lead to all the data needed to estimate the variation of dependent variables [35].

The results of this test are shown in the following table:

Table 11. Determination coefficient test results (R2)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741	.550	.540	2.391

a. Predictors: (Constant), Application Features, Self Service Technology (SST)

b. Dependent Variable: Usage Satisfaction

Source: SPSS Data Processing Version 25 (2025)

Based on the results of the determination coefficient (R^2) analysis presented in Table 11, the value of R^2 against the Adjusted R Square column recorded a figure of 0.540 (54%). This percentage explains that the Usage Satisfaction variable (Y) is explained from independent variables, namely Self Service Technology (SST) (X_1) and Application Features (X_2) by 54%. Meanwhile, there are 46% of other aspects that affect User Satisfaction but are not elaborated in this research.

Discussion Results

The Effect of Self Service Technology (SST) on the Satisfaction of Using Mobile Banking by BSI in UIN North Sumatra Students

From the findings that have been carried out, Self Service Technology (SST) has a positive and significant influence on the Satisfaction of Using Mobile Banking by BSI in UIN North Sumatra Students.

The findings are in accordance with the results Salsabila et al. (2025) explain Self Service Technology have a positive and significant influence on customer satisfaction. The same is true for research Latif & Priyanti (2024) explain Self Service Technology has a positive and real influence on consumer satisfaction.

This means that Self Service Technology (SST) affects the Satisfaction of Using Mobile Banking by BSI in UIN North Sumatra Students explained that Self Service Technology (SST) which has indicators of functionality, enjoyment, security/privacy, design, guarantee, convenience, and customization makes a strong contribution in increasing the Satisfaction of Using Mobile Banking by BSI. Which based on the data results describes that the more complete Self Service Technology (SST), the higher the satisfaction of using Mobile Banking by BSI.

The functionality feature in Self Service Technology (SST) makes it easier for students to access services independently at any time and time. Rapid and practical use also brings pleasure in transactions, without the need to queue at the branch office. In addition, security and privacy aspects are very important for students as digital users, as they feel that their data and transactions are protected. The app's attractive and easy-to-understand interface design also adds to the convenience of use. SST provides a guarantee of comfort and trust with stable and minimal risk services. Students also feel comfortable as the service is available 24/7, supporting their mobility and academic busyness. In fact, with the customization feature, the service feels more personalized and in accordance with the needs of students, such as financial management, tuition payments, and credit purchases.

The Effect of Application Features on the Satisfaction of using Mobile Banking by BSI in UIN North Sumatra Students

From the findings that have been carried out, the Application Feature has a positive and significant effect on the Satisfaction of Using Mobile Banking by BSI for UIN North Sumatra Students. The findings are in line with the Farhan et al. (2024), with the result that the application features are able to have a significant influence on consumer satisfaction In line with the results of the research Khotijah et al. (2023), which the app's features affect user satisfaction. Thus, Application Features have an effect on the Satisfaction of Using Mobile Banking by BSI in UIN North Sumatra Students showing that application features that have indicators that are applicable to application access regarding services or products, various features in transaction services, and service innovations make a strong contribution to increasing Mobile Banking by Use Satisfaction by BSI. Which based on the data results describes that the more Application Features, the higher the satisfaction of Using Mobile Banking by BSI.This can be seen from the ability of the feature to provide easy access to various product and service information through an applicative and user-friendly application. Customers feel helped by the availability of complete and easily accessible information at any time, making it easier to make decisions and execute

transactions. In addition, the diversity of features offered in transaction services is also an important factor that drives satisfaction. The availability of various transaction options, ranging from payments, transfers, purchases to independent account management, makes customers feel that the services provided are complete and according to their needs. Last but not least, the continuous service innovations, such as multi-layered security features, real-time notifications, and biometric technology, add more value that strengthens the positive customer experience. This innovation creates convenience and trust in the sustainable use of mobile banking.

The Effect of Self Service Technology (SST) and Application Features on the Satisfaction of Using Mobile Banking by BSI on UIN North Sumatra Students

From the findings that have been carried out, displaying Self Service Technology (SST) and Application Features has a positive and significant effect on the Satisfaction of Using Mobile Banking by BSI in UIN North Sumatra Students. And also the R^2 value in the Adjusted R Square column recorded a figure of 0.540 (54%). This percentage explains that the User Satisfaction variable (Y) can be explained from independent variables, namely Self Service Technology (SST) (X_1) and Application Features (X_2) by 54%. Meanwhile, there are 46% of other aspects that affect User Satisfaction but are not described in this study. Thus, it can be described that in order to improve customer satisfaction in the use of Mobile Banking, the Banking Company can optimize it through Self Service Technology (SST) and Application Features.

4. CONCLUSION

From the findings, it was concluded that with partial Self Service Technology (SST) having a positive and significant effect on the satisfaction of using mobile banking by BSI in UIN North Sumatra students, the application feature had a positive and significant effect on the Satisfaction of using mobile banking by BSI in UIN North Sumatra students, and simultaneously Self Service Technology (SST) and application features have a positive and significant influence on the Satisfaction of using mobile banking by BSI in UIN North Sumatra Students. To increase consumer satisfaction, it is also very necessary to have several other factors that have not been researched as limitations of this research such as features, the availability of free internet services to access mobile banking, and other efforts that can make users satisfied when using mobile banking from BSI. This research has a certain number of limitations both in the variables studied, the scope, and the object that is the focus. Therefore, it is important to conduct a more in-depth study by expanding the scope of future research.

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