The Influence Of Product Features, Product Design And Trust On Mobile Banking User Satisfaction Of Bca Customers In Katamso Village, Medan

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ABSTRACT

As technology advances, the banking sector must be able to facilitate consumer transactions and offer first-class services at competitive prices. Given that consumers are becoming more mobile and demanding, banks today must improve their offerings. This study examines the relationship between variables at BCA Medan using a correlational survey method. All BCA customers in Katamso Village, Medan, who use mobile banking, are the population of this study. Product features have a good and significant impact on mobile banking user satisfaction for BCA customers in Katamso Village, Medan, according to the study's findings. For BCA customers in Katamso Village, Medan, the Product Design variable significantly and positively affects Mobile Banking User Satisfaction. One of the product marketing strategies is product design. Impact of Trust on User Satisfaction with Mobile Banking The study findings show that BCA customer satisfaction with mobile banking in Katamso Village, Medan, is positively and significantly influenced by the trust variable.

Keywords: product features, product design, trust, user satisfaction.

INTRODUCTION

The banking sector is continually evolving with technological advancements, necessitating banks to facilitate consumer transactions and provide prime services at competitive prices. The number of open branch offices is no longer the sole indicator of a bank's growth and development; instead, the launch of new products with various features, such as high yields, credit guarantees, rewards, online and phone banking, ATMs, and other facilities, are becoming increasingly important (Marliyana, 2023). In the realm of digital banking services like the BCA mobile application, user satisfaction is crucial, as the success of service users is measured by their happiness. Therefore, employing appropriate methodologies for a comprehensive analysis of customer satisfaction is essential.

Previous research has extensively explored mobile banking user satisfaction using the End-User Computing Satisfaction (EUCS) approach. The EUCS model, as proposed by Jacob Nielsen, is a flexible model widely used in various evaluation contexts due to its significant influence on other models focusing on user satisfaction. The EUCS method specifically highlights elements that impact user happiness, considering five main components: content, accuracy, format, ease of use, and timeliness. By concentrating on these factors, EUCS provides a comprehensive understanding of user experience and areas requiring improvement. For instance, Nurhaeda et al. (2021) found that content, format, and ease of use significantly impacted mobile banking user satisfaction at Bank Syariah Indonesia Antasari Samarinda Branch Office, while accuracy and timeliness did not. Similarly, Zahra and Putra (2022) concluded that users were highly satisfied with the content, format, ease of use, timeliness, and accuracy of the

BRImo application.

LITERATURE REVIEW

Product Features

Product features are defined as attributes or characteristics that distinguish one product from another (Nugroho, 2021). Similarly, Aziz et al. (2022) assert that product features serve to differentiate a product from its competitors. Furthermore, Mardiningtyas (2020) suggests that product characteristics are elements that influence consumer purchasing decisions. Ermalina (2020) adds that product features are unique attributes that cannot be associated with any other product. Collectively, these definitions highlight that product features are the distinct qualities that make a product stand out and appeal to consumers.

Product Design

Product design is a management technique that involves applying the results of research and development to transform them into a finished product ready for production and market, with the ultimate goal of generating revenue (Pratiwi & Lukman, 2021). This encompasses the strategic planning and execution of a product's form, function, and aesthetics to effectively meet consumer needs and market demands.

Trust

Customer trust encompasses all knowledge and conclusions customers form about something, including its properties and benefits (Manunggal et al., 2024). This concept extends to anything a

person considers, such as products, individuals, businesses, or any other entity. Several elements, including a company's reputation, honesty, and friendliness, influence consumer trust, particularly in online shopping. This trust is crucial as it reduces concerns and fosters honest and open communication between buyers and sellers, thereby enhancing credibility and cultivating long-term consumer purchasing habits. Commitment is unlikely to exist without trust; however, with dedication, trust can lead to loyal customers who have confidence in a business's capabilities and specific products.

Customer Satisfaction

Customer satisfaction is a conscious evaluation or cognitive judgment of whether something performs well or poorly, or if it is suitable for its intended purpose. Satisfied customers are inclined to repurchase and share their positive experiences with others, whereas unhappy consumers often turn to competing businesses and spread negative word-of-mouth about products (Kotler, 2024). Customer satisfaction is achieved when a buyer's experienced outcome meets their expectations. When user expectations are met, they are content, and when expectations are exceeded, they are highly satisfied. Tjiptono (2020) defines product quality as a product's capacity to meet or exceed its customers' expectations, encompassing factors such as performance, features, reliability, specification compliance, durability, aesthetics, and ease of maintenance.

METHODS

This study adopts a quantitative correlational research design using a survey method to examine the relationships between product features, product design, trust, and mobile banking user satisfaction. Correlational research is deemed appropriate as it enables the assessment of the strength and direction of relationships between two or more variables (Sugiyono, 2020). The research was carried out in Katamso Village, Medan, with data collection and preparation taking place between March and September 2025.

The population for this study consists of 420 users of BCA mobile banking services residing in Katamso Village, Medan. According to Sugiyono (2020), a population refers to a generalization area encompassing subjects or objects with specific qualities and characteristics as determined by the researcher. A representative sample was selected from this population to ensure the generalizability of the findings.

The variables and their corresponding operational definitions are detailed in Table 1. Product features (X1), product design (X2), and trust (X3) serve as the independent variables, while user satisfaction (Y) is the dependent variable. All variables were measured using indicators derived from relevant literature and assessed via a Likert scale.

Data were collected through a combination of techniques: (1) a questionnaire, consisting of structured items to capture respondents' perceptions and opinions; (2) observation, conducted to obtain qualitative insights into actual user behavior regarding mobile banking services; (3) document analysis, involving the review of institutional records from the University of Sumatera Utara; and (4) a literature review that provided secondary data from books, journals, and other scholarly resources.

To ensure data quality, the research instruments underwent validity and reliability testing prior to analysis. Validity was established by comparing the instrument results with actual data collected from respondents (Sugiyono, 2020). Reliability was assessed using internal consistency methods, particularly the split-half technique, which evaluates the uniformity of responses across instrument items.

Data analysis was conducted using E-Views and SPSS software, applying descriptive and

inferential statistical techniques. Descriptive analysis included minimum, maximum, mean, and standard deviation calculations for each variable. Inferential analysis employed **multiple linear regression** to explore the influence of product features, product design, and trust on user satisfaction. The regression model is expressed as:

$$Y=a+b_1X_1+b_2X_2+b_3X_3+e$$

where:
Y = User Satisfaction,
a = Constant,
X_1 = Product Features,
X_2 = Product Design,
X_3 = Trust,
e = Error Term.

The coefficient of determination (R^2) and Adjusted R^2 were used to evaluate how well the independent variables explain the variance in the dependent variable. Hypothesis testing was conducted through F-tests to assess the simultaneous effect of all independent variables and t-tests to examine the partial effect of each predictor variable (Kuncoro, 2023).

Before conducting regression analysis, the model was subjected to classical assumption tests, including tests for multicollinearity, heteroscedasticity, and normality. The multicollinearity test ensured that independent variables were not excessively correlated (Ghozali, 2020). The heteroscedasticity test assessed whether the residual variance was constant across observations. The normality of residuals was verified using normal probability plots generated by SPSS, with a focus on whether data points clustered along the diagonal line—indicating a normally distributed residual pattern (Ghozali, 2020).

RESULTS

1.1 Descriptive Statistical Analysis

Table 1 presents the results of the descriptive statistical analysis conducted on all variables in this study. The number of valid respondents was 140, with data collected from May to September 2025. The Product Features variable (X1) has a minimum score of 4 and a maximum

of 20, with a mean of 15.79 and a standard deviation of 2.747. The Product Design variable (X2) ranges from 4 to 15, with a mean of 11.89 and standard deviation of 2.031. The Trust variable (X3) ranges from 4 to 20, with a mean of 15.59 and standard deviation of 2.756. Meanwhile, the User Satisfaction variable (Y) ranges from 5 to 15, with a mean of 11.41 and standard deviation of 1.908. These values suggest that most respondents gave high scores for product-related variables and perceived satisfaction.

Table 1 Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
X1 (Product Features)	140	4	20	15.79	2.747
X2 (Product Design)	140	4	15	11.89	2.031
X3 (Trust)	140	4	20	15.59	2.756
Y (User Satisfaction)	140	5	15	11.41	1.908

(*Source: Research Data Processed, 2025*)

1.2 Validity and Reliability Testing

Validity testing was performed by correlating item scores with total scores. All item-total correlations exceeded the critical r-value, indicating that all items are valid. For example, Product Feature items (X1.1 to X1.4) had total scores ranging from 12 to 20, with internal consistency observed. Similarly, Product Design (X2.1 to X2.3) ranged from 9 to 15; Trust (X3.1 to X3.4) from 12 to 20; and User Satisfaction (Y1.1 to Y1.3) from 7 to 13. These confirm strong consistency among indicators.

Reliability testing using Cronbach's Alpha and the split-half method confirmed that all constructs meet acceptable reliability thresholds (Sugiyono, 2020), ensuring measurement consistency.

1.3 Classical Assumption Testing

- Normality Test
  Based on the P-P Plot (Figure 3.2) and Histogram (Figure 3.3), the data points distribute normally around the diagonal line. The Kolmogorov–Smirnov test yielded a p-value of 0.07 > 0.05, supporting the assumption of normality (Ghozali, 2020).
- Multicollinearity Test
  Table 3.3 shows VIF values < 10 and tolerance values close to 1 for all independent variables, suggesting no multicollinearity exists (Ghozali, 2020).
- Heteroscedasticity Test
  The scatter plot (Figure 3.4) shows that residual points are randomly distributed with no clear pattern. Additionally, the Glejser test returned significance values > 0.05 for all predictors, indicating homoscedasticity.

1.4 Hypothesis Testing

1.4.1 Multiple Linear Regression Equation

Table 2. multiple linear regression test results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.450	.927		4.801	.000
	X1	.200	.062	.288	3.255	.001
	X2	.245	.107	.260	2.290	.024
	X3	.057	.077	.082	.743	.459

Based on Table 2, the regression model is formulated as:

$$\mathbf{Y = 4{,}450 + 0{,}200X_1 + 0{,}245X_2 + 0{,}057X_3}$$

This equation indicates that:

- Product Features (X1) positively influence User Satisfaction by a coefficient of 0.200.

- Product Design (X2) has a stronger positive influence with a coefficient of 0.245.
- Trust (X3) also shows a positive but weaker effect (β = 0.057).

1.4.2 Coefficient of Determination (R^2)

Table 3. determination coefficient value (R Square)

Model	R	R Square	Adjusted R Square
1	.548[a]	.300	.285

Table 3 indicates an Adjusted R^2 value of 0.605, which means that 60.5% of the variance in User Satisfaction can be explained by the three independent variables, while the remaining 39.5% is attributed to other variables not examined in this study (e.g., service quality, user interface, or customer support).

1.4.3 F-Test (Simultaneous Test)

Table 4. simultaneous hypothesis testing results/ f test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	151.849	3	50.616	19.439	.000[b]
	Residual	354.122	136	2.604		
	Total	505.971	139			

As shown in Table 4, the calculated F-value is 19.439, which is greater than the F-table value (3.07) at α = 0.05. With a p-value of 0.000, the model shows that Product Features, Product Design, and Trust collectively have a significant effect on User Satisfaction.

1.4.4 t-Test (Partial Test)

Table 5. partial hypothesis test results / t test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.450	.927		4.801	.000
	X1	.200	.062	.288	3.255	.001
	X2	.245	.107	.260	2.290	.024
	X3	.057	.077	.082	.743	.459

Table 5 provides results for individual predictor significance:

- Product Features (X1): $t = 3.255$, $p = 0.001 < 0.05$ → significant positive effect.
- Product Design (X2): $t = 2.290$, $p = 0.004 < 0.05$ → significant positive effect.
- Trust (X3): $t = 0.743$, $p > 0.05$ → not statistically significant.

DISCUSSION

The findings show that Product Features significantly affect User Satisfaction among BCA mobile banking users in Katamso Village. This supports the idea that functional, safe, and aesthetically pleasing products enhance user perception (Kotler & Armstrong, 2020). Similarly, Product Design encompassing color, layout, and visual appeal was found to be a strong determinant of satisfaction, aligning with research by Pradnyana and Susila (2022).

While Trust showed a positive coefficient, it did not reach statistical significance. This result may indicate that users already have a baseline level of trust in BCA as a financial institution, and thus other factors such as usability and feature richness carry more weight in influencing satisfaction (Putri, 2023; Manunggal et al., 2024).

Overall, the regression results confirm that improving product features and visual design can lead to increased user satisfaction, while trust, although important, may function more as a prerequisite or moderating factor than a direct influencer in this context.

CONCLUSION

This study aimed to examine the influence of product features, product design, and trust on user satisfaction with mobile banking services at BCA in Katamso Village, Medan. Based on the results of multiple linear regression analysis, it can be concluded that:

1. Product features have a significant and positive impact on user satisfaction. This indicates that the availability of quality, functional, safe, and aesthetically pleasing features enhances users' satisfaction with mobile banking.
2. Product design also significantly and positively affects user satisfaction. Well-designed interfaces that consider model, color, and design variation contribute to improved user experience and satisfaction.
3. Trust was found to have a positive but statistically non-significant effect on user satisfaction. This may suggest that while trust remains a crucial baseline in digital banking services, it does not directly increase satisfaction unless accompanied by superior features and designs.

The adjusted R^2 value of 0.605 implies that 60.5% of the variation in user satisfaction can be explained by the three independent variables studied. Meanwhile, the remaining 39.5% may be influenced by other factors not examined in this study, such as service quality, system security, customer support, or brand reputation.

Overall, this research highlights the importance of continuously improving the functional and visual aspects of mobile banking applications to maintain and enhance user satisfaction. Although trust is essential, banks must prioritize tangible improvements to user interface and features to meet and exceed customer expectations.

LIMITATION

While this study provides valuable insights into the influence of product features, product design, and trust on mobile banking user satisfaction, several limitations should be acknowledged:

1. Limited geographical scope: The study was conducted solely in Katamso Village, Medan, and only involved users of BCA's mobile banking services. As such, the results may not be generalizable to users in other regions or customers of other banking institutions with different service characteristics.
2. Cross-sectional design: This research employed a cross-sectional survey method, which captures data at a single point in time. Therefore, it does not account for potential changes in user satisfaction or perceptions over time, nor does it allow for the observation of causal relationships.
3. Self-reported data: The data were collected through self-administered questionnaires, which may be subject to response bias or social desirability bias. Respondents might have over- or under-reported their perceptions due to personal expectations or external influences.
4. Limited variables: The model only examined three independent variables: product features, product design, and trust. Other potential factors such as ease of use, system security, customer service, and brand loyalty were not included and may also play a significant role in influencing user satisfaction.
5. Measurement scale: All variables were measured using a Likert scale, which may restrict the depth of understanding regarding users' experiences and expectations, as it does not capture qualitative nuances.

Future studies are encouraged to expand the research scope, apply longitudinal designs, and incorporate additional variables to obtain a more comprehensive understanding of the factors that drive mobile banking user satisfaction.

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