COSTING: Journal of Economic, Business and Accounting
Volume 9 Nomor 2, Tahun 2026
e-ISSN : 2597-5234

THE INFLUENCE OF E-WORD OF MOUTH, DISCOUNTS, AND THE ALGORITHM ON PURCHASE DECISIONS IN TIKTOK SHOP AMONG GEN-Z CONSUMERS IN MEDAN CITY

PENGARUH E-WORD OF MOUTH, DISKON, DAN ALGORITMA TERHADAP KEPUTUSAN PEMBELIAN DI TIKTOK SHOP MASYARAKAT GEN-Z KOTA MEDAN

Aaron Wilson[1], Yeni Rafita Sihombing[2], Christopher[3], Vincent Tofansza[4]
Student Of Bachelor Program Of Management, Faculty Of Economy, Universitas Prima Indonesia[1,3,4]
PUI Digital Business And Smes, Universitas Prima Indonesia[2]
yenirafitasihombing@unprimdn.ac.id[2]

ABSTRACT

The development of digital technology has changed consumer behavior, especially Generation Z who actively use social media such as TikTok. Through the TikTok Shop feature, users can shop directly within the application supported by video content and a personalized algorithm system. This study aims to determine the influence of e-word of mouth, discounts, and algorithms on the purchase decisions of Gen-Z consumers in Medan City.This study uses a quantitative approach with a causal research design. The population in this study consists of Gen-Z individuals in Medan City who are active users of TikTok Shop, with a sample of 97 respondents determined using the Lemeshow formula. Data collection techniques were conducted using questionnaires with a Likert scale, and data analysis was performed using multiple linear regression through SPSS. The results show that partially the variables of e-word of mouth, discounts, and algorithms have a positive and significant influence on purchase decisions. Simultaneously, these three variables also have a positive and significant influence on purchase decisions with a coefficient of determination (Adjusted R^2) value of 0.798. This means that 79.8% of purchase decisions are explained by these three variables, while 20.2% are influenced by other factors such as influencer marketing, live streaming, and product quality. These findings confirm that positive reviews, discount strategies, and TikTok's algorithm system that displays content according to user preferences play an important role in encouraging consumer behavior and purchase decisions among Gen-Z consumers in Medan City.
Keywords: *e-word of mouth, discounts, algorithm, purchase decision, TikTok Shop, Gen-Z.*

ABSTRAK

Perkembangan teknologi digital telah mengubah perilaku konsumen, khususnya generasi Z yang aktif menggunakan media sosial seperti TikTok. Melalui fitur TikTok Shop, pengguna dapat berbelanja langsung dalam aplikasi yang didukung oleh konten video dan sistem algoritma yang personal. Penelitian ini bertujuan untuk mengetahui pengaruh E-Word of Mouth, diskon, dan algoritma terhadap keputusan pembelian masyarakat Gen-Z di Kota Medan. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis penelitian kausal. Populasi dalam penelitian ini adalah masyarakat Gen-Z di Kota Medan yang merupakan pengguna aktif TikTok Shop, dengan jumlah sampel sebanyak 97 responden yang ditentukan menggunakan rumus Lemeshow. Teknik pengumpulan data menggunakan kuesioner dengan skala Likert, dan analisis data dilakukan menggunakan regresi linier berganda melalui SPSS. Hasil penelitian menunjukkan bahwa secara parsial variabel E-Word of Mouth, diskon, dan algoritma berpengaruh positif dan signifikan terhadap keputusan pembelian. Secara simultan ketiga variabel tersebut juga berpengaruh positif dan signifikan terhadap keputusan pembelian dengan nilai koefisien determinasi (Adjusted R^2) sebesar 0,798. Artinya, 79,8% keputusan pembelian dijelaskan oleh ketiga variabel tersebut, sementara 20,2% dipengaruhi oleh faktor lain seperti influencer marketing, live streaming, dan kualitas produk. Temuan ini menegaskan bahwa ulasan positif, strategi potongan harga, serta sistem algoritma TikTok yang menampilkan konten sesuai preferensi pengguna berperan penting dalam mendorong perilaku konsumtif dan keputusan pembelian masyarakat Gen-Z di Kota Medan.
Kata kunci: E-Word of Mouth, Diskon, Algoritma, Keputusan Pembelian, TikTok Shop, Gen-Z.

INTRODUCTION

In this digital era, advances in information technology have brought significant changes in the way people interact, communicate, and access information. One of the most prominent innovations is the emergence of social media platforms with various content-sharing features. TikTok, as one of the fastest-growing social media platforms, has successfully attracted millions of users from various parts of the world. This application provides opportunities for its users to create and share short videos that are creative and entertaining, which often quickly become viral.

Figure 1.1 Comparison of TikTok Shop and Tokopedia Sales in the Period of February 2024 – January 2025

Source: Compas, 2025

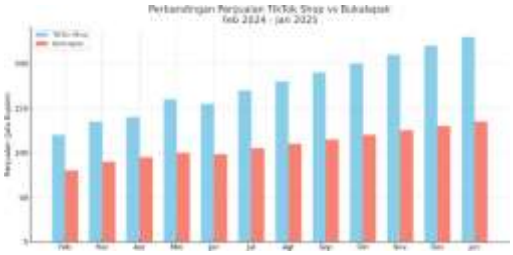


Figure 1.2 Comparison of TikTok Shop and Tokopedia Sales for the Period of February 2024 – January 2025

Source: Compas, 2025

Throughout 2024, TikTok Shop experienced significant growth in transaction value, while Tokopedia tended to remain more stable with an average sales value of around Rp75 billion per month. Meanwhile, TikTok Shop recorded higher figures, reaching Rp168.4 billion per month. The development of digital technology has significantly changed the marketing landscape and consumer behavior. One platform that has experienced rapid growth in recent years is TikTok, which has evolved not only as an entertainment medium but also as an e-commerce platform through the TikTok Shop feature. This phenomenon has attracted particular attention among Generation Z, who are known as digital natives and are highly responsive to trends on social media.

Consumers who frequently engage in online shopping today are mostly teenagers from Generation Z who were born in the digital era, making technology an inseparable part of their daily activities. Generation Z, especially university students who are in the process of searching for their identity, tend to be easily influenced by their peer groups and reference groups when making purchasing decisions. This occurs because reference groups have a strong influence that leads individuals to form certain criteria when making purchases. This tendency reveals that many products purchased online are often luxury or non-essential items.

In the digital era, the consumer behavior of Generation Z has undergone significant shifts, particularly in online shopping activities. TikTok Shop, as an e-commerce platform integrated with social media, has now become one of the preferred shopping platforms for this generation. However, the purchase decisions of Gen Z on TikTok Shop are not always based on rational considerations or actual needs but are influenced by various complex digital factors.

Behind the increasing popularity of TikTok Shop, several interesting phenomena and issues arise regarding purchase decisions influenced by digital factors. One of these is electronic word

of mouth (e-WOM), which appears through comments, reviews, and review content from other users. Many Gen-Z users tend to trust testimonials from fellow users more than formal advertisements. However, some consumers may also fall into misleading information, which can lead to disappointment after purchase. Not all reviews are positive. Negative reviews, such as dissatisfaction with product quality, seller services, or discrepancies between the actual product and what is shown in videos, can significantly affect the product's image and the level of consumer trust. Many users cancel their purchase intentions after seeing negative comments or review content that shows unfavorable experiences. This phenomenon indicates that the power of e-WOM functions not only as a promotional medium but also as a key determinant in purchase decisions.

In addition, the large discounts offered by TikTok Shop often encourage impulsive buying behavior, which does not always align with consumer satisfaction or needs. Consumers frequently purchase products simply because the prices are lower, without considering product quality or benefits. This raises questions about the extent to which discounts truly influence rational purchase decisions among Generation Z.

On the other hand, TikTok's algorithm, which is designed to display content based on user preferences, also plays a significant role in shaping consumer preferences and purchase intentions. Product-related content that continuously appears on the homepage (For You Page) has the potential to create artificial needs that were not previously planned by users. Although this algorithm increases product exposure, it may also lead to uncontrolled consumption patterns, making it difficult for users to distinguish between wants and actual needs.

These phenomena indicate that although TikTok Shop offers convenience and a new shopping experience, factors such as e-WOM, discounts, and algorithms may create dilemmas in the purchase decision-making process, particularly among Gen-Z consumers in Medan City. Therefore, it is important to further examine how these three variables, both collectively and individually, influence purchase decisions in order to provide a more objective understanding of the digital consumption patterns of today's younger generation. Based on the explanation above regarding purchase decisions, e-word of mouth, discounts, and algorithms on TikTok Shop, the purpose of this study is to determine the influence of "The Influence of E-Word of Mouth, Discounts, and the Algorithm on Purchase Decisions in TikTok Shop among Gen-Z Consumers in Medan City."

RESEARCH METHODS

This study was conducted in Medan City in July 2025 using a quantitative research approach with a causal research design to examine the cause-and-effect relationship between variables. The population in this study consists of Generation Z individuals in Medan City who are active users of TikTok Shop. Since the exact population size is unknown due to the absence of official data regarding the number of active Gen-Z TikTok Shop users in Medan, the sample size was determined using the Lemeshow formula, resulting in a minimum sample of 97 respondents. The sampling technique used in this research is purposive sampling, with specific criteria including respondents aged 17–30 years (Gen-Z category), active TikTok Shop users, residing in

Medan City, and having various statuses such as students, employees, or others. The study uses both primary and secondary data sources, where primary data were collected directly from respondents through questionnaires using a Likert scale, while secondary data were obtained from literature, databases, and related references. The operational variables in this study consist of e-word of mouth (X1), discounts (X2), and algorithms (X3) as independent variables, and purchase decisions (Y) as the dependent variable. Data quality testing was conducted through validity and reliability tests using Pearson correlation and Cronbach's Alpha. Data analysis methods include descriptive statistical analysis and multiple linear regression analysis with the regression equation Y=a+b1X1+b2X2+b3X3Y = a + b1X1 + b2X2 + b3X3Y=a+b1X1+b2X2+b3X3.
Furthermore, classical assumption tests were conducted, including normality, multicollinearity, and heteroscedasticity tests. The coefficient of determination (Adjusted R Square) was used to measure the contribution of independent variables to the dependent variable. Hypothesis testing was carried out using the t-test to determine partial effects and the F-test to examine the simultaneous effects of the independent variables on purchase decisions.

RESULTS AND DISCUSSIONS

General Overview of TikTok Shop

TikTok Shop is an e-commerce feature within the TikTok application that allows users to buy and sell products directly through short videos and live streaming. Launched in Indonesia in 2021 by ByteDance, this platform combines entertainment and shopping within a single application, creating an interactive and engaging shopping experience. TikTok Shop supports businesses ranging from micro, small, and medium enterprises (MSMEs) to large brands with an integrated system for sales, payments, and shipping. Although it was temporarily closed due to government regulations in 2023, TikTok Shop resumed operations after collaborating with Tokopedia in 2024.

Respondent Characteristics

Table Description of Respondents Based on Place of Residence in Medan (District)

No	Residence (District)	Frequency	Percentage (%)
1	Medan Amplas	5	5%
2	Medan Area	9	9%
3	Medan Barat	2	2%
4	Medan Baru	5	5%
5	Medan Belawan	2	2%
6	Medan Deli	3	3%
7	Medan Denai	4	4%
8	Medan Helvetia	8	8%
9	Medan Johor	2	2%
10	Medan Kota	3	3%
11	Medan Labuhan	2	2%
12	Medan Maimun	8	8%
13	Medan Marelan	4	4%
14	Medan Perjuangan	4	4%
15	Medan Petisah	9	9%
16	Medan Polonia	5	5%
17	Medan Selayang	5	5%
18	Medan Sunggal	5	5%
19	Medan Tembung	4	4%
20	Medan Timur	4	4%
21	Medan Tuntungan	3	3%
Total		**96**	**100%**

Source: Processed Data Results, 2025

Based on the respondents' residence data, it is known that most respondents come from Medan Area and Medan Petisah districts, each consisting

of 9 people (9%), followed by Medan Helvetia and Medan Maimun with 8 people each (8%). Meanwhile, the districts with the lowest number of respondents are Medan Barat, Medan Belawan, Medan Johor, and Medan Labuhan, each with 2 people (2%). This indicates that the distribution of respondents' residences is quite diverse across various districts in Medan City, with the highest concentration located in Medan Area and Medan Petisah.

Table Description of Respondents Based on Gender

No	Gender	Frequency	Percentage (%)
1	Male	12	13%
2	Female	84	88%
Total		**96**	**100%**

Source: Processed Data Results, 2025

Based on the respondents' gender data, it is known that the majority of respondents are female, totaling 84 people (88%), while males account for 12 people (13%). This indicates that the respondents in this study are dominated by female participants.

Table Description of Respondents Based on Age

No	Age	Frequency	Percentage (%)
1	13–18	3	3%
2	19–28	81	84%
3	>28	12	13%
Total		**96**	**100%**

Source: Processed Data Results, 2025

Based on the respondents' age data, it can be seen that most respondents are in the age range of 19–28 years, totaling 81 people (84%). Meanwhile, respondents aged over 28 years amount to 12 people (13%), and those aged 13–18 years amount to 3 people (3%). This indicates that the respondents are dominated by young and productive age groups.

Table Description of Respondents Based on Occupation

No	Occupation	Frequency	Percentage (%)
1	Entrepreneur	14	15%
2	Student	15	16%
3	Private Employee	52	54%
4	Government Employee	9	9%
5	Others	6	6%
Total		**96**	**100%**

Source: Processed Data Results, 2025

Based on the respondents' occupation data, it is known that the majority are private employees totaling 52 people (54%), followed by students with 15 people (16%), and entrepreneurs with 14 people (15%). Meanwhile, government employees amount to 9 people (9%) and other occupations amount to 6 people (6%). This indicates that most respondents come from the private employee group.

Table Description of Respondents Based on Frequency of Purchases on TikTok Shop E-Commerce

No	Order Frequency	Frequency	Percentage (%)
1	Every Day	8	8%
2	Every 2 Weeks	32	33%
3	Every Week	32	33%
4	Every 3 Weeks	12	13%
5	Once a Month	10	10%
6	Every 2–3 Months	2	2%
Total		**96**	**100%**

Source: Processed Data Results, 2025

Based on the order frequency data, it is known that most respondents make purchases once a week and once every two weeks, each totaling 32 people (33%). Furthermore, 12 respondents (13%) place orders every three weeks, 10 respondents (10%) make purchases once a month, and only 2 respondents (2%) make purchases every two to three months. Meanwhile, 8 respondents (8%) place orders every day. This indicates that the ordering frequency is dominated by customers with weekly shopping patterns.

Validity Test

To evaluate the validity of the test, a comparison was made between the calculated coefficient value (r count) and the critical value (r table) at the degree of freedom (df) = n–2, where *n* represents the number of respondents. The validity of the instrument is determined based on

the comparison between the calculated coefficient and the critical coefficient value at a significance level of 5%.

Table Validity Test of the E-Word of Mouth Variable

Item	Symbol	r count	r critical	Description
1	X1a	0.762	0.361	Valid
2	X1b	0.791	0.361	Valid
3	X1c	0.762	0.361	Valid
4	X1d	0.791	0.361	Valid
5	X1e	0.406	0.361	Valid
6	X1f	0.791	0.361	Valid
7	X1g	0.762	0.361	Valid
8	X1h	0.791	0.361	Valid

Source: Processed by the Researcher (2025)

Based on Table 3.6, it can be seen that all statements related to the E-Word of Mouth variable in the research questionnaire are considered valid. This is evidenced by the critical value of 0.361, which is smaller than the calculated correlation values for all items. Therefore, it can be concluded that all questionnaire statements related to E-Word of Mouth are valid and reliable for use in this study.

Table Validity Test of the Discount Variable

Item	Symbol	r count	r critical	Description
1	X2a	0.496	0.361	Valid
2	X2b	0.847	0.361	Valid
3	X2c	0.847	0.361	Valid
4	X2d	0.847	0.361	Valid
5	X2e	0.470	0.361	Valid
6	X2f	0.470	0.361	Valid

Source: Processed by the Researcher (2025)

Based on Table 3.7, all statements related to the Discount variable in the research questionnaire are considered valid. This is indicated by the critical value of 0.361, which is lower than all calculated correlation values. Therefore, all questionnaire items related to the Discount variable are valid and can be used in the research.

Table Validity Test of the Algorithm Variable

Item	Symbol	r count	r critical	Description
1	X3a	0.541	0.361	Valid
2	X3b	0.986	0.361	Valid
3	X3c	0.986	0.361	Valid
4	X3d	0.986	0.361	Valid
5	X3e	0.986	0.361	Valid
6	X3f	0.986	0.361	Valid

Source: Processed by the Researcher (2025)

Based on Table 3.8, all statements related to the Algorithm variable in the questionnaire are considered valid. This is proven by the critical value of 0.361, which is smaller than the calculated correlation values. Therefore, all questionnaire items related to the Algorithm variable are valid and reliable for use in the study.

Table Validity Test of the Purchase Decision Variable

Item	Symbol	r count	r critical	Description
1	Ya	0.748	0.361	Valid
2	Yb	0.799	0.361	Valid
3	Yc	0.748	0.361	Valid
4	Yd	0.799	0.361	Valid
5	Ye	0.417	0.361	Valid
6	Yf	0.799	0.361	Valid
7	Yg	0.748	0.361	Valid
8	Yh	0.799	0.361	Valid

Source: Processed by the Researcher (2025)

Based on Table 3.9, all statements related to the Purchase Decision variable in the research questionnaire are considered valid. This is shown by the critical value of 0.361, which is lower than the calculated correlation values for all items. Therefore, it can be concluded that all questionnaire statements related to the Purchase Decision variable are valid and can be reliably used in this study.

Reliability Test

Reliability is a method used to evaluate the dependability of a questionnaire that reflects the stability or consistency of the variables or constructs being measured. A questionnaire is considered reliable if an individual's responses to the questions remain consistent over time. As a general guideline, an instrument is considered reliable if the Cronbach's Alpha value exceeds the threshold of **0.60**.

Conversely, if the Cronbach's Alpha value is below **0.60**, the instrument is considered unreliable.

Table Reliability Test of the E-Word of Mouth Variable

Reliability Statistics	Value
Cronbach's Alpha	0.867
Number of Items	8

Source: Processed by the Researcher (2025)

Based on Table 3.10, the Cronbach's Alpha value is 0.867. This indicates that the statements in the E-Word of Mouth variable in the research questionnaire are considered reliable because the value exceeds the threshold of 0.60. Therefore, the instrument is consistent and reliable for use in this research.

Table Reliability Test of the Discount Variable

Reliability Statistics	Value
Cronbach's Alpha	0.745
Number of Items	6

Source: Processed by the Researcher (2025)

Based on Table 3.11, the Cronbach's Alpha value is 0.745. This indicates that the statements in the Discount variable are reliable because the value exceeds the 0.60 threshold. Therefore, the instrument can be considered consistent and reliable for use in this study.

Table Reliability Test of the Algorithm Variable

Reliability Statistics	Value
Cronbach's Alpha	0.960
Number of Items	6

Source: Processed by the Researcher (2025)

Based on Table 3.12, the Cronbach's Alpha value is 0.960. This indicates that the statements in the Algorithm variable are reliable because the value exceeds the 0.60 threshold. Therefore, the instrument is considered consistent and reliable.

Table Reliability Test of the Purchase Decision Variable

Reliability Statistics	Value
Cronbach's Alpha	0.767
Number of Items	8

Source: Processed by the Researcher (2025)

Based on Table 3.13, the Cronbach's Alpha value is 0.767. This indicates that the statements in the Purchase Decision variable are reliable because the value exceeds the 0.60 threshold. Therefore, the instrument is considered consistent and suitable for use in this research.

Descriptive Analysis

Descriptive statistics are used as a testing method related to the presentation and collection of data or test results obtained in order to provide useful information for this research.

Table Descriptive Test of Respondents for the E-Word of Mouth Variable

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
EWom1	30	3.00	5.00	3.9000	0.88474
EWom2	30	3.00	5.00	3.8333	0.69893
EWom3	30	3.00	5.00	3.9000	0.88474
EWom4	30	3.00	5.00	3.8333	0.69893
EWom5	30	3.00	5.00	3.9000	0.88474
EWom6	30	3.00	5.00	3.8333	0.69893
EWom7	30	3.00	5.00	3.9000	0.88474
EWom8	30	3.00	5.00	3.8333	0.69893
Valid N (listwise)	30				

Source: Processed by the Researcher (2025)

Based on Table 3.14, the lowest respondent answer for each variable is 3, while the highest respondent answer is 5. The average response of respondents in this study is 4.

Table Descriptive Test of Respondents for the Discount Variable

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Discount1	30	3.00	5.00	4.0667	0.86834
Discount2	30	3.00	5.00	4.1000	0.88474
Discount3	30	3.00	5.00	4.1000	0.88474
Discount4	30	3.00	5.00	4.1000	0.88474
Discount5	30	3.00	5.00	4.1000	0.88474
Discount6	30	3.00	5.00	4.1000	0.88474
Valid N (listwise)	30				

Source: Processed by the Researcher (2025)

Based on Table 3.15, the lowest respondent answer for each variable is 3, while the highest respondent answer is 5. The average respondent answer in this study is 4.

Table Descriptive Test of Respondents for the Algorithm Variable

	N	Minimum	Maximum	Mean	Std. Deviation
Algorithm1	30	3.00	5.00	4.0667	0.86834
Algorithm2	30	3.00	5.00	4.1000	0.88474
Algorithm3	30	3.00	5.00	4.1000	0.88474
Algorithm4	30	3.00	5.00	4.1000	0.88474
Algorithm5	30	3.00	5.00	4.1000	0.88474
Algorithm6	30	3.00	5.00	4.1000	0.88474
Valid N (listwise)	30				

Source: Processed by the Researcher (2025)

Based on Table 3.16, the lowest respondent answer for each variable is 3, while the highest respondent answer is 5. The average respondent answer in this study is 4.

Table Descriptive Test of Respondents for the Purchase Decision Variable
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PurchaseDecision1	30	3.00	5.00	3.9000	0.88474
PurchaseDecision2	30	3.00	5.00	3.8333	0.69893
PurchaseDecision3	30	3.00	5.00	3.9000	0.88474
PurchaseDecision4	30	3.00	5.00	3.8333	0.69893
PurchaseDecision5	30	3.00	5.00	3.9667	0.88992
PurchaseDecision6	30	3.00	5.00	3.8333	0.69893
PurchaseDecision7	30	3.00	5.00	3.9000	0.88474
PurchaseDecision8	30	3.00	5.00	3.8333	0.69893
Valid N (listwise)	30				

Source: Processed by the Researcher (2025)

Based on Table 3.17, the lowest respondent answer for each variable is 3, while the highest respondent answer is 5. The average respondent answer in this study is 4.

Multiple Linear Regression Analysis

The multiple linear regression analysis method is used to determine the extent of the influence of e-word of mouth, discounts, and algorithms on purchase decisions in TikTok Shop among Gen-Z consumers in Medan City. The multiple linear regression equation can be formulated as follows:

Y = a + b1X1 + b2X2 + b3X3 + e

The results of the multiple linear regression analysis test can be seen in the following table.

Table Multiple Linear Regression Test

Coefficients

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	17.765	0.385		46.186	0.000
E-Wom	0.268	0.018	0.915	15.226	0.000
Discount	0.115	0.022	0.393	5.286	0.000
Algorithm	0.079	0.026	0.248	3.031	0.003

Dependent Variable: Purchase Decision
Source: Processed by the Researcher (2025)

Based on the results of the multiple linear regression analysis above, the regression equation can be written as follows:

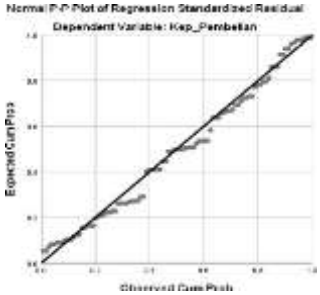
Purchase Decision = 17.765 + 0.268 E-Wom + 0.115 Discount + 0.079 Algorithm + e

The explanation of the multiple linear regression analysis above is as follows:

1. The constant value of 17.765 indicates that if E-Wom (X1), Discount (X2), and Algorithm (X3) are equal to 0, the Purchase Decision will increase by 17.765 units.
2. The coefficient of E-Wom (b1) = 0.268 indicates that if E-Wom increases by 1 unit, the Purchase Decision will increase by 0.268 units, assuming other variables remain constant.
3. The coefficient of Discount (b2) = 0.115 indicates that if Discount increases by 1 unit, the Purchase Decision will increase by 0.115 units, assuming other variables remain constant.
4. The coefficient of Algorithm (b3) = 0.079 indicates that if Algorithm increases by 1 unit, the Purchase Decision will increase by 0.079 units, assuming other variables remain constant.

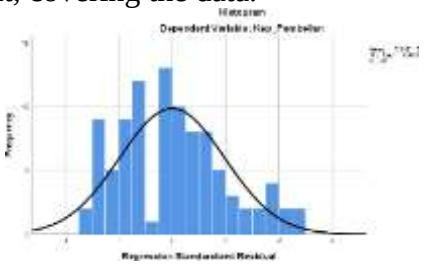
Normality Test

The normality test in this study is used to determine whether the regression model variables, both dependent and independent variables, are normally distributed or not. The methods used to test the normality of the data in this study include histogram graphs, Normal P-P Plot graphs, and the Kolmogorov–Smirnov test. The results of the Normal P-P Plot graph test can be illustrated as follows.



Source: Processed by the Researcher (2025)

Based on Figure 3.1 above, it can be seen that the line in the histogram graph indicates that the residuals follow a normal distribution pattern. This is shown by the normal curve line that is symmetrically distributed to the left and right, covering the data.



Based on Figure 3.2, the Normal P-Plot graph shows that the data points are distributed around the diagonal lin

Multicollinearity Test

The results of the multicollinearity test can be seen in Table 3.20 below

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	17.765	.385		46.186	.000		
	E_Wom	.268	.018	.915	15.226	.000	.581	1.720
	Diskon	.115	.022	.393	5.286	.000	.380	2.633
	Algortima	.079	.026	.248	3.031	.003	.313	3.194

Based on Table 3.20 above, the tolerance value of the E-Wom variable is 0.581 > 0.01 and the VIF value of the independent variable is 1.720 < 10. The tolerance value of the Discount variable is 0.380 > 0.01 and the VIF value of the independent variable is 2.633 < 10. The tolerance value of the Algorithm variable is 0.313 > 0.01 and the VIF value of the independent variable is 3.194 < 10. Therefore, it can be concluded that multicollinearity does not occur in the regression model.

Heteroscedasticity Test

The heteroscedasticity test is used to determine whether there is inequality of variance in the residual variable from one observation to another.

Source: Processed by the Researcher (2025)

In Figure 3.3, the scatterplot shows that the data points are spread out, with the points distributed above and below zero on the y-axis. Therefore, it can be concluded that heteroscedasticity does not occur in this study.

Table Glejser Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.444	1.209		2.022	.046
	E_Wom	.043	.055	.102	.770	.443
	Diskon	-.080	.068	-.191	-1.170	.245
	Algortima	.126	.082	.275	1.527	.130

a. Dependent Variable: Abs_RES

Source: Processed by the Researcher (2025)

Based on Table 3.21 above, it shows that the significance value of E-Wom is 0.443 > 0.05, the significance value of Discount is 0.245 > 0.05, and the significance value of Algorithm is 0.130 > 0.05. Therefore, it can be concluded that heteroscedasticity does not occur in this study.

Coefficient of Determination

The results of the coefficient of determination test can be seen in the following table:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.897[a]	.805	.798	.63730

a. Predictors: (Constant), Algortima, E_Wom, Diskon

b. Dependent Variable: Kep_Pembelian

Source: Processed by the Researcher (2025)

Based on Table 3.22, the Adjusted R Square value is 0.798. This means that 0.798 × 100%, or approximately 80%, indicates that E-Wom, Discount, and Algorithm variables can explain the Purchase Decision variable. Meanwhile, the remaining 20% is explained by other variables outside this study, such as influencer marketing, live streaming, and others.

Partial Test

The results of the partial hypothesis test (t-test) can be seen in the following table:

Table Partial Test

Coefficientsa

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	17.765	0.385		46.186	0.000
E-Wom	0.268	0.018	0.915	15.226	0.000
Discount	0.115	0.022	0.393	5.286	0.000
Algorithm	0.079	0.026	0.248	3.031	0.003

a. Dependent Variable: Purchase Decision

Source: Processed by the Researcher (2025)

The t-table value for a significance level of 0.05 is obtained using the formula df = n – k.

df = 97 – 4 = 93

Thus, the t-table value obtained is 1.661.

Based on the results of the t-test in Table 3.23 above, it can be explained as follows:

1. For the E-Wom variable (X1), it can be seen that the t-count value (15.226) > t-table (1.661) with a significance value of 0.000 < 0.05. Therefore, it can be concluded that E-word of mouth has a significant influence on purchase decisions in TikTok Shop among Gen-Z consumers in Medan City. Thus, H1 is accepted.
2. For the Discount variable (X2), it can be seen that the t-count value (5.286)

> t-table (1.661) with a significance value of 0.000 < 0.05. Therefore, it can be concluded that Discount has a significant influence on purchase decisions in TikTok Shop among Gen-Z consumers in Medan City. Thus, H2 is accepted.

3. For the Algorithm variable (X3), it can be seen that the t-count value (3.031) > t-table (1.661) with a significance value of 0.003 < 0.05. Therefore, it can be concluded that the Algorithm has a significant influence on purchase decisions in TikTok Shop among Gen-Z consumers in Medan City. Thus, H3 is accepted.

Simultaneous Test

The results of the simultaneous hypothesis test (F-test) can be seen in the following table:

Tabel Uji Simultan

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	155.627	3	51.876	127.724	.000[b]
	Residual	37.772	93	.406		
	Total	193.399	96			

a. Dependent Variable: Kep_Pembelian

b. Predictors: (Constant), Algortima, E_Wom, Diskon

Source: Processed by the Researcher (2025)

To determine the F-table value, the following formula can be used:
df = n – k = 97 – 4 = 93
Thus, the F-table value obtained is 2.470.

Based on Table 3.24, it shows that the F-count value (127.724) > F-table (2.470) with a significance value of 0.000 < 0.05. Therefore, it can be concluded that H4 is accepted, meaning that e-word of mouth, discounts, and algorithms simultaneously have a significant influence on purchase decisions in TikTok Shop among Gen-Z consumers in Medan City.

The Influence of E-WOM on Purchase Decisions

Based on the results of the partial test (t-test), the t-value obtained is 15.226 > t-table 1.661 with a significance value of 0.000 < 0.05, which means that the E-WOM variable (X1) has a positive and significant effect on Purchase Decisions (Y). This indicates that the higher the level of e-word of mouth, such as positive reviews, user recommendations, and good testimonial content, the greater the decision of Gen Z consumers in Medan City to make purchases on TikTok Shop. These results are consistent with the study of Sugiarti and Wati (2024), which states that e-WOM has a significant influence on purchase decisions on TikTok Shop. This empirical finding is supported by several recent journal studies that found a strong relationship between e-WOM and purchase intention or purchasing decisions. For example, a study exploring the role of e-WOM in social networking sites found that e-WOM significantly influences online purchasing behavior (Ngo, 2024). Another study investigated the mechanism by which e-WOM characteristics such as information quality, credibility, and quantity encourage information adoption and increase purchase intention on e-commerce platforms (Kumar, 2023). In addition, research examining the

moderating role of perceived risk confirmed that e-WOM functions as a source of information that reduces consumer uncertainty and strengthens purchasing decisions in the context of e-commerce (Cuong, 2024). Based on the empirical evidence and journal studies above, it can be concluded that e-WOM is an important determinant factor in shaping perceptions, reducing consumer doubts, and encouraging purchase decisions among Gen-Z consumers on the TikTok Shop platform.

The Influence of Discounts on Purchase Decisions

The results of the partial test show that the Discount variable (X2) has a t-value of 5.286 > t-table 1.661 with a significance value of 0.000 < 0.05, so it can be concluded that discounts have a positive and significant effect on purchase decisions. This means that the more attractive and larger the price discounts offered by TikTok Shop, the greater the encouragement for Gen Z consumers to make purchases. Discounts become an effective promotional strategy in attracting consumer interest, especially among young consumers who are sensitive to price. These results support the findings of Gracelia and Indriani (2023), which state that discounts have a positive effect on purchase decisions on TikTok Shop. This finding is also consistent with several recent studies that reinforce the influence of price promotions on consumer purchasing behavior. Research by Rahman and Dewi (2021) found that price discounts have a direct influence on purchase decisions because they create a perception of higher value for the product. Meanwhile, the study by Putri and Santoso (2022) revealed that discount strategies can create psychological effects such as a sense of urgency and emotional encouragement that increase the tendency to purchase, especially in the context of flash sales or limited-time promotions. In addition, the research results of Lestari and Wijaya (2024) show that price promotions communicated through social media significantly influence purchase intention because they provide a sense of trust and economic efficiency for young consumers. Based on these theories and research findings, it can be concluded that discounts function not only as a marketing strategy to increase sales but also as an effective psychological stimulus in shaping purchase decisions among Gen-Z consumers using TikTok Shop.

The Influence of Algorithms on Purchase Decisions

Based on the results of the t-test, the t-value obtained is 3.031 > t-table 1.661 with a significance value of 0.003 < 0.05, which means that the Algorithm variable (X3) has a positive and significant influence on purchase decisions. This indicates that the TikTok algorithm system that displays products according to user interests and interactions can increase the likelihood of purchase. The more often users see product content on the For You Page (FYP), the higher their interest in buying the product. These results are consistent with the study by Putri and Hayu (2024), which found that the TikTok algorithm has a significant influence on fashion product purchase decisions. In addition, several recent studies also support these findings. Research by Geyser (2023) explains that the TikTok algorithm works based on a personalized recommendation system that displays content according to user behavior and preferences, which indirectly encourages engagement and the desire to purchase products that frequently appear on the FYP. Furthermore, a study by Zhang and

Liu (2021) found that algorithmic recommendation systems can increase the exposure effect, where the more often consumers are exposed to a product, the greater the possibility that they will like and purchase it. Research by Kusuma and Hartono (2022) also shows that the intensity of algorithm-based content exposure on e-commerce platforms significantly contributes to impulsive buying, especially among young generations who actively use social media. Based on these findings, it can be concluded that the TikTok algorithm plays an important role in shaping consumer behavior through recommendation mechanisms and repeated exposure, which effectively influence the purchase decisions of Gen-Z consumers in the digital era.

The Influence of E-WOM, Discounts, and Algorithms on Purchase Decisions

The results of the simultaneous test (F-test) show that the F-count value is 127.724 > F-table 2.470 with a significance value of 0.000 < 0.05, which means that the variables E-WOM, Discounts, and Algorithms simultaneously have a positive and significant effect on Purchase Decisions on TikTok Shop among Gen-Z consumers in Medan City. This proves that purchase decisions are not influenced by only one factor but rather by a combination of digital communication influences, price promotions, and TikTok's algorithmic recommendation system. These three factors create an engaging and persuasive shopping experience that encourages faster purchase decisions. This finding is consistent with the research of Wang and Li (2021), which states that the integration of social factors, price promotions, and digital recommendations has a synergistic effect in increasing consumer purchase decisions on e-commerce platforms. In addition, a study by Rahman and Kurnia (2022) shows that the combination of digital marketing strategies such as e-WOM and price discounts supported by algorithmic systems strengthens consumer value perception and trust in products. Meanwhile, research by Dewi and Pratama (2023) found that personalized shopping experiences through algorithms combined with price promotions and user reviews can accelerate the purchase decision-making process, especially among young consumers on social media platforms. Based on these findings, it can be concluded that the simultaneous relationship between e-WOM, discounts, and algorithms is complementary, where each factor reinforces the others in creating psychological, cognitive, and emotional encouragement that ultimately increases purchase decisions on TikTok Shop.

CONCLUSION AND SUGGESTION

Based on the results and discussion, the conclusions can be drawn as follows:

1. Based on the results of the partial test, the E-Word of Mouth variable has a positive and significant influence on the Purchase Decisions of Gen-Z consumers in TikTok Shop in Medan City. This means that the higher the intensity of positive reviews, comments, and recommendations from other users on TikTok Shop, the greater the tendency of Gen-Z consumers to make purchases. E-WOM plays an important role as a source of information that builds consumer trust and reduces doubts in making purchase decisions.
2. The analysis results show that the Discount variable has a positive and significant influence on Purchase Decisions. This means that the greater

the price reduction or the more attractive the promotional offers provided, the higher the purchase intention among Gen-Z consumers. Discount strategies have proven to create a better perception of product value and generate emotional encouragement that accelerates the purchasing process, especially in limited promotions such as flash sales.

3. The Algorithm variable is also proven to have a positive and significant influence on Purchase Decisions. The more frequently products appear on the For You Page (FYP) according to user interests, the higher the likelihood of purchases occurring. TikTok's recommendation system, which personalizes content based on user preferences, has shaped the consumptive behavior of Gen-Z through repeated exposure to engaging and persuasive product content.
4. Simultaneously, the three independent variables (E-WOM, Discount, and Algorithm) have a positive and significant influence on Purchase Decisions with a coefficient of determination (Adjusted R^2) value of 0.798. This means that 79.8% of purchase decisions on TikTok Shop are influenced by these three factors, while the remaining 20.2% is influenced by other factors outside this study, such as influencer marketing, live streaming, or product quality.

REFERENCES

Afifah, R., & Andri, H. (2023). *Pengaruh Strategi Diskon terhadap Keputusan Pembelian Konsumen Online*. Jurnal Pemasaran Digital, 11(2), 145–158

Amin, M., & Yanti, R. (2021). *E-WOM dan Keputusan Pembelian di Era Digitalisasi*. Jurnal Ekonomi dan Bisnis, 9(1), 55–67

Arvianti, D., & Anggrasari, N. (2018). *Statistik untuk Penelitian Bisnis*. Jakarta: Mitra Wacana Media.

Compas. (2025). *Laporan Perbandingan Penjualan TikTok Shop dan Tokopedia 2024–2025*. Retrieved from https://compas.co.id

Elyawati, R. (2021). *Algoritma dalam E-Commerce: Rekomendasi Berbasis Preferensi Konsumen*. Jurnal Teknologi Informasi, 6(1), 77–89.

Fathoroni, F., et al. (2020). *Statistik Pendidikan dan Penelitian*. Jakarta: Bumi Aksara.

Firmansyah, R. (2020). *Strategi Pemasaran Digital: Word of Mouth di Era Online*. Yogyakarta: Deepublish.

Geyser, W. (2023). *TikTok Algorithm Explained & How it Works*. Influencer Marketing Hub. Retrieved from https://influencermarketinghub.com

Gracelia, D., & Indriani, M. (2023). *Pengaruh Diskon terhadap Keputusan Pembelian di TikTok Shop*. Jurnal Manajemen Kontemporer, 12(3), 201–210.

Hasrul, H., et al. (2021). *Peran E-WOM pada Marketplace terhadap Loyalitas Konsumen*. Jurnal Ilmu Manajemen, 7(2), 66–74.

Herlina, E. (2019). *Metodologi Penelitian dan Aplikasi SPSS*. Bandung: Alfabeta.

Priyatno, D. (2018). *Panduan Praktis Analisis Data dengan SPSS*. Yogyakarta: Mediakom.

Putri, A., & Hayu, R. (2024). *Pengaruh Algoritma TikTok terhadap Keputusan Pembelian Produk Fashion*. Jurnal Media Sosial & Marketing, 8(1), 22–35.

Qamar, N., & Rezah, R. (2020). *Teknik Sampling dalam Penelitian Sosial*. Jakarta: Graha Ilmu.

Rahmadhani, F. (2019). *Analisis Statistik dalam Penelitian Ekonomi*. Surabaya: Pustaka Riset.

Riyanto, S., & Hatmawan, H. (2020). *Metodologi Penelitian Kuantitatif untuk Bisnis*. Jakarta: Mitra Wacana Media.

Sholihin, M. (2020). *Metode Penelitian Kuantitatif dan Kualitatif*. Jakarta: Salemba Empat.

Siburian, A. S., & Anggrainie, Y. (2022). *Strategi Promosi dan Pengaruh Diskon terhadap Minat Beli Konsumen*. Jurnal Bisnis dan Pemasaran, 10(2), 122–135.

Sugiyono. (2019). *Statistika untuk Penelitian*. Bandung: Alfabeta.

Sugiarti, A., & Wati, L. (2024). *Pengaruh E-WOM terhadap Keputusan Pembelian TikTok Shop*.Jurnal Riset Ekonomi Digital, 10(2), 133–149.

Suwinovia, F., & Widuri, L. (2022). *Strategi Diskon Harga dalam Meningkatkan Volume Penjualan Produk Online*. Jurnal Ekonomi dan Bisnis Digital, 9(4), 199–210.

Waty, D., et al. (2023). *Analisis Regresi dalam Penelitian Manajemen*. Bandung: CV Ilmu Mandiri.

Yusuf, M. (2021). *Perilaku Konsumen di Era Digital*. Malang: UMM Press.

Yusuf, M., & Daris, A. (2019). *Jenis Data dan Teknik Analisis dalam Penelitian Sosial*.Jakarta:Prenadamedia.

Zhang, Y., & Liu, X. (2021). *TikTok Algorithm Recommendation and Consumer Behavior*. Journal of Digital Marketing, 5(3), 44–52.