

## THE INFLUENCE OF CUSTOMER INTIMACY, PERCEIVED USEFULNESS, AND PERCEIVED EASE OF USE ON CUSTOMER SATISFACTION IN USING BANK ACEH MOBILE BANKING

**Maya Azura\***  
Syiah Kuala University  
mayaaz@mhs.usk.ac.id

**Amri**  
Syiah Kuala University  
amry94@usk.ac.id

**Teuku Muhammad Syahrizal**  
Syiah Kuala University  
tmsyahrizal@usk.ac.id

### Abstract

The purpose of this study is to examine how customer satisfaction with the Mobile Banking Action Bank Aceh application is influenced by customer intimacy, perceived usefulness, and perceived ease of use. 114 respondents who use the Mobile Banking Action Bank Aceh were given questionnaires as part of this study's quantitative survey method. Purposive sampling is the sampling strategy employed, and SPSS version 25 is used to analyze the data using multiple linear regression. The findings demonstrate that customer satisfaction is not significantly impacted by perceived usefulness or customer intimacy. Customer satisfaction, on the other hand, is positively and significantly impacted by perceived ease of use, meaning that the more user-friendly an application is, the more satisfied customers are. Customer intimacy, perceived usefulness, and perceived ease of use all have a substantial simultaneous impact on customer satisfaction. These results show that the most important factor influencing user satisfaction when using the Mobile Banking Action Bank Aceh service is ease of use. Therefore, the bank should continue to prioritize increasing accessibility and user experience in order to raise and sustain customer satisfaction levels.

**Keyword:** Perceived ease of use, customer intimacy, perceived usefulness, customer satisfaction, mobile banking

### Abstrak

Tujuan studi ini adalah untuk menguji bagaimana kepuasan pelanggan terhadap aplikasi mobile banking Action Bank Aceh dipengaruhi oleh kedekatan pelanggan, persepsi kegunaan, dan persepsi kemudahan penggunaan. Sebanyak 114 responden yang menggunakan mobile banking Action Bank Aceh Metodologi kuantitatif penelitian ini mencakup pemberian kuesioner. Pengambilan sampel bertujuan digunakan dalam pengumpulan data, dan SPSS versi 25 digunakan untuk analisis regresi linier berganda. Studi menunjukkan bahwa persepsi kegunaan dan kedekatan pelanggan memiliki sedikit pengaruh terhadap kepuasan pelanggan. Kebahagiaan konsumen secara bermakna dijelaskan oleh persepsi kemudahan penggunaan, artinya semakin ramah pengguna suatu aplikasi, semakin puas pengguna dengannya. Kepuasan pelanggan sangat dipengaruhi oleh persepsi kegunaan, persepsi kemudahan penggunaan, dan kedekatan pelanggan secara bersamaan. Hasil ini menunjukkan bahwa faktor terpenting yang memengaruhi kepuasan pengguna terhadap layanan perbankan seluler Action Bank Aceh adalah kemudahan penggunaan. Untuk meningkatkan dan mempertahankan tingkat kepuasan pelanggan, bank harus memprioritaskan peningkatan aksesibilitas dan pengalaman pengguna.

**Kata kunci:** Persepsi kemudahan penggunaan, kedekatan pelanggan, persepsi kegunaan, kepuasan pelanggan, mobile banking

### INTRODUCTION

The banking industry has been driven by advancements in digital technology to implement electronic-based services, such as mobile banking, as a primary means of improving customer service standards (Shankar et al., 2020). Through the Mobile Banking Action application, Bank Aceh aims to meet the public's

demand for fast, useful, and convenient services. However, in practice, perceived benefits, ease of use, and the closeness of the bank customer relationship all play significant roles in determining user satisfaction, in addition to the availability of technology (BankAceh, 2023). Regarding the impact of customer closeness, customer satisfaction is influenced by perceived

usefulness and ease of use; however, several previous studies have produced contradictory findings (Laukkanen, 2016).

Although several studies indicate that not all three variables have a significant effect, other studies have found that all three variables significantly influence customer satisfaction. These inconsistent findings reveal a research gap, particularly in the context of regional banking and mobile banking usage in Aceh, which possesses unique social and cultural characteristics. Therefore, this study aims to examine how customer satisfaction with the Bank Aceh Mobile Banking Action application is influenced by customer intimacy, perceived usefulness, and perceived ease of use.

By providing empirical evidence within the local context of Bank Aceh and identifying the most important factors influencing user satisfaction, this study addresses the gaps left by previous research. Furthermore, the findings are expected to serve as a basis for the bank in developing more user-oriented digital service strategies aimed at improving and sustaining customer satisfaction

## **THEORETICAL FRAMEWORK**

### **Customer Intimacy**

Customer intimacy is a concept that emphasizes the closeness of the relationship between a company and its customers through a deep understanding of customers' needs, expectations, and preferences. According to Treacy & Wiersema (1995), customer intimacy focuses on an organization's ability to foster long-term relationships with customers through personalized and responsive services. Customer intimacy is reflected in the bank's attention to customer needs, effective communication, and the bank's ability to provide appropriate solutions.

Several studies suggest that customer intimacy plays an important role in shaping

customer satisfaction, as close relationships can foster trust and comfort. Customers who feel valued and cared for tend to demonstrate higher levels of loyalty and satisfaction. However, in digital-based services such as mobile banking, the role of customer intimacy becomes more complex because interactions no longer occur directly (Mukhoyyaroh, 2014). Therefore, it is important to examine the extent to which customer intimacy continues to influence customer satisfaction in the use of digital banking applications.

### **Perceived Usefulness**

User perception of the extent to which a system or technology can enhance performance or provide benefits in their activities is known as perceived usefulness. According to Davis (1989), perceived usefulness is the belief that using a technology will lead to improvements in both productivity and efficiency for the individual.

In mobile banking services, perceived usefulness is reflected in the benefits experienced by customers, such as ease of conducting transactions, time savings, and convenient access to banking services anytime and anywhere. The greater the perceived usefulness, the higher the likelihood that users will accept and use the technology.

Various studies explain that perceived usefulness is significant and positively related to both satisfaction and technology acceptance. However, some studies have found that even if an application is considered useful, this does not necessarily lead to increased satisfaction if there are still usability issues (Agrebi & Jallais, 2015). These inconsistent findings indicate a research gap that requires further investigation, particularly in relation to users of Bank Aceh mobile banking services.

### **Perceived Ease of Use**

The level of users' belief that a system is easy to understand and operate without requiring significant effort is known as perceived ease of use (Davis, 1989). Perceived ease of use is an

important factor in technology adoption, particularly for users with varying levels of digital literacy.

In the context of mobile banking, perceived ease of use is related to easily understandable menus, a clear application interface, and a simple transaction process. An application that is easy to use can reduce users' psychological barriers and enhance their comfort in conducting transactions.

Previous studies have shown that user satisfaction is strongly influenced by perceived ease of use (Manurung et al., 2025). Users tend to feel more satisfied when an application is easy to operate and involves minimal errors. Therefore, perceived ease of use is often considered a dominant factor in determining the success of a digital service application.

**Customer Satisfaction**

Customer satisfaction refers to the level of satisfaction or dissatisfaction an individual experiences with a product or service after comparing its performance with their expectations (Kotler & Keller, 2016). Customer satisfaction is an important indicator of banking service success because it influences customer loyalty and the sustainability of the relationship between the bank and its customers.

In mobile banking services, customer satisfaction is influenced by various factors, such as perceived benefits, ease of use, and the quality of interaction between the bank and its customers. Satisfied customers tend to recommend the service to others.

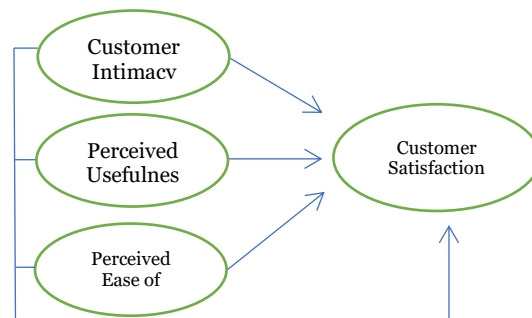
A number of studies consistently show that customer satisfaction in technology use is influenced by a combination of functional and emotional factors. However, varying research findings regarding the dominant factors affecting satisfaction indicate the existence of a research gap (Siregar et al., 2023). Therefore, this study aims to provide an empirical synthesis of the

variables influencing user satisfaction in the use of the Bank Aceh Mobile Banking Action application.

**Research Hypotheses**

- H1: Customer satisfaction with the Bank Aceh Mobile Banking Action platform is explained by customer intimacy.
- H2: Customer satisfaction with the Bank Aceh Mobile Banking Action platform is influenced by perceived usefulness.
- H3: Customer satisfaction with the Bank Aceh Mobile Banking Action application is explained by perceived ease of use.
- H4: Customer satisfaction among users of the Bank Aceh Mobile Banking Action application is significantly influenced by customer intimacy, perceived usefulness, and perceived ease of use.

**Conceptual Framework**



**Figure 1**  
**Conceptual Framework**

**METHODOLOGY**

This study employs an associative research design and a quantitative methodology to investigate the impact of customer intimacy, perceived usefulness, and perceived ease of use on customer satisfaction among users of the Bank Aceh Mobile Banking Action application. The population consists of all Bank Aceh customers who use the application. A sample of 114 respondents was selected using a purposive sampling technique, namely customers who actively use the Mobile Banking Action service.

A Likert scale was used in the questionnaire to collect primary data, and this was supported by a literature review as secondary data (Balaka, 2022). The research model illustrates the relationship in which customer intimacy, perceived usefulness, and perceived ease of use serve as three independent variables, while customer satisfaction is the dependent variable.

IBM-Statistic version 28.0 was used to perform multiple linear regression analysis on the data (Sugiyono, 2019). It was also used to test the validity and reliability of the instruments, as well as to conduct classical assumption tests and all required hypothesis tests (Andi, 2018). The purpose of this analysis is to determine the effect of each variable and their combined impact on customer satisfaction. This section includes the research type, objectives and target population, sampling technique, data collection, and data analysis methods

**RESULT**  
**Descriptive Statistic Of Characteristics**

**Table 1**  
**Respondent Characteristics**

Respondent Characteristics	Category	Freq	%
Gender	a. Laki-laki	49	42,9
	b. Perempuan	65	57,1
Age	a. 17-26 tahun	48	42,1
	b. 27-36 tahun	41	35,9
	c. 37-46 tahun	21	18,4
	d. >47 tahun	4	3,6
Marital Status	a. Menikah	47	41,2
	b. Belum menikah	67	58,8
Highest level of education	a. SMP	3	2,6
	b. SMU	44	38,6
	c. Diploma	16	14,0
	d. S-1	36	31,7
	e. S-2	12	10,5
	f. S-3	3	2,6
Monthly income	a. < Rp 2.000.000	55	48,2
	b. Rp 2.000.000-4.000.000	29	25,4
	c. Rp 4.000.000-6.000.000	23	20,2
	d. Rp 6.000.000-8.000.000	5	4,4
	e. > Rp 8.000.000	2	1,7
Occupation	a. Tidak bekerja	6	5,2
	b. Mahasiswa/Pelajar	35	30,7
	c. PNS/ASN	33	28,9
	d. Wiraswasta	31	27,1
	e. Lainnya	9	7,9
<b>Total</b>		14	100,0

Source: Data Processed by SPSS (2025)

Table 1 shows that all respondents in this study, totaling 114 individuals (100 percent), are users of the Bank Aceh Mobile Banking Action

application. Based on gender, the respondents were predominantly female, with 65 individuals (57.1 percent), while 49 individuals (42.9 percent) were male. In terms of age, most respondents were in the 17–26 years age group, totaling 48 individuals (42.1 percent), followed by the 27–36 years age group with 41 individuals (35.9 percent). Based on marital status, the majority of respondents were unmarried, namely 67 individuals (58.8 percent). Regarding educational background, most respondents were senior high school graduates, totaling 44 individuals (38.6 percent), followed by bachelor’s degree holders with 36 individuals (31.7 percent). In terms of monthly income, the majority of respondents earned ≤ IDR 2,000,000 per month, totaling 55 individuals (48.2 percent). Meanwhile, based on occupation, the largest group of respondents were students, totaling 35 individuals (30.7 percent), followed by civil servants (PNS/ASN) and self-employed individuals.

**Normality Test Result**

**Table 2**  
**The Kolmogorov–Smirnov Value Test**  
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		114
Test Statistic		.114
Asymp. Sig. (2-tailed)		.001 <sup>c</sup>
Monte Carlo Sig.		.096 <sup>d</sup>
Carlo Sig. Confidence Interval	Lower Bound	.089
(2-tailed) Interval	Upper Bound	.104

Source: Data Processed by SPSS (2025)

The Table 2. Kolmogorov–Smirnov test results indicate that the residuals are not normally distributed (Sig. 0.001 < 0.05). However, since this test is sensitive to large sample sizes, the Monte Carlo test was applied, which produced a significance value of 0.104 > 0.05. This result confirms that the residuals are normally distributed at a 95% confidence level, indicating that the regression model is appropriate for use and that the normality

assumption is satisfied without any substantial deviation.

### Multicollinearity Test Result

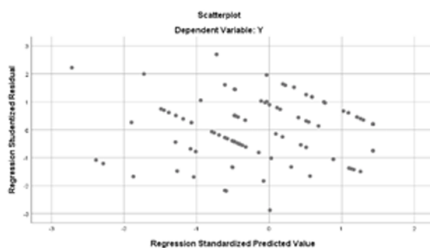
**Table 3**  
**Multicollinearity Test Results**

Model	Collinearity Statistics	
	Tolerance	VIF
Customer Intimacy	.480	2.095
Perceived Usefulness	.315	3.171
Perceived Ease of Use	.383	2.613

a. Dependent Variable: Customer Satisfaction  
Source: Data Processed by SPSS (2025)

Table 3. The tolerance values for all variables (customer intimacy, perceived usefulness, and perceived ease of use) are greater than 0.10, and the VIF values are below 10.00. This indicates that there is no multicollinearity; therefore, the research model is free from multicollinearity issues.

### Heteroscedasticity Test Result



Source: Data Processed by SPSS (2025)

**Figure 2. Scatterplot Test**

The scatterplot shows that the residual points are randomly dispersed without any discernible pattern, indicating constant residual variance. Therefore, no heteroscedasticity is detected, and the regression model satisfies the critical assumption of homoscedasticity in multiple linear regression

### Partial Test Results

**Table 4**  
**Multiple Linear Regression Analysis**  
**Coefficients<sup>a</sup>**

Model	Standardized Coefficients			
	Beta	t-count	t-table	Sig.
1 (Constant)				
Customer Intimacy	.095	1.053	1.981	.295
Perceived Usefulness	.108	5.042	1.981	.333
Perceived Ease of Use	.603	2.142	1.981	.000

a. Dependent Variable: Customer Satisfaction  
Source: Data Processed by SPSS (2025)

At a 5 percent significance level, the analysis results show that customer intimacy has a positive but insignificant effect on customer satisfaction, indicating that a higher level of bank

customer closeness does not necessarily lead to a significant increase in satisfaction.

The perceived usefulness variable also has a positive but insignificant effect, meaning that although the Mobile Banking application is considered useful, this perception is not strong enough to significantly enhance customer satisfaction. In contrast, perceived ease of use has been proven to have a positive and significant effect on customer satisfaction, indicating that the easier the application is to understand and use, the higher the level of customer satisfaction.

Thus, it can be concluded that the dominant determinant explaining customer satisfaction is perceived ease of use, while customer intimacy and perceived usefulness do not have a significant impact.

### Simultaneously Test Results

**Table 5**  
**Uji Simulta (F-statistic)**  
**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	168.690	3	56.230	49.054	.000 <sup>b</sup>
Residual	126.091	110	1.146		
Total	294.781	113			

Source: Data Processed by SPSS (2025)

Table 5, based on the F-test results, the calculated F value is 49.054 with a significance level of 0.000, which is far below the 0.05 significance threshold. This indicates that the regression model involving the variables of customer intimacy, perceived usefulness, and perceived ease of use significantly affects customer satisfaction. Since the alternative hypothesis is accepted and the null hypothesis (Ho), which states that there is no combined effect, is rejected, it can be concluded that the three independent variables jointly have a significant influence on customer satisfaction.

### Coefficient of Determination Test Result

**Table 6**  
**Coefficient of Determination (R<sup>2</sup>)**  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.756 <sup>a</sup>	.572	.561	1.07064

a. Predictors: (Constant), Perceived Ease of Use, Customer Intimacy, Perceived Usefulness  
b. Dependent Variable: Customer satisfaction  
Source: Data Processed by SPSS (2025)

Customer intimacy, perceived usefulness, and perceived ease of use contribute 56.1 percent to the explanation of customer satisfaction, as indicated by an Adjusted R Square value of 0.561. The remaining 43.9 percent of the variation in customer satisfaction is influenced by factors outside the model. Furthermore, an R value of 0.756 indicates that these three independent variables have a relatively strong relationship with customer satisfaction.

## DISCUSSION

### **Customer Intimacy, Perceived Usefulness, and Perceived Ease of Use Simultaneously Affect Customer Satisfaction**

Customer intimacy, perceived usefulness, and perceived ease of use all significantly influence customer satisfaction, according to the simultaneous test (F-test), with a significance value of  $0.000 < 0.05$ . This indicates that variations in customer satisfaction with the Bank Aceh Mobile Banking Action application can be explained by these three factors.

However, the partial test results (t-test) show that customer satisfaction is only positively and significantly influenced by perceived ease of use. Meanwhile, customer intimacy and perceived usefulness do not demonstrate a significant effect. These findings confirm that ease of use is the primary factor in shaping customer satisfaction, in line with the study by Yunita et al. (2024), which states that ease of use enhances the impact of service quality on customer satisfaction.

### **Customer Intimacy and Its Effect on Customer Satisfaction**

Customer intimacy has a positive but insignificant effect on customer satisfaction based on the partial test results (p-value = 0.295,  $> 0.05$ ). This suggests that the level of closeness between the bank and its customers through mobile banking services does not have a significant impact on user satisfaction.

The study indicates that customer satisfaction is not solely determined by the

relationship or emotional closeness with the bank, but is more strongly influenced by functional factors such as ease of use and the quality of transaction experience. Although this finding differs from the study by Setiansye & Guritno (2023), which reported a significant effect of customer intimacy, differences in context and respondent characteristics may explain the variation in results.

This also suggests that the functional benefits of the application are not yet fully perceived as a satisfying added value by users. Although the Mobile Banking Action application is considered capable of supporting financial activities, customer satisfaction appears to be more influenced by operational aspects experienced directly during usage, such as process smoothness, clarity of features, and minimal technical obstacles (Hanafizadeh et al., 2014).

### **Perceived Usefulness and Its Effect on Customer Satisfaction**

The partial analysis shows that perceived usefulness has an insignificant effect on customer satisfaction, with a significance value of 0.333 ( $> 0.05$ ). This indicates that customers' perception of the usefulness of the mobile banking application does not directly increase their level of satisfaction. Although the application is considered useful in supporting financial activities, these benefits are not sufficient to create satisfaction if they are not accompanied by an easy and comfortable user experience. Customer satisfaction is more strongly influenced by the operational aspects of the application than by perceived usefulness alone.

### **Perceived Ease of Use and Its Effect on Customer Satisfaction**

The partial analysis shows that perceived ease of use has a significant effect on customer satisfaction, with a significance value of 0.000 ( $< 0.05$ ). This indicates that perceived ease of use of the Bank Aceh Mobile Banking Action

application directly increases customer satisfaction with the mobile banking service. The application is considered useful in supporting financial activities and daily transactions, and this is sufficient to create satisfaction when combined with ease and comfort in use. Customer satisfaction is more strongly influenced by the operational aspects of the application than by perceived usefulness alone.

This condition indicates that perceived ease of use is complementary in nature, where the benefits of new technology will have an optimal impact on satisfaction only when accompanied by a comfortable and effortless user experience (Shaikh & Karjaluo, 2015). These differing results can be interpreted as a reflection of user expectations that place greater emphasis on system interaction quality rather than merely the conceptual benefits of the application.

## CONCLUSION

This study concludes that customer intimacy and perceived usefulness do not have a significant effect on customer satisfaction among users of the Bank Aceh Mobile Banking Action application. In contrast, perceived ease of use is proven to have a significant and positive impact on customer satisfaction. This finding indicates that the ease of learning and using the application is the main factor determining the level of user satisfaction.

Simultaneously, customer intimacy, perceived usefulness, and perceived ease of use have a positive effect on customer satisfaction. These findings suggest that although not all variables have a strong individual influence, all three still play a role in shaping customer satisfaction.

In conclusion, this study confirms that user satisfaction with mobile banking is

primarily determined by ease of use. Therefore, Bank Aceh is recommended to prioritize the development of a simpler, more understandable, and user friendly application in order to continuously improve and maintain customer satisfaction.

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