

## THE INFLUENCE OF CUSTOMER PERCEPTIONS, SERVICE FEATURES, AND SECURITY ON MOBILE BANKING CUSTOMER SATISFACTION AT INDONESIAN SHARIA BANKS IN MALANG CITY



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### Abstract

This study aims to analyze the influence of customer perception, service features, and security on mobile banking customer satisfaction at Bank Syariah Indonesia in Malang City. Along with the increasing use of digital banking services, understanding the factors that affect customer satisfaction is important for banks to improve service quality. This study uses a quantitative approach with multiple linear regression analysis methods. Data was collected through the distribution of questionnaires to Bank Syariah Indonesia mobile banking users in Malang City. The results of the analysis show that customer perception, service features, and security affect customer satisfaction. A good perception of the bank's services increases customer trust and convenience, complete and easy-to-use service features contribute to a better user experience, while guaranteed security is a key factor in maintaining customer loyalty. The results of this research can be a reference for Bank Syariah Indonesia in improving mobile banking services by paying attention to customer perception aspects, developing more innovative features, and improving security systems. This research can also be a reference for future research related to the satisfaction of users of digital banking services.

**Keywords:** Customer Perception, Service Features, Security, Customer Satisfaction, Mobile Banking, Bank Syariah Indonesia

## INTRODUCTION

The development of information technology has brought significant changes in various sectors, including the banking industry (Inayatulloh, I., Diana, N., and Alrasyid, 2022). One of the innovations that emerged as a result of this development is mobile banking services, which allow customers to conduct financial transactions quickly, easily, and efficiently through mobile devices. Bank Syariah Indonesia (BSI), as one of the largest sharia-based financial institutions in Indonesia, also adopted this service to improve customer service and expand banking access (Shalsabilah, N., and Firmansyah, 2023). In recent years, the use of mobile banking in Indonesia has experienced significant growth, along with technological advances and increasing financial inclusion.

In the first quarter of 2024, mobile banking users at major Indonesian banks experienced a significant increase. Overall, the nominal value of digital banking transactions in Indonesia as of April 2024 reached IDR5,340.92 trillion, growing 19.08% year-on-year (YoY) according to Bank Indonesia data (BSI, 2024). This growth shows a significant change in people's behavior, which increasingly relies on digital banking services for their financial activities. In addition, PT Bank Syariah Indonesia Tbk (BSI) or BRIS also reported that it is in the process of developing the BSI Mobile super app this year to embrace the digital banking era. This growth shows significant changes in people's behavior, which increasingly rely on digital banking services for their financial activities. It also demonstrates BSI's commitment to compete in the growing digital banking market, while offering more integrated services to its customers. Currently, BSI is also releasing a new mobile banking application called "Byond by BSI". Byond by BSI is the latest super app from Bank Syariah Indonesia (BSI) that offers more than 130 features, covering financial, social and spiritual services in one platform, unlike the more limited BSI Mobile. The app is equipped with the latest technology and advanced security systems, such as fraud detection and security hardware, to protect customer data. In addition, Byond by BSI offers a more modern and user-friendly interface, providing a better experience compared to BSI Mobile. As part of BSI's rebranding efforts, the app aims to create a broader ecosystem of services that suit the halal lifestyle. Customers are expected to migrate to Byond by BSI within a year, as BSI Mobile will be phased out.

PT Bank Syariah Indonesia Tbk (BSI) recorded a 45.02% increase in digital transactions through BSI Mobile as of June 2024, with a total of 247.5 million transactions worth Rp299 trillion. As an appreciation, BSI launched the BSI Mobile Hujan Rezeki Program from October 2023 to March 2024, offering attractive prizes such as cars, Vespa, and E-Mas Savings (BSI, 2024). The program also aims to strengthen the closeness of Islamic banking to the community as a financial, social, and spiritual friend. BSI Mobile is Bank Syariah Indonesia's main initiative in strengthening digital banking services. As of June 2024, BSI Mobile had 7.12 million users, an increase of 33.9% compared to the previous year (Zetta Hannany, 2024). The following is data on the performance of mobile banking services from several banks in Indonesia.

The development of information technology has brought significant changes in various sectors, including the banking industry (Inayatulloh, I., Diana, N., and Alrasyid, 2022). One of the innovations that emerged as a result of this development is mobile banking services, which allow customers to conduct financial transactions quickly, easily, and efficiently through mobile devices. Bank Syariah Indonesia (BSI), as one of the largest

sharia-based financial institutions in Indonesia, also adopted this service to improve customer service and expand banking access (Shalsabilah, N., and Firmansyah, 2023). In recent years, the use of mobile banking in Indonesia has experienced significant growth, along with technological advances and increasing financial inclusion.

In Malang City, the use of mobile banking services continues to increase along with the increasing number of smartphone users and public awareness of the importance of digital technology in daily life. However, despite the increasing popularity of mobile banking, several issues and phenomena are still a major concern. One issue that often arises is customer perception of the services provided. This perception includes how customers assess the ease of use, speed, and convenience of mobile banking services offered by BSI (Lailatul, 2018).

In addition, the service features available in the mobile banking application are also an important factor affecting customer satisfaction. Features such as bill payments, fund transfers, account opening, and other Islamic financial services must be designed to be user-friendly and relevant to customer needs (Khusna, K. M., and Khoiriawati, 2023). However, there are still complaints about feature limitations or complexity of use that reduce user experience. In addition, with the cashless society program promoted by the Indonesian government, more and more people are adapting to a cashless lifestyle. This encourages banks to provide more innovative and inclusive services to reach more customers.

Security is also a major concern in mobile banking services. First, the security of digital transactions is one of the main concerns for customers (Khotijah, 2023). The recent cyber-attack on Bank Syariah Indonesia's mobile banking application underscores the importance of data protection and system security in maintaining customer trust. In May 2023, Bank Syariah Indonesia (BSI) suffered a ransomware attack that caused a week-long service disruption, compromising customers' personal data and exposing them to the risk of identity theft and fraud. Although initially claimed to be system maintenance, BSI failed to be transparent and violated data protection principles as stipulated in Law Number 27 of 2022 on Personal Data Protection (UU PDP). This leak highlights the importance of strengthening data security by banking institutions, especially ahead of the full implementation of the PDP Law in 2024. Improvements in security systems and transparency are expected to restore customer confidence. The incident shows that while technology provides convenience, the risks associated with data and transaction security must be properly managed by banks. Cases such as personal data theft, online fraud, and unauthorized access by third parties have created concerns among customers. Customer trust in the BSI application security system is one of the keys to success in maintaining and increasing their satisfaction (Sutedjo, 2021).

This phenomenon shows that customer satisfaction depends not only on the existence of mobile banking services, but also on the perceived quality of customers, the sophistication of service features, and the level of security offered. Therefore, it is important to identify and analyze the influence of these factors on mobile banking customer satisfaction at Bank Syariah Indonesia, especially in Malang City. The results of this study are expected to provide strategic input for BSI in improving service quality and customer satisfaction, and support the growth of Islamic banking in Indonesia. Several studies regarding customer perceptions, service features, and security on customer satisfaction of mobile banking users have also been conducted previously. (Purnomo, 2019) found that customer perception has a positive and significant effect on customer satisfaction and loyalty. Similar research by

(Nurhaliza, P., and Dyarini, 2023) corroborates that customer perceptions, along with product excellence, contribute significantly to customer satisfaction. In addition, (Setiawan, 2016) identified that service quality, perception, and trust have a significant influence on mobile banking service user satisfaction. In the context of service features, (Meileny, F., and Wijaksana, 2020) that service features, along with perceived benefits and convenience, have a positive and significant impact on customer satisfaction. However, different result were found by (Khusna, K. M., and Khoiriawati, 2023) who stated that service features do not always have a significant effect, while convenience and efficiency remain the main determinants of application user satisfaction. Security is also an important aspect in customer satisfaction, as shown by (Khotijah, 2023) which shows that security, convenience, and service quality partially have a significant effect on customer satisfaction of mobile banking users at Islamic banks. Another study by (Chusnah, C., and Indriana, 2020) confirmed that security and convenience directly increase customer satisfaction fintech.

Based on previous research, there are several research gaps that can be used as a basis for further research. First, most of the research was conducted at conventional banks or different regions, such as conducted by (Purnomo, 2019) at BRI Kanca Wonosari on BCA Mobile banking users. Specific research on the influence of customer perceptions, service features, and security on customer satisfaction at Bank Syariah Indonesia (BSI), especially in Malang City, is still rarely found. This research was conducted in Malang City because this city has great potential in the development of mobile banking services, especially Islamic banking. With a population of almost 900,000 people and a high level of smartphone usage, Malang is a strategic market for digital services. Data from the Indonesian Internet Service Providers Association or *Asosiasi Penyelenggara Jasa Internet Indonesia* (APJII) in 2022 shows that more than 60% of the population uses smartphones for daily activities, including financial transactions. Second, many previous studies have focused on a particular combination of variables, such as customer perception and trust or service features, convenience, and efficiency, but none have specifically integrated customer perception, service features, and security as independent variables in one study. Third, there are inconsistencies in results between previous studies, such as in service features, which according to (Khusna, K. M., and Khoiriawati, 2023) are not significant, while (Meileny, F., and Wijaksana, 2020) found a significant effect, indicating the need for more in-depth studies by considering contextual factors. In addition, research specific to the Islamic market segment is still limited, considering that many previous studies have focused more on general fintech applications or combining Islamic and conventional contexts.

## REVIEW OF LITERATURE

### Definition of Customer Perception

Perception is the process of summarizing information and interpreting messages that involves personal and situational factors, and is influenced by one's cultural and life background (Suharini, 2011). Perception of an object can vary, depending on how people interpret it (Astuti, T., and Mustikawati, 2013). In the context of service, customer satisfaction is very important to maintain the company's image and compete in the market. *According to Undang-Undang* No. 10 of 1998 on Banking, in Article 1 Paragraph 16, a

customer is a parties who uses bank services. One of the Qur'anic verses that can be associated with customer perceptions is Surah Al-Hujurat (49: 12):

يَا أَيُّهَا الَّذِينَ آمَنُوا اجْتَنِبُوا كَثِيرًا مِّنَ الظَّنِّ إِنَّ بَعْضَ الظَّنِّ إِثْمٌ وَلَا تَجَسَّسُوا وَلَا يَغْتَبَ بَعْضُكُم بَعْضًا أَيُحِبُّ أَحَدُكُمْ أَنْ يَأْكُلَ لَحْمَ أَخِيهِ مَيْتًا فَكَرِهْتُمُوهُ وَاتَّقُوا اللَّهَ إِنَّ اللَّهَ تَوَّابٌ رَّحِيمٌ

Meaning: "O you who believe, avoid many prejudices! Verily, some prejudices are sins. Do not find fault with others and let none of you backbite another. Would any of you like to eat the flesh of his dead brother? Surely you feel disgusted. Fear Allah, for Allah is Oft-returning, Most Merciful." (QS. Al-Hujurat: 12)

### Service Features

In product or service development, it is very important to create elements that are special, unique, and different from other products already on the market. The features in a product act as additional advantages or facilities that distinguish the product from similar products (Meileny, F., and Wijaksana, 2020). Through unique and different features, consumers can easily recognize and assess the advantages of a product compared to other products. According to (Sangadji, E. M., and Sopiah, 2014) features are characteristics that function to improve or add to the basic functions of a product or service. Good and relevant features will be a determining factor for consumers in choosing a particular product or service. Therefore, for marketers, features are the key to making their products superior to competitors' products. This makes features an important element in marketing strategy.

### Security

Security is an important factor in building brand trust, especially in online transactions (Suryani, 2013) If the security level of an online platform is weak, it can reduce the level of consumer trust in the online store. Security here refers to the extent to which consumers feel that the internet is safe to transmit sensitive information. Consumers who feel secure with the overall internet environment are more likely to trust websites that provide e-commerce services. Security also includes technological advances that can affect consumers' intention to shop online (Sawhani, 2021) such as cryptography, digital signatures, and digital certificates play an important role in protecting users from the risk of fraud, hacking, or phishing.

### Customer Satisfaction

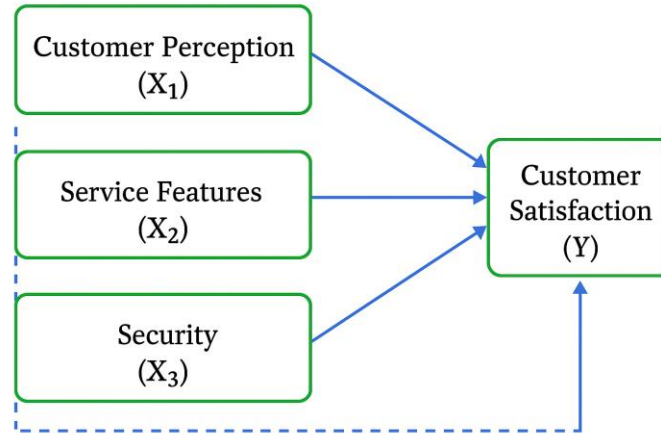
Consumer satisfaction is a concept defined by many experts from various perspectives, although there is no single definition that can be used as a common reference (Sondakh, 2015) In general, almost all definitions touch on the same core, namely how consumers rate a product or service after comparing the perceived performance with their expectations. Satisfaction arises when the results received by consumers match what they expected, while dissatisfaction occurs when the results are far below their expectations (Cahyani, 2016). If the performance of the product or service exceeds expectations, consumers will feel very satisfied.

Customer satisfaction can be seen as a feeling or evaluation of consumers after using a product, which arises from the comparison between expectations and reality (Ismail, 2014). If the results received match expectations, the customer is satisfied. However, if the results more than meet expectations, customers will feel very satisfied. Conversely, if the

performance of the product or service does not meet expectations, the customer feels disappointed.

### Conceptual Framework

Based on the description of the relationship between the variables above, the conceptual framework used in this study is as follows:



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

Source: Data processed by the author, 2025

### RESEARCH METHOD

This research is a quantitative approach with an explanatory research approach. The approach used in this research is explanatory research, which is a type of research that aims to explain the cause-and-effect relationship between variables. This research is quantitative research with an explanatory research approach. The research location refers to the place where the study is carried out to obtain relevant data to solve research problems. In this case, the research focused on customers who use mobile banking services at Islamic banks located in Malang City. This research is quantitative research with an explanatory research approach.

In this study, the intended population includes Islamic bank customers in Malang City, which is considered to represent a group of users of Islamic banking services in the region. This population was chosen because of its relevance and potential in providing data that supports the research objectives. The research location refers to the place where the study is carried out to obtain relevant data to solve research problems. In this case, the research focused on customers who use mobile banking services at Islamic banks located in Malang City. This research is quantitative research with an explanatory research approach. In this study, the intended population includes Islamic bank customers in Malang City, which is considered to represent a group of users of Islamic banking services in the region. This population was chosen because of its relevance and potential in providing data that supports the research objectives. The technique for determining the number of samples in this study uses the Hair formula, which is suitable when the population size is not known with certainty. The research location refers to the place where the study is carried out to obtain relevant data to solve research problems. In this case, the research focused on customers who use mobile banking services at Islamic banks located in Malang City. This research is quantitative

research with an explanatory research approach. Therefore, the sample size is determined by adjusting the number of indicators in the study, namely by multiplying 5 to 10 statements on the questionnaire (Hair, 2013). Based on the results of the sample calculation, it is known that this study requires 150 respondents. Based on the sample calculation results in this study, primary data were collected through distributing questionnaires designed to explore the effect of customer perceptions, service features and security on satisfaction with the use of mobile banking services at Islamic banks. This method was chosen to obtain direct information that is relevant and specific from respondents who match the research criteria. It is known that this research requires as many as 150 respondents.

This research applies multiple linear regression data analysis methods with the help of the Statistical Package for Social Science (SPSS) application. This method is used to test the relationship between the independent variable and the dependent variable partially or simultaneously.

## RESULTS AND DISCUSSION

### Characteristics of Respondents

**Table 1.**  
**Characteristics of Respondents Based on Gender**

Gender	Total Respondents	Percentage
Laki-Laki	78	46.9%
Perempuan	88	53.1%
Total	166	100%

Source: Data processed by the author, 2025

Table 1 shows that the majority of respondents in this study were women, with a difference of 10 respondents or 6.2% more than men. Thus, the gender distribution of respondents is quite balanced, although there is a slight dominance by female respondents.

**Table 2.**  
**Characteristics of Respondents by Age**

Age	Total Respondents	Percentage
17	16	9,6%
18	14	8,4%
19	15	9,0%
20	9	5,4%
21	16	9,6%
22	8	4,8%
23	13	7,8%
24	10	6,0%
25	9	5,4%
26	20	12,0%
27	16	9,6%
28	20	12,0%

Source: Data processed by the author, 2025

Based on Table 2, the respondents were fairly evenly spread across ages, with a tendency to be higher in the 26 - 28 years old age groups compared to other ages.

**Table 3.**  
**Characteristics of Respondents Based on Domicile**

Domicile	Total Respondents	Percentage
Kedungkandang	36	21,7%
Blimbing	33	19,9%
Sukun	35	21,1%
Klojen	30	18,1%
Lowokwaru	32	19,3%

Source: Data processed by the author, 2025

Based on Table 4, the distribution of respondents in the five sub-districts of Malang City shows that the majority of respondents live in the Kedungkandang sub-district, as many as 36 people (21.7%). Sukun sub-district is in second place with 35 respondents (21.1%), followed by Blimbing sub-district with 33 respondents (19.9%). Meanwhile, Lowokwaru and Klojen sub-districts had 32 (19.3%) and 30 (18.1%) respondents, respectively. This distribution shows that respondents were spread fairly evenly across the five sub-districts.

#### Validity Test

The questionnaire is considered valid if each question in the questionnaire is able to measure the intended variable. As an indicator of validity, if the calculated r value is greater than the r table value, then the statement in the questionnaire is declared valid. The following are the results of the validity test:

**Table 4.**  
**Results of the Validity Test of Customer Perception Variables, Service Features, Security and Usage Satisfaction**

Variable	Item	Pearson Correlation	R-table	Description
Customer Perception	X1.1	0.772	0.152	Valid
	X1.2	0.729	0.152	Valid
	X1.3	0.738	0.152	Valid
	X1.4	0.742	0.152	Valid
	X1.5	0.801	0.152	Valid
	X1.6	0.758	0.152	Valid
	X1.7	0.764	0.152	Valid
Service Features	X2.1	0.782	0.152	Valid
	X2.2	0.805	0.152	Valid
	X2.3	0.770	0.152	Valid
	X2.4	0.794	0.152	Valid
Security	X3.1	0.844	0.152	Valid
	X3.2	0.811	0.152	Valid
	X3.3	0.861	0.152	Valid
	X3.4	0.831	0.152	Valid
Ease	Y1.1	0.783	0.152	Valid
	Y1.2	0.778	0.152	Valid

Y1.3	0.872	0.152	Valid
Y1.4	0.757	0.152	Valid
Y1.5	0.848	0.152	Valid

Source: Data processed by the author, 2025

Based on the description in Table 4, it can be concluded that all statement items used to measure each variable are declared valid and can be used in research, because the r-count value is greater than the r-table value.

### Reliability Test

**Table 5.**  
**Results of the Validity Test of Customer Perception Variables, Service Features, Security, and Usage Satisfaction**

Variable	Cronbach's Alpha	Description
Customer Perception	0.876	Reliable
Service Features	0.794	Reliable
Security	0.854	Reliable
Usage Satisfaction	0.867	Reliable

Source: Data processed by the author, 2025

Based on the results shown in Table 5 above, it can be concluded that all statement items used to measure each variable have a high level of reliability. This is indicated by the Cronbach alpha value, which exceeds 0.6.

### Normality Test

**Table 6.**  
**Normality Test Results**  
**Kolmogorov-Smirnov**

N	166
Test Statistic	0.059
Asymp. Sig. (2-tailed)	0.200

Source: Data processed by the author, 2025

Based on Table 6 normality test results, it can be concluded that the data used in this study are normally distributed because they have an Asymp. Sig. (2-tailed) > 0.05. So that the data can continue the next test.

### Multicollinearity Test

**Table 7.**  
**Multicollinearity Test**

Variable	Collinearity Statistic	
	Tolerance	VIF
Customer Perception	0.941	1.062
Service Features	0.953	1.050
Security	0.987	1.013

Source: Data processed by the author, 2025

Based on the analysis results in Table 7, it can be concluded that the data in this study does not experience multicollinearity symptoms, as indicated by a tolerance value of more than 0.1 and a Variance Inflation Factor (VIF) value of less than 10.

### Heteroscedasticity Test

**Table 8.**  
**Heteroscedasticity Test**

Variable	t	Sig.
Customer Perception	-0.410	0.683
Service Features	-0.099	0.921
Security	0.791	0.430

Source: Data processed by the author, 2025

Based on the analysis in Table 8, it can be concluded that the data in this study do not experience symptoms of heteroscedasticity, as indicated by the significance value (Sig.), which is greater than 0.05 heteroscedasticity test.

### Autocorrelation Test

**Table 9.**  
**Autocorrelation Test (Durbin Watson)**

DW	dL	dU	4-dU
2.005	1.6971	1.7957	2.2043

Source: Data processed by the author, 2025

Based on Table 9, the Durbin-Watson (DW) value of 2.005 is compared with the lower limit value (dL) of 1.6971 and the upper limit (dU) of 1.7957. Because the DW value is in the range  $dU \leq DW \leq (4 - dU)$  or  $1.7957 \leq 2.005 \leq 2.2043$ , it can be concluded that the regression model in this study does not experience autocorrelation. This shows that the residuals in the model do not have a certain relationship pattern, so the classical assumptions regarding autocorrelation have been met.

### Multiple Linear Regression Test

**Table 10.**  
**Multiple Linear Regression Test**

Variable	Unstandardized B	Coefficients Std. Error	t	Sig.
(Constant)	4.701	0.304	8.236	.000
Customer Perception → Ease	0.119	0.004	4.762	.000
Service Features → Convenience	0.152	0.011	4.746	.000
Security → Ease	0.240	0.014	7.351	.000

Source: Data processed by the author, 2025

The results of the study indicate that all three independent variables—customer perception of ease ( $B = 0.119$ ;  $p < 0.001$ ), service features on convenience ( $B = 0.152$ ;  $p < 0.001$ ), and security on ease ( $B = 0.240$ ;  $p < 0.001$ )—have a positive and significant effect on the dependent variables. This suggests that better customer perception, enhanced service features, and higher perceived security are associated with greater ease and convenience for users.

**Determination Coefficient Test (R<sup>2</sup>)**

**Table 11.**  
**Determination Coefficient Test (R<sup>2</sup>)**

R	R Square	Adjusted R Square
0.792 <sup>a</sup>	0.627	0.620

Source: Data processed by the author, 2025

Based on the description in Table 11, it can be concluded that the coefficient of determination (Adjusted R Square) is 0.524. This means that the variables of customer perception, service features, and security in this study are able to explain the effect on the variable customer satisfaction in using mobile banking by 62.0%. Meanwhile, the remaining 38% is influenced by other variables not included in this research model.

**T-Test**

**Table 12.**  
**T-Test (Partial)**

Variable	Unstandardized B	Coefficients Std. Error	t	Sig.
(Constant)	4.701	0.304	8.236	.000
Customer Perception → Ease	0.119	0.004	4.762	.000
Service Features → Ease	0.152	0.011	4.746	.000
Security → Ease	0.240	0.014	7.351	.000

Source: Data processed by the author, 2025

Based on table 12 shows that the analysis reveals that customer perception, service features, and security each have a positive and significant influence on ease, with security showing the strongest effect. This implies that improvements in these areas can significantly enhance users' perceived ease of use.

**F-Test**

**Table 13.**  
**F-Test**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	32.156	3	10.719	19.391	.000 <sup>b</sup>
Residual	15.874	162	.098		
Total	48.030	165			

Source: Data processed by the author, 2025

From the F test results in Table 13 above, it is known that the F-count value is 19.391 and the F-table value is 2.430 (F-count > F-table), as well as a significance value (Sig.) of 0.000 which is smaller than 0.05.3 Thus, H<sub>a</sub> is accepted, which means that simultaneously and significantly, the variables of customer perception, service features, and security affect the satisfaction of using Bank Syariah Indonesia mobile banking.

**The Influence of Customer Perceptions on Customer Satisfaction of Mobile Banking Users in Malang City**

This study shows the results that customer perceptions (business activity characteristics, Islamic banking accountability, Islamic banking characteristics, and Islamic

banking users) have a significant effect on customer satisfaction (overall customer satisfaction, satisfaction dimensions, confirmation of expectations, repurchase intentions, willingness to recommend). Based on the respondents' answers in this study, the indicators “fulfillment of product and service needs” and “transaction reporting and disclosure of honest and fair rights and obligations” have the highest value of all question items in the customer perception variable. This indicator is the dominant indicator compared to other indicators in customer perceptions of Bank Syariah Indonesia services. This value affects the level of ability of this indicator in measuring the effect of customer perceptions on mobile banking user satisfaction, so it is found that there is a significant influence in it.

The results of this study are strengthened by the results conducted by (Setiawan, 2016) which show that customer perceptions have a positive and significant effect on user satisfaction with mobile banking services. In addition, this study is also in line with the findings of (Meileny, F., and Wijaksana, 2020), (Makmuriyah, A. N., and Vanni, 2020), and (Deliyana, R., Permatasari, B., and Sukmasari, 2021) which reveal that perception factors have a significant influence on customer satisfaction in using mobile banking.

### **The Effect of Service Features on Customer Satisfaction of Mobile Banking Users in Malang City**

This study shows the results that service features (feature completeness, feature needs, feature attractiveness, and convenience) have a significant effect on customer satisfaction (overall customer satisfaction, satisfaction dimensions, confirmation of expectations, repurchase intentions, willingness to recommend). Customer satisfaction depends not only on the availability of the features offered, but also on the ease of use and smooth transaction experience. However, this satisfaction can be jeopardized if there are recurring system problems, such as those often experienced by BSI Mobile and Byond by BSI users. Frequent system errors, login glitches, or slow transaction processing can cause inconvenience to customers. If these problems continue to occur, then customer trust in BSI mobile banking services may decrease. BSI needs to be more careful and maintain the quality of its services, because even though the features provided are complete, if there are frequent interruptions, the benefits will not be felt optimally by customers. If customer trust decreases, it is not impossible that they will switch to other banking services that are more stable and reliable. Therefore, maintaining system stability in service features and improving the reliability of digital services are key factors in maintaining customer satisfaction.

Based on the respondents' answers in this study, the indicator “easy access to features through application displays” has the highest value of all question items in the variable influence of service features on customer satisfaction. This indicator is the most dominant compared to other indicators in shaping customer satisfaction with the use of Islamic Bank mobile banking in Malang City. This value shows that easy access to features plays an important role in increasing customer satisfaction, so there is a significant influence in it. Thus, it can be concluded that the indicator “easy access to features through application display” is the most dominant indicator in shaping the variable influence of service features on customer satisfaction of mobile banking users in Malang City.

The results of this study strengthen the results conducted by (Meileny, F., and Wijaksana, 2020), where service features have a positive and significant effect on LinkAja customer satisfaction in Indonesia. In addition, the results of this study are also in line with the research of (Makmuriyah, A. N., and Vanni, 2020), where service features have a

significant effect on customer satisfaction in using mobile banking services. (Khotijah, 2023) also supports these findings, where application features have a positive and significant effect on customer satisfaction of mobile banking users at Islamic banks. Furthermore, (Putri, C. A., and Ginting, 2021) shows that service features affect user experience, which in turn has an impact on customer satisfaction.

### **The Effect of Security on Customer Satisfaction of Mobile Banking Users in Malang City**

This study shows the results that security (security assurance and data confidentiality) has a significant effect on customer satisfaction (overall customer satisfaction, satisfaction dimensions, confirmation of expectations, repurchase intentions, willingness to recommend). Security is the main factor that ensures customer comfort and trust in digital transactions. This research data shows that the majority of respondents agree or strongly agree that BSI mobile banking services have a reliable security system. This proves that the security aspect is not just a complement, but a determining factor for customer satisfaction. This satisfaction also reflects the extent to which the mobile banking service is able to provide a safe and risk-free transaction experience. While security is crucial, recurring technical issues can reduce customers' trust in mobile banking. System disruptions, such as errors and transaction delays, have the potential to reduce user satisfaction. If not addressed, customers may switch to a more stable service. Therefore, maintaining system stability and security is key to maintaining customer satisfaction.

Based on the research results, the indicator "security of transactions through internet banking" has the highest value among all question items in the security variable on customer satisfaction. This indicator is the most dominant factor compared to other security aspects in shaping customer satisfaction with the use of Islamic Bank mobile banking in Malang City. This value shows that transaction security guarantees and personal data protection play an important role in increasing customer satisfaction, so there is a significant influence in it. Thus, it can be concluded that the indicator "security of transactions through internet banking" is the most dominant factor in shaping the security variable on customer satisfaction of mobile banking users in Malang City.

The results of this study are strengthened by the results conducted by (Khotijah, 2023), which show that security has a positive and significant effect on customer satisfaction of Sharia Bank mobile banking users. In addition, this study is also in line with the findings of (Chusnah, C., and Indriana, 2020), (Deliyana, R., Permatasari, B., and Sukmasari, 2021), and (Ilham, Y., and Dirgantara, 2020) which reveal that security factors have a significant influence on customer satisfaction in using mobile banking.

### **Effect Of Customer Perception, Service Features, And Security on Customer Satisfaction of Mobile Banking Users in Malang City**

The results showed that customer perceptions, service features, and security simultaneously had a significant effect on customer satisfaction of Bank Syariah Indonesia mobile banking users in Malang City. This significant simultaneous effect illustrates that customer satisfaction is not only determined by a single factor, but by a combination of various complementary aspects. The integration of positive perceptions formed in the minds of customers, comprehensive and customized service features, and reliable security systems has created strong value for mobile banking users. The significant contribution of the three variables to customer satisfaction indicates the effectiveness of the mobile banking

development strategy that has been implemented by Bank Syariah Indonesia. Nevertheless, there is still room for improvement, given the existence of other factors outside the research model that also affect customer satisfaction. This opens up opportunities for banks to continue to innovate and improve mobile banking services as a whole.

Research that is in line with this research is research conducted by (Khotijah, 2023) which examines the effect of security, convenience, service quality, and application features on customer satisfaction of mobile banking users. In addition, research conducted by (Deliyana, R., Permatasari, B., and Sukmasari, 2021) also supports because it discusses the effect of security perceptions on customer satisfaction in using mobile banking. Another relevant research is research by (Khusna, K. M., and Khoiriawati, 2023) which examines the effect of service features, convenience, and efficiency on user satisfaction. These three studies are related to this research in looking at the factors that influence customer satisfaction of mobile banking users.

## CONCLUSION

Based on the results of the analysis that has been carried out regarding the influence of customer perceptions, service features, and security on customer satisfaction of mobile banking users in Malang City. It can be conclusion the customer perception variable has a positive and significant effect on customer satisfaction. This shows that the more positive the customer's perception of Islamic Bank mobile banking, the higher their level of satisfaction in using the service. The service feature variable has a significant influence on customer satisfaction. Ease of access, completeness of features, and convenience in using the application are the main factors in increasing the satisfaction of mobile banking users in Malang City. The security variable has a positive and significant effect on customer satisfaction. Security in transactions and protection of personal data are the main factors that influence the trust and satisfaction of Sharia Bank mobile banking users. Overall, customer perceptions, service features, and security together have a significant impact on customer satisfaction. This shows that good mobile banking services must pay attention to these three aspects in order to increase customer satisfaction.

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