



The Influence of Promotion, Trust, and COD Systems on Online Purchase Decisions on Shopee

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Abstract. The Influence of Promotion, Trust and Cash on Delivery Systems on Online Purchase Decisions on Shopee. This comprehensive study seeks to thoroughly examine the specific ways in which marketing promotions, the foundational level of consumer trust, and the availability of a flexible cash on delivery (COD) payment method collectively influence the purchasing decisions of consumers within the Shopee marketplace. In the current business landscape, characterized by the exponential growth of the global e-commerce industry, gaining a sophisticated understanding of the key factors that drive consumer choices has become absolutely vital for any business aiming to secure a competitive advantage. This particular research was meticulously conducted utilizing a quantitative approach, with the resulting data analyzed through the robust statistical method of multiple linear regression. The participant group for this research consisted of 100 active undergraduate students from Hasanuddin University, spanning the academic years from 2017 to 2021, representing a key demographic of digital consumers. The conclusive findings from the analysis demonstrate that all three variables—promotions, trust, and COD—when considered together, exert a demonstrably positive and statistically significant impact on the purchasing decisions made by this student population. This outcome offers highly valuable and actionable insights for e-commerce strategists, underscoring the necessity of developing precise marketing initiatives designed not only to boost immediate sales figures but also to cultivate lasting customer loyalty in a crowded digital market.

Keywords: Keywords: Purchasing Decision, Promotion, Trust, Cash on Delivery, E-commerce.

1 Introduction

Rapid advancements in internet technology have changed the way consumers shop, establishing e-commerce as one of the biggest market trends. Online shopping phenomenon in Indonesia is exponential. According to data compiled by Jayani [1], the increase in the number of e-commerce users in Indonesia is driven by easy internet access and high smartphone penetration, making Indonesia one of the largest digital markets in Southeast Asia. This trend is further accelerated by changes in consumer behavior seeking convenience and efficiency. Catriana [2] noted that the main driving factors for the shift to online shopping are the availability of various attractive

promotions and the ease of logistics offered by marketplaces, which have fundamentally changed people's consumption patterns.

Platforms like Shopee have become dominant players in the Southeast Asian market, offering easy access and a diverse range of products. The growth of digital business transactions users in Indonesia has been projected to continue progressive, driven by aggressive promotional programs and modifications in consumer behavior influenced by the COVID-19 pandemic [3].

Consumer purchasing decisions in the digital environment are influenced by various factors. According to Kotler & Armstrong [4], Both internal factors, such as promotions, and external factors, such as trust, are critically important. Promotion, as a marketing communication tool, aims to increase brand awareness and persuade the target market. Previous research by Setyarko [5] The results proved that promotions significantly and positively affect online purchasing decisions.

In addition to promotions, trust is the foundation of online business transactions. Without trust, consumers will hesitate to make transactions. Ardyanto et al. [6] The study found a positive correlation, indicating that higher levels of consumer trust lead to higher online purchasing decisions. One feature offered to build trust is the Pay on Delivery Method, which enables consumers to settle payment once they have received the goods. Despite high digital adoption, the preference for cash payment methods remains very dominant. Rizaty [7] in his report revealed that the main reasons consumers choose Cash on Delivery are doubts about the product quality and distrust of the guarantee of online banking transactions. The COD feature is considered the most effective risk mitigation solution for consumers who want to verify the physical condition of goods before spending money.

While these three factors are theoretically important, their influence can vary. Students are an active consumer segment on online marketplace. Even so, the findings are inconsistent in previous study regarding the effect of COD. Some studies show a positive influence [8], while others, such as Rizki and Widodo's [9] study, found no significant effect. This study is motivated by the background to determine the role played by promotions, trust levels, and the COD payment method in shaping online purchasing decisions among Hasanuddin University students who use the Shopee marketplace.

2 Literature Review

2.1 Promotion

In brand management, promotion is a vital element of communication. Kotler and Armstrong [4] define promotion as activities that communicate product benefits and persuade target customers to purchase them. The effectiveness of promotions in influencing consumer behavior has been widely studied. Fauziah and Tunjungsari [10], The analysis indicated that aggressive sales incentives, specifically discounts and free carriage, possess a statistically significant direct relationship with buying intention.

Regarding of the online marketplace Shopee, promotions are manifested through sales promotions such as "Free Shipping," Cashback, and Flash Sales. Dwijantoro [11] found that aggressive sales promotions effectively increase purchasing impulses in

price-sensitive consumers. Promotions function as external stimuli that can trigger impulse purchases in consumers who previously had no intention of purchasing.

- **Hypothesis 1 (H1):** Promotions are statistically proven to boost purchasing decisions.

2.2 Trust

Trust is a key asset in virtual business interactions. Putra et al. [12] emphasize that, in addition to ease of use, trust and psychological comfort are crucial determinants. If consumers feel confident that the platform guarantees the security of their data and transactions, the psychological barrier to making a purchase will be drastically reduced. Schiffman and Kanuk [13] define trust as consumer confidence in the integrity and honesty of another party (the seller). Given that consumers cannot physically see or touch the product before purchasing, trust in the platform and seller acts as a risk bridge.

- **Hypothesis 2 (H2):** A statistically significant and favorable relationship exists between trust and purchasing decisions.

2.3 Cash On Delivery

Payment on Delivery (Cash on Delivery) is a mechanism where installment is made in cash when the goods are delivered by the courier to the buyer. The relevance of cash on delivery (COD) systems remains high across various market segments. Research by Armiani [14] The results indicate that the option for Cash on Delivery (COD) favorably affects purchasing choices, especially for consumers engaging with the MSME sector or marketplace platforms during periods of economic instability. COD provides buyers with a sense of full control, which is a determining factor in finalizing transactions.

Rizki and Widodo [9] found in their research that COD has a significant influence because it provides a sense of security ("the goods are here, then pay") and reaches consumers who do not have access to banking (unbanked people). For the student segment, COD minimizes the risk of online fraud.

- **Hypothesis 3 (H3):** The COD system is statistically proven to significantly and positively affect purchasing outcomes.

2.4 Purchase Decision

Purchasing decisions are an integrative stage in consumer behavior. Kotler and Keller [15] define defining purchasing decisions as the evaluative phase where consumers establish brand preferences and proceed to make the actual acquisition. Aulia et al. [16] state that in online shopping, these decisions are greatly influenced by marketing stimuli (promotions) and psychological factors (trust and sense of security).

3 Methodology

3.1 Research Design

A causal design was adopted as the specific framework for this quantitative study. The Empirical method necessitates the measurement of phenomena through numerical data analysis and compilation. Meanwhile, the causal design is applied to clearly test and determine the existing relationship of influence, specifically how Promotion, Trust, and COD, as independent variables, impact Purchase Decision as the dependent variable.

3.2 Population and Sample of Participants

The subjects of this research are the entire group that the research targets. Since studying the entire population is not feasible, a sample, or a small representative subset, is taken. The purposive sampling technique means the researcher selects the sample based on specific criteria (e.g., having shopped on Shopee). To achieve statistically representative results, The precise number of samples needed was obtained by employing the Slovin formula .The subjects consists of all active undergraduate students at Hasanuddin University from the 2017-2021 batches (26,299 individuals).The research sample is composed of 100 participants, all of whom were selected using the established purposive sampling technique technique.

3.3 Data Collection

This research employed an relying on an online survey as the core data collection method, which involves a digitally distributed question form. Responses from this questionnaire were evaluated on a Likert-type instrument, the measurement used a fivepoint range, from 1 (Strongly Disagree) to 5 (Strongly Agree), to capture the respondents' attitudes and views.

3.4 Instrument Quality Testing

The research instrument was tested for validity (r -computed $>$ r -table) and reliability (Cronbach's Alpha $>$ 0.60). Validity testing is performed to ensure the research instrument (the questionnaire) accurately assesses the specific variable or concept it intends to measure. The reliability test ensures that the questionnaire is consistent; if tested repeatedly on the same respondents, the results would tend to be the same. A valid and reliable instrument produces high-quality data.

3.5 Data Analysis Technique

Multiple linear regression analysis, following the mathematical model:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon. \quad (1)$$

Was implemented on the research data. This statistical technique is essential for determining the combined impact of Promotion (X1), Trust (X2), and COD (X3) on the Purchase Decision (Y). Consequently, the model allows for the estimation of the Purchase Decision value from these three independent variables.

3.6 Hypothesis Testing

To test the hypotheses, two statistical tests were utilized at a 0.05 significance level: the F-test, which assesses the overall (simultaneous) effect of Promotion, Trust, and COD on the Purchase Decision; and the t-test, which analyzes the influence of each variable separately (partially). The study utilized a 0.05 threshold for statistical significance, meaning the results are interpreted with a 95% level of confidence.

4 Result

4.1 Instrument Testing

Validity Test. The results of the validity test for the Promotion, Trust, and Cash on Delivery variables are as follows:

Table 1. Validity Test for Promotion, Trust, Cash on Delivery, and Online Purchasing Decisions

Variable	Item	Pearson Pearson's State-Correlation ment	r table	Description
Promosion(X1)	X1.1	0,643	0,3	Valid
	X1.2	0,728	0,3	Valid
	X1.3	0,775	0,3	Valid
	X1.4	0,783	0,3	Valid
	X1.5	0,792	0,3	Valid
Trust(X2)	X2.1	0,787	0,3	Valid
	X2.2	0,848	0,3	Valid
	X2.3	0,854	0,3	Valid
Cash onDelivery (X3)	X3.1	0,858	0,3	Valid
	X3.2	0,905	0,3	Valid
	X3.3	0,922	0,3	Valid
Online Purchasing cision (Y)	De-Y.1	0,937	0,3	Valid
	Y.2	0,925	0,3	Valid
	Y.3	0,871	0,3	Valid

Source: SPSS Data Processing Results

Based on Table 1, the overall validity test can be concluded that all questions in the questionnaire are valid and suitable for use in this study.

Reliability Testing. This reliability test aims to obtain information on consistent or stable responses over time. The following are the results and their description:

Table 2. Instrument Reliability Test Results

No	Variable	Cronbach's Alpha	Description
1	Promosion (X1)	0,797	Reliable
2	Trust (X2)	0,775	Reliable
3	Cash on Delivery (X3)	0,876	Reliable
4	Online Purchasing Decision (Y)	0,890	Reliable

Source: SPSS Data Processing Results

Table 2 indicates that every variable's Cronbach's Alpha (α) score significantly exceeds the 0.60 standard. The respective figures are 0.797 (Promotion), 0.775 (Trust), 0.876 (Cash on Delivery), and 0.890 (Online Purchasing Decision). These findings confirm that the research instrument successfully passed the reliability test and is therefore considered trustworthy

4.2 Descriptive Variable Analysis

Promosion (X1). Data on the promotion variable were obtained from a five-item questionnaire with 100 Hasanuddin University students as respondents.

The following are the respondents' responses regarding the promotion variable:

Table 3. Distribution of Respondents' Responses to the Promotion Variable (X1)

No	Statement	Score					Total
		SA	A	N	DA	SD	
1	X1.1	61	32	5	2	-	100
2	X1.2	50	30	13	5	2	100
3	X1.3	65	29	4	1	1	100
4	X1.4	57	38	4	1	-	100
5	X1.5	61	32	4	2	1	100

Source: SPSS Data Processing Results

Based on Table 3, the results of the distribution of respondents' answers show that for the promotion variable, the most dominant statement is the third statement. Out of 100 respondents, 65 respondents (65%) stated that they strongly agreed.

Trust (X2). The trust variable data was obtained from a questionnaire consisting of three questions and 100 Hasanuddin University students.

The following are the respondents' responses regarding the trust variable:

Table 4. Distribution of Respondents' Responses to the Trust Variable (X2)

No	Statement	Score					Total
		SA	A	N	DA	SD	
1	X2.1	35	48	16	-	1	100
2	X2.2	23	41	31	5	-	100
3	X2.3	23	48	25	3	1	100

Source: SPSS Data Processing Results

Based on table 4, the results of the distribution of respondents' answers show that in the trust variable, the most dominant statements are the first and third statements. Out of 100 respondents, 48 respondents (48%) stated they agreed.

Cash on Delivery (X3). The Cash On Delivery variable data was obtained from a questionnaire consisting of three questions and 100 Hasanuddin University students

The following are the respondents' responses regarding the Cash On Delivery variable:

Table 5. Distribution of Respondents' Responses to the Cash on Delivery Variable (X3)

No	Statement	Score					Total
		SA	A	N	DA	SD	
1	X3.1	44	33	18	4	1	100
2	X3.2	34	36	22	7	1	100
3	X3.3	36	40	17	3	4	100

Source: SPSS Data Processing Results

Based on table 5, the results of the distribution of respondents' answers show that for the Cash on Delivery variable, the most dominant statement is the first statement. Out of 100 respondents, 44 respondents (44%) stated they agreed.

Purchasing Decision Variable (Y). The Purchasing Decision variable data was obtained from a questionnaire consisting of three questions and 100 Hasanuddin University students

Table 6. Distribution of Respondents' Responses to the Purchasing Decision (Y)

No	Statement	Score	Total
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		SA	A	N	DA	SD	
1	Y.1	77	20	2	1	-	100
2	Y.2	72	21	4	3	-	100
3	Y.3	71	26	2	1	-	100

Source: SPSS Data Processing Results

Based on table 6, the results of the distribution of respondents' answers show that in the online purchasing decision variable, the most dominant statement is the first statement. Out of 100 respondents, 72 respondents (72%) stated that they strongly agreed.

4.3 Multiple Linear Regression Analysis

Multiple linear regression was utilized to assess the impact exerted by the predictor variables Promotion, Trust, and Cash on Delivery on the dependent variable, online purchasing decisions, among active undergraduate students at Hasanuddin University from the 2017-2021 cohort. The data processing was executed using the SPSS statistical package.

The results of the multiple linear regression calculations for this study are as follows:

Table 7. Results of Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std.Error	Beta
1	(Constant)	5.190	1.151	
	Promosion	.322	.047	.565
	Trust	.160	.070	.194
	Cash on Delevery	-.019	.052	-.030

Notes: Dependent Variable: Online Purchase Decision

Source: SPSS Data Processing Results

Based on the Unstandardized Coefficients provided in Table 7, the following multiple linear regression equation was formulated:

$$Y = 5,190 + 0,322 (X1) - 0,160 (X2) + 0,019 (X3) + e \quad (2)$$

The estimated regression model indicates that, when all predictors are fixed at zero, the baseline level of online purchasing decisions among Hasanuddin University students in the 2017–2021 cohort is 5.190. This constant represents the expected value of the dependent variable under a hypothetical condition in which Promotion, Trust, and Cash on Delivery (COD) do not vary, thereby providing a reference point for interpreting the marginal effects of each independent variable within the model.

With respect to the explanatory variables, Promotion exhibits a positive coefficient of 0.322, implying that an increase of one unit in Promotion is associated with an increase of 0.322 units in students' online purchasing decisions, conditional on Trust and COD remaining unchanged. Trust also shows a positive association, with a coefficient of 0.160, indicating that a one-unit increase in Trust corresponds to a 0.160-unit increase in online purchasing decisions when other predictors are held constant. In contrast, Cash on Delivery presents a negative coefficient of -0.019 , suggesting that, *ceteris paribus*, a one-unit increase in COD is associated with a slight decrease of 0.019 units in online purchasing decisions. These coefficient estimates provide the basis for subsequent hypothesis testing regarding the direction and magnitude of each predictor's relationship with the decision to purchase online.

Partial Test (F Test). A partial test or F test was conducted to simultaneously test the Promotion (X1), Trust (X2), and Cash on Delivery (X3) variables against the online purchasing decision variable (Y).

Table 8. (F) Test

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	115.756	3	38.585	23.414	.000b
	Residual	158.204	96	1.648		
	Total	273.960	99			

Source: SPSS Data Processing Results

As shown in Table 8, the simultaneous test (F-test) yielded an F-value of 23.414. Because this value surpasses the critical F-table value (3.97) and the F-significance is below 0.05, it is concluded that the combined set of variables—Promotion, Trust, and Cash on Delivery—significantly influences online purchasing decisions. This result indicates that the overall hypothesis is accepted..

Partial Test (t-Test). To ascertain the extent to which promotion, trust, and cash on delivery individually influence online purchasing decisions, a t-test analysis was performed using an alpha level of 0.05. The summary of the t-test results from this analysis is displayed in Table 9:

Table 9. (t-Test)**Coefficients^a**

Model		Unstandardized Coefficients		Standardize d	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	5.190	1.151		4.508	.000
	Promosion	.322	.047	.565	6.863	.000
	Trust	.160	.070	.194	2.267	.026
	Cash onDelivery	-.019	.052	-.030	-.363	.717

Source: SPSS Data Processing Results

The partial hypothesis testing results derived from Table 9 show that the calculated t values are 6.863 for Promotion (X1), 2.267 for Trust (X2), and -0.363 for Cash on Delivery (X3). Using an alpha level of 0.05, these statistics indicate differentiated effects across the explanatory variables in predicting students' online purchasing decisions.

Promotion (X1) demonstrates a statistically significant and positive influence on online purchasing decisions, as evidenced by its p value of 0.000. This result supports the acceptance of the corresponding hypothesis and indicates that promotional activity is a substantive predictor within the model. Consistent with the estimated coefficient of 0.322, a one-unit increase in Promotion is associated with a 0.322-unit increase in purchasing decisions, holding other predictors constant.

Trust (X2) also exhibits a positive and statistically significant effect on online purchasing decisions. The p value of 0.026 falls below the 0.05 threshold, thereby supporting the acceptance of the hypothesis for Trust. The coefficient estimate of 0.160 suggests that, *ceteris paribus*, a one-unit increase in Trust corresponds to a 0.160-unit increase in purchasing decisions, indicating that trust-based perceptions contribute meaningfully to students' propensity to purchase online.

By contrast, Cash on Delivery (X3) does not present a statistically significant association with online purchasing decisions, as its p value of 0.717 exceeds 0.05. Accordingly, the hypothesis regarding COD is rejected. Although the coefficient is negative at

-0.019, implying that an increase of one unit in COD is associated with a marginal 0.019-unit decrease in purchasing decisions, this relationship is not supported statistically within the sample and therefore should be interpreted as non-significant.

5 Discussion

5.1 The Influence of Promotion on Online Purchasing Decisions

The empirical findings indicate that Promotion exerts a statistically significant influence on online purchasing decisions among Hasanuddin University students. The t value for Promotion is 4.508 with a p value of 0.000, which is well below the 0.05 threshold; therefore, the null hypothesis is rejected and the research hypothesis is supported. Conceptually, promotion functions as a managerial activity intended to communicate product advantages and to persuade potential consumers to proceed with purchase decisions. This quantitative result is also reflected in respondents' evaluations of promotional practices on Shopee. In particular, responses to the third questionnaire statement show that 65 respondents strongly agreed that they purchase products on Shopee because the platform offers extensive promotional incentives, including cashback and discounts. This pattern is consistent with prior evidence indicating that promotions have a partial and positive effect on purchasing decisions within the Shopee marketplace context [1].

5.2 The Influence of Trust on Online Purchasing Decisions

The results further demonstrate that Trust significantly influences online purchasing decisions among Hasanuddin University students who use Shopee. The t value is 2.267 with a p value of 0.026, indicating statistical significance at the 0.05 level; accordingly, the null hypothesis is rejected and the alternative hypothesis is accepted. Trust can be understood as an individual's belief in the reliability of another party and a willingness to accept vulnerability in a transactional relationship. The descriptive pattern of responses reinforces this interpretation. Based on the first questionnaire statement for the trust construct, 48 respondents agreed that they purchase products via Shopee because sellers provide assurances of satisfaction and ensure transaction security. This aligns with earlier research showing that trust has a significant effect on online purchasing decisions, particularly because trust strengthens consumer confidence when transacting in digital marketplaces [2].

5.3 The Effect of Cash on Delivery on Online Purchasing Decisions

In contrast, Cash on Delivery does not exhibit a statistically significant effect on online purchasing decisions in the Shopee context. The partial t test yields a t value of -0.363 and a significance level of 0.717, which exceeds the 0.05 threshold; therefore, the hypothesis relating to Cash on Delivery is rejected. Cash on Delivery is commonly defined as a payment method in which the customer pays in cash to the courier at the point of delivery. Responses to the first statement for this construct show that 44 respondents strongly agreed, with respondents indicating that some products offered on Shopee are not available with the Cash on Delivery option. This outcome is consistent with prior findings that Cash on Delivery does not significantly influence purchasing decisions in Shopee online stores [3].

6 Conclusion

This study concludes that promotion and trust positively and significantly influence the online purchase decisions of university students. Conversely, the cash on delivery (COD) payment system is no longer a relevant factor for this segment. The implication is that e-commerce players targeting young consumers should focus their strategies on promotional innovation and strengthening the trust ecosystem, while continuously developing a seamless digital payment experience.

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