



# Investigating the Consumer Behavior of E-Commerce Product and Its Impact on Purchase Intention in Indonesia

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**Abstract.** E-commerce has changed the pattern of people's habits in general, which in the past the buying and selling process was only carried out directly, but with the existence of e-commerce, the buying and selling process can be done online. The purpose of this study is to analyze consumer behavior on e-commerce product and its impact on purchasing decisions. The method used in this study is quantitative, using a questionnaire and data analysis calculated with the Partial Least Square - Structural Equation Model (PLS-SEM). The study sample was 394 respondents from nine provinces in Indonesia. Based on the analysis, the benefits provided by e-commerce, convenience, and fast service have a significant effect on consumers' purchasing intentions of e-commerce products. Meanwhile, trust and reviews have no relationship with the intensity of e-commerce purchases. In maintaining sustainable e-commerce growth, digital economic and business actors should consider that societies will purchase e-commerce product if only the e-commerce platform provide benefit, convenience and fast response to their consumer. The existence of affliator or influencer has no correlation with the consumer's decision to purchase.

**Keywords:** consumer behavior · e-commerce · services · consumer purchase intentions

## 1 Introduction

Currently, the development of the digital world is very rapid, digitalization has an influence on all sectors, especially the economic sector. In the economic sector, digital developments can facilitate the field of trade, one of which is electronic commerce. Electronic commerce is known as *Electronic Commerce (e-commerce)*. Based on research by Eri, et al. [1], e-commerce is able to have a positive and significant influence on GDP so that it can increase the pace of economic growth in Indonesia. Online shopping is a common activity found globally [2]. Every e-commerce company is currently competing to make updates in every feature on its platform. This makes people choose e-commerce that has complete features. Innovation in e-commerce is important in technology so that it can influence consumer decisions and loyalty [3].

The increase in e-commerce transactions in Indonesia is in line with the development of the internet in ASEAN. Based on data released by the Coordinating Ministry for the Economy of the Republic of Indonesia (2022), the value of e-commerce transactions in Indonesia in the first quarter of 2022 reached IDR 108.54 trillion or grew 23 percent compared to the previous year period. The pandemic has had an impact on people who use e-commerce. It is proven that there were 21 million Consumers of Indonesia's digital services from March 2020 to the first semester of 2021, as many as 72% came from rural areas (Kompas.com, 2022). Based on the results of the E-Commerce survey of the Central Statistics Agency in 2021, Indonesia has 2,361,423 e-commerce businesses. Of these, as many as 1,774,589 e-commerce businesses or around 75.15% are concentrated on the island of Java. This is because the island of Java is close to the economic center which has adequate facilities such as smooth internet access [4]. In terms of popularity, Tokopedia has become the most visited e-commerce by Indonesians, followed by Shopee and Lazada.

The presence of e-commerce can facilitate the buying and selling process, but there are several problems faced by e-commerce, such as security that consumers are worried about and problems regarding taxes, for example, unclear who has the right to collect taxes [5]. The emergence of e-commerce has made people adapt to a new life. Promotion is an important influence to build consumer trust [6]. Based on research by Faizah and Prakso (2021), consumer behavior in determining decisions to shop online is influenced by trust, convenience, hedonic motivation, price, promotion, shopping experience and product quality. The quality of services provided to customers can affect people's buying interest. With the large selection of quality e-commerce, people can evaluate and compare the advantages of each e-commerce [8].

Research by Siti and Alifah (2018) concluded that the higher the convenience obtained by customers, the higher the level of trust and the better the level of interaction. This will have an impact on the higher purchasing decisions. Based on research by Nurul and Dedi (2020), the Covid-19 pandemic situation has an impact on increasing e-commerce sales. This is influenced by changes in consumer behavior during the pandemic, namely limited access to shop directly so that online shopping is the main choice, especially many e-commerce platforms have made it easier for people to meet their needs. Several researchers explained the impact of e-commerce for business actors, including: it can provide opportunities for business actors to be able to increase marketing and transaction reach [11].

This study aims to analyze e-commerce consumer behavior and its impact on purchasing decisions. A thorough understanding of consumer behavior will provide the first step in improving the quality of e-commerce services. With the higher quality of e-commerce, more and more people will use online shopping platforms which will ultimately have an impact on increasing economic growth.

## 2 Literature Review

### 2.1 Consumer Behavior

According to Schiffman and Kanuk (2008) a purchase decision is a selection of two or more choices on a purchase. Meanwhile, according to Sumarwan (2003) consumer behavior is defined as activities, actions, and psychological processes that can encourage consumers to before buying, when buying, using, spending products and services after carrying out evaluation activities. Consumers have a goal to get something that is needed, chilled, and in demand. The purpose of these consumers is to be able to satisfy what they want [12]. Consumers can make the decision to choose to make a purchase or not to make a purchase.

### 2.2 Influence of Purchasing Decisions

In determining purchasing decisions, consumers are influenced by several factors, including cultural, social, personal, and psychological factors (Kotler & Keller, 2009). The buyer will make a purchase decision with a series of processes that start from knowing the problem, looking for information about the product or brand, and evaluation on each of these alternative options, then the process will lead to a purchase decision (Tjiptono, 2014: 21).

According to Dedy (2015), the decision in purchasing is influenced by several decisions, there are 3 (three) factors, namely:

- a. The influence of others: neighbors, friends, confidants, family, etc.
- b. Unfortunate situation: price, family income, expected benefits.
- c. Predictable factors: situational factors that can be anticipated by the consumer.

### 2.3 Influence of Purchasing Decisions

The Technology Acceptance Model (TAM) according to Davis, Bagozzi, and Warshaw (1989) is a model used to explain how individuals accept the use of information technology systems. TAM knows user behavior in using technology. In this model, there are several important factors that can be felt, namely usability, ease, and intention to use technology [15, 16, 17]. The benefit of using TAM is that its measurement properties are excellent, compact, and have empirical strength [18].

## 3 Research Method

This study aims to analyze e-commerce consumer behavior and its impact on purchasing decisions. The source of this study's data came from a questionnaire with a total of 394 respondents. The criteria in this study are people who have made transactions in E-Commerce for the last 3 years and have opened packaging in e-commerce. The variables used in this study consist of free variables and bound variables. The free variables are Perceived Usefulness, Perceived Ease of Use, Trust, and Benefit. While the bound variable is Purchase Intention. This study used the Partial Least Square-Structural Equation Model (PLS-SEM) method to analyze the data. In the process of managing data, researchers use SmartPLS software. Items used in variables use point scales ranging from 1 "strongly disagree" and 7 "strongly agree".

**Table 1.** Validity and Reliability Test

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Benefit	0.805	0.810	0.884	0.718
Perceived Ease of Use	0.668	0.671	0.857	0.750
Perceived Usefulness	0.588	0.593	0.829	0.708
Purchase Intention	0.894	0.913	0.934	0.824
Trust	0.891	0.896	0.917	0.647

Source: Processing Data from SmartPLS

Research hypothesis:

H1: Benefit positively affects Purchase Intention

H2: Perceived Ease of Use positively affects Purchase Usefulness

H3: Perceived Ease of Use positively affects Purchase Intention

H4: Perceived Usefulness positively affects Benefit

H5: Trust positively affects Perceived Ease of Use

H6: Trust positively affects Purchase Intention

## 4 Result and Discussion

After the questionnaire was distributed, there were 394 respondents who filled out the questionnaire. After receiving it, data management is carried out for analysis. From the questionnaire that has been processed, the overall age of the respondents who are the object of this study ranges from 15–28 years.

### 4.1 Validity and Reliability

The results of data management resulted in an Average Variance Extracted (AVE) value of more than 0.5 so that the research variables could be declared to meet the validity aspect. The composite reliability from this study shows that all variables produce a Composite Reliability value of more than 0.7 so that it can be said to meet the reliability aspect (Table 1).

### 4.2 Hypotheses Test

Based on the results of data that has been processed using the PLS-SEM method, the Benefit variable has a positive effect to Purchase Intention. So that the first hypothesis (H1) of this research is acceptable. Furthermore, the Perceived Ease of Use variable has a positive effect on the perception of Usefulness. Then, the Perceived Ease of Use variable also has a positive effect on Purchase Intention. For the next variable, Perceived

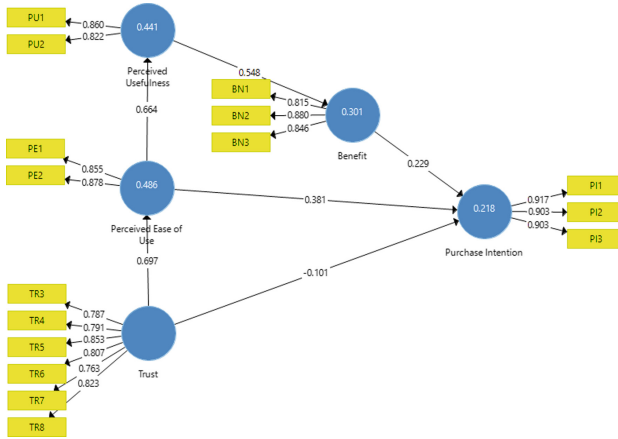


Fig. 1. Path Analysis

Table 2. Hypotheses Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Decision
Benefit - > Purchase Intention	0.229	0.228	0.076	2.993	0.003	H1 Accepted
Perceived Ease of Use - > Perceived Usefulness	0.664	0.664	0.038	17.669	0.000	H2 Accepted
Perceived Ease of Use - > Purchase Intention	0.381	0.385	0.058	6.557	0.000	H3 Accepted
Perceived Usefulness - > Benefit	0.548	0.547	0.046	12.033	0.000	H4 Accepted
Trust - > Perceived Ease of Use	0.697	0.697	0.037	19.033	0.000	H5 Accepted
Trust - > Purchase Intention	-0.101	-0.100	0.077	1.310	0.191	H6 Rejected

Source: Processing Data from SmartPL

Usefulness also has a positive relationship with Benefit. The last variable tested for hypothesis is Trust which has a positive effect on Perceived Ease of Use. Therefore, H1, H2, H3, H4 and H5 are accepted. Meanwhile, Trust negatively affects purchase intention, so H6 is declared rejected (Fig. 1 and Table 2).

## 5 Discussion

The results of this study show that there is a significant correlation between Benefit, Perceived Ease of Use, Perceived Usefulness to Purchase Intention. However, there is no significant relationship between trust and purchase intention. Purchase Intention can be obtained through ease of service, providing benefits, and good service. Providing convenience and good service to consumers is the main factor that contributes positively to e-commerce purchasing decisions.

The first variable tested was the variable benefit on purchase intention which resulted in a positive influence influenced by the benefits provided by e-commerce, such as providing discounts and free shipping. Conveniences such as a large selection of products, purchases of returns, and payments using pay later prove that they can increase consumer perception to increase their purchase intentions. So that the ease felt by consumers and the benefits provided by e-commerce have a positive effect on people's buying intentions [19].

The perceived ease of use variable is obtained from the influence of the ease of service offered by e-commerce positively affecting the perceived usefulness that has fast service and purchase intention. Convenience that consumers feel. Fast service and providing ease of service affects the benefits received by consumers.

Providing trust to consumers through services such as presenting complete information, customer review results, security systems, customer data confidentiality, payment security data confidentiality will have a positive impact on the convenience felt by customers. But not against people's buying intentions. The results of customer reviews will make it easier for consumers to find out whether the products sold from e-commerce are worth buying or not. The results of this study suggest the same results as the research of Huang, et al. (2020) which states that the recommendations of friends or other people are the most trusted information by consumers.

A good security system, complete information, reviews, and payment security do not necessarily increase consumers' purchase intentions. This is contrary to the results of research by Park, et al. (2021) which states that reviews will bring a high perception of trust so as to create trust in consumers' purchase intentions.

## 6 Conclusion

The results of identifying factors that can influence consumers' purchase intentions include: first, the benefits felt and the convenience provided by e-commerce can encourage purchase intentions community. Second, the ease of e-commerce has a significant effect on fast service. With fast service will provide benefits to consumers. Furthermore, trust or reviews from customers are used to make it easier for consumers to find out about the product. However, the trust variable has no effect on the increase in consumers' purchase intentions.

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