

# Online Consumers' Buying Behavior Perspective on Instagram Platform

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**Abstract**—The study aims at analyzing the influence of Celebrity Endorser, Information Quality, Viral Marketing and Trust on Purchase Decision of @21onshop Instagram Account. Within the conduct of the study, the data that had been gathered were the primary data that had been attained by means of online questionnaire distribution from February until April 2019. The number of sample that had been involved was 195 people and these samples were selected by means of incidental sampling technique. Then, the researcher tested the data validity, the data reliability and the hypotheses within the study by means of Structural Equation Modelling in LISREL Program. The results of the study show that both Celebrity Endorser and Viral Marketing do not have significant influence on Purchase Decision over Instagram whereas both Information Quality and Consumer Trust have significant influence on Purchase Decision over Instagram.

**Keywords:** *celebrity endorser, information quality, viral marketing, trust, purchase decision*

## I. INTRODUCTION

The development of Internet and communication technology that becomes more rapid in the era of globalization has encouraged cultural changes in people's life. Nowadays, electronic media have been one of the media that people heavily rely on in performing either communication or business. The small-scale, the middle-scale and even the big-scale businessmen rely on and take advantage from the advancement of the Internet technology in order to win the business competition and to bring their business forward [1].

The number of Internet users in Indonesia at 2016 is 132,7 million people or around 51,5% of the total Indonesian population, which accounts for 256,2 million people in total. The highest figure of Internet users is found in Java Island with the total number 86,339,350 people or around 65% of the total Internet users. In comparison to the use of Internet in Indonesia at 2014, which covers 88,1 million people, there has been an increase about 44,6 million people in just within two days (2014 – 2016). Certainly, the data are very significant, especially for the businessmen or the owners of online shops. Then, Internet content that has been mostly visited by the users is online shops with the number of visits around 82,2 million times or 62% of the total visits. On the other hand, the mostly visited social media platform is Facebook with the number of

visits around 71,6 million times or 54% of the total visits, followed by Instagram with the number of visits around 19,9 million times or 15% of the total visits.

Looking at the above explanation, it does make sense that within the last several years the online shops start to develop significantly. Shopping through online shops nowadays has been more general to perform in Indonesia. Consequently, many people start to perform their trading activities through the online platform. The change on the shopping behaviour has been confirmed by the increasing volume of e-commerce transaction. An annual report published by *We Are Social* shows that the percentage of Indonesian people who afford the product and service through online platform has been 41% of the total population in just one month at 2017. This figure has been increasing from 2016, which has only been 26% of the total population.

One of the tools that might be benefitted by any entrepreneur who wants to run the business in online shop is social media. With regards to the statement, one of the social media platforms that have been well-known in Indonesia is Instagram. Instagram is a photo and video-sharing application that enables the users to capture photo and video, apply digital to the photo and video that have been captured and share the photo and video that have been digitally filtered to the social network, including the account of the Instagram users (<https://id.wikipedia.org/wiki/Instagram>).

The social system in Instagram operates by being the followers of the other Instagram account or holding the Instagram account. The communication among the Instagram users might be established by dropping likes and giving comments to the pictures that have been uploaded by the other users [2].

Many customers in the present days have shifted from their habit of performing offline purchase, which involves the activities of viewing the product and service and also performing transaction directly, to the habit of performing online purchase. They have decided to perform online purchase because the online purchase might be performed in anywhere and at any time. However, performing online purchase through certain platforms (for example through social media such as Instagram) will not always be easy in comparison to the websites of the online shop such as Bhinneka.Com, Tokopedia

or Lazada. In the case of website-based online shop, if the product or service that the customers order has not been retrieved by the customer then the seller in the online will not receive their money. The situation is completely different in the case of social media-based online shop: the transaction over the social media-based online shop only involves the seller and the customer; consequently, there will be a big possibility of fraud within the online transaction over the social media-based online shop.

Specific to the case of Instagram, nowadays this social media platform has been often benefitted as the media for advertisement or promotion by the accounts of online shops. Not to mention, the initiative of promotion itself has been endorsed by the Celebrity of Instagram or also known as Celebgram. The celebrities such as television figures, movie actors, famous athletes and public figures have been widely endorsed in magazine, radio and television advertisements for strengthening the product [3].

In relation to the situations that have been explained, the rate of information quality is very important for the customers because the clearer and the more qualified the information is the more interested the customers will be toward performing purchase transaction. In the same time, information quality also defines the occurrence of purchase decision toward any product or service. Thus, in the case of online transaction, information quality might be defined as the perception of the customers toward the product or the service that has been adjusted into a website. The given information should be useful and relevant in predicting the quality and the usefulness of a product or service [4].

Apart of celebrity endorsement and information quality, many social media platforms that have been benefitted by the online shops make use of viral marketing as their new strategy in order to draw the interest of the customers. Viral marketing is basically a form of Internet-based word of mouth marketing initiative (also known as e-mouth to mouth marketing or e-word of mouth marketing) which promotional function has been network-like and has been designed like a virus that is spread from one person to another quickly with a wide area coverage by providing special reward to the customers" [5].

Last but not the least, customer trust is another important aspect for the customers in deciding their online purchase through social media platform such as Instagram. Customer trust becomes the first factor of consideration in purchasing a product or service. Trust refers to the tendency of a party who is willing to accept the decision of another party although the first party is not protected by the second party and is does not have any guarantee from the action of the second party [6]. Then, the customer trust toward the online shop lies in the popularity of the online shop. The more popular the online shop is, the more the customer will trust the credibility of the online shop.

Departing from the overall elaboration, the researcher would like to conduct a study that will describe the influence of viral marketing on purchase decision. Through the conduct of the study, it is expected that the results of the study will contribute something new about the impact of viral marketing on purchase decision. Then, within the conduct of the study,

the researcher has set four variables that might be suspected to influence the online purchase behaviour.

## II. LITERATURE REVIEW, HYPOTHESES DEVELOPMENT AND RESEARCH FRAMEWORK

In this section, several literatures will be reviewed with regards to the topic of the study. The literatures will be reviewed in order to provide theoretical foundation for the conduct of the study. Then, along with the literature review the hypotheses within the study will be developed and the framework will be designed in order that the conduct of the study will result in valid and reliable data.

### A. Literature Review

This section contains the theoretical foundations that will guide the researcher in conducting the study. The theoretical foundations will be reviewed with regards to the variables that have been set for the study. In addition, the researcher also develops the hypothesis for each variable at the end of the elaboration on each variable. Then, the literature review is related to the concept of Purchase Decision, Celebrity Endorser, Information Quality, Viral Marketing and Trust.

*1) Purchase decision:* Purchase decision refers to the process of making decision in which a customer truly decides to purchase and consume the product or service among the numerous alternatives [7]. Within the purchase decision, there are 5 stages of decision-making process namely [7]:

- Needs Assessment
- Information Search
- Alternative Evaluation
- Purchase Decision
- After-Purchase Behaviour

*2) Celebrity endorser:* Celebrity refers to the figures (actors, entertainers or athletes) who have been known for their achievement in the society. The achievement might come from different domains in relation to the product that will be endorsed. Usually, celebrity becomes the ambassador of certain product in relation to their achievement [3]. Then, in analysing the attribute of a celebrity endorser a researcher might implement the VisCAP model [3]. The VisCAP model consists of four elements namely:

- Visibility
- Credibility
- Attraction
- Power

The theory is supported by the results of the study by Mubarak and Nuralam, which states that Celebrity Endorser has positive influence on Purchase Decision [8]. Departing from this elaboration, the researcher would like to propose the first hypothesis as follows:

H<sub>1</sub>: Celebrity Endorser has positive influence on Purchase Decision.

3) *Information quality*: Information quality is defined as the perception of a customer toward the product or service that has been offered by a website [4]. The information that has been offered should be useful and relevant in predicting the quality and the usefulness of a product service. The more qualified the information that has been offered to the online customers is, the higher the desire of the online customers to purchase the product will be. Then, the value of information is defined by four characteristics namely:

- Accuracy
- Timeliness
- Completeness
- Appropriateness

The theory is supported by the results of a study by Wahyuni, which states that Information Quality has positive and significant influence on Purchase Decision [9]. Departing from this elaboration, the researcher would like to propose the second hypothesis as follows:

H<sub>2</sub>: Information Quality has positive influence on Purchase Decision.

4) *Viral marketing*: Viral marketing is basically a form of Internet-based word of mouth marketing (e-mouth to mouth marketing or e-word of mouth marketing) which promotional function is networking-like and is designed like a virus that infects one person to another quickly and widely with the provision of special reward to the customers [5]. Then, the dimensions that might serve as the benchmark in Viral Marketing are namely [10]:

- First Component: Messenger
- Second Component: Message
- Third Component: Environment

Viral Marketing has positive influence on Purchase Decision [11]. Departing from this elaboration, the researcher would like to propose the third hypothesis as follows:

H<sub>3</sub>: Viral Marketing has positive influence on Purchase Decision.

5) *Trust*: Trust refers to the belief of one party with regards to the intention and the behaviour of another party. Thereby, in relation to customer, customer satisfaction might be defined as the customer expectation that the service provider is trustworthy or reliable in meeting the commitment [12,13]. Trust is built among the parties who have not been familiar with one to another both in terms of interaction and in terms of transactional process. Then, there are two dimensions of customer trust namely:

- Trusting Belief
- Trusting Intention

Trust has positive influence on Purchase Decision [14]. Departing from this elaboration, the researcher would like to propose the fourth hypothesis as follows:

H<sub>4</sub>: Trust has positive influence on Purchase Decision.

## B. Research Framework

Departing from the above theoretical review and hypotheses development, the framework that will be used in conducting the study is as follows figure 1.

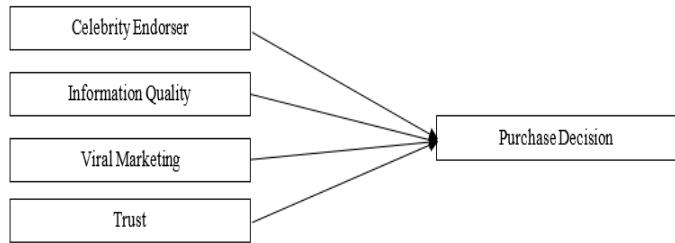


Fig. 1. Research framework.

## III. METHODOLOGY

Within the conduct of the study, the researcher adopted the quantitative research method. Then, with regards to the method, the researcher decided to assign the causal research design. A causal research deals with the relationship that imposes the cause and effect relationship in which the independent variable influences the dependent variable [15]. Consequently, there are the independent (influencing) variables and the dependent (influenced) variable. In the context of the study, the independent variables were Celebrity Endorser, Information Quality, Viral Marketing and Trust while the dependent variable was Purchase Decision. Furthermore, the population that had been involved into the study was 195 customers of @21onshop. The samples were selected from the given population by means of incidental sampling technique.

### A. Operational Variables

Prior to conducting the study, the researcher should define the operational variables first. The definition on the operational variable might be consulted in the following section.

1) *Purchase decision*: The dimensions and the indicators of the Purchase Decision are as follows [7]:

#### a) *Needs assessment*

- Internal and external stimulation
- Needs that should be met

#### b) *Information search*

- Individual / personal information search
- Commercial, public or experimental information search

#### c) *Alternative evaluation*

- Comparison on alternative products
- Final assessment

*d) Purchase decision*

- Establishment of preferences among the brands in the cluster of selection
- Establishment of intention in purchasing the most favoured brand
- Establishment of decision

*e) After-purchase behaviour*

- Product use
- Product evaluation

2) *Celebrity endorser*: The dimensions and the indicators of the Celebrity Endorser are as follows [3]:

*a) Visibility*

- Level of popularity
- Number of fans

*b) Credibility*

- Knowledge or skills that a celebrity has
- Customer perception toward the reputation of the celebrity
- Public perception toward the honesty displayed by the celebrity in sharing his or her opinion

*c) Attraction*

- Public perception about the interesting physical appearance of the endorser
- Public perception about the non-physical appearance or the personality of the endorser
- Perception of similarity between the celebrity and the products that have been advertised, the activities that have been performed and the problems that have been encountered

*d) Power*

- The capacity of the celebrity in attracting the customer
- The capacity of the celebrity in persuading the customer to commit purchase decision

3) *Information quality*: The dimensions and the indicators of the Quality Information are as follows [10]:

*a) Accuracy*

- Clear information
- Detailed and accurate information

*b) Timeliness*

- Information that has been provided is on time
- Information that has been provided is up to date

*c) Completeness*

- Information that has been provided is complete

- Information that has been provided is able to persuade the customer to commit purchase decision

*d) Appropriateness*

- Information that has been provided is in accordance to the facts

4) *Viral marketing*: The dimensions and the indicators of the Viral Marketing is as follows [10]:

*a) Messenger*

- Information transmitter
- Information dissemination

*b) Message*

- Quality of the information that has been delivered
- Forwarding the information that has been delivered

*c) Environment*

- Manner of information delivery
- Self-condition of the message retriever

5) *Trust*: The dimensions and the indicators of Trust are as follows [13]:

*a) Trusting belief*

- Benevolence
- Integrity
- competence

*b) Trusting intention*

- Willingness to depend
- Subjective Probability

## B. Assumption Test and Research Instrument Quality

Within the conduct of the study, the researcher implemented the Factor Analysis Model. Then, the aspects that should be given attention within the test were the Standardized Loading Factor (SLF) Value and on the Anti Image Table and the Extraction Value on the Communalities Table. The questions within the study would have been considered valid if the SLF Value and the Extraction value had been higher than 0.50.

In relation to the above explanation, reliability test displays how far a measurement instrument is able to provide relatively similar results if the re-measurement is performed on the same object. The reliability is calculated by using the Variance Extract Formula and the Reliability Construct Formula as follows:

- Formula of Construct Reliability

$$CR = \frac{(\sum \text{Standardized Loading})^2}{(\sum \text{Standardized Loading})^2 + \sum \text{Measurement Error}} \delta$$

- Formula of Variance Extract

$$VE = \frac{\sum \text{Standardized Loading}^2}{\sum \text{Standardized Loading}^2 + \sum \text{Measurement Error}}$$

The higher the Construct Reliability value is and the higher the Variance Extract Value is, the more reliable the composing indicators of the latent variable is in measuring the latent variables. Then, the suggested Construct Reliability Value is higher than 0.70, while the suggested Variance Extract Value is higher than 0.50.

*1) Results of validity and reliability test for celebrity endorser:* The results of the Validity Test and the Reliability Test for the variable Celebrity might be elaborated as follow.

*a) Results of validity test for celebrity endorser:* Within the Validity Test, six indicators have been observed and tested with regards to Celebrity Endorser. The results that have been attained from the Validity test are as follows: 1) Chi-Square = 118.42; 2) df = 9; P-Value = 0.00000; and 4) RMSEA = 0.216. Then, the complete results of the Validity Test might be described in Figure 2 below.

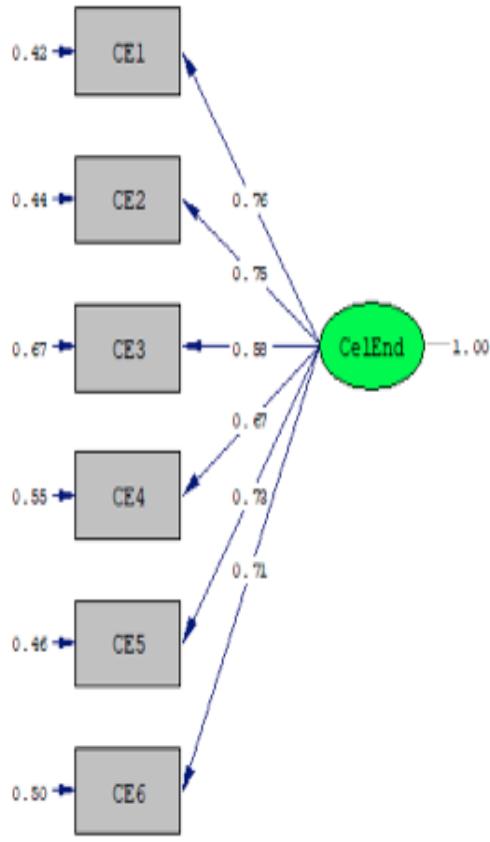


Fig. 2. Measurement model for the variable celebrity endorser.

In the meantime, the complete results of the Validity Test for the variable Celebrity Endorser might be consulted in Table 1 below.

TABLE I. RESULTS OF VALIDITY TEST FOR THE VARIABLE CELEBRITY ENDORSER

Statement	SLF Value	Criteria	Conclusion
CE1	0.76	> 0.50	VALID
CE2	0.75	> 0.50	VALID
CE3	0.58	> 0.50	VALID
CE4	0.67	> 0.50	VALID
CE5	0.72	> 0.50	VALID
CE6	0.71	> 0.50	VALID

Source: Data Processing Results by LISREL 8.80

From the results in Table 1 above, it is apparent that the Standardized Loading Factor Value for all of the six indicators has been higher than 0.50. Consequently, it might be inferred that all of the statements have been valid.

*b) Results of reliability test for celebrity endorser:* The results of the reliability test might be consulted in the following calculation.

$$\begin{aligned} & (\sum \text{Standardized Loading})^2 \\ &= (0.76 + 0.75 + 0.58 + 0.67 + 0.73 + 0.71)^2 \\ &= 17.64 \end{aligned}$$

$$\begin{aligned} & \sum \text{Standardized Loading}^2 \\ &= 0.76^2 + 0.75^2 + 0.58^2 + 0.67^2 + 0.73^2 + 0.71^2 \\ &= 2.96 \\ & \sum \text{Measurement Error} \\ &= 0.42 + 0.44 + 0.67 + 0.55 + 0.46 + 0.50 \\ &= 3.04 \end{aligned}$$

$$\begin{aligned} CR &= \frac{17.64}{17.64+3.04} = 0.85 \\ VE &= \frac{2.96}{2.96+3.04} = 0.50 \end{aligned}$$

From the results of the above calculation, it is apparent that the Construct Reliability Value for the variable Celebrity Endorser has been higher than 0.70 namely 0.85. Therefore, it might be inferred that the variable Celebrity Endorser has been reliable to be assigned into the study.

*2) Results of validity and reliability test for information quality:* The results of the Validity Test and the Reliability Test for the variable Information Quality might be elaborated as follow.

*a) Results of validity test for information quality:* Within the Validity Test, six indicators have been observed and tested with regards to Information Quality. The results that have been attained from the Validity test are as follows: 1) Chi-Square = 50.01; 2) df = 9; P-Value = 0.00000; and 4) RMSEA = 0.132. Then, the complete results of the Validity Test might be described in Figure 3 below.

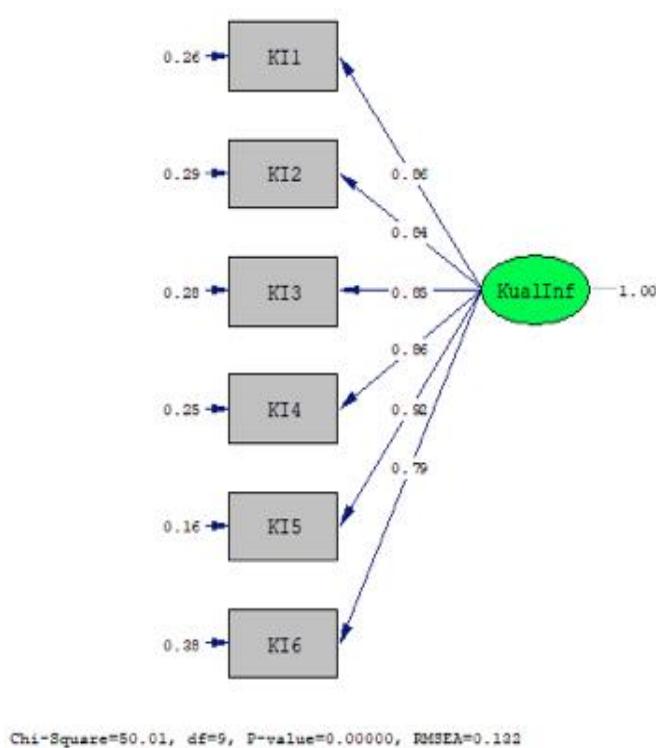


Fig. 3. Measurement model for the variable information quality.

In the meantime, the complete results of the Validity Test for the variable Information Quality might be consulted in Table 2 below.

TABLE II. RESULTS OF VALIDITY TEST FOR THE VARIABLE INFORMATION QUALITY

Statement	SLF Value	Criteria	Conclusion
IQ1	0.86	> 0.50	VALID
IQ2	0.84	> 0.50	VALID
IQ3	0.85	> 0.50	VALID
IQ4	0.86	> 0.50	VALID
IQ5	0.92	> 0.50	VALID
IQ6	0.75	> 0.50	VALID

Source: Data Processing Results by LISREL 8.80

From the results in Table 2 above, it is apparent that the Standardized Loading Factor Value for all of the six indicators has been higher than 0.50. Consequently, it might be inferred that all of the statements have been valid.

*b) Results of reliability test for information quality:* The results of the reliability test might be consulted in the following calculation.

$$\begin{aligned} & \left( \sum \text{Standardized Loading} \right)^2 \\ & = (0.86 + 0.84 + 0.85 + 0.86 + 0.92 + 0.79)^2 \\ & = 26.21 \end{aligned}$$

$$\begin{aligned} & \sum \text{Standardized Loading}^2 \\ & = 0.86^2 + 0.84^2 + 0.85^2 + 0.86^2 + 0.92^2 + 0.79^2 \\ & = 4.37 \end{aligned}$$

$$\begin{aligned} \sum \text{Measurement Error} \\ & = 0.26 + 0.29 + 0.28 + 0.25 + 0.16 + 0.38 \\ & = 1.62 \end{aligned}$$

$$\begin{aligned} CR & = \frac{26.21}{26.21+1.62} = 0.94 \\ VE & = \frac{4.37}{4.37+1.62} = 0.72 \end{aligned}$$

From the results of the above calculation, it is apparent that the Construct Reliability Value for the variable Information Quality has been higher than 0.70 namely 0.94. Therefore, it might be inferred that the variable Information Quality has been reliable to be assigned into the study.

*3) Results of validity and reliability test for viral marketing:* The results of the Validity Test and the Reliability Test for the variable Viral Marketing might be elaborated as follow.

*a) Results of validity test for viral marketing:* Within the Validity Test, three indicators have been observed and tested with regards to Information Quality. The results that have been attained from the Validity test are as follows: 1) Chi-Square = 0.00; 2) df = 0; P-Value = 1.00000; and 4) RMSEA = 0.000. Then, the complete results of the Validity Test might be described in Figure 4 below.

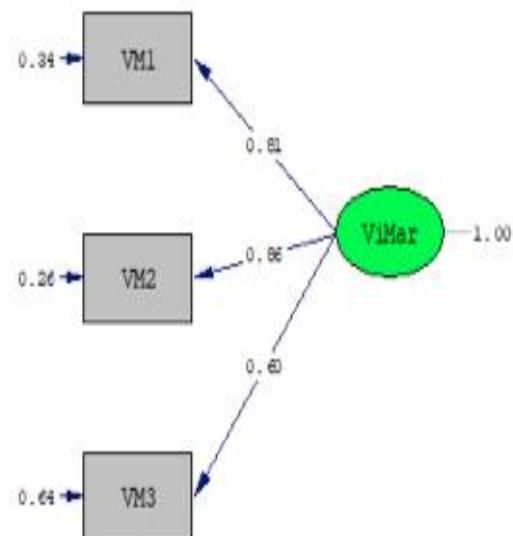


Fig. 4. Measurement model for the variable viral marketing.

In the meantime, the complete results of the Validity Test for the variable Information Quality might be consulted in Table 3 below.

TABLE III. RESULTS OF VALIDITY TEST FOR THE VARIABLE VIRAL MARKETING

Statement	SLF Value	Criteria	Conclusion
VM1	0.81	> 0.50	VALID
VM2	0.86	> 0.50	VALID
VM3	0.60	> 0.50	VALID

Source: Data Processing Results by LISREL 8.80

From the results in Table 3 above, it is apparent that the Standardized Loading Factor Value for all of the three indicators has been higher than 0.50. Consequently, it might be inferred that all of the statements have been valid.

*b) Results of reliability test for viral marketing:* The results of the reliability test might be consulted in the following calculation.

$$\left( \sum \text{Standardized Loading} \right)^2 \\ = (0.81 + 0.86 + 0.60)^2$$

$$= 5.15$$

$$\sum \text{Standardized Loading}^2 \\ = 0.81^2 + 0.86^2 + 0.60^2$$

$$= 1.24$$

$$\sum \text{Measurement Error}$$

$$= 0.34 + 0.26 + 0.64$$

$$= 1.24$$

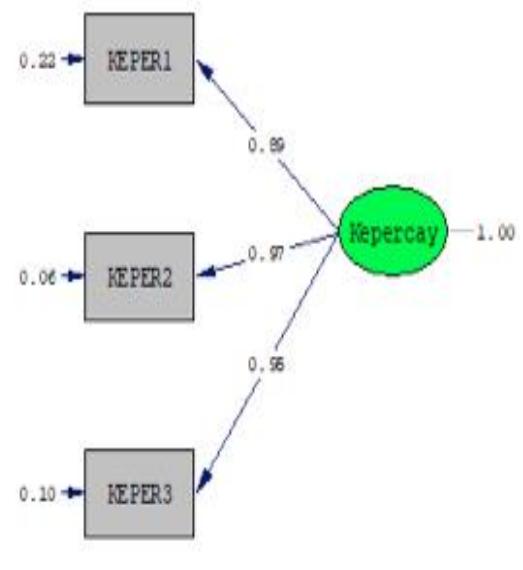
$$CR = \frac{5.15}{5.15+1.24} = 0.80$$

$$VE = \frac{1.75}{1.75+1.24} = 0.58$$

From the results of the above calculation, it is apparent that the Construct Reliability Value for the variable Viral Marketing has been higher than 0.70 namely 0.80. Therefore, it might be inferred that the variable Viral Marketing has been reliable to be assigned into the study.

*4) Results of validity and reliability test for trust:* The results of the Validity Test and the Reliability Test for the variable Trust might be elaborated as follow.

*a) Results of validity test for trust:* Within the Validity Test, three indicators have been observed and tested with regards to Trust. The results that have been attained from the Validity test are as follows: 1) Chi-Square = 0.00; 2) df = 0; P-Value = 1.00000; and 4) RMSEA = 0.000. Then, the complete results of the Validity Test might be described in Figure 5 below.



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

Fig. 5. Measurement model for the variable trust.

In the meantime, the complete results of the Validity Test for the variable Information Quality might be consulted in Table 4 below.

TABLE IV. RESULTS OF VALIDITY TEST FOR THE VARIABLE TRUST

Statement	SLF Value	Criteria	Conclusion
TR1	0.89	> 0.50	VALID
TR2	0.97	> 0.50	VALID
TR3	0.96	> 0.50	VALID

Source: Data Processing Results by LISREL 8.80

From the results in Table 4 above, it is apparent that the Standardized Loading Factor Value for all of the three indicators has been higher than 0.50. Consequently, it might be inferred that all of the statements have been valid.

*b) Results of reliability test for trust:* The results of the reliability test might be consulted in the following calculation.

$$\left( \sum \text{Standardized Loading} \right)^2 \\ = (0.89 + 0.97 + 0.95)^2 = 7.89$$

$$\sum \text{Standardized Loading}^2 \\ = 0.89^2 + 0.97^2 + 0.95^2 = 2.63$$

$$\sum \text{Measurement Error} \\ = 0.22 + 0.66 + 0.10 = 0.38$$

$$CR = \frac{7.89}{7.89+0.38} = 0.95$$

$$VE = \frac{2.63}{2.63+0.38} = 0.87$$

From the results of the above calculation, it is apparent that the Construct Reliability Value for the variable Trust has been higher than 0.70 namely 0.95. Therefore, it might be inferred that the variable Trust has been reliable to be assigned into the study.

*5) Results of validity and reliability test for purchase decision:* The results of the Validity Test and the Reliability Test for the variable Purchase Decision might be elaborated as follow.

*a) Results of validity test for purchase decision:* Within the Validity Test, five indicators have been observed and tested with regards to Trust. The results that have been attained from the Validity test are as follows: 1) Chi-Square = 59.43; 2) df = 5; P-Value = 0.00000; and 4) RMSEA = 0.204. Then, the complete results of the Validity Test might be described in Figure 6 below.

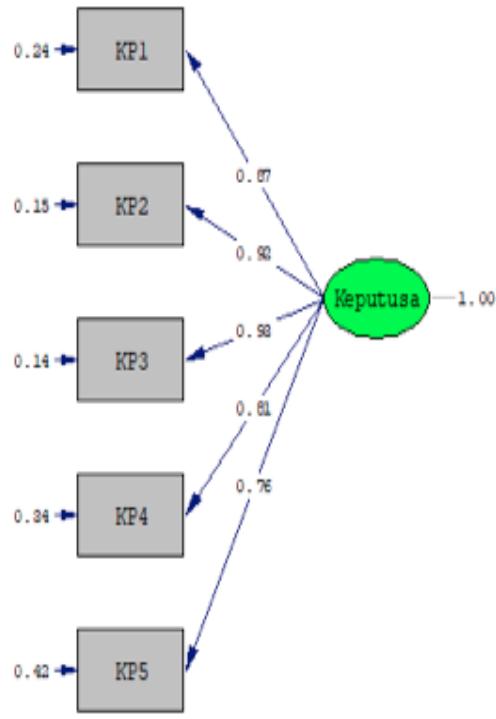


Fig. 6. Measurement model for the variable purchase decision.

In the meantime, the complete results of the Validity Test for the variable Information Quality might be consulted in Table 5 below.

TABLE V. RESULTS OF VALIDITY TEST FOR THE VARIABLE PURCHASE DECISION

Statement	SLF Value	Criteria	Conclusion
PD1	0.87	> 0.50	VALID
PD2	0.92	> 0.50	VALID
PD3	0.93	> 0.50	VALID
PD4	0.81	> 0.50	VALID
PD5	0.76	> 0.50	VALID

Source: Data Processing Results by LISREL 8.80

From the results in Table 5 above, it is apparent that the Standardized Loading Factor Value for all of the five indicators has been higher than 0.50. Consequently, it might be inferred that all of the statements have been valid.

*b) Results of reliability test for purchase decision:* The results of the reliability test might be consulted in the following calculation.

$$\begin{aligned}
 & (\sum \text{Standardized Loading})^2 \\
 & = (0.87 + 0.92 + 0.93 + 0.81 + 0.76)^2 = 18.40 \\
 & \sum \text{Standardized Loading}^2 \\
 & = 0.87^2 + 0.92^2 + 0.93^2 + 0.81^2 + 0.76^2 = 3.70 \\
 & \sum \text{Measurement Error} \\
 & = 0.24 + 0.15 + 0.14 + 0.34 + 0.42 = 1.29 \\
 & CR = \frac{18.40}{18.40+1.29} = 0.93 \\
 & VE = \frac{3.70}{3.70+1.29} = 0.74
 \end{aligned}$$

From the results of the above calculation, it is apparent that the Construct Reliability Value for the variable Purchase Decision has been higher than 0.70 namely 0.93. Therefore, it might be inferred that the variable Purchase Decision has been reliable to be assigned into the study.

*6) Results of compatibility test for all measurement models:* After having identified the overall measurement models, the overall measurement models should be analysed in order to see the compatibility between the overall measurement models and the overall data. Then, after the compatibility has been identified, the researcher will proceed to the calculation of the Construct Reliability Value and the Variance Extracted Value of each latent variable. In the subsequent stage, the researcher will add the Original Structural Model into the CFA Model [15]. The hybrid model will be estimated and analysed in order to view the overall compatibility and the overall evaluation toward the structural model. The results of the Model Compatibility Test for all of the measurement models might be consulted in Figure 7 and Table 6 below.

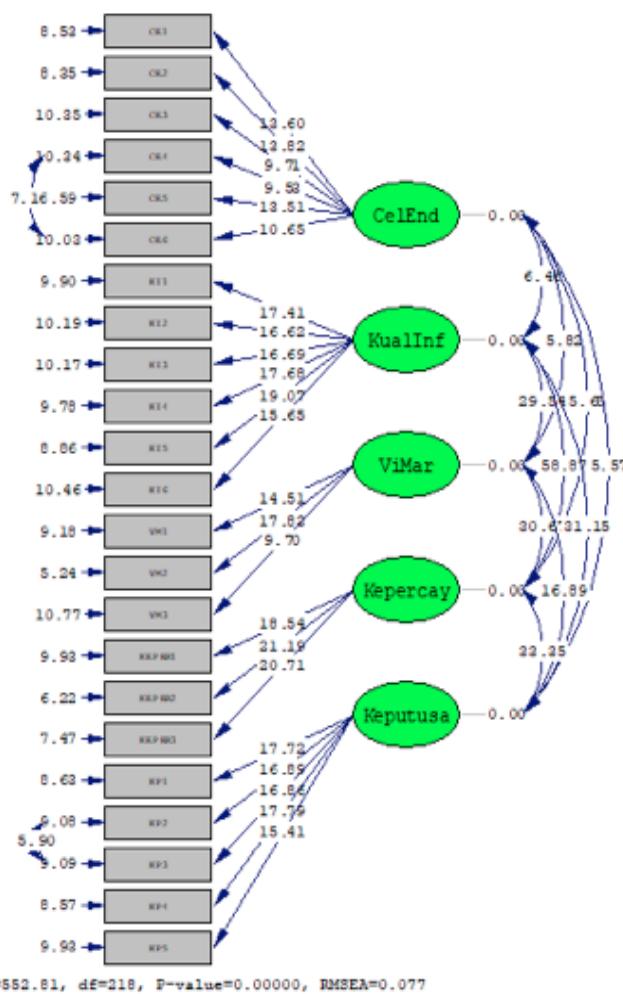


Fig. 7. Results of measurement model modification.

TABLE VI. RESULTS OF COMPATIBILITY TEST FOR THE MEASUREMENT MODEL

No	GOF Measures	Level of Compatibility Target	Results of Estimation	Level of Compatibility
1	Root Mean Square Error of Approximation (RMSEA) P (Close Fit)	RMSEA $\leq 0.08 \geq 0.50$	0.077	Good Fit
2	Normed Fit Index (NFI)	NFI $\geq 0.90$	0.970	Good Fit
3	Non – Normed Fit Index (NNFI)	NNFI $\geq 0.90$	0.980	Good Fit
4	Comparative Fit Index (CFI)	CFI $\geq 0.90$	0.980	Good Fit
5	Incremental Fit Index (IFI)	IFI $\geq 0.90$	0.980	Good Fit
6	Relative Fit Index (RFI)	RFI $\geq 0.90$	0.960	Good Fit
7	Goodness of Fit Index (GFI)	GFI $\geq 0.90$	0.840	Marginal Fit
8	Adjusted Goodness of Fit Index (AGFI)	AGFI $\geq 0.90$	0.800	Marginal Fit

Source: Data Processing Results by LISREL 8.80

From the results in both Figure 7 and Table 6 above, it is apparent that the model compatibility scores have displayed the Goodness of Fit Index that meet or even exceeds the requirements. Therefore, in overall it might be defined that the Goodness of Fit value for the present study has displayed the "Good Fit" criteria.

a) *Results of structural model compatibility test:* After the Overall Model Compatibility Test has been performed and

the researcher has attained the good measurement model, the researcher proceeds to the Structural Model Compatibility Test or the T-Test. The Structural Model Compatibility Test consists of the Overall Model Compatibility Test and the Causal Relationship Analysis [15]. The inter-variable causal relationship might be considered significant or insignificant based on the results of the Causality Test. The results of the Causality Test might be consulted in Figure 8 and Table 7 below.

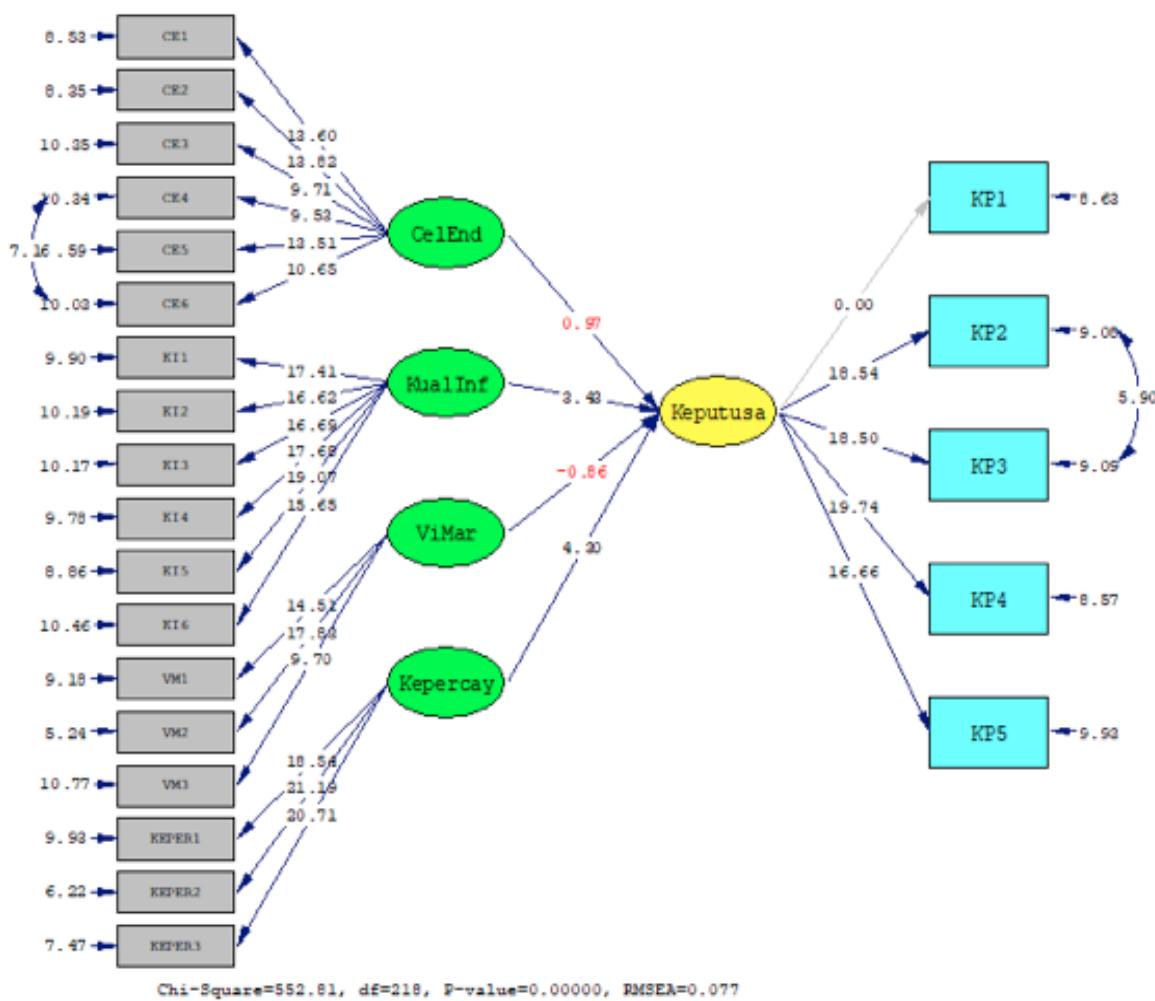


Fig. 8. Results of structural model compatibility test (T-Test).

TABLE VII. RESULTS OF STRUCTURAL MODEL TEST FOR THE OVERALL MEASUREMENT MODELS

No	GOF Measures	Level of Compatibility Target	Results of Estimation	Level of Compatibility
1	Root Mean Square Error of Approximation (RMSEA) P (Close Fit)	RMSEA $\leq 0.08 \geq 0.50$	0.077	Good Fit
2	Normed Fit Index (NFI)	NFI $\geq 0.90$	0.970	Good Fit
3	Non – Normed Fit Index (NNFI)	NNFI $\geq 0.90$	0.980	Good Fit
4	Comparative Fit Index (CFI)	CFI $\geq 0.90$	0.980	Good Fit
5	Incremental Fit Index (IFI)	IFI $\geq 0.90$	0.980	Good Fit
6	Relative Fit Index (RFI)	RFI $\geq 0.90$	0.960	Good Fit
7	Goodness of Fit Index (GFI)	GFI $\geq 0.90$	0.840	Marginal Fit
8	Adjusted Goodness of Fit Index (AGFI)	AGFI $\geq 0.90$	0.800	Marginal Fit

Source: Data Processing Results by LISREL 8.80

From the results in both Figure 8 and Table 7 above, it is apparent that the model compatibility scores have displayed the Goodness of Fit Index that meet or even exceeds the requirements. Therefore, in overall it might be defined that the Goodness of Fit value for the present study has displayed the "Good Fit" criteria.

*b) Results of hypotheses test:* After the structural model with the good Goodness of Fit Index has already been attained, the researcher proceeds to the Hypothesis Test.

Within the study, there are four hypotheses that the researcher would like to test. Then, the hypothesis will be conducted by viewing the significance within the relationship of each variable. The significance value ( $\alpha$ ) that should be assigned into the study is 0.05 or 5% with  $t$ -value  $\geq 1.96$ .

The results of the estimate values for the causal relationship in the structural model that has been tested and in the results of the Hypothesis Test with the  $t$ -value for each variable might be viewed in the Table 8 below.

TABLE VIII. RESULTS OF ESTIMATES VALUES CALCULATION

Hypothesis	Structural Path	t-values	Notes	Conclusions
H1	Celebrity Endorser → Purchase Decision	0.97	The data do not support the hypothesis.	Celebrity Endorser does not have significant influence on Purchase Decision.
H2	Information Quality → Purchase Decision	3.42	The data support the hypothesis.	Information Quality has significant influence on Purchase Decision.
H3	Viral Marketing → Purchase Decision	-0.86	The data do not support the hypothesis.	Viral Marketing does not have significant influence on Purchase Decision.
H4	Trust → Purchase Decision	4.20	The data support the hypothesis	Trust has significant influence on Purchase Decision.

|Source: Data Processing Results by LISREL 8.80

The results of the statistical tests for the variable Celebrity Endorser show that the variable Celebrity Endorser does not have significant influence on the variable Purchase Decision. The finding has been confirmed by the t-value of Celebrity Endorser that is lower than 1.96 namely 0.97. On the contrary, the results of the statistical tests for the variable Information Quality show that the variable Information Quality has significant influence on Purchase Decision. This finding has been confirmed by the t-value of Information Quality that is higher than 1.96 namely 3.42.

Furthermore, the results of the statistical tests for the variable Viral Marketing show that the variable Viral Marketing does not have significant influence on the variable Purchase Decision. This finding has been confirmed by the t-value of the Viral Marketing that is lower than 1.96 namely -0.86. Last but not the least, the results of the statistical tests for the variable Trust show that the variable Trust has significant influence on the variable Purchase Decision. This finding has been confirmed by the t-value of the variable Trust that is higher than 1.96 namely 4.20

In brief, it might be concluded that two out of four hypotheses have been acceptable within the conduct of the study. In other words, it might be safely concluded that both Celebrity Endorser and Viral Marketing does not have significant influence on Purchase Decision while both Information Quality and Trust has significance influence on Purchase Decision.

#### IV. ANALYSIS

In this section, the researcher would like to analyse further results of the statistical tests for the influence of the four independent variables namely Celebrity Endorser, Information Quality, Viral Marketing and Trust, on the dependent variable, namely Purchase Decision. The analysis on the influence of each variable might be consulted in the following section.

##### A. Analysis on the Influence of Celebrity Endorser on Purchase Decision

As having been found, the variable Celebrity Endorser does not have significant influence on the variable Purchase Decision. This finding has been confirmed by the t-value of the variable Celebrity Endorser which is lower than the requirement ( $0.97 < 1.96$ ). The implication of this finding is that the purchase decision among the customers of @21onshop

is not influenced by the promotional factors in the form of Celebrity Endorser.

Thus, the results of the study with regards to the influence of the variable Celebrity Endorser on the variable Purchase Decision do not support the results of the study by Khan [16] and also the results of the study by Fildzah and Sari [1], which altogether claim that Celebrity Endorser has significant influence on Purchase Decision. This situation is normal to take place because without @21onshop having to endorse celebrities or the Celebrities of Instagram for the product the promotional efforts that have been pursued by @21onshop and the product contents that have been displayed in the websites of @21onshop become the factor for the customers to commit their purchase decision (for example: the product has interesting design and the product consists of up to date alternatives (in terms of clothing model, clothing colour, clothing material information and alike)). The fashion products that have been sold in @21onshop are always affordable for the customers. Consequently, there is no need for endorsement by celebrities just like the other products.

##### B. Analysis on the Influence of Information Quality on Purchase Decision

As having been found, the variable Information Quality has positive and significant influence on the variable Purchase Decision. This finding has been confirmed by the t-value of the variable Information Quality which is higher than the requirement ( $3.42 > 1.96$ ). The implication of this finding is that the information quality that has been found in the online shop site of @21onshop such as the price tag on the content of the products that have been sold, the clothing model, the colour alternative and the clothing material information is already clear and sufficient so that the customers are persuaded to commit their purchase decision in @21onshop.

Thus, the results of the study with regards to the influence of the variable Information Quality on the variable Purchase Decision support the results of the study by Wahyuni [9] and the results of the study by Nawangsari and Karmayanti [17], which altogether claim that Information Quality has positive and significant influence on Purchase Decision. Consequently, it might be inferred further that the product information that has been displayed in the website of @21onshop has already sufficient for and well-understood by the customers.

### C. Analysis on the Influence of Viral Marketing on Purchase Decision

As having been found, the variable Viral Marketing does not have significant influence on the variable Purchase Decision. This finding has been confirmed by the t-value of the variable Viral Marketing which is lower than the requirement ( $-0.86 < 1.96$ ). The implication of this finding is that the purchase decision among the customers of @21onshop is not influenced by the contents that have gone viral in the social media platform.

Thus, the results of the study with regards to the influence of the variable Viral Marketing on the variable Purchase Decision do not support the results of the study by Andini et al., [11] and the results of the study by Hamed [18], which altogether claim that Viral Marketing has positive influence on Purchase Decision. This situation is quite normal since the products in @21onshop are not viral in the social media platforms yet. Instead, the purchase decision among the customers of @21onshop might be influenced by the product quality and the various product alternatives. Viral marketing usually takes place on the new products or the products with premium price, whereas the products that have been sold in @21onshop are the mainstream fashion products that have been worn by many people. Therefore, the viral marketing does not influence the purchase decision at all in this regard.

### D. Analysis on the Influence of Trust on Purchase Decision

As having been found, the variable Trust has positive and significant influence on the variable Purchase Decision. This finding has been confirmed by the t-value of the variable Trust which is higher than the requirement ( $4.20 > 1.96$ ). The implication of this finding is that the testimony of the customers with regards to their expectation toward the product has been sufficient and reliable and consequently the new or the potential customers might be persuaded to commit their purchase decision in @21onshop.

Thus, the results of the study with regards to the influence of the variable Trust on the variable Purchase Decision support the results of the study by Mahkota et al., [19] and the results of the study by Chaturvedi [14], which altogether claim that Trust has significant influence on Purchase Decision. Therefore, it might be concluded that the customer trust toward the @21onshop website has been good and such a good trust has persuaded the customers to keep shopping the items that have been sold in the @21onshop website.

## V. CONCLUSIONS AND SUGGESTIONS

In this section, the researchers would like to provide the conclusions of the study and the suggestions for the given party. Both of the conclusions and the suggestions might be consulted in the following sections.

### A. Conclusions

Through the conduct of the study, the researcher would like to identify the influence of Celebrity Endorser, Information Quality, Viral Marketing and Trust on Purchase Decision. In relation to the objective of the study, based on the results of the

study and the discussions within the study the researcher would like draw several conclusions. First of all, the variable Celebrity Endorser does not have significant influence on the variable Purchase Decision. Then, the variable Information Quality has positive and significant influence on the variable Purchase Decision. Next, the variable Viral Marketing does not have significant influence on the variable Purchase Decision. Last but not the least, the variable Trust has positive and significant influence on Purchase Decision.

### B. Suggestions

Departing from the conclusions that have been drawn, and also looking at the results of the data analysis and the discussions within the study, the researcher would like to propose several suggestions. First, the owner of or the seller in @21onshop should perform a market researcher in order to identify the latest trend that has been up to date and that the customers have recently demanded. By performing the market researcher, it is expected that the customers perceive the efforts made by @21onshop in affording the products that have been the big hits in the market. In the same time, it is also expected that the owner or the seller of the @21onshop always displays the testimonies made by the customers so that the new or the potential customers will have higher sense of trust in committing their purchase decision in @21onshop.

Second, the owner of or the seller in @21onshop should consider to promote the product by endorsing the celebrities or the celebrities of Instagram that have been famous recently. In the same time, it is suggested that the owner of or the seller in @21onshop should follow-up the customers who have committed their purchase decision by, for example, asking whether the product has arrived or not, whether the order has been matched or not and alike. In relation to the testimony, the owner of or the seller in @21onshop might invite the customers to share their testimony with regards to the items that they have purchased since the testimony provided by the customers might serve as part of promotional efforts. In turn, for the customers who have provided their testimony, they might be provided with several benefits such as voucher, discounts or free gift.

Through this section, the researcher would like to suggest as well that the future researchers who would like to pursue the similar topic might expand the findings and the discussions within the study by incorporating the variables that have not been assigned. The variables that might be incorporated in relation to the influence on the variable Purchase Decision are Perceive Value, Price, Word of Mouth and alike.

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