

## **The Effect of E-Commerce on Purchase Decision at Wingko Babat NN. Meniko**

**Michael Hans**

Soegijapranata Catholic University  
[michael.hans97@yahoo.com](mailto:michael.hans97@yahoo.com)

### **Abstract**

The study aims to determine the effect of e-commerce on purchase decision in the case of the online store of Wingko Babat NN. Meniko at Tokopedia. It applies a quantitative approach with four independent variables comprising ease of use, trust, information quality, and service quality and dependent variable of purchase decision. The data was collected using questionnaire which had been tested for its validity and reliability prior to its distribution and was analyzed using multiple linear regression analysis. The results show that partially ease of use, trust, information quality, and service quality do not significantly influence purchase decision. However, they simultaneously have a significant effect on purchase decision.

**Keywords:** ease of use, information quality, service quality, trust, purchase decision

### **INTRODUCTION**

The internet has recently become a basic need for community since many people can meet their needs through the internet. The internet users had increased from 143.2 million in 2017 to 171.1 million in 2018 which was 64.8% of the Indonesian total population (Asosiasi Penyelenggara Jasa Internet Indonesia, 2020). Continuous growth of the internet users also increases the number of e-commerce users. SEA e-Conomy reported that e-commerce in Indonesia grew 54% that increase from US\$21 billion in 2019 to US\$32 billion in 2020 (Google, TEMASEK, & Bain & Company, 2020). The growth is predicted to continuously increase in the coming years.

E-commerce refers to the use of the internet for business transactions, such selling products and services to consumers using the internet and the World Wide Web (Maulana, Susilo, & Riyadi, 2015). It has been a necessity for a company to develop their business through e-commerce by for example creating a website. E-commerce gives benefits for

consumers and businesses. Consumers do not need to come directly to the store for buying products and thus no travel costs spent. Shipping costs that replace the travel costs is even lower (Maulana et al., 2015). Companies can transact 24 hours a day and can save promotion costs since they can market their products or services to a wider area with affordable costs (Maulana et al., 2015).

E-commerce covers six dimensions of information system success: system quality in the internet, information quality in capturing e-commerce content issues, quality of service, usage, user satisfaction, and benefits (Pradana, 2015). The most famous e-commerce in Indonesia based on the number of website visitors are Tokopedia, Shopee, Lazada, and Bukalapak (Tim Riset iPrice, 2022). Tokopedia and Shopee that had respectively 157.2 million visits and 132.7 million visits in the first quarter of 2022 dominated the e-commerce in Indonesia. Lazada ranked the third had only 24.6 million visits that was far below that of Tokopedia and Shopee.

Decision to purchase on an e-commerce is influenced by many factors. Studies indicate that online purchase decision is influenced by ease of use and trust on e-commerce (Ardyanto, Susilo, & Riyadi, 2015), convenience and information quality (H Rizki, Astuti, & Susilo, 2015), service quality and promotion (Dristanto & Rodhiyah, 2016).

Wingko Babat NN. Meniko is a store producing and selling local foods of Semarang such as *wingko babat*, *lunpia*, *bakpia*, *bandeng*, *mochi*, and *tahu bakso* for particularly tourists visiting the city of Semarang. It creates online stores for promoting their products to those reside outside Semarang. Locally, Wingko Babat NN. Meniko that has been popular for its *wingko babat* distributes its products for the resellers in almost the entire area of Semarang. Apart from the physical store, Wingko Babat NN. Meniko also opens an online

store at Tokopedia. The online store is a way for digitization Wingko Babat NN. Meniko wants to do.

The use of online store is triggered by the low number of customers coming to the store on weekdays compared to those coming during the holidays. Online store is expected to make more people outside Semarang know the products, increase the number of customers to come to the store on other than the holiday season, and also keep up with the changes in the market.

Besides the desire to keep up with technological developments encouraging stores to involve in e-commerce, the online store of Wingko Babat NN. Meniko at Tokopedia was opened due to the pandemic Covid-19 happening in 2020. The Covid-19 had made Wingko Babat NN. Meniko lost a lot of customers even during the national holidays which was usually the busiest time for the store. However, the number of customers who come to the store is still the problem currently. In other words, the main goal of opening e-commerce was to reduce the impact of Covid-19 and in the future it is to increase the number of customers coming to the store on other than the holiday season. The e-commerce has increased the sales by approximately 20% and was dominated by the selling of *wingko babat* (19%). Those buying the products from the online store at Tokopedia potentially increase. This study aims to know the influence of the use of Tokopedia on online purchase decision at the Wingko Babat NN. Meniko.

## **LITERATURE REVIEW**

### **E-commerce**

E-commerce is the process of buying and selling transactions using electronic devices such as telephones and the internet. It is more than just buying and selling products online, but

also covers the entire process of developing, marketing, selling, shipping, servicing, and managing payment of the customers, with the support of a worldwide network. E-commerce systems rely heavily on the internet and other information technologies to support the processes (Mujiyana & Elissa, 2013). E-commerce can help sellers to promote their products online since it can make potential customers to buy the products they want and to take advantages of all available facilities (Yadewani & Wijaya, 2017).

### **Ease of Use**

Ease or perceived ease of use (PEU) is interpreted as the degree to which a person believes that using a particular system will be free of effort (Davis, 1989). It can also indicate an individual's level of confidence in which studying, utilizing, and using the technology perceivably eases users (Naufaldi & Tjokrosaputro, 2020).

According to the research conducted by Ardyanto et al. (2015), ease of use of e-commerce has a significant influence on online purchase decision. Similarly, Hartono, Silintowe, and Huruta (2021) who examined ease of transaction concluded that easier transactions in online purchasing leads to higher purchase decision. However, the research of Gunawan, Ali, and Nugroho (2019) shows different results. Perceived ease of use measured with easy to learn, facilities for the users, improvement of skills, and easy to operate has insignificant effect on purchase decision. Since ease of use has become the market requirement, it thus does not provide added value for consumer purchasing decision. The ease of accessing the marketplace does not make them automatically make purchases on the marketplace. Accordingly, the proposed hypothesis is as follows:

H1: Ease of use of e-commerce influences purchase decision.

## Trust

Trust to the sites and the online sellers is buyer's main consideration in shopping online. Several research results indicate that trust is an important factor in building and maintaining long-term relationships with the customers (Ardyanto et al., 2015). The more popular the online shopping site, the higher the buyer's trust in the site. Buyers will be more confident and believe in the reliability of the site. Their trust is reflected through integrity, kindness, and competence of the seller before they decide to purchase (Mahliza, 2020). The results of Ardyanto et al. (2015) researching the *petersaysdenim.com* indicate that trust in using e-commerce influences online purchase decision. Consumers using the website believe that the *petersaysdenim.com* has a good level of security and thus the level of risk is low. This has made them to always use the *petersaysdenim.com* website.

The research conducted by Akbar, Sularso, and Indraningrat (2020) shows that trust and purchase decisions have positive relationship. This means that the higher the trust, the higher the possibility of making decision to purchase online. Higher trust will make buyers feel safe and happy that in turn encourage them to make purchases. The research conducted by Mahliza (2020) using trust as a mediating variable resulted that trust plays a role as a mediating variable of the three antecedents of trust consisting of brand image, safety, and risk on purchase decision. Trust has a positive effect on purchase decision. The higher the consumer's trust in the seller as reflected in the competence, benevolence, and integrity of the seller, the higher the consumer's decision to purchase. Trust can thus be measured with competency, kindness (benevolence), and integrity of seller. The proposed hypothesis is thus as follows:

H2: Trust in using e-commerce influences online purchase decision.

## Information Quality

Information quality is defined as customer's perception on the quality of information about products or services provided by a website. The higher the quality of the information perceived by online buyers, the higher their interest to buy the products (Mellani, Bopeng, & Bajari, 2019). Quality of information can be assessed using attributes such as information obtainable from a system, information accuracy, information relevance, timeliness, and information completeness (Pawirosumarto, 2016). Besides those attributes, presentation with good information design on a website also indicates the attribute of information quality. The best quality information of the internet is when the information can be obtained easily, is organized, and is available excessively (Pawirosumarto, 2016).

The research conducted by Rizki et al. (2015) concluded that information quality has a significant effect on online purchase decision. More specifically it indicated that quality of the information of the website was able to increase online purchases. Similar conclusion resulted by the study of Akbar et al. (2020) shows positive relationship of the quality of information and online purchase decision. They emphasized that the higher the quality of the information, the higher the probability of consumer to decide to purchase online. In other words, the quality of the information was able to make consumers happy and this encourages consumers to make purchases. Moreover, the more relevant, valid, and appropriate the information provided, the more likely consumers to decide to purchase. Mellani et al. (2019) who addressed Traveloka in their research show significant effect of the information quality on purchase decision. This indicates that the Traveloka application is easy to understand and makes ordinary consumers understand the content and the system easily. Options in the Traveloka application make consumers to easily trace back the details of the ordered ticket.

This means that good quality information can increase the likelihood of a consumer to make buying decision.

Information quality can be measured using timeliness, completeness, conciseness, accessibility, understandability, and availability. The proposed hypothesis is thus as follows:

H3: Information quality of e-commerce influences purchase decision.

### **Service Quality**

Quality is a special standard in which its availability, performance, reliability, maintainability, and characteristics can be measured (Dristanto & Rodhiyah, 2016). Zeithaml, et al as cited by Dristanto and Rodhiyah (2016) identified five dimensions of service quality, namely reliability, responsiveness, assurance, empathy, and tangibles. E-service quality is defined as the extent to which it facilitates efficient and effective service in purchasing and delivering products from virtual marketplaces. It is also defined as a website that provides services for consumers in carrying out online services such as online shopping and information searching (Hartono et al., 2021).

The research conducted by Dristanto and Rodhiyah (2016) shows that service quality has a positive influence on purchase decision. This reflects that the better the assessment of service quality, the higher the decision of consumers to purchase. However, difficulty for contacting the seller and getting refund for the unmatched order are still considered as not optimal yet. Hartono et al. (2021) also concluded that service quality has a positive impact on purchase decision. This explains that better quality of service for consumers leads to higher online purchase decision.

In addition, the indicators of e-service quality are efficiency (ability of consumers to find a good website), reliability (ability of the website to provide accurate and precise information to consumers), responsiveness (ability of the website services to respond to

consumer’s problems in making purchases and in providing prompt service to consumers), fulfillment (ability to provide products the consumers want immediately), privacy (ability of the website services to protect consumer data). Accordingly, a hypothesis that can be proposed is thus

H4: Service quality in e-commerce influences purchase decision.

**Purchase Decision**

According to Kotler as cited by Dristanto and Rodhiyah (2016), decision to purchase is actually a collection of a number of decisions. A decision to purchase includes decisions on product types, product form, product brand, seller, the number of product, time of purchases, and method of payment. Such decision in online purchase is affected by the use of e-commerce and it can thus be hypothesized that

H5: The use of e-commerce influences purchase decision.

Accordingly, the research framework is as presented in figure 1.

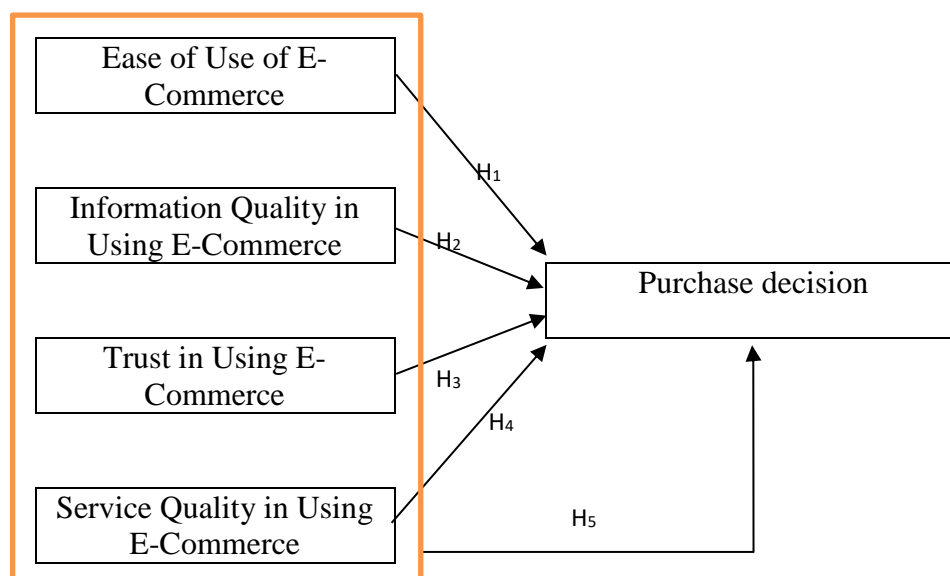


Figure 1. The Research Framework



## METHODS

This research applies quantitative which is based on positivism. It is used to examine certain populations or samples, sampling techniques are generally carried out randomly, data are collected using research instruments, data analysis is quantitative/statistical in nature with the aim of testing predetermined hypotheses (Sugiyono, 2015).

The object of this research is purchase decision of the customers of Wingko Babat NN. Meniko online store. Accordingly, the population of this research is the customers of the Wingko Babat NN. Meniko who made purchases through e-commerce Tokopedia. Since the number of population member is unknown and therefore sample was taken by applying purposive sampling technique. Only customers who bought from the Wingko Babat NN. Meniko online store were selected as the respondents. Since there are five variables, the sample is thus  $5 \times 10 = 50$  customers.

This study uses survey for collecting primary data which refers to obtaining information from the first hand, that is, customers of Wingko Babat NN. Meniko online store. Questionnaire was used for this purpose. The questions or statements in the questionnaire represent the variables that were specifically defined by the researcher. Respondents were asked to complete the questionnaire by indicating their level of agreement with the statements. The level of agreement is constructed in 5-point scale of Likert ranging from strongly disagree to strongly agree. The Likert scale is considerably appropriate to measure attitudes and opinions.

Validity test was applied to measure whether each questionnaire item is able to reveal the things to be measured. Item that is irrelevant to the purpose of the measurement is said to have low validity or invalid. The invalid item found was removed and retest was then

conducted to the questionnaire. Table 1 presents the results of validity test using correlation.

The items are valid since the r values are above the r threshold of 0,279.

**Table 1. The Results of Validity Test**

<b>Item</b>	<b>r</b>
Ease of use 1	0.817
Ease of use 2	0.826
Ease of use 3	0.619
Ease of use 4	0.857
Trust 1	0.764
Trust 2	0.792
Trust 3	0.821
Information quality 1	0.479
Information quality 2	0.663
Information quality 3	0.709
Information quality 4	0.636
Information quality 5	0.775
Information quality 6	0.296
Service quality 1	0.722
Service quality 2	0.683
Service quality 3	0.634
Service quality 4	0.673
Service quality 5	0.525
Purchase decision 1	0.634
Purchase decision 2	0.714
Purchase decision 3	0.626
Purchase decision 4	0.671
Purchase decision 5	0.321

Reliability test is a tool to measure the reliability of a questionnaire. The questionnaire is reliable if the response to the statements are consistent or stable from time to time. It is reliable if the Cronbach's alpha  $> 0.60$ . Table 2 indicates that the questionnaire is reliable as each variable has Cronbach's Alpha  $> 0.60$ . Thus, the questionnaire can be used to gather data.

**Table 2. The Results of Reliability Test**

Variable	<i>Cronbach's Alpha</i>
Ease of use	0.779
Trust	0.704
Information quality	0.653
Service quality	0.652
Purchase decision	0.537

Multiple regression was used to test influence of the independent variables of ease of use ( $X_1$ ), trust ( $X_2$ ), information quality ( $X_3$ ), and service quality ( $X_4$ ) on the dependent variable of purchase decision ( $Y$ ). The formula is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

where  $a$  = constant,  $b_i$  = multiple regression coefficient, and  $e$  = errors

The t test was conducted to determine significance of the role of an independent variable on the dependent variable by assuming that the other independent variables are considered constant. Meanwhile F test was used to test the effect of the independent variables simultaneously on the dependent variable.

## RESULTS AND DISCUSSION

### Results

The result of multiple linear regression analysis is presented in table 3. The constant has a positive value of 9.095. This shows that consumers still make purchase decision even though all the independent variables which include ease of use ( $X_1$ ), trust ( $X_2$ ), information quality ( $X_3$ ), and service quality ( $X_4$ ) do not take role.

**Table 3. Multiple Regression Analysis Results**

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	9.095	3.833	
Ease of use	.232	.127	.270
Trust	.111	.220	.073
Information quality	.271	.137	.305
Service quality	.012	.185	.012

The coefficient values of all the independent variables are positive indicating a unidirectional influence between the independent variable and the dependent variable. More specifically, it can be stated that decision to purchase is higher if the use the e-commerce is easier, trust to the e-commerce is higher, quality of information provided by the e-commerce is better, and service quality of the e-commerce is higher.

Table 4 presents the t test results that is used to test acceptance or rejection of the hypotheses. The decision is made by comparing the t value to the t table of 2.014 or significance value of 0.05. If the t value  $< 2.014$  and significance value  $> 0.05$ , the hypothesis is rejected and vice versa.

**Table 4. The t Test Results**

Model	t	Sig.
(Constant)	2.373	.022
Ease of use	1.826	.074
Trust	.504	.617
Information quality	1.982	.054
Service quality	.067	.947

The hypothesis 1 stating that the ease of use of e-commerce has an effect on purchase decision is rejected since the t value of  $1.826 < t$  table of 2.014 and with a significance value of  $0.074 > 0.05$ . It means that ease of use does not significantly influence customer decision to purchase at the Wingko Babat NN. Meniko store via Tokopedia.

The hypothesis 2 stating that trust in the use of e-commerce influences purchase decisions is also rejected since the t value (0.504) < t table (2.014) and the significance value of 0.617 > 0.05. It means trust has no significant effect on customer's purchase decision at the Wingko Babat NN. Meniko store via Tokopedia.

The hypothesis 3 stating that the quality of information in the use of e-commerce influences purchase decision is rejected because t value (1.982) < t table (2.014) and significance value of 0.054 > 0.05. This shows that the quality of information does not significantly influence customer's purchase decision at the Wingko Babat NN. Meniko store via Tokopedia.

The hypothesis 4 stating that service quality in the use of e-commerce influences purchase decision is rejected because the t value (0.067) < t table (2.014) and significance value of 0.947 > 0.05. It means that service quality has no significant effect on customer's purchase decision at the Wingko Babat NN Meniko store via Tokopedia.

Based on the results of the F test presented in table 5, the hypothesis 5 stating that the use of e-commerce has no effect on purchase decision is accepted as the F value 3.900 > F table 2.58 (df1 = 4 and df2 = 45), and significance value of 0.008 < 0.05. Therefore, it can be stated that the use of e-commerce influences consumer's purchase decision at the Wingko Babat NN Meniko store via Tokopedia.

**Table 5. The F Test Result**

Model	F	Sig.
Regression	3.900	.008

## Discussion

The results indicate that all the independent variables (convenience, trust, information quality, and service quality) have a positive influence on the dependent variable (purchase

decision). As indicated by value of the coefficient, information quality has the greatest influence (0.271) that is followed by ease of use (0.232). This proves that information quality and ease of use have a major contribution in driving customers to make decision to purchase at Wingko Babat NN. Meniko via Tokopedia. However, both attributes do not significantly influence customers' purchase decisions at the Wingko Babat NN. Meniko store via Tokopedia.

Tracing back to the questionnaire, it can be seen that some respondents think that using e-commerce is not easy to learn and the appearance and system of Tokopedia is still considerably quite confusing. This possibly the reason for ease of use is partially unable to influence significantly purchase decision of the respondents. This result is consistent with that of Gunawan, Ali, and Nugroho (2019), They found that ease of use also does not significantly influence purchase decision because it is the requirement for an e-commerce system and it cannot be an added value for influencing purchase decision. Accordingly,  $H_1$  is rejected.

The result that trust does not significantly influence purchase decision is contradictory with previous studies. The research conducted by Ardyanto et al. (2015), Akbar, Sularso, & Indraningrat (2020), and Mahliza (2020) results in trust has an influence on purchase decision. This shows that the respondents' trust to the seller is not the main reason in determining their buying decision at a store in Tokopedia. This is possibly the reason for  $H_2$  is rejected.

By reviewing the questionnaire, it is apparent that some respondents considered that the information provided and shown by Wingko Babat NN. Meniko in its store at Tokopedia is a little late, unconcise, and unclear. Such information quality is thus not significantly influence the respondents' purchase decision. Accordingly,  $H_3$  is rejected.

The research also found that service quality does not significantly influence purchase decision. The data revealed that several respondents found that Wingko Babat NN. Meniko store provided incomplete information about the products and the shop and responded relatively slow and not good enough according to the respondents' standards. This is possibly the reason for H<sub>4</sub> is rejected.

Even though partially the independent variables do not influence the purchase decision, they however simultaneously influence significantly the purchase decision. This means that no matter how small the effect of each variable, they still affect purchase decision positively and together or simultaneously they provide sufficient influence to the purchase decision. Thus, H<sub>5</sub> is accepted.

## **CONCLUSION AND IMPLICATIONS**

### **Conclusion**

This research was conducted to find out which variables have an influence on purchase decision at Wingko Babat NN. Meniko online store. The analysis concludes that ease of use, trust, quality of information, and service quality does not significantly influence customers' decision to purchase at Wingko Babat NN. Meniko store via Tokopedia. Simultaneously they significantly influence the purchase decision.

The results indicate that Wingko Babat NN. Meniko online store must be able to simultaneously provide ease of use, trust of customers, good information quality, and high service quality to influence customers' purchase decisions. It cannot only emphasize on one variable and ignores other variables, but must be able to increase ease of use, trust, information quality, and service quality in the store simultaneously without leaving a single one behind in order to greatly increase the customers' decision to buy from the store online.

## Recommendations

It is suggested that academics and researchers focus on ease of use, trust, information quality, and service quality simultaneously rather than partially for them to have a significant influence on purchase decision. For Wingko Babat NN. Meniko, the results can be used as a reference for developing the existing store at Tokopedia. It can increase responsiveness in order to improve the quality of service and information. It may consider to make their own e-commerce website other than that in Tokopedia for it to be able to design the website optimally regardless the appearance and system provided by Tokopedia. Further research can add other independent variables, increase the number samples, and divide respondents into groups according to research needs.

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