Analysis of the Influence of TikTok Social Media and the Ease of Use of the Tokopedia Marketplace Platform on the Purchase Intention of Digital Business Students

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Abstract. The rapid development of technology and the internet has changed the way individuals access information and conduct transactions. This research examines the role of social media TikTok and the Tokopedia marketplace platform in influencing the behavior of college students who actively use the Tokopedia marketplace platform studying digital business, with a focus on how creative content can attract consumer attention. Engaging short videos on Tiktok, supported by sophisticated algorithms, present personalized information, thereby increasing user engagement and shopping behavior. The research method used is quantitative, with multiple linear regression analysis to evaluate the relationship between variables. The instrument used is Likert scale-based to measure respondents regarding various aspects of social media marketing and ease of use of the platform. It is expected that the results of the study show TikTok social media marketing has a positive and significant influence on students' purchase intention, along with the ease of use of the Tokopedia marketplace which supports decision making in the purchasing process.

Keywords: Marketplace, social media marketing, consumer purchase intention, ease of use.

Introduction

Many aspects of human life have changed due to advancements in technology and the internet, particularly in how people buy and obtain information. Social media has become one of the most important factors in various societal activities, including economic activities, in today's digital era. One of the fastest-growing social media networks in recent years, TikTok, has emerged as a crucial channel for distributing original content that has the power to shape user preferences and decisions. Its diverse content and sophisticated algorithms can display information based on user interests, enhancing interaction and influencing purchasing decisions (Zhang & Chen, 2022). TikTok is known for its entertaining and often viral short videos, which have the potential to initiate new consumption trends. In addition to entertainment, creative content that includes product reviews, challenges, and promotions also successfully influences consumers' purchasing decisions. Social media consumers are often swayed by popular culture, influencer endorsements, and product suggestions on TikTok. TikTok serves as a highly effective digital marketing tool for brands looking to connect with their target demographics due to these phenomena. To facilitate customer product shopping on the TikTok platform, TikTok launched the TikTok Shop feature in 2021. Since the COVID-19 pandemic was still ongoing at that time, all transactions on the TikTok Shop platform were conducted online by app users during the outbreak. A wide variety of goods are available on TikTok Shop, including everyday necessities such as clothing, shoes, snacks, skincare products, school supplies, household

items, makeup, and more. Additionally, TikTok Shop offers items like makeup, household tools, and other products that help consumers meet their needs without having to leave their homes (Smith, 2023).

On the other hand, with the increasing demand for convenient and fast online shopping, marketplace systems like Tokopedia have also undergone significant changes. As one of the largest marketplaces in Indonesia, Tokopedia is leveraging this by continuously enhancing the usability of its platform, from a more user-friendly interface to a range of tools that simplify the transaction process. One key element influencing consumer decisions when making purchases on digital platforms is its ease of use (Rahman & Wijaya, 2022). The way marketplace platforms like Tokopedia and social media like TikTok are integrated has a substantial impact on consumers' purchase intentions. Customers are emotionally driven to buy certain products by TikTok's imaginative content, and the Tokopedia platform makes it easy for them to do so by facilitating transactions. This demonstrates a great synergy between increasingly integrated entertainment and the functional aspects of e-commerce (Wang & Nguyen, 2021).

This research will examine how the use of TikTok influences consumers' intentions to make purchases, particularly focusing on how the content presented can attract consumer interest for purchasing. The first hypothesis (H1) states that the variable Social Media Influence (X1) positively affects the variable Purchase Intention (Y) of Digital Business students. The second hypothesis (H2) posits that the variable Ease of Use of the Platform (X2) positively affects the variable Purchase Intention (Y) of Digital Business students. The third hypothesis (H3) asserts that both the variable Social Media Influence (X1) and the variable Ease of Use of the Platform (X2) positively affect the variable Purchase Intention (Y) of Digital Business students.

This research has both theoretical and practical benefits. Theoretically, this study can advance knowledge about how social media influences customer behavior and how they engage with e-commerce websites. Practically, it is expected that the findings of this research can assist businesses and marketers in developing more successful marketing strategies by leveraging the interaction between social media and marketplaces. Additionally, the results of this study can provide guidance for creating features in marketplaces that will make online purchases more convenient and satisfying for customers (Yusuf & Ardiansyah, 2023). This study is relevant in providing a clearer understanding of how social media and e-commerce can complement each other to enhance purchase intentions and drive the expansion of digital businesses, considering Indonesia's increasing reliance on both platforms (Nugraha, 2023).

Method

This research employs a quantitative approach to examine the influence of TikTok social media and the ease of use of the Tokopedia platform on the purchase intention of students in the Digital Business Study Program. The data were collected from active students from the 2021-2024 cohort, using probability sampling techniques with a sample size of 120 respondents.

Data were gathered through a questionnaire that was tested for validity and reliability. The reliability test was conducted by assessing the Cronbach’s Alpha value, where a research instrument is considered reliable if the Cronbach’s Alpha value is greater than 0.60 (Ghozali, 2016). The reliability test results indicated that the Cronbach's Alpha values for the Social Media Influence variable (X1) was 0.680, for Ease of Use of the Platform (X2) was 0.823, and for Purchase Intention (Y) was 0.668, demonstrating that these instruments are valid and reliable.

The data collection process was conducted online using Google Forms with the following steps: first, designing and pilot testing the questionnaire; second, distributing the questionnaire to respondents; and third, collecting the completed questionnaires for analysis.

Data analysis was performed using SPSS software. Descriptive analysis was used to examine data distribution through frequency, percentage, mean, and standard deviation. Additionally, multiple linear regression analysis was applied to determine the effect of independent variables on the dependent variable in this study.

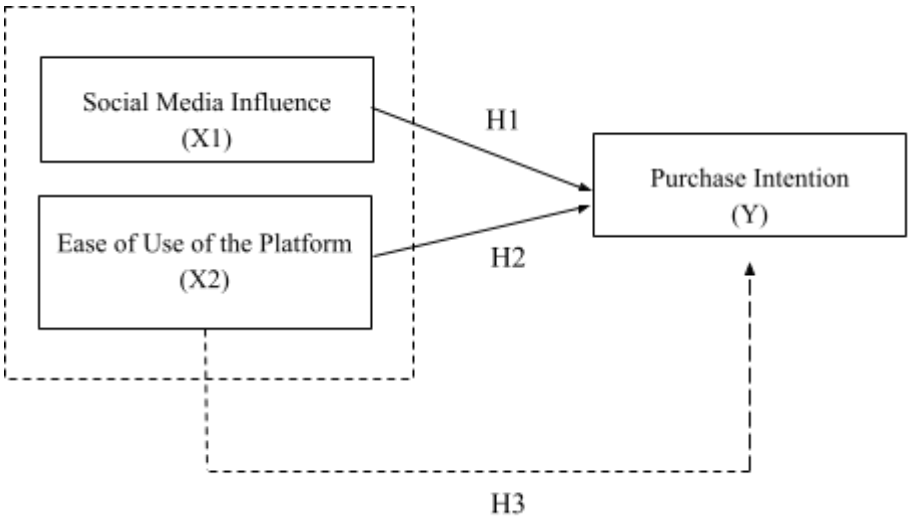

Image 1: Empirical Research Model

Results and Discussion

Instrument Test

A. Validity Test

Table 1: Results of the Validity Test for Variable X

Variable	Significant	Description
X.1	0.000	Valid
X.2	0.000	Valid
Y.1	0.000	Valid

Based on Table 1, variable X is declared valid because the test results show a significance value lower than 0.05. This means that all X variables can be accepted as valid, and the next step is to conduct a reliability test. Furthermore, according to Table 1, the test results for variable Y also indicate validity, with a significance value lower than 0.05 and a calculated r value exceeding the table r value. Therefore, all variable Y can be considered valid, and the reliability test will proceed.

B. Reliability Test

The reliability test is conducted by calculating the Cronbach's Alpha value, which indicates that the variables used in this study have an adequate level of reliability in measuring the intended concepts.

Table 2: Number of Samples (Respondents)

	N	%
Cases Valid	120	100.0
Excluded	0	0
Total	120	100.0

Table 2 presents data regarding the number of samples or respondents (N) analyzed using the SPSS Program, which is 101 people. Then, the Cronbach's Alpha value was calculated to evaluate the reliability of the three variables studied.

Table 3: Reliability Test Results

Variable	Cronbach's Alpha Value	Criteria Cronbach Alpha	Description
Social Media Influence	0.680	>0.600	Reliable
Ease of Use of the Platform	0.823	>0.600	Reliable
Purchase Intention	0.668	>0.600	Reliable

According to the results presented in Table 3, the three research variables—Social Media Influence, Ease of Use of the Platform, and Purchase Intention—have Cronbach's Alpha values that meet the reliability standards. The Cronbach's Alpha value for Social Media Influence (X1) is 0.680, for Ease of Use of the Platform (X2) it is 0.823, and for Purchase Intention (Y) it is 0.668. All these values are higher than the minimum threshold of 0.600, indicating that the instruments used are sufficiently consistent and accurate in measuring the concepts under study. Therefore, all three variables are considered suitable for further analysis in this research.

Classical Assumption Test

A. Normality Test

Table 4: Normality Test Results

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	120
Asymp. Sig. (2-tailed)	.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on the analysis conducted using the One Sample Kolmogorov-Smirnov Test for normality, it was found that the distribution of residual values does not follow a normal distribution pattern. This is evident from the significance value (Asymp. Sig.) of 0.000, which is much smaller than the standard significance level of 0.050. This condition indicates that the analyzed residual data do not meet the assumption of normal distribution. Given the detected non-normality in the residual distribution, the next step is to make adjustments in data processing. According to the book "SPSS Exact Tests 7.0 for Windows" by Cyrus R. and Nitin R., there is an alternative method that can be applied to address this non-normality, namely the Monte Carlo test. This approach aims to examine whether the distribution of residual data from the research sample shows extreme tendencies or does not follow a normal distribution pattern. Below are the results of the normality test after applying the Monte Carlo test.

Table 5: Normality Test Results

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	120
Asymp. Sig. (2-tailed)	.000[c]
Monte Carlo Sig. (2-tailed)	.061[d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Based on 10000 sampled tables with starting seed 1502173562.

Based on the analysis using the Kolmogorov-Smirnov method presented in Table 5, it can be concluded that the residual distribution in this study is now normal. This conclusion is supported by the change in the significance value, which initially was 0.000 and changed to 0.061 after conducting the Monte Carlo test. This change indicates that the residual distribution now meets the normality criteria, with a significance value higher than 0.050. Therefore, it can be concluded that the residual data follow a normal distribution, which is one of the important assumptions for further statistical analysis.

B. Multicollinearity Test

Table 6: Uji Multikolinearitas

Coefficients[a]			
Model		**Collinearity Statistics**	
		Tolerance	**VIF**
	(Constant)		
	PEMESO	.749	1.335
	KEPENGFORM	.749	1.335

Based on the data analysis presented in Table 6, it can be concluded that there are no multicollinearity issues among the variables studied, as the Variance Inflation Factor (VIF) for each variable is 1.335. This value meets the established criterion, which states that VIF must be less than 5.

C. Autocorrelation Test

Table 7: Autocorrelation Test

Model Summary[b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	.476[b]	.226	.213	2.912	2.001

a. Predictors: (Constant), KEPENGFORM , PEMESO

b. Dependent Variable: MINBEL

Table 7 shows a Durbin-Watson (DW) value of 2.001, which lies between the values of dL and dU (dL < dW < dU), with a calculated dL value of 1.6684 and a dU value of 1.7361. The value of 4 - dU, or 4 - 1.7361, is 2.2639. Therefore, it can be concluded that the assumption has been met.

D. Heteroscedasticity Test

Table 8: Heteroscedasticity Test

Correlations			
			Unstandardized Residual
Spearman's rho	PEMESO	Correlation Coefficient	-.071
		Sig. (2-tailed)	.440
		N	120
	KEPENGFORM	Correlation Coefficient	.024
		Sig. (2-tailed)	.791
		N	120
	Unstandardized Residual	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	120

Based on the analysis conducted in Table 8 using the Spearman Rho test, with significance values greater than 0.05, it can be concluded that there are no significant heteroscedasticity issues in the regression model. This is evident from the significance values for the Social Media Influence variable (0.440) and the Ease of Use of the Platform variable (0.791), both of which are greater than 0.05. Since no significant indications of heteroscedasticity were detected, it can be concluded that the linearity assumption in the regression model has been met. This condition is important to ensure the validity and reliability of the statistical analysis results that will be conducted in the subsequent stages.

Hypothesis Test

A. T-Test

Below are the results of the T test, as indicated by the significance values in Table 9.

Table 9: T-test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.008	1.937		7.230	.000
	PEMESO	.223	.081	.259	2.761	.007

	KEPENGFORM	.243	.079	.289	3.080	.003

a. Dependent Variable: PEMESO

The Social Media Influence variable (X1) has a significance value of 0.007, which is less than the significance threshold of 0.05. The calculated t value obtained is 2.761, which is greater than the table t value at the 0.05 significance level. This indicates that the first hypothesis is accepted, meaning that Social Media Influence has a significant positive effect on Purchase Intention.

Similarly, for the Ease of Use of the Platform variable (X2), the significance value is 0.003, which is also less than 0.05. The calculated t value is 3.080, which exceeds the table t value at the 0.05 significance level. This indicates that the second hypothesis is accepted, meaning that Ease of Use of the Platform also has a significant effect on Purchase Intention.

B. F-Test

The following F test results can be seen in Table 10.

Table 10: Uji F

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	290.033	2	145.017	17.098	.000[b]
	Residual	992.333	117	8.481		
	Total	1282.367	119			

a. Dependent Variable: MINBEL

b. Predictors: (Constant), KEPENGFORM, PEMESO

This study shows that both Social Media Influence (X1) and Ease of Use of the Platform (X2) have a significant impact on Purchase Intention (Y). This is reflected in their significance values, which are both less than 0.05 (0.000 < 0.05), specifically 0.000, as well as the calculated F value, which is greater than the table F value (F calculated > F table), namely 17.098 > 3.07.

C. Determination Test

The following determination test results can be seen in Table 11

Table 11: Determination Test

Model Summary[b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	.476a	.226	.213	2.912	2.001

a. Predictors: (Constant), KEPENGFORM, PEMESO
b. Dependent Variable: MINBEL

Based on the obtained output, the coefficient of determination is 0.226, indicating that the Social Media Influence (X1) and Ease of Use of the Platform (X2) variables contribute 21.3% to the Purchase Intention (Y) variable. Meanwhile, the remaining 78.7% is influenced by other factors not included in the scope of this research.

The hypothesis test results for the Social Media Influence variable (X1) reveal that the significance value from the t-test is 0.007, which is less than 0.05 (< 0.05), and the calculated t value is 2.761, which is greater than the table t value of 1.984 (t calculated 2.761 > t table 1.984). These results indicate that hypothesis 1 (H1) in this study, which states that Social Media Influence (X1) has a significant relationship with Purchase Intention (Y), is accepted. This finding supports previous research, such as that conducted by Setianingsih and Aziz (2022), which also found that Social Media Influence significantly impacts sales levels, particularly on platforms like TikTok. This underscores the importance of social media as a key factor in influencing purchasing decisions, especially among students who are active in the digital ecosystem.

The hypothesis test results for the Ease of Use of the Platform variable (X2) show that the significance value for this variable in the t-test is 0.003, which is less than 0.05 (< 0.05). The calculated t value of 3.080 is also higher than the table t value of 1.980 (t calculated 3.080 > 1.980). This result indicates that hypothesis 2 (H2) in this study, which states that Purchase Intention (Y) among Digital Business students is positively and significantly influenced by the Ease of Use of the Platform variable (X2), is accepted. This finding aligns with previous research conducted by Ihsan et al. (2023), which also found that Ease of Use of the Platform similarly impacts sellers' sales levels on TikTok.

The hypothesis test results for Purchase Intention (Y) indicate that the calculated F value reaches 17.098, which is significantly greater than the table F value of 3.070 (F calculated 17.098 > F table 3.070). Additionally, the significance value in the F test is 0.000, which is less than 0.05. These results indicate that hypothesis 3 (H3) in this study, which states that Social Media Influence (X1) and Ease of Use of the Platform (X2) have a significant effect on Purchase Intention (Y) among Digital Business students, is accepted. Furthermore, the determination test results show that Social Media Influence (X1) and Ease of Use of the Platform (X2) together contribute 21.3% to the variation occurring in Purchase Intention (Y).

Conclusion

This study highlights the significant impact of TikTok's social media influence and the user-friendliness of the Tokopedia platform on the purchase intentions of Digital Business students. Employing a quantitative research approach, the findings reveal that creative and engaging content on TikTok, bolstered by its advanced algorithmic recommendations, plays a pivotal role in capturing consumer attention and stimulating purchasing interest. Simultaneously, Tokopedia's intuitive and seamless interface facilitates hassle-free transactions, making it easier for users to navigate the buying process and finalize their purchase decisions.

The research underscores that these two factors, both independently and synergistically, explain 21.3% of the variance in students' purchase intentions. The remaining 78.7% is attributed to external variables such as personal preferences, socioeconomic conditions, and other digital touchpoints. These findings emphasize the vital interplay between social media and e-commerce platforms in driving consumer behavior, illustrating how the combination of engaging content and streamlined user experiences can bolster digital business growth.

Furthermore, this study offers valuable insights for marketers and businesses operating in the digital ecosystem. To maximize consumer engagement and sales conversions, businesses should focus on leveraging TikTok's viral content potential and optimizing their e-commerce platforms for simplicity and

efficiency. Such strategies not only align with evolving consumer habits but also position businesses to thrive in the dynamic landscape of digital commerce.

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