Influence of E-Wom, Price Perception, and Product Quality on VIVO Smartphone Purchasing Decision

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ABSTRACT
The market share of PT Vivo Mobile Indonesia has experienced fluctuating developments. The main objective of this study is to examine the influence of E-wom, price perception, and product quality, on Vivo smartphone purchasing decisions both simultaneously and partially. Data were collected using a survey method. The questionnaires were distributed to Vivo smartphone buyers and users in the city of Semarang. Multiple linear regression techniques were administered. The results of this study indicated that both simultaneously and partially E-wom, Price Perception, and Product Quality have a positive impacts on Purchasing Decisions. The combined contribution of the three variables to Purchasing Decisions is 73.9% and the remaining 26.1% is likely influenced by other variables.

Kkey Words: E-Wom, Price Perception, Product Quality, Purchase Decision

Pengaruh E-Wom, Persepsi Harga, dan Kualitas Produk terhadap Keputusan pembelian VIVO Smartphone

Abstrak
Pangsa pasar PT Vivo Mobile Indonesia mengalami perkembangan yang fluktuatif. Tujuan utama penelitian ini adalah untuk mengkaji pengaruh E-wom, Persepsi Harga dan Kualitas Produk, terhadap keputusan pembelian smartphone Vivo baik secara simultan maupun parsial. Data dikumpulkan dengan metode survai; kuesioner dibagikan kepada pembeli sekaligus pengguna smartphone Vivo di kota Semarang. Analisis data menggunakan teknik regresi linier berganda. Hasil penelitian ini menunjukkan baik secara simultan maupun parsial E-Wom, Persepsi Harga, dan Kualitas Produk Berdampak positif terhadap Pembelian. Kontribusi gabungan ketiga variabel terhadap Keputusan Pembelian sebesar 73,9% dan 26,1% sisanya kemungkinan dipengaruhi oleh variabel yang lain.

Kata kunci: E-Wom, Persepsi Harga, Kualitas Produk, Keputusan Pembelian

INTRODUCTION

In the current industrial era 4.0, technological transformation has become the main guide in directing changes in the marketing landscape. This change is marked by the development of a dynamic market share. Dynamic market developments have led to rapid evolution in marketing strategies driven by the role of digital technology (Grönroos, 2016). In facing this dynamic, the use of digital marketing such as social media has become the key to achieving increasingly diversified target markets (Gupta, 2020). One of the digital marketing media that can be utilized is E-Wom Concept. E-Wom becomes a direct interaction medium between customers in building a positive image through the presence of platforms such as Instagram, Facebook, and Twitter (Lemon, 2016). Active interaction on social media platforms allows buyers to obtain more information, engage in discussions, and witness the experiences of other buyers (Enyioko, 2016). The fast E-Wom process

can influence purchasing decisions, prospective buyers are more inclined to determine products that have received positive validation from other buyers.

The digital promotion tactics through the E-Wom concept are supported by the development of internet users in Indonesia. The internet penetration rate in Indonesia increased by 1.17% compared to the previous survey, from 64.8% in 2018 to 77.02% in 2021-2022 (APJII 2023). This shows that more and more people are aware of the use of the internet as a primary need in daily activities; including marketing, whereonline-based marketing such as social media is very effective in the digital era. Wibowo et.al (2022) stated that now the enthusiasm of business actors and their ability to use digital marketing technology is high. This is indicated by the very high demand for advanced training related to social media promotion and creative content creation. The development of the use of electronic social media by the Indonesian people has also increased rapidly. Andi (2022) on We Are Social data showed an increase of 12.6% or around 19.4 million active users of the Indonesian people in January 2022.

Research gap of this study was marked by Clarita's (2023) findings which stated that Price Perception had a significant impact on Purchase Decisions. These contradict findings of Ardian's (2022) research state that Price Perception did not have a significant positive effect on Purchase Decisions. This insignificance is due to the complex nature of customer behavior and many other factors that can influence purchasing decisions. This is also reinforced by Raglan's (2019) research, which contains contradictions with the findings of Müller-Bloch's (2015) research on Price Perception and Purchase Decisions.

PT Vivo Mobile Indonesia is a telecommunications technology company that has been in the top five-smartphone market share in Indonesia for the past three years. Based on research by Oláh et al. (2019), it implies that changes in digital marketing strategies in one company will affect other companies in the IT industry, so new breakthroughs are needed to lead the market share in a country. The following is Table 1 of market share data from Q1 2021 to Q4 2023 showing Vivo market in strengthening its position.

TABLE 1
Vivo SMARTPHONE MARKET SHARE
YEAR 2021-2023 IN INDONESIA

Year	Quarter 1	Market share (%)	Growth (%)
2021	1	16	-
	2	16.6	+ 3.75
	3	20.6	+ 24.1
	4	19.6	- 4.85
2022	1	17.1	- 0.13
	2	17.8	+ 4
	3	18.8	+ 5.6
	4	18.2	- 3.19
2023	1	16.5	- 9.34
	2	16.5	0
	3	14.4	- 12.72
	4	17.4	+ 20.83

Ssource: IDC Quarterly Phone Tracker 2023 Wwebsite

Table 1 shows the fluctuation of Vivo market share in Indonesia from Q1 2021 to Q4 2023 but 24.1% jump in market share 12.72% from Q2 to Q3 2023. However, there was a growth of 20.83% from Q3 to Q4 2023. A large decline of 9.34% from Q1 to Q2 2023. Likewise, a decline of Vivo market share can be said to have experienced fluctuating growth during this period there was substantial variation in growth and decline.

The purpose of this research focuses on examining: The Influence of E-WOM, Price Perception and Product Quality on Vivo Smartphone Purchase Decisions both simultaneously and partially. Assauri stated (2019:13), "Marketing management is understood as a series of activities involving evaluation, design, implementation, and operational control." Tjiptono (2008:21) stated that the marketing mix involves a combination of variables used by companies to influence consumer responses. In essence, the Marketing mix includes the arrangement of various marketing elements of product provision, pricing, product distribution, and promotion in order to achieve sales goals and customer satisfaction.

Kotler's perspective, in Keller (2016) "Consumer behavior can be understood as a process when individuals and groups make purchasing decisions and use goods and services to satisfy their needs and desires." The Black Box Model in this study is used to explain the decision-making process around purchasing. Kotler & Armstrong (2012:150) stated "Purchase decisions in consumer behavior models are influenced by various factors, including individual characteristics, marketing stimuli, and other stimuli." The stimulus in question is a collection of factors that influence buyer decisions that can be represented through the black box model. According to Buchari (2016:96), "A purchase decision is a decision taken by customers to buy the products or services they want, influenced by factors of financial conditions, economy, product, price, location, promotion, technology, and culture." Lis & Neßler (2014:63) define E-Wom as "A marketing strategy by utilizing social media to facilitate consumer opinions about products or services." The traditional concept of "word of mouth" has shifted to the online realm.

According to Tjiptono (2019:76), "Price perception as a cognitive mechanism by which consumers assess the price value of expected goods and services." "Consumer price value perceptions can vary, so products and services need to be produced in such a way as to create a positive perception in the eyes of consumers. Yunita (2021:60), "Product quality is defined as a collection of attributes and features inherent in goods and services, which have the capacity to meet needs, reflecting various additional special characteristics of the product."

This research model uses purchasing decision variables as dependent variables. E-Wom, Price Perception, and Product Quality as independent variables. The research model image is presented in Figure 1.

Figure 1: Research Model
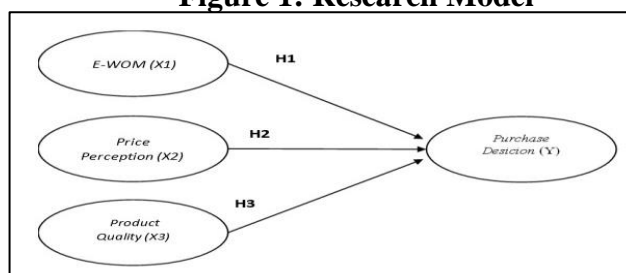
This study uses a quantitative approach. The population of this study is buyers and users of Vivo smartphones in Semarang. The determination of the number of samples refers to the Cochran criteria which state that the minimum sample for testing research data is 100. This study collected the data by distributing questionnaire which has been tested its validity and reliability to 105 respondents who have purchased and used Vivo smartphones in the city of Semarang. The analysis tool to test the influence of E-womb, Price perception, and Pproduct Qquality on purchasing decisions uses multiple linear regression. The research data is processed using the SPSS statistical application program version 25.

RESULTS AND CONCLUSION
The quality of research data is tested with classical assumption test.

Testing Classical Assumptions
Multicollinearity test
Ghozali (2018:138) explains that the multicollinearity test aims to determine whether there is a correlation between the independent variables of the regression model. In Table 2 below, we present the results of the multicollinearity test used in this study.

TABLE 2

TEST RESULT MULTICOLLINEARITY
Multicollinearity Statistics Model

	Tolerance	VIF
Electronic Word of Mouth (E-WOM)	0.764	1,309
Price perception	0.748	1,336
Product Quality	0.671	1,489

Source: Processed Primary Data. 2024

Table 2 shows that there are no signs of multicollinearity because the tolerance value is more than 0.10 and the VIF value of each variable is below 10. The test results show that the independent variables E-WOM, Price Perception and Product Quality do not have a strong correlation, so these independent variables can be used in this study.

Normality test,
Ghozali (2018), the normality test aims to check whether the residuals in the regression model are normally distributed. The results of the normality test for the research data are shown in Table 3.

TABLE 3
NORMALITY TEST RESULTS
ONE-SAMPLE KOLMOGROV-SMIRNOV TEST

		Unstandardized Residual
N		105
Normal Parameters	Mean	0.0000000
	Std. Deviation	0.26023923
M Extreme OST Differences	Absolute	0.074
	Positive	0.074
	Negative	-0.051
Test Statistics		0.074
Asymp. Sig (2-Tailed)		0.189c

Source: Processed Primary Data. 2024

The results of the normality test show that the research data follows a normal distribution as seen in Table 3 where the Asymp. Kolmogorov-Smirnov Test value is 0.189, greater than the significance level of 0.05.

Linearity test (Ghozali, 2018:167) Linearity testing is used to assess whether the model specifications in an empirical study are correct or not. The following is a table 4 of the output of the linearity test of this research data.

TABEL 4
LINEARITY TEST RESULTS
ANOVA TABLE

|		F Sig.
E-WOM	*Deviation from Linearity*	1,566 0,082
Price perception	*Deviation from Linearityy*	1,092 0,376
Product Quality	*Deviation from Linearity*	0.789 0.719

Source: Processed Primary Data. 2024

The research variables have values as shown in Table 4. Deviation from linearity above 0.05 shows that all variables have a linear relationship.

Heteroscedasticity test, Ghozali (2018:137) heteroscedasticity testing

In used to check for significant differences between residual variables in the regression model." The following is a display of Figure 2 of the heteroscedasticity test using the scatterplot method.

FIGURE 2
HETEROSCEDASTITY TEST RESULTS
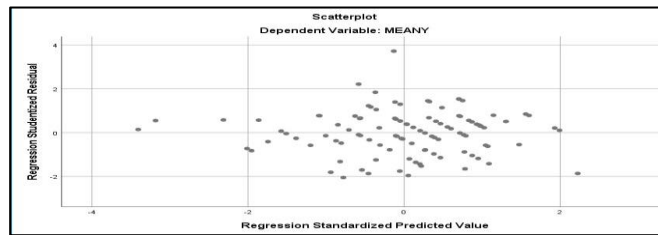
Source: Processed Primary Data. 2024

Figure 2 shows that the points are distributed in a similar way to and away from zero and it is stated that no particular pattern is formed. Based on the heteroscedasticity testing criteria, it can be concluded that there is no heteroscedasticity in the data so that the research model is said to be good.

Analysis of Influence Between Variables

The influence between independent variables, namely E-Wom, Price Perceptian and Product Quality variables on purchasing decisions using Multiple Linear Regression. Ghozali (2018) said that this regression analysis is used to evaluate the influence of several independent variables on one dependent variable. Regression analysis can not only see how strong the relationship is between these variables, but also in which direction these variables move. Influencing one another.

The influence between variables simultaneously

Test the influence between variables simultaneously using the F significance test. Table 5 displays the results of the analysis of the influence between E-Wom, Price Perception and Product Quality simultaneously on purchasing decisions

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TABEL 5
F ANOVA STATISTIC TEST RESULTS[b]

Model	Sum Of square	df	Mean Square	F	Sig.
Regression	20,705	3	6,902	98,969	0,000[b]
Residual	7,043	101	, 070		
Total	27,749	104			

Source: Processed Primary Data. 2024

The results of the analysis show that the significance value of each is 0.000, which means that the sig score < 0.05 and the F value > table value, namely 98.969 > 2.69, so it can be said that E-Wom, Price Perception and Product Quality are element which simultaneously affects *Purchase Decision* by consumers.

Partial influence between variables

Test the influence between variables partially using the significance test t. Ghozali (2018:98) explains that the t-test is used to determine how much weight each independent variable has in relation to the dependent variable. Table 6 shows the results of the t-test showing the influence of E-Wom, Price Perception and Product Quality on consumer purchasing decisions.

TABLE 6
STATISTICAL TEST RESULTS T
Coefficients

Model	Unstandardized Coeficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.627	0.242	-	2,589	0.011
E-WOM (X1)	0.183	0.044	0.237	4,136	0,000
Price Perception (X2)	0.307	0.040	0.442	7,626	0,000
Product Quality (X3)	0.356	0.054	0.402	6,577	0,000

Source: Processed Primary Data. 2024

The output of testing the influence between variables partially can be obtained by the regression equation:

$$Y= 0.237\ X1+0.442\ X2 +0.402X2 + 0.402X3$$

Partial influence of E-wom, Price Perception and Product Quality on consumer purchasing decisions are explained as follows:

1. The influence of E-wom on purchasing decisions.

The regression coefficient value of E-wom on purchasing decisions is 0.237, at a significance value of $0.000 < 0.05$. The results of this test can be stated that Electronic E-wom has a positive effect on purchasing decisions.

2. Price Influencee Perception of Purchasing Decisions

Price regression coefficient valuee Perception on Purchase Decision 0.442 at a significance of $0.000 < 0.05$. The results of this test can be stated that Price Perception has a significant positive effect on Purchase Decision.

3. Influence of Product Quality on Purchase Decisions

The regression coefficient value of Product Quality on Purchase Decisions is 0.442 at a significance of $0.000 < 0.05$. The results of this test can be stated that Product Quality has a significant positive effect on Purchase Decisions.

Determination Coefficient

Analysis The determination coefficient aims to determine how much contribution the E-wom, Price Perception and Product Quality variables have to the purchasing decision variable. The results of the determination coefficient test ($R2$) are presented in Table 7.

TABEL 7
RESULTS OF DETERMINATION COEFFICIENT TEST

Model SUMMARY	R	R Square	Adjusted R Estimate	Std. Error
1	0.864[a]	0.746	0.739	0.26408

Source: Processed Data, 2024

Value Adjusted R Squared is 0.739. This shows that E-Wom, Price Perception, and Product Quality contribute 73.9% to the total influence on purchasing decisions.

Description of Variable and Indicator Values

Measurement of variable values and the indicators that form them uses index values.

E-Wom (X1)

The value of the E-WOM variable and indicator index reveals that the highest value of 83.81 is in the content indicator, while the lowest value, which is 63.49, is in the valence of opinion indicator. Overall, the E-WOM index of 75.60 is in the high category.

Price perception(X2)

the index value of the indicators forming the Price Perception variable shows that the highest value, which is 81.27, is in the price The measurement results of the Purchase Decision variable value show that the highest value, which is 83.65, is in the payment method indicator, while the lowest value, which is 75.56, is in the supplier selection indicator. Overall, the value of the Purchase Decision variable is 78.10, which is in the high category.

CLOSING

It is concluded that E-WOM, Price Perception, and Product Quality simultaneously have a significant positive effect on the purchase decision of Vivo Smartphones; E-WOM, Price Perception, and Product Quality partially have a significant positive effect on the purchase decision of Vivo Smartphones; E-WOM, Price Perception, and Product Quality contribute 73.9% to the Purchase Decision of Vivo smartphone products; The index value of the E-WOM variable is 75.60 (high), Price Perception 80.36 (high), Product Quality 81.11 (High) and Purchase Decision 78.10 (high).

To increase Vivo product purchases can be done by Increasing buyer involvement in E-Wom with reward programs for active users and the formation of a Vivo user community to share experiences; Increasing

suitability indicator through benefits, while the lowest value, which is 79.37, is in the price competitiveness indicator. Overall, the Price Perception index is 80.36, which is in the high category.

Product Quality(X3)

The measurement results of the Product Quality variable index value show that the highest value, which is 83.17, is in the perceived quality indicator, while the lowest value, which is 77.78, is in the reliability indicator. Overall, the average value of the Product Quality variable is 81.11, which is in the high category.

Purchase Decision (Y)

Price Perception to increase competitiveness, the company should be able to offer bundling products through more competitive prices and establish cooperation through third parties to provide attractive offers to buyers; Increasing Product Quality, the company should provide user education about cellphone care, including the use of original chargers and routine maintenance, will help improve quality perception and reduce the risk of damage.

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