

## **Influence Of Consumer Behavior and Product Quality on Consumer Decision Making in Selecting DANA as Financial Technology Mobile Payment Application**

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### **Abstract**

As technology advances and becomes more sophisticated, consumer behavior patterns shift. The presence of such events stimulates diverse corporate industries to compete in order to develop innovation. Businesses in the field of financial technology also use it (Fintech). DANA is a mobile payment application that supports ATM cards for online purchases. DANA has proven to be the third most popular app in Indonesia, with the most users and the most downloads. The goal of this research is to analyse the influence of customer behavior and product quality on the selection to use DANA as a mobile payment application. This type of research is quantitative by using descriptive data analysis techniques that use multiple linear hypothesis models with a total of 400 research samples. The results obtained from this study that consumer behavior and quality productx have a significant and positive effect on partial (individual) decision making. As for the results of simultaneous testing (collectively) on consumer behavior and product quality to consumer decision making in choosing DANA as a mobile payment application has a significant effect and the results are accepted.

**Keywords:** Consumer Behavior, Product Quality, Decision Making, Mobile Payment

### **Abstrak**

Meningkatnya pertumbuhan teknologi yang semakin cepat dan semakin canggih, hal ini membuat pola perilaku konsumen ikut mengalami perubahan. Adanya peristiwa tersebut mendorong untuk berbagai industri bisnis berlomba-lomba menciptakan inovasi. Hal ini juga dimanfaatkan oleh para pelaku bisnis dibidang Financial Technology (Fintech). DANA merupakan aplikasi mobile payment yang memanfaatkan kartu ATM yang berguna untuk melakukan pembelian secara online. Terbukti hingga sampai saat ini DANA menempati posisi ketiga dengan jumlah pengguna terbanyak dan jumlah download terbanyak di Indonesia. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh perilaku konsumen dan kualitas produk terhadap pengambilan keputusan dalam memilih DANA sebagai aplikasi mobile payment. Jenis penelitian ini adalah kuantitatif dengan menggunakan teknik analisis data deskriptif yang menggunakan model hipotesis linear berganda dengan jumlah sampel penelitian sebanyak 400 responden. Hasil yang didapat dari penelitian ini bahwa perilaku konsumen dan kualitas produk berpengaruh signifikan dan positif terhadap pengambilan keputusan secara parsial (individu). Sementara untuk hasil pengujian simultan (secara bersama-sama) pada perilaku konsumen dan kualitas produk terhadap pengambilan keputusan konsumen dalam memilih DANA sebagai aplikasi *mobile payment* berpengaruh signifikan dan hasilnya diterima.

**Kata Kunci:** Perilaku Konsumen, Kualitas Produk, Pengambilan Keputusan, Mobile Payment.

## INTRODUCTION

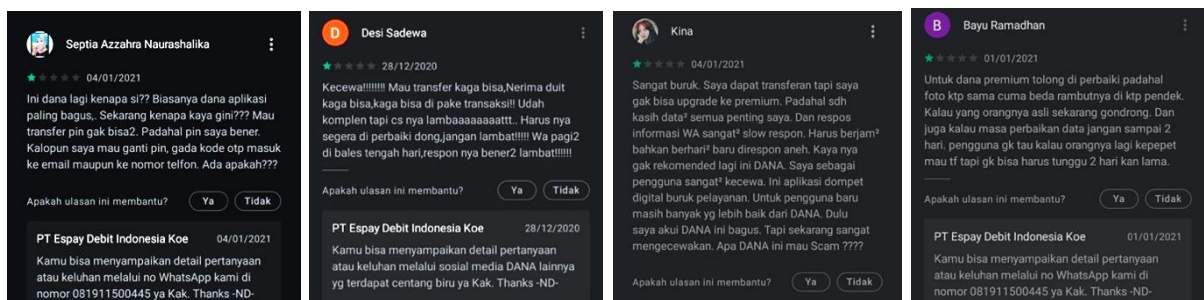
Today's technological advancements are characterized by rapid and dynamic developments. Indirectly, the adoption and use of this technology is rapidly expanding, resulting in a dramatic shift in consumer behavior. Various types of sectors, including the financial technology industry, make use of technological advancements.

Fintech growth isn't just about technology-based financial management of money; digital or electronic wallets, often known as e-wallets, are also on the rise. This e-wallet is typically used for a variety of online payment transactions, such as purchasing goods or services. According to information collected from Bank Indonesia, there are 51 electronic money corporations that have been registered and have got approval from the Bank Indonesia. OVO, Gopay, ShopeePay, Paytren, DANA, and others are examples of these applications or e-wallets.

Mobile Payment is a type of Fintech that allows users to conduct various types of transactions using a cellular network. DANA is one of the mobile payment systems that is currently being developed.

DANA is a digital wallet service application that allows you to undertake many types of online purchasing with the help of an ATM card. DANA is a relatively young application, yet it is capable of adapting swiftly and meeting the needs of its users. According to a magazine or iPrice article published in 2020, DANA is presently ranked third in Indonesia in terms of the number of users and the number of application downloads, trailing only Gopay (Gojek) and OVO.

Despite the fact that DANA's performance is pretty good, as evidenced by observations on the Android-based application download service known as the Playstore, many DANA users continue to gripe about the DANA application. This is evident in various Instagram comment fields, as well as the Playstore application's assessment and comment columns.



**Figure 1.1 Example of comments about the application of funds**

Source: Processed data on Playstore (2021)

According to Figure 1.1, the application still has to be developed in order to provide comfort to its users. As a result, the title of this study is "The Influence of Consumer Behavior and Product Quality on Decision Making in Choosing DANA as a Financial Technology Mobile Payment Application" in order to see the pattern of consumer behavior and product quality in the DANA application.

## **LITERATURE**

### **Consumer Behavior**

Consumer behavior, according to Kotler and Keller (2016), is the study of how individuals, groups, or organizations choose, acquire, use, and put goods, services, ideas, or experiences to meet their desires and needs. Consumer behavior can be classified into three groups or dimensions:

- a. Cultural Factor
- b. Social Factor
- c. Personal Factor

### **Product Quality**

Kotler and Keller (2016) write: "Product quality is all the combination of product qualities from marketing, engineering (planning), manufacturing (product), and maintenance that make the items utilized match consumer expectations,"

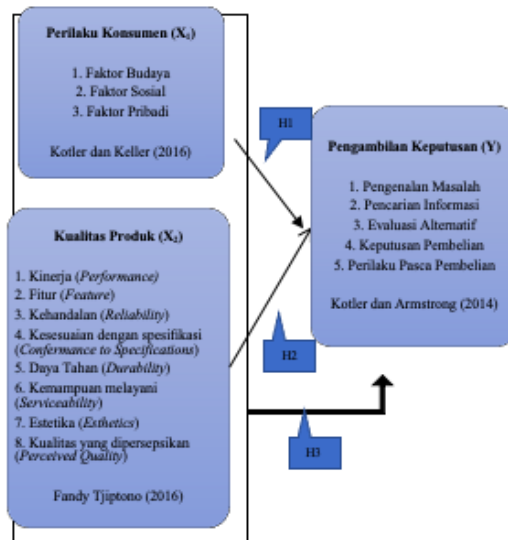
### **Decisions Making**

Decision-making, according to Siagian (2015), is a systematic approach to the nature of the choices encountered and choosing actions that are the most appropriate actions based on calculations. The most crucial aspect of decision-making is establishing the stages or activities for acquiring information about the scenario in which a choice must be made.

According to Kotler and Armstrong (2014), the aspects of decision making are as follows:

- a. Problem Introduction
- b. Search Information
- c. Alternative Evaluation
- d. Buying decision
- e. Post Purchase Behavior

**Framework**



**Figure 2. Framework**  
 Source: The author's results (2021)

**Hypothesis**

It is then built on a hypothesis based on the framework above, which incorporates temporary conclusions on the variables researched as follows:

- H1: Consumer Behavior has a significant effect on Consumer Decision Making.
- H2: Product Quality has a significant effect on Consumer Decision Making.
- H3: Consumer Behavior and Product Quality have a significant effect on Consumer Decision Making.

**METHODE**

**Types of Research**

This study employs descriptive and causal (conclusive) research methods with a quantitative approach, as shown by some of the descriptions above.

Descriptive research, according to Sugiyono (2017), is study undertaken to determine the existence of independent variables, focusing solely on one or more variables without comparing or relating them to other factors.

**Operational Variables and Measuring Scale**

a. Operational Variables

The independent variable and the dependent variable were used in this study. This independent variable is made up of consumer behavior and product quality variables. While the dependent variable is decision making.

b. Scale of Measurement

This study used an ordinal scale with a likert five (odd) instrument scale as the measurement scale.

**Population and Sample**

a. Population

The population in this study were users of the DANA mobile payment application. According to Kompas.com, which was last publicized in 2020 regarding the number of DANA application users, it did not mention that DANA application users had reached 40,000,000 users. (Kompas.com, 2020)

b. Sample

This study uses a non-probability sampling technique, with the type of purposive sampling. The large number of the population of DANA application users is 40,000,000 users because the data and sources that the author believes and are valid, then the determination of the total sample is determined by the Slovin formula. As a result of the calculating, the sample size for the study is 400 respondents.

### **The classical assumption**

The classical assumption test carried out in this research consists of:

- a. Normality test
- b. Multicollinearity Test
- c. Heteroscedasticity Test

### **Bivariate Correlation Analysis**

Partial correlation analysis is used to determine the strength of the correlation between the two variables (independent variable and dependent variable) where other variables that are considered influential are controlled or fixed (as control variables).

### **Multiple Linear Analysis**

Multiple regression analysis was used to test the hypothesis of the influence between the independent variables on the dependent.

### **Hypothesis Test**

Hypothesis testing conducted in this study consisted of:

- a. t-test (Partial)
- b. F-Test (Simultaneous)
- c. Coefficient of Determination

## **RESULT AND DISCUSSION**

### **Descriptive Analysis**

c. Consumer Behavior Responses from Respondent

The consumer behavior variable was classified into the good category with a percentage of 71.9 percent based on the findings of the research conducted.

d. Responses from Respondents on Product Quality

The product quality variable was classified into the good group with a percentage of 76.06 percent, according to the findings of the research.

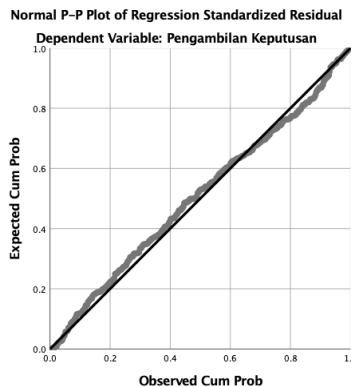
e. Responses from Respondents on Decision Making

The decision-making variables were found to be in the good category with a percentage of 75.80 percent based on the findings of the study.

### **Classical Assumption Test**

a. Normality Test

Normality test is used to determine whether the data obtained from the research results are normally distributed or not, so that the data can be continued into the regression model. With the help of IBM SPSS 25, the normalcy test employed in this study uses the Probability Plot approach and the One-Sample Kolmogorov-Smirnov Test, as follows:



**Figure 4.1 Graph of P-Plot Normal Normal Test Results**

According to Figure 4.1, the data is normally distributed, as indicated by the points/plots spreading and following the diagonal line's orientation.

**Table 4.1 One-Sample Kolmogorov-Smirnov Test**

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		400
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	2.64701108
Most Extreme Differences	Absolute	.045
	Positive	.045
	Negative	-.039
Test Statistic		.045
Asymp. Sig. (2-tailed)		.053 <sup>c</sup>

a. Test distribution is Normal.  
 b. Calculated from data.  
 c. Lilliefors Significance Correction.

The significance value of 0.53 in the table above, which is the Kolmogorov-Smirnov normality test, indicates that the test is normally distributed, because the significance rate ( $\alpha$ )  $\geq$  0.05.

**b. Multicollinearity Test**

According to Indrawati (2015), multicollinearity testing is used to identify the existence or absence of multicollinearity symptoms in multiple linear regression where there should not be a high correlation between independent variables, reducing confidence in the test results.

**Table 4.2 Multicollinearity Test Results**

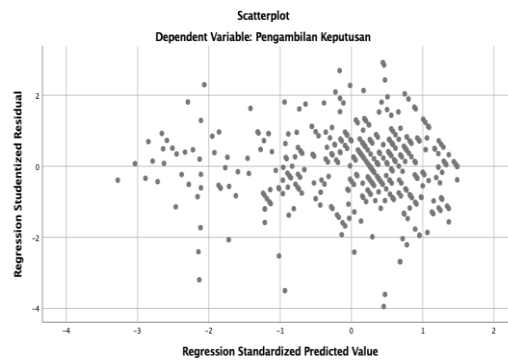
Coefficients <sup>a</sup>							
Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.282	.609		2.106	.036	
	Perilaku Konsumen	.173	.025	.228	6.802	.000	.257 3.890
	Kualitas Produk	.477	.022	.737	21.964	.000	.257 3.890

a. Dependent Variable: Pengambilan Keputusan

Based on the results of the aforesaid multicollinearity test on the variables of customer behavior and product quality, the results obtained are VIF 3.890, which means  $VIF \leq 10$ , and tolerance results of 0.257, which means tolerance value  $> 0.10$ . As a result, it is possible to conclude that the data in this regression model does not exhibit symptoms of multicollinearity amongst independent variables.

**c. Heteroscedasticity Test**

The heteroscedasticity test is used to determine whether there is a variable inequality from one observation's residual to another observation in this regression model. This heteroscedasticity test use the Scatterplot Graph detection method.



**Figure 4.2 Scatterplot Graph**

There is no clear pattern in the image above, the dots are scattered above and below zero. As a result, we can conclude that this test is free of heteroscedasticity.

**Bivariate Correlation Analysis**

Based on the results of simple correlation analysis (Bivariate Correlation) of the variables between consumer behavior and product quality with the dependent variable, namely decision making, the following results are obtained;

- 1) Correlation between consumer behavior and decision making

**Table 4.3 Correlation of Consumer Behavior with Decision Making**

		Perilaku Konsumen	Pengambilan Keputusan
Perilaku Konsumen	Pearson Correlation	1	.863**
	Sig. (2-tailed)		.000
	N	400	400
Pengambilan Keputusan	Pearson Correlation	.863**	1
	Sig. (2-tailed)	.000	
	N	400	400

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From the results of a simple correlation analysis between the variables of consumer behavior and decision making above, the correlation value is 0.863. Thus, it can be concluded that there is a "very strong" relationship between consumer behavior and decision making. Meanwhile, the direction of the relationship is positive because the value of r is positive, meaning that if consumer behavior increases, decision making will increase in choosing DANA as a mobile payment application.

2) Correlation between product quality and decision making

**Table 4.4 Correlation of Product Quality with Decision Making**

		Kualitas Produk	Pengambilan Keputusan
Kualitas Produk	Pearson Correlation	1	.934**
	Sig. (2-tailed)		.000
	N	400	400
Pengambilan Keputusan	Pearson Correlation	.934**	1
	Sig. (2-tailed)	.000	
	N	400	400

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From the results of simple correlation analysis between product quality variables and decision making above, the correlation value is 0.934. This shows that there is a "Very Strong" relationship between product quality and decision making. Meanwhile, the direction of the relationship is positive because the value of r is positive, meaning that if the quality of the product increases, decision making will increase in choosing DANA as a mobile payment application.

d. Multiple Linear Analysis

Based on multiple linear regression estimation using IBM SPSS version 25, the results are obtained as shown in the following table:

**Table 4.5 Results of Multiple Linear Analysis**

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.282	.609		2.106	.036		
	Perilaku Konsumen	.173	.025	.228	6.802	.000	.257	3.890
	Kualitas Produk	.477	.022	.737	21.964	.000	.257	3.890

a. Dependent Variable: Pengambilan Keputusan



Based on the findings of the previous multiple linear analysis, the regression equation is as follows:

$$Y = 1,282 + 0,173X_1 + 0,477X_2$$

The equation may be summed up as follows:

- 1) The constant value of 1.282 says that if the customer behavior variable (X1) and product quality variable (X2) both have a value of 0 (zero), then decision making has a value of 1.282, assuming that all other factors that might impact decision making are constant.
- 2) The variable regression coefficient on consumer behavior (X1) is 0.173, indicating a direct link between the consumer behavior variable (X1) and the decision-making variable (Y). If the consumer behavior variable rises by 1%, decision making will increase by 0.173 if the other independent variables stay constant.
- 3) The regression coefficient on the product quality variable (X2) is 0.477, indicating a direct link between the product quality variable (X2) and the decision-making variable (Y). If the consumer behavior variable rises by 1%, the decision-making variable increases by 0.477, assuming the other independent factors stay constant.

## Hypothesis Test

### a. Partial Test (t-test)

The partial hypothesis test is used to determine the extent to which one independent variable may explain the dependent variable.

**Table 4.6 Partial Test Results (t-test)**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.282	.609		2.106	.036
	Perilaku Konsumen	.173	.025	.228	6.802	.000
	Kualitas Produk	.477	.022	.737	21.964	.000

a. Dependent Variable: Pengambilan Keputusan

Based on the t-test results table above, the t-table value is 1.971 with a significance level of 0.05. As a result, the partial test is as follows:

- 1) The t-count of the consumer behavior variable (X1) is 6.802. This implies that the t-count is larger than the t-table ( $6.802 > 1.971$ ), and the significant value is  $< 0.05$ . As a result, for the consumer behavior variable, there is a significant and positive effect between consumer behavior and decision making.
  - 2) The t-count of the product quality variable (X2) is 21.964. This implies that the t-count is larger than the t-table ( $21,964 > 1.971$ ), and the significant value is  $< 0.05$ . As a result, for the product quality variable, there is a significant and positive effect between product quality and decision making.
- b. Simultant Test (F-test)

The simultaneous test, also known as the F-test, was used to assess the influence of independent variables (customer behavior and product quality) on the dependent variable (decision making) at the same time.

**Table 4.7 Simultaneous Test Results (F-Test)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21537.500	2	10768.750	1529.225	.000 <sup>b</sup>
	Residual	2795.660	397	7.042		
	Total	24333.160	399			

a. Dependent Variable: Pengambilan Keputusan  
 b. Predictors: (Constant), Kualitas Produk, Perilaku Konsumen

According to the F-test results table above, the F-count value is 1529.225, which is more than the F-table of 3.04, and the significance value is less than 0.05, which is 0.00. Based on these findings, it is possible to conclude that the variables of customer behavior and product quality, either together or simultaneously, have an impact on decision making (accepted).

c. Coefficient of Determination

From the data obtained by the author, the results of testing the coefficient of determination are as follows:

**Table 4.8 Results of the Coefficient of Determination Analysis**

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.941 <sup>a</sup>	.885	.885	2.654

a. Predictors: (Constant), Kualitas Produk, Perilaku Konsumen  
 b. Dependent Variable: Pengambilan Keputusan

According to the coefficient of determination test listed above, R Square has a value of 0.885 or 88.5 %. This demonstrates that the independent variables, namely customer behavior and product quality, may explain the dependent variable of decision making. While the remaining 11.5 % (100% -88.5%) is explained by other variables not included in this analysis.

The result of 88.5 % is considered high, indicating that the independent variables analyzed give a lot of information needed to forecast fluctuations in these variables.

Meanwhile, the coefficient "R" acquired a value of 0.941 or 94.1 %, indicating that the link between consumer behavior and product quality on decision making has a very strong effect.

**CONCLUSION**

- 1) Based on the results of the partial (individual) test on the consumer behavior variable, the t-count value is 6.802 and the significance value is 0.00. The variable of customer behavior may thus be inferred to have a significant and positive influence on decision making.

- 2) Based on the results of the partial (individual) test on the product quality variable, the t-count value is 21,964 and the significance value is  $< 0.05$ . The variable of product quality may thus be inferred to have a significant and positive influence on decision making.
- 3) The F-count value of 1529.225 is larger than the F-table of 3.04 and has a significant value of less than 0.05 based on the results of simultaneous testing or F-test on the variables of customer behavior and product quality simultaneously. Based on these findings, it is possible to conclude that the factors of customer behavior and product quality, either simultaneously or combined, have an impact on decision making.

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