Journal of Islamic Digital Economic and Finance
Vol. 01, No. 02, 2025, Page.061-080
E-ISSN : 3124-7210
DOI : https://doi.org/10.62265/jidef.v1i02.219

Beyond BSI Customer Satisfaction Determinants: Interface Design, User Experience, and Ease of Use

Yanuar Wendy Wardana
Politeknik Negeri Semarang, Indonesia
Corresponding email: wendywardana1922@gmail.com

Article History:

Corresponding:
Yanuar Wendy Wardana
wendywardana1922@gmail.com
Submitted:
August 03rd, 2025
Revised:
November 01st, 2025
Accepted:
November 13rd, 2025
Published:
December 22th, 2025
By:
Journal of Islamic Digital Economics and Finance (JIDEF)

Keywords: Customer Satisfaction; Ease of Use; Interface Design; Mobile Banking; User Experience.
Copyright:
©2025. Yanuar Wendy Wardana

This article is licensed under the Creative Commons Attribution-Share Alike 4.0 International License
http://creativecommons.org/licenses/by-sa/4.0/

Abstrak

Introduction: Data from the Financial Services Authority (OJK) shows that the number of mobile banking users in Indonesia reached 147.8 million users in 2023, increasing 23.4% from the previous year. Customer satisfaction in mobile banking applications becomes a critical factor determining the success of Islamic banking digital transformation, as 73% of customers will switch banks after poor mobile banking experiences.
Objective: This research aims to analyze the influence of interface design, user experience, and ease of use on customer satisfaction of the Byond BSI mobile banking application and identify the most dominant factor in shaping user satisfaction.
Method: This research uses a quantitative research method with snowball sampling technique, resulting in 100 respondents who are active customers of Bank Syariah Indonesia using Byond BSI application. Data analysis includes validity and reliability tests, classical assumption tests, and multiple linear regression analysis.
Result: The findings show that interface design, user experience, and ease of use have positive and significant influences on customer satisfaction of the Byond BSI application. All three independent variables prove to be fundamental determinants in enhancing customer satisfaction and competitive advantage in Indonesia's Islamic digital banking market.
Implication: This suggests that combining interface design optimization that prioritizes visual consistency and intuitive navigation, user experience development integrating functional efficiency with pleasant experiences, and ease of use enhancement through transaction process simplification serves as strategic framework for Islamic banking digitalization.

A. Introduction

The era of banking digitalization has fundamentally transformed Indonesia's financial industry landscape, with mobile banking becoming the backbone of the banking sector's digital transformation. Data from the Financial Services Authority (OJK) shows that the number of mobile banking users in Indonesia reached 147.8

million users in 2023, increasing 23.4% from the previous year. Bank Indonesia also reported that digital banking transaction values grew 13.48% year on year (yoy) reaching Rp 584.92 trillion in December 2023. This rapid growth reflects a shift in customer preferences that increasingly prioritize convenience, speed, and accessibility in conducting banking transactions. In the context of Islamic banking, mobile banking application of the bank's commitment to providing services that comply with Islamic principles that are easily accessible to the wider community (Mohd Thas Thaker et al., 2019).

Bank Syariah Indonesia (BSI) as the result of a merger of three largest state-owned Islamic banks in Indonesia, has launched the mobile banking application "BYOND by BSI" which serves as the spearhead of the national Islamic banking digitalization strategy. The BYOND by BSI application was officially launched on November 9, 2024 with the vision of becoming a super app that integrates various financial, social, and spiritual services based on Islamic principles. BSI's public data show positive responses from the community towards this latest application, achieving 3 million active users within 2 months from launch until Januari 2025. As a comparison, the previous BSI Mobile application had approximately 3.5 million active users before migration to BYOND, showing a high adoption rate with 86.7% of old users having migrated to the new platform. BSI's initial target to reach 1 million users by December 2024 has been exceeded, indicating high market enthusiasm for Islamic banking digital innovation.

The high initial adoption rate of BYOND by BSI show positive signs, however, the sustainability and continuous growth of this application will be largely determined by the extent to witch the platform can meet expectations and provide customer satisfaction. Customer satisfaction in the context of mobile banking applications becomes a critical factor that determines the success of Islamic banking digital transformation (Zouari & Abdelhedi, 2021). Research conducted by McKinsey & Company in 2023 reveals that 73% customers will switch to other banks if the experience a poor experience using mobile banking applications. Furthermore, empirical studies show that customer satisfaction with mobile banking applications significantly affects loyalty, positive word of mouth, and intensity of digital banking service usage (Zalloum et al., 2019). In the context of Islamic banking, customer satisfaction is not only related to the functional aspects of the application, but also to customers' perceptions of the ease of accessing products and services that comply with Islamic principles through digital platforms (Zouari & Abdelhedi, 2021).

Interface design becomes one of the main determinants of mobile banking application user satisfaction, as stated in User Experience theory which emphasizes the importance of visual design, information architecture, and interaction design in creating positive user experiences (Nielsen & Norman, 1998). Previous research shows that the quality of mobile banking application interface design positively correlates with user satisfaction, with elements such as intuitive layout, visual consistency, and easy to understand navigation being the most influential factors (Liu et al., 2021). In the context of the Byond by BIS application, interface design that reflects Islamic identity while meeting modern usability standards become a

particular challenge in ensuring customer satisfaction across diverse technological and demographic backgrounds.

User experience is a holistic factor that is crucial in determining mobile banking application user satisfaction, encompassing the overall perception and response of users to interactions with digital system. A study conducted by Santoso (2023) reveals that mobile banking application users will not return to using an application after experiencing poor user experience. While applications with good user experience can increase customer satisfaction (Ramadhan et al., 2023). User Experience in mobile banking encompasses various dimensions ranging from system responsiveness, intuitive navigation, content personalization, to emotional engagement created during interaction with the application (Handani, 2024). In the Islamic financial transactions, positive user experience not only affects user satisfaction but also strengthens customer trust and loyalty to digital platform, especially considering the high sensitivity of Islamic customers to service compliance with Islamic principles. The Byond BSI application, which handles millions of daily interactions from customers with diverse backgrounds is required to create a seamless and meaningful user experience to ensure sustainable customer satisfaction.

Perceived ease of use as conceptualized in the Technology Acceptance Model (TAM) is a significant predictor of satisfaction and information technology adoption (Davis, 1989). In the context of mobile banking, ease of use encompasses aspects such as simplicity, learnability, and efficiency that enable users with various levels of digital literacy to operate applications easily (Ngurah, 2021). Empirical research conducted by (Susila et al., 2023) and (Makmuriyah & Vanni, 2020) shows that ease of use of mobile banking applications significantly affects customer satisfaction, with stronger effects on customer segments who are less familiar with digital technology. This becomes relevant for the Byond by BSI application which serves customer with diverse demographic profiles and digital literacy levels.

Although research on mobile banking satisfaction has been extensively conducted, there are still significant gaps in academic literature, particularly in the context of Indonesia Islamic banking. First, the majority of previous studies focus on conventional banking with little attention to the unique characteristics of Islamic banking that combine technological aspects with Islamic principles. Second, research that specifically explores the determinants of Islamic mobile banking application customer satisfaction with a focus on interface design, user experience, and ease of use aspects is still limited. Third, empirical studies using the Byond by BSI application as a research object have not been widely conducted, even though as a result of the merger of Indonesia's largest Islamic bank, BSI has unique characteristics that distinguish it from other Islamic banks. Fourth, most previous research uses cross-sectional approaches with limited samples, so generalization of results still needs to be strengthened with more comprehensive studies.

Based on the identified knowledge gaps, this research aims to analyze the influence of interface design, user experience, and ease of use on customer satisfaction of the Byond by BSI mobile banking application. The research will test casual

relationships between these three determinants and customer satisfaction as well as identify the most dominant factor in shaping user satisfaction. Practically, the research results are expected to provide strategic insights for BSI management in optimizing features and performance of the Byond application to improve customer satisfaction, while serving as a reference for the Islamic banking industry in developing digitalization strategies centered on user satisfaction

B. Literatur Review

Customer satisfaction in digital banking is based on Service Quality Theory by (Parasuraman et al., 1988), which defines satisfaction as the result of consumer evaluation of service quality received compared to expectations through dimensions of reliability, responsiveness, assurance, empathy, and tangibles. (Kamboj et al., 2022) define mobile banking customer satisfaction as feelings of pleasure or disappointment after comparing application performance with expectations, while (Alamoudi et al., 2022) explain it as emotional and cognitive responses to application usage experience. Theory development shows evolution from traditional models toward comprehensive approaches considering technological aspects and digital experience (Chen & Liu, 2025). (Zouari & Abdelhedi, 2021) Expressing the need to integrate the emotional and cognitive satisfaction dimensions for holistic understanding of customer satisfaction in the digital era. (Kamboj et al., 2022) research found that system quality significantly influences mobile banking customer satisfaction in India, while (Alamoudi et al., 2022) confirmed the positive influence of perceived usefulness on banking application satisfaction in Saudi Arabia. Customer satisfaction measurement indicators referring to (Parasuraman et al., 1988) include reliability, assurance, tangibles, empathy, responsiveness.

Interface design is grounded in Human-Computer Interaction (HCI) Theory by (Card, 2018) which defines it as a way of designing systems that enable effective interaction between humans and technology through visual and structural elements that are user-friendly, intuitive, and match users' cognitive capabilities. (Indrati, 2023) define mobile banking interface design as the arrangement of visual, structural, and navigation elements that facilitate intuitive and efficient interaction, while (Kumalasari et al., 2022) explain it as a combination of visual aesthetics, functionality, and navigation ease adapted to mobile screen characteristics. (Flavian et al., 2021) found significant influence of interface design quality on trust and mobile banking user satisfaction in Spain, while (Baabdullah, 2020) confirmed the positive influence of visual appeal and navigation design on user experience in Saudi Arabia. Measurement indicators referring to (Shneiderman, 2010) namely consistency, universal usability, informative feedback, user control, error prevention and handling.

User Experience is based on User Experience Theory by (Hassenzahl, (2010) which defines UX as a person's perceptions and responses from using a product, system, or service that includes pragmatic and hedonic aspects as a result of dynamic interaction between user, product, and context that is subjective and holistic. Tam & Oliveira, (2017) define mobile banking UX as the totality of user perceptions,

emotions, and responses while interacting with applications that include usability, desirability, and value. Recent research integrates omnichannel UX concepts that consider experience consistency across multiple touchpoints in digital banking ecosystems (Somu, 2025). Tam & Oliveira, (2017) research found significant influence of perceived enjoyment and perceived security on mobile banking user experience in Portugal. Measurement indicators include pragmatic quality, hedonic quality, overall appeal (Hassenzahl, 2010).

Ease of use is grounded in Technology Acceptance Model (TAM) by Davis, (1989) which defines Perceived Ease of Use as the degree to which a person believes that using a particular system will be free from physical and mental effort as a fundamental construct that influences attitudes, intentions, and technology usage behavior. Baabdullah et al., (2019) define mobile banking ease of use as the perception that interacting with applications does not require excessive cognitive effort and can be done intuitively and efficiently. Theory development shows evolution from original TAM toward extended TAM that considers mobile-specific characteristics and cultural factors (Chimborazo et al., 2021). Alalwan et al., (2015) research found significant influence of perceived ease of use on attitude and behavioral intention of mobile banking in Jordan, while (Suryani et al., 2021) and Al-Farrasi et al., (2025) argues that ease of use has a significant positive effect on customer satisfaction. Measurement indicators include learnability, efficiency, memorability, error prevention & recovery, subjective satisfaction (Nielsen, 1994).

C. Research Methodology

This study utilizes a quantitative research approach. Quantitative methodology represents an investigation technique grounded in positivist philosophical foundations and serves to examine predetermined theoretical propositions (Sugiyono, 2010). Primary data collection is accomplished through the distribution of structured questionnaires employing a five-point interval measurement scale, supplemented by comprehensive literature review incorporating scholarly articles, academic journals, published books, and additional relevant sources pertaining to the research subject matter.

This research targets active customers of Bank Syariah Indonesia who utilize the Byond by BSI mobile banking application as the study population. The sample selection employs non-probability sampling methodology, specifically implementing snowball sampling techniques that yielded 100 participants. The snowball sampling approach initiates with a core participant group that progressively expands through referral chains from existing respondents to recruit additional participants. This sampling strategy was selected considering the confidential characteristics of customer data and the unavailable information regarding the complete population size. Such methodology ensures adequate sample representation despite the sensitive and private nature of banking customer information.

The collected research data undergoes comprehensive analytical processes to guarantee precision and consistency. Initially, validation and reliability assessments

are executed to evaluate the measurement tools according to established criteria. Following this, comprehensive classical assumption evaluations are implemented, encompassing distributional normality assessments to confirm data patterns, multicollinearity evaluations to investigate correlations among predictor variables, and heteroscedasticity examinations to identify variance inconsistencies in residual errors. The analytical framework incorporates multiple linear regression modeling to investigate variable relationships, alongside F-statistics and T-statistics to evaluate model adequacy and individual variable significance. Additionally, regression coefficient tests (R^2) are used to determine the proportion of variance in the dependent variable explained by the independent variables (Ghozali, 2016).

D. Results and Discussion

The purpose of the Results and Discussion is to state your findings and make interpretations and/or opinions, explain the implications of your findings, and make suggestions for future research. Its main function is to answer the questions posed in the introduction, explain how the results support the answers and, how the answers fit in with existing knowledge on the topic. The Discussion is considered the heart of the paper and usually requires several writing attempts.

This analytical section commences with the evaluation of measurement instruments through validation and reliability assessments, ensuring the precision and consistency of data gathered from 100 participants comprising active Bank Syariah Indonesia customers who utilize the Byond BSI mobile banking platform. Following this, comprehensive prerequisite testing is executed, encompassing distributional normality verification to confirm data patterns, multicollinearity assessment to investigate correlations between predictor variables, and heteroscedasticity examination to identify variance irregularities in residual terms, thereby confirming that the dataset satisfies the essential requirements for multiple regression modeling. The investigation then proceeds with multiple regression analysis to examine how interface design, user experience, and ease of use influence customer satisfaction levels. These analytical outcomes undergo further scrutiny through F-statistics for overall model adequacy assessment and t-statistics for individual variable significance evaluation, while coefficient of determination (R^2) analysis quantifies the explanatory power of independent variables regarding dependent variable variance. This methodological framework establishes a robust analytical foundation for understanding how interface design, user experience, and ease of use contribute to customer satisfaction within the Byond BSI mobile banking context.

Validity Test

The validity assessment was conducted using SPSS Version 26 to evaluate whether the research instrument (questionnaire) accurately measures the intended constructs. An indicator is considered valid when the calculated correlation coefficient (r-calculated) exceeds the critical correlation coefficient value (r-table). Based on a sample size of 100 respondents, the critical r-table value is established at 0.196, which

serves as the benchmark for determining item validity in this study. The test results are as follows:

Table No 1.
Validity Test Results

Variable	Instrument	R-Count	Statement
Interface Design	X1.1	0.739	Valid
	X1.2	0.770	Valid
	X1.3	0.699	Valid
	X1.4	0.645	Valid
	X1.5	0.466	Valid
User Experience	X2.1	0.676	Valid
	X2.2	0.694	Valid
	X2.3	0.612	Valid
	X2.4	0.784	Valid
	X2.5	0.708	Valid
Ease of Use	X3.1	0.843	Valid
	X3.2	0.874	Valid
	X3.3	0.791	Valid
	X3.4	0.773	Valid
	X3.5	0.874	Valid
Customer Satisfaction	Y1.1	0.486	Valid
	Y1.2	0.670	Valid
	Y1.3	0.443	Valid
	Y1.4	0.758	Valid
	Y1.5	0.818	Valid

Source: Primary data processed

The validity assessment demonstrates that all research instruments utilized in this study, encompassing interface design, user experience, ease of use, and customer satisfaction, meet the validity criteria. This determination is based on the empirical evidence showing that every variable obtained correlation coefficient values exceeding the critical threshold of 0.196 (r-table value). These findings confirm that the measurement instruments are statistically appropriate and reliable for assessing the specified constructs within this research framework.

Reliability Test

The reliability assessment is an analytical approach employed to evaluate the consistency and dependability of survey instruments. A questionnaire demonstrates reliability when respondents' responses to the items remain stable and coherent over time. A variable is considered to possess adequate reliability when its Cronbach's Alpha coefficient exceeds the threshold of 0.60. The reliability analysis outcomes for this study are presented below:

Table 2.
Reliability Test Results

Variable	Cronbach Alpha	Statement
Interface Design	0.683	Reliable
User Experience	0.719	Reliable
Ease of Use	0.888	Reliable
Customer Satisfaction	0.645	Reliable

Source: Primary data processed

Based on the reliability analysis presented in the table above, all research variables including interface design, user experience, ease of use, and customer satisfaction demonstrate acceptable reliability levels. Each construct achieved Cronbach's Alpha coefficients that surpassed the minimum threshold of 0.60, confirming that the measurement instruments possess internal consistency and are statistically sound for empirical investigation. These findings validate that the questionnaire items reliably capture the intended theoretical constructs and are suitable for further statistical analysis in this research.

Normality Test

Following the validation of instrument reliability and validity, the analysis proceeds to examine the classical assumptions required for multiple linear regression. The first assumption to be tested is data normality, which is crucial for ensuring the validity of statistical inferences. The Kolmogorov-Smirnov test was employed to assess whether the research data follows a normal distribution pattern. This test compares the observed cumulative distribution with the expected normal distribution, with the decision criterion that data is considered normally distributed when the significance value exceeds 0.05. The normality test results are presented below:

Table 3.
Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters [a,b]	Mean	.0000000
	Std. Deviation	1.16194210
Most Extreme Differences	Absolute	.074
	Positive	.074
	Negative	-.043
Test Statistic		.074
Asymp. Sig. (2-tailed)		.195[c]
a. Test distribution is normal		

b. Calculate from data

Source: Primary data processed

The normality assessment in this study was conducted using the Kolmogorov-Smirnov technique, with findings presented in Table 3. The analysis revealed a significance level of 0.195 from the Kolmogorov-Smirnov test, which exceeds the critical threshold of 0.05. These results demonstrate that the research data follows a normal distribution pattern, as evidenced by the significance value surpassing the established criterion of 0.05, thereby satisfying the normality assumption required for parametric statistical analysis.

Multicollinearity Test

The second classical assumption examined is multicollinearity, which assesses the presence of strong correlations among independent variables. Multicollinearity can distort regression results and make it difficult to determine the individual effect of each predictor variable. This test is conducted by examining the Variance Inflation Factor (VIF) and Tolerance values. The absence of multicollinearity is indicated when VIF values are less than 10 and Tolerance values exceed 0.10. The multicollinearity test results are presented in the following table:

Table 4.
Multicollinearity Test Results

Model	Collinearity Statistic	
	Tolerance	VIF
Interface Design	.542	1.846
User Experience	.335	2.985
Ease of Use	.333	3.004

Source: Primary data processed

Based on the multicollinearity test results shown in Table 4, all independent variables demonstrate VIF values below 10 and Tolerance values above 0.10. These findings indicate that there is no significant multicollinearity problem among the independent variables (interface design, user experience, and ease of use), confirming that each variable contributes uniquely to explaining customer satisfaction without substantial intercorrelation issues.

Heteroskedasticity Test

The third classical assumption to be examined is heteroscedasticity, which evaluates whether the variance of residuals remains constant across all levels of the independent variables. Heteroscedasticity occurs when the error variance is not uniform throughout the regression model, potentially leading to biased and inefficient parameter estimates. This study employs the Glejser test to detect heteroscedasticity, where the absolute values of residuals are regressed against the independent

variables. The absence of heteroscedasticity is confirmed when the significance values of all independent variables exceed 0.05. The heteroscedasticity test results are presented below:

Table 5.
Heteroskedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.505	0.781		3.208	0.002
Interface Design	-0.057	0.048	-0.163	-1.202	0.232
User Experience	-0.038	0,053	-0.124	-0.719	0.474
Ease of Use	0.017	0.049	0.059	0.340	0.735

Source: Primary data processed

The heteroscedasticity test results in Table 5 show that all independent variables have significance values greater than 0.05, indicating that the regression model does not suffer from heteroscedasticity problems. This confirms that the variance of residuals is homogeneous across different levels of the predictor variables, thereby satisfying the homoscedasticity assumption required for valid regression analysis.

Multiple Linear Regression Analysis

Following the verification that all classical assumptions have been met, the analysis proceeds to multiple linear regression to examine the relationship between the independent variables and the dependent variable. Multiple linear regression is employed to determine the simultaneous influence of interface design, user experience, and ease of use on customer satisfaction of the Byond BSI mobile banking application. This analysis provides insights into both the individual contribution of each predictor variable and their collective impact on the outcome variable. The multiple linear regression results are presented in the following table:

Table 6.

Multiple Linear Regression Analysis Test Results

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.486	1.172		4.681	0.000
Interface Design	0.297	0.072	0.326	4.148	0.000
User	0.424	0.079	0.538	5.382	0.000

Experience					
Ease of Use	0.032	0.073	0.044	0.434	0.000
a. Dependent Variable: Customer Satisfaction					

Source: Primary data processed

Based on the multiple linear regression analysis results shown in Table 6, the regression equation can be formulated as:

$$\mathbf{Y = 5.486 + 0.297X1 + 0.424X2 + 0.032X3}$$

Where Y represents customer satisfaction, X_1 represents interface design, X_2 represents user experience, and X_3 represents ease of use. The analysis reveals the coefficient values and their respective significance levels, indicating the magnitude and statistical significance of each variable's influence on customer satisfaction.

F Test

The F-test is conducted to evaluate the simultaneous effect of all independent variables on the dependent variable. This test determines whether the regression model as a whole is statistically significant in explaining the variance in customer satisfaction. The decision criterion is based on comparing the F-calculated value with the F-table value, or alternatively, examining the significance level. The model is considered significant if the significance value is less than 0.05, indicating that interface design, user experience, and ease of use collectively have a significant impact on customer satisfaction. The F-test results are presented below:

Table 7.
F Test Results

ANOVA[a]					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	282.049	3	94.016	67.526	.000[b]
Residual	133.661	96	1.392		
Total	415.710	99			
a. Dependent Variable: Customer Satisfaction					
b. Predictors: (Constant), Interface Design, User Experience, Ease of Use					

Source: Primary data processed

The F-test findings are presented in Table 7, revealing an F-calculated value of 67.526, which exceeds the F-table value of 2.70, accompanied by a significance level of 0.000, substantially below the 0.05 threshold. These statistical outcomes demonstrate that the regression model is highly significant, indicating that interface design, user experience, and ease of use collectively exert a meaningful and statistically significant influence on customer satisfaction of the Byond BSI mobile banking application.

T Test

The t-test is performed to examine the individual effect of each independent

variable on the dependent variable while controlling for other variables in the model. This test determines which specific variables significantly contribute to customer satisfaction. The decision is made by comparing the t-calculated value with the t-table value, or by examining the significance level of each variable. A variable is considered to have a significant effect if its significance value is less than 0.05. The t-test results for each variable are presented in the following table:

Table 8.
T Test Results

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.486	1.172		4.681	0.000
Interface Design	0.297	0.072	0.326	4.148	0.000
User Experience	0.424	0.079	0.538	5.382	0.000
Ease of Use	0.032	0.073	0.044	0.434	0.000
a. Dependent Variable: Customer Satisfaction					

Source: Primary data processed

The partial test results displayed in Table 8 demonstrate the individual contribution of each predictor variable. Interface design shows a t-calculated value of 0.297 with a significance level of 0.000, user experience exhibits a t-value of 0.424 with significance of 0.000, and ease of use presents a t-calculated value of 0.032 with significance of 0.000. These findings reveal that all three variables (interface design, user experience, and ease of use) have statistically positive and significant individual effects on customer satisfaction, while maintaining the influence of other variables constant in the model. The positive coefficient values indicate that improvements in each of these factors will lead to enhanced customer satisfaction with the Byond BSI mobile banking application.

R^2 Test

The coefficient of determination (R^2) measures the proportion of variance in the dependent variable that is explained by the independent variables in the regression model. R^2 values range from 0 to 1, where values closer to 1 indicate that a larger proportion of the variance in customer satisfaction is explained by the model. Additionally, the adjusted R^2 provides a more conservative estimate by accounting for the number of variables in the model, making it more suitable for multiple regression analysis. The R^2 analysis results are presented below:

Tabel 9.
R^2 Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824[a]	0.678	0.668	1.180
a. Predictors: (Constant), Interface Design, User Experience, Ease of Use				
b. Dependent Variable: Customer Satisfaction				

Source: Primary data processed

The coefficient of determination analysis presented in Table 9 indicates an R^2 value of 0.678 and an adjusted R^2 of 0.668. This means that approximately 67.8% of the variance in customer satisfaction can be explained by the combined influence of interface design, user experience, and ease of use, while the remaining 32.2% is attributed to other factors not included in this research model. The adjusted R^2 value of 66.8% provides a more conservative estimate, confirming the model's strong explanatory power while accounting for the number of predictor variables. The correlation coefficient (R) of 0.824 indicates a strong positive relationship between the independent variables and customer satisfaction.

The Influence of Interface Design on Customer Satisfaction

The results of testing the first hypothesis show that interface design has a positive and significant influence on customer satisfaction of the Byond BSI application. This finding confirms the theoretical argument from Human Computer Interaction Theory which emphasizes that interface design quality is a critical determinant in creating optimal user experiences in digital banking systems.

The positive relationship between interface design and customer satisfaction is supported by several previous studies within the last five years. Flavian et al., (2021) in their research on mobile banking users in Spain found that interface design quality significantly influences user satisfaction. The research argues that visual consistency, intuitive navigation, and attractive aesthetics create cognitive ease that reduces friction in application usage. Arrizki, (2023) in their research on BSI Mobile and service quality toward customer satisfaction among Islamic Banking students at UINSU found that mobile banking applications significantly influence customer satisfaction In line with this, Baabdullah, (2020) through a study of mobile banking users in Saudi Arabia confirmed the positive influence of visual appeal and navigation design on user satisfaction. This research argues that high-quality interface design creates positive first impressions and facilitates efficient task completion.

Furthermore, research on the influence of feature completeness and navigation design of mobile banking applications on individual customer user experience at PT Bank Central Asia Tbk (2020) confirmed that interface design and navigation arrangement are important factors that need careful consideration to achieve good appearance and user satisfaction (Harinata & Lutfi, 2020). A. J. Santoso et al., (2022) through their evaluation of BSI Mobile application usability using

Usability Testing and System Usability Scale methods demonstrated that interface design significantly affects user acceptance and satisfaction. Additionally, Tampubolon & Syah (2024) in their analysis of user interface design role in Maxim mobile application using A/B Testing method found that recommended interface designs better meet user needs and satisfaction compared to current designs, with satisfaction scores in the "Quite Satisfied" category.

The theoretical argumentation regarding this relationship is based on cognitive load theory which explains that well-designed interfaces reduce users' cognitive burden, allowing them to focus on transaction objectives rather than struggling with complex navigation. When customers experience ease in interacting with professionally and consistently designed interfaces, this creates positive affective responses that directly contribute to their satisfaction levels. The practical implications of this finding indicate that BSI needs to conduct continuous improvement on aspects of visual consistency, simplifying navigation structure, enhancing feedback mechanisms, and optimizing aesthetic appeal to maintain and increase customer satisfaction with Byond BSI.

The Influence of User Experience on Customer Satisfaction

The results of testing the second hypothesis show that user experience has a positive and significant influence on customer satisfaction of the Byond BSI application. This finding confirms the theoretical argument from User Experience Theory developed by (Hassenzahl, 2010) which emphasizes that user experience is the result of dynamic interaction between users, products, and context that includes pragmatic and hedonic aspects in creating holistic and meaningful experiences.

The results of this study are in line with various empirical studies that have explored the relationship between user experience and customer satisfaction in the context of digital banking. Research conducted by (Wibowo et al., 2019) analyzing user experience on mobile banking applications in Indonesia using usability testing and User Experience Questionnaire (UEQ) on JakOne Mobile and BCA Mobile found that user experience significantly influences customer satisfaction and application effectiveness. Study conducted by (Harinata & Lutfi, 2020) regarding the influence of feature completeness and navigation design of mobile banking applications on individual customer user experience at PT Bank Central Asia Tbk found that both feature completeness and navigation design have a significant impact on user experience.

Furthermore, research by (Dewi et al., 2023) using a mixed-method approach through usability testing and User Experience Questionnaire (UEQ) on BTNS Mobile banking applications provided empirical evidence regarding significant correlation between user experience quality and satisfaction levels in using mobile banking services. This finding is reinforced by research using the User Centered Design method to evaluate the relationship between user experience, user interface and customer satisfaction on banking mobile applications (2024), which showed that 90% of participants successfully completed task scenarios during usability testing evaluation (Sudirjo et al., 2024). Recent study on the impact of user experience and customer

satisfaction on customer loyalty in BCA Mobile Banking (2025) demonstrates that user experience has a considerable impact on customer satisfaction and customer loyalty, with customer satisfaction serving as a crucial mediating factor (Nur lelasari & Innocentius Bernarto, 2023).

Theoretically, this relationship can be explained through the dual-process theory framework which conceptualizes user experience as a multidimensional construct formed from a combination of pragmatic quality (efficiency and effectiveness in achieving functional goals) and hedonic quality (aspects of pleasure and psychological stimulation experienced by users). When customers experience congruence between functional expectations and pleasant actual experiences in using the Byond BSI application, positive emotional attachment formation occurs which significantly contributes to the overall satisfaction construct.

The Influence of Ease of Use on Customer Satisfaction

The results of testing the third hypothesis show that ease of use has a positive and significant influence on customer satisfaction of the Byond BSI application. This finding aligns with the theoretical framework of Technology Acceptance Model (TAM) developed by (Davis, 1989) which emphasizes that perceived ease of use is a fundamental determinant of user acceptance and satisfaction with information systems. The measurement of ease of use in this study follows Nielsen's usability principles, encompassing five key indicators: learnability (the capacity of users to master fundamental functions during their initial interaction with the interface), efficiency (the speed at which users execute operations after acquiring familiarity with the system), memorability (the ability of users to retain operational competence when returning to the application following periods of non-usage), error prevention and recovery (the frequency and severity of user mistakes, along with the effectiveness of correction mechanisms), and subjective satisfaction (the overall pleasantness and comfort experienced during system interaction).

The results of this study are consistent with various empirical studies that have explored the relationship between ease of use and customer satisfaction in mobile banking contexts. Research conducted by (Makmuriyah & Vanni, 2020) analyzing factors affecting customer satisfaction in using mobile banking services at Bank Syariah Mandiri in Semarang found that ease of use significantly influences customer satisfaction in using mobile banking services. Study by (Vinasti & Ramdan, 2022) on perceived ease of use toward usage intention through trust in mobile banking users with 250 respondents in Sukabumi revealed that perceived ease of use has a positive and significant effect on trust, which in turn affects usage intention.

Furthermore, research by (Arsita et al., 2025) examining the influence of ease of use, security, and reliability on mobile banking usage among society in Palopo city demonstrated that ease of use has a significant effect on mobile banking usage. The study collected data using questionnaires distributed online to 105 respondents using purposive sampling technique. Additionally, research on the influence of efficiency, security and ease of use on customer interest in transacting using mobile banking at Bank Syariah Mandiri Ulee Kareng Banda Aceh (2021) with 100 respondents showed

that ease of use variable has a significant effect on customer interest in transacting using mobile banking (Triyanti et al., 2021). This finding is reinforced by studies on the role of mobile banking services in increasing customer satisfaction and loyalty at Islamic banks, which showed that optimizing mobile banking service quality, including ease of use and design, can ensure better customer satisfaction.

Theoretically, the relationship between ease of use and customer satisfaction can be explained through Nielsen's usability framework, which demonstrates that systems with high usability - characterized by excellent learnability, efficiency, memorability, low error rates, and high subjective satisfaction - create positive user experiences that directly contribute to overall satisfaction. When customers find the Byond BSI application easy to learn, efficient to use, memorable in its interface patterns, error-resistant, and subjectively pleasant, this creates a comprehensive positive experience that significantly enhances their satisfaction levels. The practical implications of this finding indicate that BSI should focus on continuous improvement of the application's learnability through intuitive design patterns, efficiency optimization through streamlined workflows, memorability enhancement through consistent interface elements, robust error prevention and recovery mechanisms, and overall subjective satisfaction improvement through pleasant and engaging user interactions.

E. Conclusion

This research successfully analyzed the determinants of customer satisfaction in the Byond BSI mobile banking application by examining the influence of interface design, user experience, and ease of use. The hypothesis testing results demonstrate that all three independent variables have positive and significant influences on customer satisfaction of the Byond BSI application. These findings confirm the validity of Human-Computer Interaction Theory, User Experience Theory, Technology Acceptance Model, and Service Quality Theory in the context of the Byond BSI application.

Theoretically, this research contributes to the development of customer satisfaction models specific to Islamic mobile banking applications by integrating technological aspects and user experience. The implementation of interface design that prioritizes visual consistency and intuitive navigation, user experience development that integrates functional efficiency with pleasant experiences, and optimization of ease of use through transaction process simplification proves to be a fundamental strategy in enhancing Byond BSI's competitive advantage in Indonesia's increasingly competitive Islamic digital banking market.

Practically, the results of this research provide strategic insights for Bank Syariah Indonesia management to optimize Byond BSI application development through improving user-centric interface design quality, developing features that holistically enhance user experience, and continuous improvement in user journey simplification to minimize friction in every customer interaction. These findings provide a strategic framework for BSI in conducting customer-centric digital transformation, while offering valuable benchmarking insights for the Islamic banking

industry in developing sustainable digitalization strategies that respond effectively to evolving customer expectations in the dynamic financial technology landscape.

Nevertheless, this research acknowledges certain limitations, including the research focus limited to a single Islamic mobile banking application and the use of cross-sectional methods that cannot capture the dynamic changes in customer satisfaction over time. Future research is recommended to explore cross-application comparisons among Islamic mobile banking platforms and employ longitudinal approaches to provide more comprehensive understanding of digital banking customer satisfaction dynamics.

F. Bibliography

A. Parasuraman, Valarie A. Zeithaml, & Leonard L. Berry. (2025). A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *1988*, *64*(1), 12–40.

Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., Lal, B., & Williams, M. D. (2015). Adoption of mobile banking in Jordan: Exploring demographic differences on customers' perceptions. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *9373*, 13–23. https://doi.org/10.1007/978-3-319-25013-7_2

Alamoudi, H. O., Alharthi, M. D., Shaikh, A. A., & Haddoud, M. Y. (2022). Examining the antecedents and consequences of perceived value – a case study of mobile banking application usage in the Kingdom of Saudi Arabia. *International Journal of Mobile Communications*, *20*(3), 263. https://doi.org/10.1504/ijmc.2022.122609

Baabdullah, A. M. (2020). Factors Influencing Adoption of Mobile Social Network Games (M-SNGs): The Role of Awareness. *Information Systems Frontiers*, *22*(2), 411–427. https://doi.org/10.1007/s10796-018-9868-1

Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Kizgin, H., & Patil, P. (2019). Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model. *International Journal of Information Management*, *44*, 38–52. https://doi.org/10.1016/j.ijinfomgt.2018.09.002

Card, S. K. (2018). *The psychology of human-computer interaction*. Crc Press.

Chen, L., & Liu, Y. (2025). Research on Digital Interactive Narrative Design in Museums from the Perspective of User Experience. *2025 8th International Symposium on Big Data and Applied Statistics, ISBDAS 2025*, *15*(15), 485–489. https://doi.org/10.1109/ISBDAS64762.2025.11117126

Chimborazo, L. E., Frasquet, M., & Mollá, A. (2021). Explaining mobile commerce usage intention based on technology acceptance models in a developing market context. *Market-Trziste*, *33*(1), 25–40. https://doi.org/10.22598/mt/2021.33.1.25

Davis, F. D. (1989). Technology acceptance model: TAM. *Al-Suqri, MN, Al-Aufi, AS: Information Seeking Behavior and Technology Adoption*, *205*(219), 5.

Dewi, R. K., Faturrohman, Y. I., Aisa, R., & Setiawan, A. (2023). Analisis Pengalaman Pengguna Aplikasi Mobile Banking "BTNS Mobile" dengan Usability Testing dan User Experience Questionnaire (UEQ). *Lisyabab : Jurnal Studi Islam Dan Sosial*, *4*(2), 262–275. https://doi.org/10.58326/jurnallisyabab.v4i2.201

Fachri Arrizki. (2023). PENGARUH BSI MOBILE DAN PELAYANAN TERHADAP KEPUASAN NASABAH (STUDI KASUS MAHASISWA/I PERBANKAN SYARIAH-

UINSU). *EKSYA : Jurnal Ekonomi Syariah*, *4*(1), 184–192. https://doi.org/10.56874/eksya.v4i1.1167

Flavian, C., Gurrea, R., & Orús, C. (2021). Mobile word of mouth (m-WOM): analysing its negative impact on webrooming in omnichannel retailing. *International Journal of Retail and Distribution Management*, *49*(3), 394–420. https://doi.org/10.1108/IJRDM-05-2020-0169

Ghozali, I. (2016). Aplikasi analisis multivariete dengan program IBM SPSS 23. https://perpus.petra.ac.id/catalog/site/detail?id=149488. In *(Semarang: Badan Penerbit UNDIP, Cet. VIII, 2016), H. 96*. Badan penerbit universitas diponegoro.

Handani, N. D. (2024). User experience of mobile banking application in Indonesia: New technology of banking. *Global Business & Finance Review (GBFR)*, *29*(2), 127–141.

Harinata, A., & Lutfi, A. (2020). Analisis Pengaruh Kelengkapan Fitur dan Desain Navigasi Aplikasi Perbankan Berbasis Mobile Terhadap User Experience Nasabah Individu pada PT Bank Central Asia Tbk. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, *4*(4), 111. https://doi.org/10.24912/jmbk.v4i4.8671

Hassenzahl, M. (2010). Experience Design: Technology for All the Right Reasons. *Synthesis Lectures on Human-Centered Informatics*, *3*(1), 1–95. https://doi.org/10.2200/s00261ed1v01y201003hci008

Indrati, A., & Bayu Saputra. (2023). ANALISIS USABILITY LAYANAN BCA MOBILE BANKING BERDASARKAN PERSEPSI PENGGUNA MENGGUNAKAN HEURISTIC EVALUATION. *Jurnal Ilmiah Teknik*, *2*(1), 35–42. https://doi.org/10.56127/juit.v2i1.469

Kamboj, S., Sharma, M., & Sarmah, B. (2022). Impact of mobile banking failure on bank customers' usage behaviour: the mediating role of user satisfaction. *International Journal of Bank Marketing*, *40*(1), 128–153. https://doi.org/10.1108/IJBM-10-2020-0534

Kumalasari, R. A. D., Permanasari, K. I., Karismariyanti, M., & Munandar, D. (2022). Mobile banking: system quality, information quality, service quality, customer satisfaction, and loyalty. *Jurnal Administrare: Jurnal Pemikiran Ilmiah Dan Pendidikan Administrasi Perkantoran*, *9*(1), 141–148.

Liu, L., Li, Y., Zhang, H., Cheng, X., Mu, X., Fan, Q., Ge, Y., & Guo, S. (2021). Simultaneously enhancing strength and ductility in graphene nanoplatelets reinforced titanium (GNPs/Ti) composites through a novel three-dimensional interface design. *Composites Part B: Engineering*, *216*, 108851.

Makmuriyah, A. N., & Vanni, K. M. (2020). Analisis Faktor Faktor yang Mempengaruhi Kepuasan Nasabah Dalam Menggunakan Layanan Mobile Banking. *Jurnal Pendidikan, Hukum, Dan Bisnis*, *5*(1), 37–44.

Mohd Thas Thaker, M. A. Bin, Allah Pitchay, A. Bin, Mohd Thas Thaker, H. Bin, & Amin, M. F. Bin. (2019). Factors influencing consumers' adoption of Islamic mobile banking services in Malaysia: An approach of partial least squares (PLS). *Journal of Islamic Marketing*, *10*(4), 1037–1056. https://doi.org/10.1108/JIMA-04-2018-0065

Ngurah, R. W. (2021). User Interface Dan User Experience Untuk Mengelola Kepuasan Pelanggan. *Jurnal Sosial Humaniora Terapan*, *3*(2), 17–31. https://scholarhub.ui.ac.id/jsht/vol3/iss2/2

Nielsen, J. (1994). Enhancing the explanatory power of usability heuristics. *Conference on Human Factors in Computing Systems - Proceedings*, 152–158. https://doi.org/10.1145/191666.191729

Nielsen, J., & Norman, D. A. (1998). User Experience. *Nd Https://Www. Nngroup. Com/Articles/Definitionuser-Experience*.

Nur lelasari, & Innocentius Bernarto. (2023). The Impact Of Customer Satisfaction On Customer Loyalty Of BCA Mobile Banking. *Jurnal Manajemen*, *27*(1), 169–190. https://doi.org/10.24912/jm.v27i1.1121

Ramadhan, H. A., Purwaamijaya, B. M., & Guntara, R. G. (2023). Pengaruh User Experience terhadap Customer Satisfaction pada Aplikasi Seluler Streaming Vidio. *JTIM: Jurnal Teknologi Informasi Dan Multimedia*, *5*(2), 122–133.

Rinaldy, A., Putra, M., & Susanti, E. (2017). Pengaruh Kemudahan dan Keamanan terhadap Penggunaan Mobile Banking. *Jurnal Ilmu Ekonomi Dan Bisnis*, *5*(2), 45–54.

Santoso, A. J., Wijoyo, H. S., & Perdanakusuma, A. R. (2022). Evaluasi Usability Aplikasi Bank Syariah Indonesia Mobile menggunakan Metode Usability Testing dan System Usability Scale. *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, *6*(2), 793–801. https://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/10604%0Ahttp://j-ptiik.ub.ac.id/index.php/j-ptiik/article/download/10604/4704

Santoso, M. H. (2023). Pengembangan Aplikasi Mobile yang User-Friendly: Strategi Desain UX. *Literacy Notes*, *1*(1), 1–11. http://liternote.com/index.php/ln/article/view/2/4

Sempati May Al-Farrasi, Miswanto Miswanto, Baldric Siregar, & Frasto Biyanto. (2025). PENGARUH KETERSEDIAAN DIGITAL PAYMENT, PERCEIVED SECURITY DAN PERCEIVED EASE OF USE TERHADAP CUSTOMER SATISFACTION PADA RUMAH MAKAN DI SETURAN. *Juremi: Jurnal Riset Ekonomi*, *4*(4), 1051–1064. https://doi.org/10.53625/juremi.v4i4.9572

Shneiderman, B. (1987). Designing the user interface strategies for effective human-computer interaction. *ACM SIGBIO Newsletter*, *9*(1), 6. https://doi.org/10.1145/25065.950626

Somu, B. (2025). Transforming Customer Experience in Digital Banking Through Machine Learning Applications. *International Journal of Engineering and Computer Science*, *9*(12), 25304–25322. https://doi.org/10.18535/ijecs.v9i12.4590

Sudirjo, F., Ratna Tungga Dewa, D. M., Indra Kesuma, L., Suryaningsih, L., & Yuniarti Utami, E. (2024). Application of The User Centered Design Method To Evaluate The Relationship Between User Experience, User Interface and Customer Satisfaction on Banking Mobile Application. *Jurnal Informasi Dan Teknologi*, *6*(1), 7–13. https://doi.org/10.60083/jidt.v6i1.465

Sugiyono. (2014). Memahami Penelitian Kualitatif R&D. In *Metode Penelitian Kualitatif R&D, Alvabeta, Bandung* (Vol. 7, Issue 2005). Alfabeta.

Suryani, D., Ermansyah, E., & Alsukri, S. (2021). Pengaruh Perceived Ease of Use, Perceived Usefulness dan Trust Terhadap Kepuasan Pelanggan Gojek. *Indonesian Journal of Business Economics and Management*, *1*(1), 11–19. https://doi.org/10.57152/ijbem.v1i1.171

Susila, N. S. A., Putra, K. E. S., & Khalik, I. (2023). Pengaruh Citra Merek dan Kemudahan Penggunaan yang Dirasakan Terhadap Kepuasan Pelanggan Pada Pengguna Mobile Banking BCA. *Jurnal Manajemen Dan Bisnis*, *5*(2), 172–181.

Tam, C., & Oliveira, T. (2017). Understanding mobile banking individual performance: The DeLone & McLean model and the moderating effects of individual culture. *Internet Research*, *27*(3), 538–562. https://doi.org/10.1108/IntR-05-2016-

0117

Tampubolon, F. R., & Husrizal Syah, D. (2024). Analisis Peran Desain User Interface Aplikasi Mobile Maxim Menggunakan Metode A/B Testing. *Simkom*, *9*(2), 172–183. https://doi.org/10.51717/simkom.v9i2.441

Triyanti, D., Kaban, R. F., & Iqbal, M. (2021). PERAN LAYANAN MOBILE BANKING DALAM MENINGKATKAN KEPUASAN DAN LOYALITAS NASABAH BANK SYARIAH. *Jurnal Muhammadiyah Manajemen Bisnis*, *2*(1), 51. https://doi.org/10.24853/jmmb.2.1.51-62.

Vinasti, M. A., Ramdan, A. M., & Mulia, F. (2022). Analisis Persepsi Kemudahan Penggunaan Terhadap Minat Guna Melalui Kepercayaan Pada Pengguna Mobile Banking. *Management Studies and Entrepreneurship Journal*, *3*(3), 2022. http://journal.yrpipku.com/index.php/msej

Yuwono, R., Wibowo, A., Wijoyo, S. H., & Rokhmawati, R. I. (2019). Analisis Pengalaman Pengguna Pada Aplikasi Mobile Banking di Indonesia Dengan Menggunakan Usability a dan User Experience Questionnaire (UEQ) (Studi pada JakOne Mobile dan BCA Mobile). *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, *3*(6), 5666–5673.

Zalloum, L., Alghadeer, H., & Nusairat, N. (2019). The effect of using mobile banking services applications on electronic word of mouth: The mediating role of perceived trust. *International Business Research*, *12*(9), 62–80.

Zouari, G., & Abdelhedi, M. (2021). Customer satisfaction in the digital era: evidence from Islamic banking. *Journal of Innovation and Entrepreneurship*, *10*(1), 9. https://doi.org/10.1186/s13731-021-00151-x