

## The Effect of Convenience, Trust, and Security on Purchasing Decisions Through Tokopedia (A Case Study of Tokopedia Users in Cirebon City)

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### Abstract

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#### Keywords:

E-Commerce; Tokopedia;  
Convenience; Security; Trust;  
Results

The rapid development of technology in *e-commerce* in Indonesia has intensified competition among platforms, highlighting the importance of understanding the factors that influence consumers' purchasing decisions. This study aims to analyze how convenience, trust, and security affect the purchasing decisions of Tokopedia users, particularly in Cirebon City. The research employed a quantitative approach with an associative method. Data were collected using a questionnaire distributed via Google Forms to 170 respondents who had made at least one purchase on Tokopedia within the past six months. A purposive sampling technique was used in this study. Data analysis was conducted using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) method with the SmartPLS application. The results indicate that convenience, trust, and security have a positive and significant effect on purchasing decisions, both partially and simultaneously, with an  $R^2$  value of 0.646, indicating that 64.6% of the variance in purchasing decisions can be explained by these three variables. It can therefore be concluded that convenience, trust, and security have a positive and significant influence on the purchasing decisions of Tokopedia users in Cirebon City, both partially and simultaneously.

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### INTRODUCTION

The rapid development of technology today has changed many aspects of human life, one of which is the way of communicating, working to accessing various kinds of digital services. One of the real impacts of this progress is the emergence of the trend of online shopping. The development of online shopping also brings changes in people's consumption patterns. In the past, purchases were only made through shopping centers such as markets, or traditional stores. But now consumers can buy various necessities without having to leave home (Saputra et al. 2023). These changes encourage the rapid development of E-Commerce platforms in Indonesia, so in addition to offering convenience, it can also pose new challenges in ensuring consumer trust and comfort (Tiurmaida et al. 2025).

Databoks shows that the projection of the number of e-commerce user data in Indonesia shows a significant increase every year (Jusuf et al. 2025; Setiawan et al. 2020; Strzelecki et al. 2022). Along with the projected increase in the number of E-commerce users, competition between E-commerce platforms in Indonesia is also experiencing competition. In Indonesia itself, there are various kinds of E-Commerce platforms such as Tokopedia, Shopee, Lazada, Bukalapak, Blibli, JD ID, and so on (Fandiyanto et al. 2025; Rosa et al. 2023).

According to the Indonesian Internet Service Providers Association (APJII) in 2025, Shopee will be the most frequently accessed e-commerce platform with a percentage of 53.22%,

followed by Tiktok Shop at 27.27%, while Tokopedia only gets a percentage of 9.57%. This shows that Tokopedia faces quite strong competition pressure compared to its two main competitors, so it is important for Tokopedia to understand the factors that influence consumer purchasing decisions in order to increase its competitiveness.

In the context of online shopping, purchase decisions do not occur simply, but through various considerations that consumers feel during the search process to transactions. In the TAM model by Davis (1989), the higher the ease of use of a system, the greater the likelihood of the system being used (Agung et al. 2021). The ease of using the application is an important factor that is suspected to influence how a person decides to do online shopping activities. In the context of the level of convenience, this is one of the factors that determine consumers in choosing and using online shopping platforms. This shows that the ease of using the application has the potential to have an influence on an online purchase decision (Tambing et al. 2023).

In addition, trust is an important element in the online purchase transaction process and also has an important meaning for consumers (Saxena & Thakur, 2024). Trust plays an important role in a purchase decision, because it is the basis for consumers to assess the credibility and quality of a product or service. McKnight et al. (2002) explain that trust plays a role in influencing and increasing consumer intention to make purchases (Akbar et al. 2020). In the consumer decision-making process, purchase intent is the stage that precedes the purchase decision. Therefore, factors that affect purchase intent, such as trust, also have the potential to influence purchasing decisions (Cho et al. 2015; Setiawan et al. 2020).

Another factor that is suspected to influence the purchase decision is the security of the e-commerce. The security that consumers certainly want includes protection of identity privacy, security in conducting online transactions, and ensuring that personal data is not misused (Cassim 2015; Strzelecki et al. 2022). The Risk Perception Theory introduced by Bauer (1960) explains that the perception of uncertainty and potential losses can hinder purchasing decisions (Clara et al. 2025). Therefore, the level of security that consumers feel towards an e-commerce platform has the potential to influence consumers in making transactions. In an online purchase process, the security aspect is a priority concern, because consumers' personal data must be protected and must not be leaked or spread (Napitupulu & Supriyono, 2023).

In the study of consumer behavior, convenience, trust, and security are often considered as determinants of purchase decisions on e-commerce platforms, but there are still few studies that examine the influence of convenience, trust, and security on purchase decisions, especially on users of the Tokopedia e-commerce platform in Cirebon City. Therefore, a more focused empirical test is needed to analyze the role of these three factors on purchase decisions in Tokopedia users in Cirebon City, so the purpose of this study is to analyze the influence of convenience, trust, and security on purchase decisions in Tokopedia users in Cirebon City in order to gain a more contextual understanding while supporting the strengthening of strategies to encourage purchase decisions through Tokopedia. The benefits of this research are expected to contribute both theoretically and practically. Theoretically, this study enriches the literature on consumer behavior in E-Commerce by providing empirical evidence regarding the role of convenience, trust, and security in purchasing decisions. Practically, the results of this study can serve as a reference for E-Commerce platforms, particularly Tokopedia, in developing strategies to improve user experience, strengthen consumer trust, and enhance transaction security, thereby increasing purchasing decisions and competitiveness in the market.

## RESEARCH METHOD

This research was conducted using an associative quantitative research design, which aimed to identify the relationships and influences between two or more variables (Palandi et al., 2022). This study used primary data obtained from questionnaires distributed to respondents via Google Forms. The data processing and analysis in this study were carried out using the SmartPLS 4 application with the Partial Least Squares–Structural Equation Modeling (PLS-SEM) approach.

In this study, the population size was unknown; therefore, the sample size was determined using the Hair formula. According to Joseph F. Hair Jr. (2010), as cited in (Rahayu & Susanti, 2022), if the sample size is too large—for example, reaching 400 respondents—the analysis method becomes highly sensitive, making it difficult to obtain a good measure of goodness-of-fit. Therefore, the recommended sample size is 5–10 observations for each estimated parameter. With 17 parameter indicators multiplied by 10, the sample size in this study was calculated to be 170 respondents. The sampling technique used in this study was purposive sampling, which can be defined as selecting respondents based on specific criteria determined by the researcher (Rahayu & Susanti, 2022). The criteria for respondents were individuals domiciled in Cirebon City who had made at least one purchase through the Tokopedia application within the last six months and were within the age range of 17–40 years.

The data analysis technique in this study was carried out in several stages using the PLS-SEM method. First, the measurement model (outer model) was evaluated through validity and reliability testing, including convergent validity using outer loading values and Average Variance Extracted (AVE), as well as construct reliability using Cronbach's alpha and composite reliability. Indicators with loading values above 0.70 and AVE above 0.50 were considered valid and reliable. Second, the structural model (inner model) was analyzed by assessing the  $R^2$  value to determine the explanatory power of the independent variables on the dependent variable. Third, hypothesis testing was conducted using a bootstrapping procedure to examine the significance of relationships between variables based on path coefficients, t-statistics, and p-values. A hypothesis was accepted if the t-statistic was greater than 1.96 and the p-value was less than 0.05. Through these stages, the analysis was expected to provide accurate empirical evidence regarding the effect of convenience, trust, and security on purchasing decisions among Tokopedia users in Cirebon City.

## RESULTS AND DISCUSSION

### a) Validity Test

Outer loading is used to measure the degree of an indicator's ability to reflect the latent construct represented. The higher the outer loading value, the stronger the relationship between the indicator and the latent construct, thus showing the fulfillment of convergent validity. Indicators that have an outer value of  $\geq 0.70$  are considered to have met good measurement criteria and can be used in reflective measurements.

**Table 1. Outer Loading Results**

VARIABLE	INDICATOR	OUTER LOADING	REMARKS
<b>Facilities</b>	KM1	0.872	VALID
	KM2	0.843	VALID
	KM3	0.784	VALID
	KM4	0.851	VALID
<b>Trust</b>	KC1	0.828	VALID
	KC2	0.803	VALID
	KC3	0.767	VALID
	KC4	0.822	VALID
<b>Security</b>	KN1	0.823	VALID
	KN2	0.844	VALID
	KN3	0.854	VALID
	CN4	0.853	VALID
<b>Verdict Purchase</b>	KP1	0.812	VALID
	KP2	0.804	VALID
	KP3	0.741	VALID
	KP4	0.789	VALID
	KP5	0.756	VALID

Source: Processed primary data using SmartPLS 4, 2026

The test results showed that each indicator used in this study had a loading factor value that was above the minimum required limit of  $\geq 0.70$ . This can be interpreted that all indicators in the measurement model have met the convergent validity standard. These results indicate that the research instrument has an adequate level of validity and is suitable for use for the next stage of analysis.

### b) Reliability Test

The purpose of the Reliability Test is to be able to assess the extent to which research indicators are able to provide consistent results in describing a construct. In this study, the level of reliability of the construct was analyzed using several measures, including Cronbach's Alpha, Composite Reliability consisting of rho\_a and rho\_c. (Hair et al. 2021) states that a construct is declared to have good reliability if the Cronbach's Alpha and Composite Reliability values show a value of  $\geq 0.70$ , which indicates that there is adequate internal consistency between indicators in one construct.

**Table 2. Cronbach's Alpha, Composite Reliability & Average Variance Extracted**

Variable	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)	Remarks
<b>Facilities</b>	0.860	0.877	0.904	0.702	Reliable
<b>Trust</b>	0.821	0.830	0.881	0.649	Reliable
<b>Security</b>	0.866	0.880	0.908	0.711	Reliable
<b>Purchase Decision</b>	0.840	0.844	0.886	0.610	Reliable

Source: Processed primary data using SmartPLS 4, 2026

Based on Table 2, the test results show that all research variables have passed the reliability and validity standards. Cronbach's Alpha value for each variable is above 0.70, which indicates good internal consistency of the indicator. In addition, the Composite Reliability values ( $\rho_a$  and  $\rho_c$ ) of the entire construct also exceeded the minimum limit of 0.70, so it can be concluded that the research instrument has an adequate level of reliability. Furthermore, the Average Variance Extracted (AVE) value for all variables is above 0.50, which shows that each construct can adequately explain the variance of its indicators. This shows that all variables in this study are said to be reliable and valid, and are suitable for use for the next stage of analysis.

### c) R-Square

In the assessment of the ability of independent variables to decipher the variation of dependent variables, a determination coefficient (R-Square) test was carried out. The R-Square value shows the proportion of variations in dependent variables that can be explained by independent variables in the research model. In this study, the R-Square value was categorized as weak if  $\leq 0.5$ , while if it was in the range of 0.5–0.7, and strong if it was  $\geq 0.7$ . This grouping is used to evaluate whether or not the research model is good in describing the relationship between variables. The results of the R-Square test are shown as follows.

**Tabel 3. R-square & R-square adjusted**

	R-square	R-square adjusted
<b>Purchase Decision</b>	0.646	0.640

Source: Processed primary data using SmartPLS 4, 2026

Based on the results of the determination coefficient analysis in Table 3, an R-square value of 0.646 was obtained for the Purchase Decision variable. These results show that 64.6% of the variation in Purchase Decisions can be explained by the independent variables used in the research model. Meanwhile, the remaining 35.4% were influenced by other factors outside of this research model.

The R-square adjusted value shows 0.640, which can be interpreted that after adjusting for the number of independent variables in the model, the model's ability to explain the Purchase Decision variable remains high. This can be interpreted that the structural model built can explain strongly and relatively stable, so it can be said to be suitable to be used to explain the relationship between the variables being studied.

#### d) Model Structural

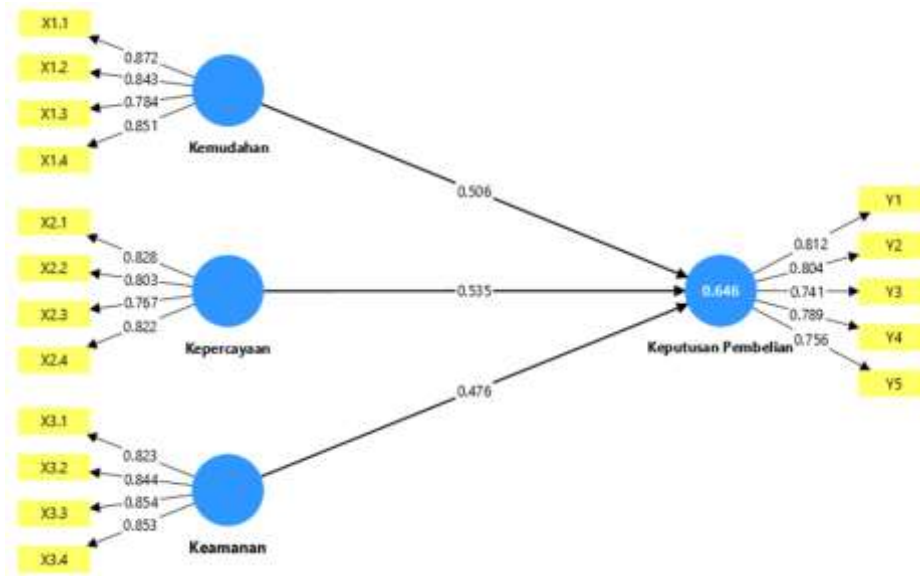


Figure 1. Structural Models

Source: Processed primary data using SmartPLS 4, 2026

#### e) Uji Hypothesis

The hypothesis test in this study was carried out by considering the path coefficient (original sample), T-statistic, and P-values as the basis for the research. A hypothesis can be said to be acceptable if the T-statistical value obtained exceeds 1.96 and is supported by P-values that are below the limit of 0.05.

Tabel 4. Path coefficient

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values
Convenience -> Purchase Decision	0.506	0.504	0.048	10.458	0.000
Trust -> Purchase Decision	0.535	0.534	0.048	11.053	0.000
Security -> Purchase Decision	0.476	0.474	0.044	10.760	0.000

Source: Processed primary data using SmartPLS 4, 2026

#### H1: The Influence of Convenience on Purchase Decisions

The test findings show that the relationship between convenience and purchase decisions is shown by a path coefficient value of 0.506, with a T-statistical value of 10.458 and a P-value of 0.000. All such values have exceeded the limits of the criteria set in the hypothesis test. Thus, it can be concluded that Convenience has a positive and significant effect on a purchase decision, so that a hypothesis that states a significant influence of Convenience on a Purchase Decision can be accepted.

## **H2: The Influence of Trust on Purchasing Decisions**

The findings of the test results show that the relationship between trust and purchase decisions is shown by the value of the path coefficient of 0.535, with a T-statistical value of 11.053 and a P-value of 0.000. All of these values have exceeded the limit of the criteria set in the hypothesis test. Therefore, it can be concluded that Trust has a positive and significant influence on a purchase decision, so that a hypothesis that states the existence of a significant influence of Trust on a Purchase Decision can be accepted.

## **H3: The Influence of Security on Purchase Decisions**

The test results showed that the relationship between Security and purchase decisions was shown by a path coefficient value of 0.476, with a T-statistics value of 10.760 and a P-value of 0.000. All of these values have exceeded the limit of the criteria set in the hypothesis test. As a result, it can be concluded that Security has a positive and significant influence on a purchase decision, so the hypothesis that there is a significant influence of Security on the Purchase Decision can be accepted.

## **H4: The Simultaneous Influence of Ease, Trust and Trust on Purchase Decisions**

The value of the determination coefficient (R-square), which is 0.646, shows that 64.6% of the variation in Tokopedia users' purchase decisions in Cirebon City can be explained simultaneously by the variables of convenience, trust, and security, while the remaining 35.4% are influenced by other factors outside the research model conducted. This indicates that these three independent variables simultaneously have a strong and significant role in explaining purchasing decisions. Thus, the fourth hypothesis (H4) in this study can be declared acceptable.

## **Discussion**

### **The Influence of Convenience on Purchase Decisions**

The results of the hypothesis test show that convenience has a positive and significant influence on a purchase decision of Tokopedia users, especially in Cirebon City. This is evidenced by the path coefficient value of 0.506, the T-statistical value of 10.458 and the P-values of 0.000, all of which have met the hypothesis acceptance criteria. The findings of this result state that the higher the level of convenience that consumers can feel in using the Tokopedia application, the greater the likelihood that consumers will be able to make purchase decisions.

The convenience referred to in this study includes the ease of recognizing application features, ease of navigation, ease of obtaining product information, and ease of purchase process. It can be concluded that respondents can really feel the benefits of the Tokopedia application which is easy to use and efficient. This condition encourages consumers to feel comfortable, not experience technical obstacles, and easily complete the purchase process, so that it has a direct impact on purchase decisions. The results of this study are in line with the research conducted by (Lubis et al. 2023) which reveals that convenience has a positive and significant influence on a purchase decision. This shows the importance of improving the convenience of the system as a strategy in encouraging purchase decisions on the Tokopedia e-commerce platform.

### **The Influence of Trust on Purchasing Decisions**

Referring to the results of structural analysis, trust has been proven to have a positive and significant effect on a purchase decision. This is shown by the path coefficient value of 0.535, the T-statistics value of 11.053 and the P-values of 0.000, which shows that the second hypothesis in this study is acceptable. These findings indicate that consumer trust in the Tokopedia application plays an important role in encouraging purchase decisions.

Trust in this study can be seen from the indicators of reliability, honesty, care, and credibility of the platform. It can be concluded that respondents consider Tokopedia to be a reliable, honest, caring, and reputable platform. This trust has a direct impact on purchasing decisions because it helps consumers in reducing the doubts and risks that often arise at the time of online purchases, especially for the reason that there is no physical interaction carried out directly between the seller and the buyer. The results of this study are in line with the research conducted by (Kristanto et al. 2025) which expresses trust that has a positive and significant influence on a purchase decision. This shows the importance of increasing the strengthening of consumer trust as a strategy in encouraging purchase decisions on the Tokopedia E-commerce platform.

### **The Influence of Security on Purchasing Decisions**

The results obtained from the third hypothesis test show that security has a positive and also significant influence on a purchase decision. This is shown by the highest path coefficient value among independent variables, which is 0.476, T-statistics value 10.760, and P-values 0.000, the results show that the security factor is an important aspect that of course consumers pay attention to in making purchases through Tokopedia.

Security in this study includes the confidentiality of personal data, secure data management, assurance in transaction security, and secure payment methods. This can be concluded that respondents feel that their personal data and transactions are well protected when using the Tokopedia application. Of course, this sense of security has a direct impact on purchasing decisions because it makes consumers more confident in making transactions without any worries about data misuse or the risk of fraud. The results of this study are in line with the research that has been carried out by (Devananda et al. 2023) that reveal security has a positive and significant influence on a purchase decision. This shows the importance of improving data and transaction security protection as a strategy in encouraging purchase decisions on the Tokopedia E-commerce platform.

## **CONCLUSION**

The results of this study indicate that convenience, trust, and security have a positive and significant influence on the purchasing decisions of Tokopedia users in Cirebon City, both partially and simultaneously, with an  $R^2$  value of 0.646, meaning that 64.6% of the variation in purchasing decisions was explained by these three variables while the remaining 35.4% was influenced by other factors not examined in this study. Partially, ease of application use, the level of consumer trust, and transaction security were all proven to enhance purchasing decisions, with trust identified as the most influential variable. These findings highlight the importance for e-commerce platforms to continuously improve system usability, strengthen

consumer trust, and ensure robust data and transaction security to encourage purchasing decisions; therefore, future research is recommended to explore additional variables—such as price perception, promotions, or user experience—and to expand the study to different regions or platforms to provide more comprehensive insights.

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