

## Factors that Influence the Decision in Using Social-Media as a Media for Buying and Selling Transaction

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### Abstract

There are many uses of technology and the use of technology used in everyday life. One of the uses of technology is social media, ranging from facebook, Twitter, Instagram and many more. Increased use of social media can change everyone's lifestyle. Facebook is one of the social media that has its own benefits and functions. In this study, examined the part of Facebook where the use of facebook as a buying and selling transaction. The use of facebook as a medium of buying and selling transactions has become commonplace for the people of Indonesia, judging by the data in 2019 facebook users reached 120 million users. The purpose of this research is to find out the influence of variable trust, transaction quality and satisfaction on intention to use. With this, researchers used Structural Equation Modeling-Partial Least Square (SEM-PLS) method as an analysis technique for relation patterns between variables in the study. The results showed that trust has the highest value of relationships or relationships of 0.710 compared to transaction quality and satisfaction. This indicates that the **level of trust is very influential on the intention of use and this is usually one of the benchmarks in conducting buying and selling transactions.**

Keywords: Intention to Use; Trust; Transaction Quality; Satisfaction; Decision Factors

### 1. Introduction

In the era of technological development in the world, there are many uses of technology and the use of technology used in everyday life. One of the uses of technology is social media, ranging from facebook, Twitter, Instagram and many more. Increased use of social media can change everyone's lifestyle. Nowadays with the development and progress of social media has become one of the needs that can facilitate various affairs and have an impact on existing sectors.

With the development of the world of technology and information can make the internet as one of the most popular communication media by the public. Based on survey data conducted by the Indonesian Association of Internet Service Providers (APJII) in 2019-2020 (Q2) which states that from the survey results, there are about 73.7% or about 196.71 million Internet users out of a total population of 266.91 million people in Indonesia. While the data in 2018, the number of internet users there is about 64.8% or 171.17 million. Which means that the increase in internet usage from year

to year is increasing. The most visited internet usage based on social media is facebook which has a figure of 65.8 compared to other social media. Now the issue is how relevant the use of Facebook as media on deciding buy and sell transaction. Therefore, this research may find which variables may play important role in deciding the decision-making process.

In deciding a purchase, there are many factors that can influence consumer behavior both from internal and external factors. According to (Verina, Yulianto, & Latief, 2014) the large influence on online purchases is determined on the factors of website design, reliability, customer service and trust.

A system that has good performance means that the system has *the ability of hardware and software* in supporting the system to facilitate in use that has an impact on improving performance both individually and organizationally (Simeru & Tanamal, 2020).

In the research conducted by (Tanamal, 2019) on social media, Youtube as a medium of

buying and selling, with the results of research that **consumer satisfaction has the highest contribution to the decision in conducting buying and selling transactions.** As Comparison on this research, the researcher will search using different social media to find other important variable which will determine the decision-making process.

## 2. Literature Review

### 2.1 Structural Equation Modeling (SEM)

The difference between the regression analysis method and Structural Equation Modeling (SEM) is that the regression analysis method analyzes the relationship between the observed variables, while the Structural Equation Modeling (SEM) analysis method analyzes the latent or unobserved variables. Structural Equation Modeling (SEM) is one of the analytical techniques that can be used by researchers in analyzing patterns of relationships between variables involved in a study, namely variables and indicators and one variable with other variables. There are two types of variables in the general form of Structural Equation Modeling (SEM), including:

#### 1. Latent Variable

Latent variables are variables that cannot be measured directly (abstractly). Latent variables can only be observed indirectly through their effect on the observed variables. Latent variables are symbolized by a circle (ellipse). There are two types of forms in latent variables, including:

##### a. Exogenous Variables ( $\xi$ / *ksi*)

Exogenous variables are independent variables that can affect endogenous or dependent variables.

##### b. Endogenous Variables ( $\eta$ / *eta*)

Endogenous variables are dependent variables that can affect exogenous variables or independent variables.

#### 2. Observed Variable (*Observed* or *Measured Variable*)

Observed variables are variables that can be measured directly, observed variables are also referred to as indicator variables. Observed variable is a measure of the latent variable, in which each type of latent variable has a symbol:

a. Observed variable which is also a measure of the exogenous variable, which is symbolized as "x".

b. Observed variable which is also a measure of the endogenous variable, which is symbolized as "y".

The Structural Equation Modeling (SEM) model has two models, including the structural model and the measurement model. The following is an explanation of the two forms of models in Structural Equation Modeling (SEM):

#### 1. Structural Model

The structural model is a model that can describe the relationship between latent variables, the relationship between variables as follows:

- Exogenous with Endogenous, which is symbolized by  $\gamma$  (*gamma*).
- Endogenous to Endogenous, which is symbolized by  $\beta$  (*beta*).

#### 2. Measurement Model

The measurement model is a model that describes the two variables, namely the latent variable and the unobserved variable. The loading factor that connects the relationship between these variables is symbolized as  $\lambda$  (*lambda*).

Apart from the model owned by Structural Equation Modeling (SEM), it also has two errors in Structural Equation Modeling (SEM) including:

#### 1. Structural Error

In structural errors, exogenous variables cannot predict endogenous variables perfectly, so that there are components that have structural errors which can be symbolized as  $\zeta$  (*zeta*).

#### 2. Measurement Error

In measurement errors, there are latent variables that cannot be perfectly described by the observed variables, so that there is an error component in the measurement that has a relationship with the observed variable:

a. X is symbolized as  $\delta$  (*delta*)

b. Y is symbolized as  $\varepsilon$  (*epsilon*) (Robi, Kusnandar, & Sulistianingsih, 2017).

Intended use is a person's willingness, tendency or intention to perform certain behaviors. The theory of planned behavior and the development of the theory of reasoned action can be explained from this definition of intention (Sukma, Hadi, & Nikmah, 2019).

Trust (TU) is one of the bases of business transactions involving two or more parties, each of whom has trust in one another. Trust that is built from scratch can be proven and cannot be recognized by other parties. Trust has been considered as an impetus in the form of transactions between sellers and buyers so that customer satisfaction can be realized as expected from the parties concerned (Tanamal, 2019).

Satisfaction is a feeling of pleasure in someone where the feeling of pleasure arises when looking at the results of a comparison between perceptions or impressions of performance on the results of a product and the expectations obtained. Satisfaction is also related to quality, in other words, total quality management (TQM), which is a product designed with the aim of improving the quality of a product, service and trade process that is carried out continuously (Millah & Suryana, 2020).

Job Satisfaction or Job Satisfaction can also be defined as the way everyone can feel a job that results from a person's attitude towards various jobs (Siagian & Khair, 218). Quality is the parts that are in a product / service that can cause a match to the resulting product. The best quality of information will increase usability and increase interest in the use of information systems (Fitriani, 2020). Transactions between sellers and buyers can be realized consumer satisfaction with the trust of both parties in various transactions (Tanamal, 2019).

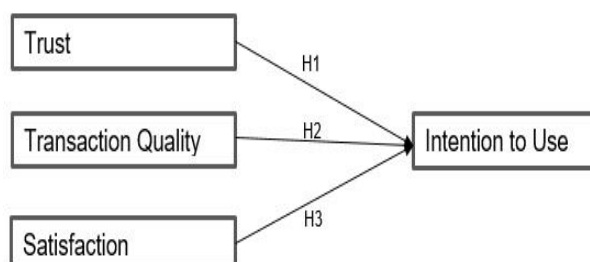


Figure 1. Analysis Model

Based on the analysis medium in Figure 2, the formulation of the hypothesis in this study are:

H1: Trust has a significant positive effect on Intention to Use

H2: Transaction Quality has a positive effect on Intention to Use

H3: Satisfaction has a significant positive effect on Intention to Use.

### 3. Research Methodology

This study uses the Structural Equation Modeling - Partial Least Square (SEM - PLS) method which has a minimum sample size of 10 multiplied by each path (Abdillah & Hartono, 2015). In this study, there are three lines, so the sample to be used is at least 30 samples.

Population is a collection or the total number of collections of individuals, goods, groups, communities or other units that can be understood and researched (Bergin, 2018). Population refers to a group of people who are a reference for events of interest to the researcher, thus the researcher

analyzes an existing event or phenomenon. The population in this study is the Indonesian people who use the Facebook application as a medium for buying and selling transactions (Tanamal, 2019).

The sampling process in this study uses non-probability sampling, in which the definition of non-probability sampling itself is a way in which the process of withdrawing or taking several samples does not have the same chance of each population used in this study as a sample. The determination of the sampling in this study using accidental sampling (accidental sampling) and judgment sampling (Tanamal, 2019). The sample used in this study were Facebook users who made buying and selling transactions, the number of samples in this study were **100 samples**.

The data collection method uses online-based questionnaires using one of the platforms from Google Form. The results received will be measured using a Likert scale. The Likert scale is a scale made with the aim of finding out the strength of the subject between agreeing and disagreeing on a statement, using five points to calculate the score of the respondent namely.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

By using a Likert scale, respondents can choose the answer to each question on the questionnaire provided by the researcher.

Question indicators on Trust variables;

1. Believe that Facebook can work well as a medium for buying or selling transactions.
2. Believe in the validity of Facebook as a medium for buying or selling transactions.
3. Testimonials on the Facebook application give the effect of trust.

Transaction Quality variable question indicators;

1. Facebook makes my buying or selling transactions easier.
2. Facebook makes the effectiveness of my buying or selling transactions increasing.
3. Facebook is very useful for my buying or selling transactions.

Satisfaction variable question indicator;

1. The quality provided by the seller or buyer on the Facebook application is as promised.
2. The services provided are good and provide satisfaction to consumers (buyers and sellers).
3. The Facebook application provides satisfaction for every consumer who uses it (buyers and sellers).

Indicator question variable Intention to Use;

- 1 I would recommend buying and selling transactions via Facebook to other people.
- 2 I would say good things about buying and selling through the Facebook application to other people.
- 3 I will return to using Facebook for the next sale and purchase transaction.
- 4 I will make the Facebook application my first choice for buying and selling transactions.

#### 4. Results And Discussion

Tests were carried out on 100 respondents. From the collected data of respondents, a characteristic test was carried out on the population and the results obtained were that a total of 9 respondents had to be expelled and there was a total of 91 respondents who could continue in the next test.

##### 4.1 Respondent

Table 1. Respondent Data

Gender	Total	Percentage
Male	55	60%
Female	36	40%
Age		
Under 18 Years	5	5%
18-21 Years	28	31%
22-30 Years	42	46%
Over 30 Years	16	18%

##### 4.2 Convergent Validity Test

The validity test can describe a question used in research to be able to show something that is measured is valid and if the question is significantly correlated with the total score, it can be stated that the question is valid (Mokoginta, Lambey, & Pontoh, 2017). Validity test also refers to the extent to which an instrument used in research can perform its function (Tanamal, 2019). If the AVE (Average Variance Extracted) value > 0.5 (Herani, 2018) or the Outer Loadings value > 0.7, the indicator is considered valid (Santosa, 2018).

Table 2. Convergent Validity Test: Outer Loadings

Variable	ITU	SFN	TQ	TU	Note
ITU1	0,818				Valid
ITU2	0,835				Valid
ITU3	0,799				Valid
ITU4	0,759				Valid
TQ1			0,867		Valid
TQ2			0,868		Valid
TQ3			0,884		Valid

Variable	ITU	SFN	TQ	TU	Note
SFN1		0,749			Valid
SFN2		0,759			Valid
SFN3		0,865			Valid
TU1				0,837	Valid
TU2				0,778	Valid
TU3				0,866	Valid

Convergent validity testing in the table above shows that the test results on all variables in this study have an outer loadings value > 0.7 which means that the indicators in the study can represent their latent variables and can be tested further.

Table 3. Convergent Validity Test: AVE

Variable	AVE
ITU	0,645
SFN	0,628
TQ	0,762
TU	0,685

The table above shows the results on the convergent validity test of Average Variance Extracted (AVE), where all the results of the test show all AVE values > 0.5, which means that the results of the convergent validity test have the results that the indicators in this study are valid.

##### 4.3 Discriminant Validity Test

In discriminant testing that explains how one latent variable is with another latent variable, where the events obtained by latent variable A are different from the events obtained by latent variable B (Santosa, 2018). There are two tests that must be carried out on discriminant validity testing, namely at the level of indicators and latent variables (Herani, 2018).

At the indicator level, the test results are seen from the cross loading, where the value of the outer loadings of an indicator against its latent variable > the value of the outer loadings of an indicator against other latent variables.

Table 4. Discriminant Validity Test: Level Indicators

Indicator	ITU	SFN	TQ	TU	Note
ITU1	<b>0,818</b>	0,599	0,661	0,539	Valid
ITU2	<b>0,835</b>	0,641	0,600	0,560	Valid
ITU3	<b>0,799</b>	0,499	0,522	0,466	Valid
ITU4	<b>0,759</b>	0,481	0,469	0,390	Valid
TQ1	0,516	0,693	<b>0,867</b>	0,617	Valid
TQ2	0,671	0,659	<b>0,868</b>	0,517	Valid
TQ3	0,648	0,765	<b>0,884</b>	0,587	Valid
SFN1	0,495	<b>0,749</b>	0,609	0,659	Not valid

Indicator	ITU	SFN	TQ	TU	Note
SFN2	0,563	<b>0,759</b>	0,612	0,478	<i>Not valid</i>
SFN3	0,597	<b>0,865</b>	0,698	0,537	<i>Valid</i>
TU1	0,478	0,566	0,558	<b>0,837</b>	<i>Valid</i>
TU2	0,474	0,552	0,519	<b>0,778</b>	<i>Valid</i>
TU3	0,570	0,610	0,545	<b>0,866</b>	<i>Valid</i>

From the results shown in the table above, that the value of the outer loadings of each indicator against the latent variable is still smaller than the outer loadings value, namely SFN1 and SFN2. Thus, latent variables do not have good discriminant validity. From the results of the cross-loading analysis, the indicators on the latent variables, namely SFN1 AND SFN2, were removed from the model. Then a retest is carried out on the discriminant validity test at the indicator level.

Table 5. Discriminant Validity Test: Level Indicators2

Indicator	ITU	SFN	TQ	TU	Note
ITU1	<b>0,821</b>	0,550	0,661	0,539	<i>Valid</i>
ITU2	<b>0,832</b>	0,513	0,600	0,560	<i>Valid</i>
ITU 3	<b>0,800</b>	0,408	0,522	0,466	<i>Valid</i>
ITU4	<b>0,758</b>	0,427	0,469	0,390	<i>Valid</i>
TQ1	0,516	0,557	<b>0,867</b>	0,617	<i>Valid</i>
TQ2	0,672	0,612	<b>0,868</b>	0,516	<i>Valid</i>
TQ3	0,648	0,649	<b>0,884</b>	0,587	<i>Valid</i>
SFN3	0,597	<b>1,000</b>	0,698	0,537	<i>Valid</i>
TU1	0,478	0,471	0,558	<b>0,837</b>	<i>Valid</i>
TU2	0,473	0,392	0,519	<b>0,778</b>	<i>Valid</i>
TU3	0,570	0,469	0,545	<b>0,866</b>	<i>Valid</i>

In retesting the discriminant validity, it shows that the outer loadings value of each indicator against its latent variable > the outer loadings value of the other latent variables. Then it can be continued in the next testing process.

The next test is testing at the level of latent variables, the test results can be seen in the Fornell-Larcker Criterion, where the AVE root value between latent variables > AVE root value between latent variables and other latent variables.

Table 6. Discriminant Validity Test: Lever Variable

Variable	ITU	SFN	TQ	TU	Note
ITU	<b>0,803</b>				<i>valid</i>
SFN	0,597	<b>1,000</b>			<i>Valid</i>
TQ	0,710	0,698	<b>0,873</b>		<i>Valid</i>
TU	0,616	0,537	0,652	<b>0,828</b>	<i>valid</i>

The table above shows that the results of the discriminant validity test at the latent variable level,

where the AVE root value between these latent variables shows that each variable has an AVE root value between these latent variables > the AVE root value between other latent variables. The results of the discriminant validity test in this study indicate that each latent variable in this study varies according to the phenomena obtained by each latent variable.

#### 4.4 Reliability Test

The reliability test is one of the tests that shows a measure of the consistency and stability of the respondent in answering the questions on the questionnaire (Mokoginta, Lambey, & Pontoh, 2017). Reliability test is carried out using the Cronbach Alpha test and if the value of Cronbach Alpha is > 0.7, it can be stated that the instrument has the reliability of the good variables (Tanamal, 2019).

Table 7. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability	Note
ITU	0,818	0,879	<i>Reliable</i>
SFN	1,000	1,000	<i>Reliable</i>
TQ	0,845	0,906	<i>Reliable</i>
TU	0,770	0,867	<i>Reliable</i>

From the results of the reliability test above, it shows that the latent variables used in this study are reliable. Judging from the value of Cronbach's Alpha and the value of Composite Reliability > 0.7. In accordance with the provisions that if the test results obtained > 0.7, then the latent variable can be concluded that the latent variable in the study is reliable.

#### 4.5 Path Coefficient Test

In the Path Coefficient test, it explains the relationship between the latent variables used and is in accordance with the hypothesis in the study. The relationship or relation on the Path Coefficient test is a negative or positive relationship (Herani, 2018).

Table 8. Path Coefficient Test

Variable	Intention to Use
<i>Trust</i>	0,244
<i>Transaction Quality</i>	0,440
<i>Satisfaction</i>	0,160

From the path coefficient test, the results show that;  
 a. The Path Coefficient value in the Trust relationship with Intention to Use is 0.244 which means that there is a positive relationship.

- b. The Path Coefficient value in the Transaction Quality and Intention to Use relationship is 0.440, which means that there is a positive relationship.
- c. The Path Coefficient value in the Satisfaction with Intention to Use relationship is 0.160 which means that there is a positive relationship.

#### 4.6 R Square Test

To find out how the ability of the independent variable in defining the dependent variable in the study is to use the coefficient of determination test. It is known that the value of the coefficient of determination is between 0 and 1 (Astuti, Wulan, & Fathoni, 2019). According to the book of (Basuki & Prawoto, 2016) the coefficient of determination (R<sup>2</sup>) is a coefficient that provides an explanation of the relationship or relationship between the dependent variable and the independent variable in a model in research.

Table 9. R Square Test

Variable	R Square
Intention to Use	0,558

The results obtained from the test of the coefficient of determination are 0.558 which is equal to 55.8%. This figure means that the latent variables in the study have a relationship or relationship to Intention to Use. While the remaining 44.2% is influenced by latent variables outside the research model. The amount of the variable outside the regression model is usually called an error. The value of the coefficient of determination is between 0 - 1. If the coefficient of determination is closer to 1, it means that it has a stronger influence.

#### 4.7 Hypothesis Test

The formulation of a hypothesis is a temporary answer to the problem formulation in this study (Siregar, Dalimunthe, & Trijunianto, 2019). The hypothesis is seen as significant from the comparison of the t-statistic value with the t-table, if the t-statistic value > the hypothesis t-table in the study is accepted (Abdillah & Hartono, 2015). By using the formula to find the t-table value as follows (Tanamal, 2019);

$$T\text{-Table} = (\alpha / 2; n - k - 1)$$

Information:

$\alpha$  = level of confidence in the study: 0, 05  
 n = Number of samples in the study  
 k = Number of latent variables

Based on the formula above, the results show that the t-table  $(0.05 / 2; 91-3-1) = (0.025; 97)$  and the t-table result is 1.984.

Table 10. Hypothesis Test

Relation	T-Statistic	T-Tabel	Note
TU→ITU	1,801	1,984	Not Significant
TQ→ITU	2,699	1,984	Significant
SFN→ITU	1,360	1,984	Not Significant

Based on the results obtained, the results are;

- a. The trust variable has a t-statistic value of 1.801. Thus the t-statistic value < t-table value. In accordance with the provisions of the hypothesis, it can be concluded that hypothesis 1 is rejected.
- b. The transaction quality variable has a t-statistic value of 2,699. Thus the t-statistic value > t-table value. In accordance with the provisions of the hypothesis in this study, it can be concluded that hypothesis 2 is accepted.
- c. The Satisfaction variable has a t-statistic value of 1.360. Thus the t-statistic < t-table value. In accordance with the provisions the hypothesis in this study, it can be concluded that hypothesis 3 is rejected.

#### 5. Conclusion

Based on all the tests that have been carried out in this research, it can be stated that:

1. **Trust** has a positive effect on Intention to Use, **but not significant** on Intention to Use.
2. **Transaction quality** has a positive and **significant** effect on Intention to Use.
3. **Satisfaction** has a positive effect on Intention to Use, **but not significant** on Intention to Use.

The value of the relationship or relationship that is highest in this study is **the relation of intention to use to trust**, which is equal to 0.710, from this value that the **level of trust greatly affects the level of intended use**. While the lowest relationship value is the relationship between Satisfaction and intention to use, namely with a relationship value of 0.160, from this value means that the

effect given to the intention to use is not high, but it is better if higher the satisfaction, the higher for intention of use.

Then for the seller it is necessary to consider in marketing strategy for a given product to the buyer whether the buyer is satisfied with a product offered or not. Buyers are expected to do research in advance before buying any product.

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