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# THE INFLUENCE OF PRODUCT QUALITY AND PRICE ON CONSUMER PURCHASE INTENTION AT PT. VIVO MOBILE COMMUNICATION

Arum Salsabila<sup>1</sup>, Rr. Chusnu Syarifa Diah Kusuma<sup>1,\*</sup>

<sup>1</sup>Department of Business and Finance, Vocational Faculty, Universitas Negeri Yogyakarta, 55281, Indonesia

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#### ABSTRACT

This study aims to examine: (1) the effect of product quality on consumer purchase intention at PT. Vivo Mobile Communication; (2) the effect of price on consumer purchase intention at PT. Vivo Mobile Communication; and (3) the effect of product quality and price on consumer purchase intention at PT. Vivo Mobile Communication. The research design used was explanatory research with a quantitative descriptive approach. The study was conducted in Indonesia, and the research subjects were consumers at PT. Vivo Mobile Communication, which had purchased and used Vivo smartphones. Primary data were collected through questionnaires. Instrument testing included validity and reliability assessments. Data analysis techniques involved descriptive analysis as well as prerequisite tests, such as normality, linearity, heteroscedasticity, and multicollinearity tests. Hypothesis testing was carried out using simple regression and multiple regression analyses. The results of the study indicate that (1) product quality has a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication; (2) price has a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication, and (3) product quality and price together have a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication.

#### Keywords:

Price; Product Quality; Consumer Purchase Intention

#### 1. Introduction

With the advancement of technology, its use as a communication tool has become increasingly widespread. This trend is evident in the rising number of smartphone, internet, and social media users in Indonesia [1]. According to Gaini, a smartphone is a compact electronic device with a wide range of functions [2]. Based on data from Statistics Indonesia (BPS), the proportion of smartphone users in Indonesia reached 65.87% in 2021. By 2022, this number had increased to 67.88% [3].

The number of smartphone users in Indonesia continues to rise, with 354 million smartphone users recorded in 2023. In contrast, data from Statistics Indonesia (BPS) indicate that the country's population in mid-2023 was 278.69 million. This suggests that, in 2023, the number of smartphone users in Indonesia surpassed the total population, indicating that many Indonesians own more than one smartphone. According to Stephanie Elizabeth, Tech Industry Lead at Google Indonesia, the number of smartphone users in the country is expected to keep growing. It is projected to triple by 2025 [4].

\*Corresponding author.

E-mail address: chusnu@uny.ac.id

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The surge in smartphone users in Indonesia has prompted smartphone manufacturers to compete aggressively for market share, striving to meet the evolving needs and preferences of consumers [1]. In Indonesia, the smartphone market is dominated by major brands such as Oppo, Samsung, Vivo, Xiaomi, and iPhone. Table 1 presents comparative data on smartphone brands based on the Top Brand Award over the past three years.

Doubaltat	Tahun						
Peringkat	2021	2022	2023				
1	Samsung	Samsung	Samsung				
2	Орро	Орро	Орро				
3	Xiaomi	iPhone	iPhone				

Xiaomi

Vivo

Xiaomi

Vivo

iPhone

Vivo

**Table 1.** Comparative Data of Smartphone Brands

Based on the data presented in Table 1, it can be seen that over the past three years, PT. Vivo Mobile Communication, as the producer of Vivo smartphones, has consistently ranked fifth in the comparison of smartphone brands when compared to other manufacturers such as Oppo, Samsung, Xiaomi, and iPhone. PT. Vivo Mobile Communication is a technology company engaged in the production of exceptional smartphones, supported by innovative services, intelligent devices, and design-driven innovation [5]. As one of the leading smartphone manufacturers, PT. Vivo Mobile Communication consistently strives to increase its market share. Figure 1 shows the market share of PT. Vivo Mobile Communication in Indonesia over the past four years, based on data from the International Data Corporation (IDC).

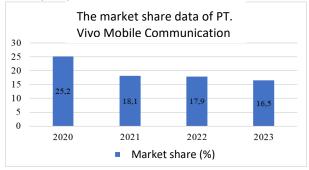


Fig. 1. Market Share Data of PT. Vivo Mobile Communication [6-8]

Based on the data in Figure 1, it can be observed that over the past four years, the market share of PT. Vivo Mobile Communication in Indonesia has declined each year. In the third quarter of 2023, according to the International Data Corporation (IDC), Vivo smartphone shipments to Indonesia decreased compared to the same period in 2022. The number of Vivo smartphones shipped dropped by 16.9%, from 1.5 million units in the third quarter of 2022 to 1.3 million units in the third quarter of 2023 [9]. This decline in market share and shipments indicates a decreasing consumer purchase intention for Vivo smartphones in Indonesia.

According to Tambunan, consumer purchase intention is a behavior in which consumers are attracted to the products offered or have a desire to use, consume, and choose these products over others [10]. Consumer purchase intention is one of the key factors that must be considered, as it serves as a determinant of the success of product marketing. Purchase intention can be influenced by stimuli from sellers, such as the alignment between consumer needs and the products offered, promotional discounts, or attractive product offerings [11].

According to Kotler, four factors can influence consumer purchase intention toward a product. These factors include product quality, brand image, advertising, and price [12]. To determine which factors have the greatest influence on consumer purchase intention for PT. Vivo Mobile

Communication products in Indonesia, a preliminary study was conducted by distributing questionnaires to 100 consumers of PT. Vivo Mobile Communication in Indonesia. Figure 2 presents the data from the distribution of the preliminary study questionnaires.

Factors that influence consumer buying interest in PT. Vivo Mobile Communication in Indonesia

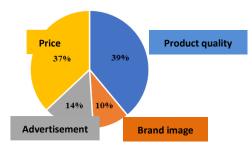


Fig. 2. Pie Chart of Factors Influencing Consumer Purchase Intention

Based on the data from the preliminary study questionnaire regarding the factors influencing consumer purchase intention for PT. Vivo Mobile Communication in Indonesia, as shown in the pie chart above, it is evident that among the four factors, product quality and price are the most dominant. Product quality accounts for 39%, while price contributes 37% to consumer purchase intention for PT. Vivo Mobile Communication in Indonesia.

According to Kotler and Armstrong, product quality refers to a product's ability to perform its functions well, which includes ease of use, durability, accuracy, reparability, and reliability [2]. Zainuddin states that creating products of the best quality can lead consumers to favor those products, thereby increasing sales volume [10]. Susanti argues that a product can be considered of high quality if it meets customer expectations. Product quality is also one of the factors that plays a significant role in increasing customers' intention to purchase the product [13]. According to the research by Arianto & Difa [14], product quality has a positive and significant effect on consumer purchase intention at PT. Nirwana Gemilang Property. Another study by A. Hidayat & Hartanto [15] also found that product quality has a positive and significant influence on consumer purchase intention at PT. Tiga Agung. However, research conducted by Antonia & Alexander [14] showed that product quality has a negative and insignificant effect on consumer purchase intention in the Blibli marketplace in Tangerang City.

In addition to product quality, price is also a key factor that can influence consumer purchase intention at PT. Vivo Mobile Communication in Indonesia. Price is one of the main aspects considered by consumers before they decide to be interested in or intend to purchase a product [16]. According to Tjiptono, price is the monetary value spent to acquire or use certain goods and services [17]. Research conducted by Febrian [13] states that price influences purchase intention, with an effect size of 12.29%. Fauzan & Rohman [18], in their study, found that price has a positive and significant effect on students' purchase intention toward Kawasaki motorcycles at STIE Muhammadiyah Jakarta. However, a different result was found in the study by Kasman et al. [19], which revealed that price does not have a positive and significant influence on consumer purchase intention in the Lazada marketplace.

As one of the major smartphone manufacturers, it is essential for PT. Vivo Mobile Communication aims to enhance consumer purchase intention in Indonesia in order to compete with other brands, increase its market share, and boost sales in the Indonesian market. Therefore, based on the issues faced by PT. Vivo Mobile Communication, the researcher is interested in conducting a study entitled "The Influence of Product Quality and Price on Consumer Purchase Intention at PT. Vivo Mobile Communication."

#### 2. Method

#### 2.1. Research Design

The researcher employed an explanatory research method in this study. According to Sugiyanto, explanatory research is a type of study that aims to clarify the positions of all variables under investigation and the relationships among those variables [20]. This explanatory research approach was chosen to confirm the hypotheses that have been proposed, with the expectation that this study will provide a more straightforward explanation and deeper understanding of the relationships and effects between the independent and dependent variables specified in the research hypotheses.

The research approach employed in this study is the quantitative descriptive method. Quantitative research is a method that utilizes numerical data, which is then analyzed statistically to test a hypothesis [21]. The quantitative method is used to measure the effect of the independent variables—product quality and price—on the dependent variable, which is consumer purchase intention. Meanwhile, the descriptive aspect of this study aims to provide an overview and detailed information regarding product quality, price, and their influence on the purchase intention of consumers at PT. Vivo Mobile Communication in Indonesia. Therefore, by using the quantitative descriptive method, the researcher can reveal the impact of the independent variables on the dependent variable in this study.

#### 2.2. Research Location, Period, and Subjects

The study was conducted in Indonesia, with the research period spanning from March to September 2024. The subjects of this research were consumers of PT. Vivo Mobile Communication in Indonesia which has purchased and used Vivo smartphones.

#### 2.3. Population and Sample

The population refers to the entire set of objects used in a research study. Population is defined as the generalization area consisting of subjects or objects that possess specific characteristics and qualities determined by the researcher for investigation, from which generalizations can then be made [22]. In this study, the population consists of all consumers in Indonesia who have purchased and used Vivo smartphones, with the exact number being unknown.

A sample is a subset of the population that possesses specific characteristics and is used in research [22]. According to Arikunto, a sample is defined as a representative portion or segment of the population that has been designated for study. Sampling is carried out when the research population is large and it is not feasible to examine all members because of their large size. Suppose the number of subjects is fewer than 100. In that case, it is preferable to include the entire population, thus making the study a population study. However, if the number of subjects is large, it is recommended to select 10%–15%, 20%–25%, or even more, depending on the context [23].

Since the exact population size is unknown, the researcher determined the sample size using the formula proposed by Hair et al. This formula is intended for situations where the population size is undetermined, and it recommends a minimum sample size of 5–10 times the number of questions or statements [24]. In this study, there are 33 statements; therefore, the required sample size is 165 respondents. The sampling technique employed in this research is purposive sampling, with the minimum criterion being 18 years of age. This criterion was chosen because individuals aged 18 and above are considered capable of making rational decisions and sound judgments.

#### 2.4. Data Collection Technique

The data collection technique used in this study was a questionnaire. A questionnaire is a method of collecting data by providing respondents with a series of questions or statements to be answered in writing. This study utilized a closed-ended questionnaire, in which respondents selected answers from the options provided that best reflected their actual situation. The questions

in the questionnaire were related to product quality and price regarding consumer purchase intentions for PT. Vivo Mobile Communication.

#### 2.5. Research Instrument

The research instrument in this study utilized a modified Likert scale for scoring. The Likert scale is commonly used to measure opinions, attitudes, and perceptions of individuals or groups toward a particular phenomenon. In this research, the modified Likert scale was simplified to five alternative responses. Respondents could choose the option that best reflected their situation from those provided in the questionnaire. Table 2 presents the scoring guidelines for each response option used in the questionnaire.

#### 2.6. Data Analysis Technique

The data analysis techniques used in this study included descriptive data analysis, analysis prerequisite tests—comprising normality test, linearity test, heteroscedasticity test, and multicollinearity test—as well as hypothesis testing, which involved both simple regression analysis and multiple regression analysis.

#### 3. Results and Discussion

#### 3.1. Results

#### 3.1.1. Respondent Characteristics

#### 3.1.1.1. Gender

Table 3 presents the description of respondents' gender in this study. It can be seen from Table 3 that the majority of respondents in this study are female, accounting for 58%.

<b>Table 3.</b> Gender							
Gender	Gender Frequency Percentage (%)						
Laki-laki	70	42					
Perempuan	95	58					
Total	165	100					

#### 3.1.1.2. Age

Table 4 presents the age distribution of respondents, showing that the majority of respondents in this study are aged 21–25 years, accounting for 41%.

Table 4. Age

Age	Frequency	Percentage (%)	
18 – 20	18	11	
21 – 25	67	41	
26 – 30	36	22	
31 – 35	28	17	
>35	16	10	
Total	165	100	

#### 3.1.1.3. Domicile

Table 5 presents the domicile distribution of respondents in this study, showing that the majority of respondents are from Central Java, accounting for 34%.

Table 5. Domicile

Domicile	Frequency	Percentage (%)
Special Region	45	27
Yogyakarta (DIY)		
DKI Jakarta	24	15
West Java	28	17
Central Java	56	34
East Java	9	5
Others	3	2
Total	165	100

#### 3.1.1.4. Occupation

Table 6 presents the employment status of the respondents, indicating that the majority of respondents in this study are students, accounting for 36%.

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Occupation	Frequency	Percentage (%)
Student	59	36
Civil Servant	15	9
Military/Police	6	4
Private Sector Employee	37	22
Entrepreneur	26	16
Others	22	13
Total	165	100

#### 3.1.1.5. Monthly Allowance or Income

Table 7 presents the description of respondents' monthly allowance or income, indicating that the majority of respondents have a monthly allowance or income between IDR 1,000,000 and IDR 2,000,000, accounting for 29%.

Table 7. Monthly Allowance or Income

Monthly Allowance or Income	Frequency	Percentage (%)
<rp1.000.000< td=""><td>41</td><td>25</td></rp1.000.000<>	41	25
Rp1.000.000 - Rp2.000.000	48	29
Rp2.000.000 - Rp3.000.000	28	17
Rp3.000.000 - Rp4.000.000	36	22
> Rp4.000.000	12	7
Total	165	100

#### 3.1.2. Description of Variable Categories

#### 3.1.2.1. Consumer Purchase Intention

Figure 3 presents the data on consumer purchase intention, showing that the majority of consumers at PT. Vivo Mobile Communication falls into the low purchase intention category, accounting for 30%, while the smallest proportion, 10%, is in the very high category.



Fig. 3. Pie Chart of Consumer Purchase Intention Trends

#### 3.1.2.2. Product Quality

Figure 4 presents data on product quality trends, showing that the majority of consumers at PT. Vivo Mobile Communication perceives product quality to be in the medium category, accounting for 33%. In contrast, the smallest proportion, at 12%, falls into the very low category.



Fig. 4. Pie Chart of Product Quality Trends

#### 3.1.2.3. Price

Figure 5 presents data on price trends, showing that the majority of consumers at PT. Vivo Mobile Communication perceives the price to be in the low category, accounting for 28%, while the smallest proportions, each at 14%, fall into the very high and very low categories.



Fig. 5. Pie Chart of Price Trends

#### 3.1.3. Analysis Prerequisite Tests

#### 3.1.3.1. Normality Test

The normality test in this study was conducted using the Kolmogorov-Smirnov test. If the significance value obtained from the normality test is greater than 0.05, the data are considered to be normally distributed. Conversely, if the significance value is less than 0.05, the data are considered not to be normally distributed. Table 8 presents the results of the normality test, which was conducted using IBM SPSS Statistics 26 on Windows 10.

Table 8. Normality Test ResultVariableSigThresholdDesciptionUnstandard Residual0,064>0,05Normal

Based on the table above, the significance values for all three variables are 0.064, which is greater than 0.05. Therefore, it can be concluded that the data in this study are normally distributed. 3.1.3.2. Linearity Test

The linearity test was conducted using an F-test at a 5% significance level. If the significance value is greater than 0.05, the two variables are considered to be linear. However, if the significance value is less than 0.05, the two variables are considered not to be linear. Table 9 presents the results of the linearity test, which was conducted using IBM SPSS Statistics 26 on Windows 10.

Table 9. Linearity Test ResultVariableSigThresholdDescriptionProduct Quality (X1)0,195>0,05Linear relationshipPrice (X2)0,485>0,05Linear relationship

Based on the results of the linearity test shown in Table 9, the product quality variable has a linear relationship with consumer purchase intention, as the significance value is greater than 0.05,

namely 0.195. Similarly, the price variable also demonstrates a linear relationship with consumer purchase intention, with a significance value greater than 0.05, specifically 0.485. Therefore, it can be concluded that all independent and dependent variables in this study exhibit a linear relationship.

#### 3.1.3.3. Heteroscedasticity Test

The heteroscedasticity test was performed using the Glejser test. An effective regression model does not exhibit heteroscedasticity. The results can be considered free from heteroscedasticity if the Asymp. Sig. Value is greater than 0.05, while if the Asymp. Sig. If the value is less than 0.05, it is considered that heteroscedasticity is present. Table 10 presents the results of the heteroscedasticity test, which was conducted using IBM SPSS Statistics 26 on Windows 10.

Table 10. Heteroscedasticity Test Result

Variable	Sig	Description
Product Quality (X <sub>1</sub> )	0,195	No heteroscedasticity detected
Price (X <sub>2</sub> )	0,485	No heteroscedasticity detected

The table above shows that the significance values for product quality and price are both greater than 0.05, at 0.067 and 0.074, respectively. This indicates that there is no heteroscedasticity, meaning there are no significant differences between observations.

#### 3..1.3.4. Multicollinearity Test

The multicollinearity test was conducted to measure the degree of intercorrelation among the independent variables in the study and to ensure that there are no multicollinearity issues. If the tolerance value is greater than 0.1 and the Variance Inflation Factor (VIF) is less than 10, then multicollinearity does not occur. Conversely, suppose the tolerance value is less than 0.1 and the VIF is greater than 10. In that case, multicollinearity is present, and data analysis cannot proceed. Table 11 presents the results of the multicollinearity test, which was performed using IBM SPSS Statistics 26 on Windows 10.

Table 11. Multicollinearity Test

			•
Variable	Tolerance	VIF	Description
Product Quality (X <sub>1</sub> )	0,774	1,293	No multicollinearity detected
Price (X <sub>2</sub> )	0,774	1,293	No multicollinearity detected

Based on the results of the multicollinearity test shown in Table 11, the tolerance values for both variables are greater than 0.1, at 0.774. The Variance Inflation Factor (VIF) values for both variables are less than 10, at 1.293. Therefore, it can be concluded that no multicollinearity exists.

#### 3.1.4. Hypothesis Testing

#### 3.1.4.1. First Hypothesis

The first hypothesis in this study is "The Effect of Product Quality on Consumer Purchase Intention at PT. Vivo Mobile Communication." This hypothesis was tested using simple regression analysis with one predictor, and the calculations were performed using IBM SPSS Statistics 26 on Windows 10, as presented in Table 12.

Table 12. Summary of the First Hypothesis Test Results (X1-Y)

(r)	(r²)	(β)	(Cons)	(Sig.)	(Calculated )	t-value (Table)	Description
0.57 3	0.32 8	0.72 3	0.449	0.000	8.923	1.974	Positive and Significant

Based on the table above, the results of the first hypothesis test regarding the effect of product quality on consumer purchase intention at PT. Vivo Mobile Communication can be explained as follows:

#### 3.1.4.1.1. Simple Regression Equation

Based on the summary table of the first hypothesis test results above, the regression equation can be expressed as:

 $Y = 0.723X_1 + 0.449$ 

This regression equation indicates that the coefficient for  $X_1$  (product quality) is 0.723, meaning that every one-point increase in product quality results in an increase of 0.723 in consumer purchase intention (Y). The positive regression coefficient signifies that the effect of product quality  $(X_1)$  on consumer purchase intention (Y) is positive.

#### 3.1.4.1.2. Correlation Coefficient (r) and Coefficient of Determination (r<sup>2</sup>)

Table 12 shows that the correlation coefficient (r) between product quality and consumer purchase intention is 0.573. It also shows an r<sup>2</sup> value of 0.328, indicating that 32.8% of the variation in consumer purchase intention (Y) can be explained by product quality  $(X_1)$ . In comparison, the remaining 67.2% is influenced by other factors not analyzed in this study.

#### 3.1.4.1.3. t-Test

The summary of the first hypothesis test in Table 12 shows that the calculated t-value is 8.923 with a significance value of 0.000. Compared to the critical t-value of 1.974 at the 5% significance level, since the calculated ttt-value is greater than the critical value and the significance is less than 0.05, it indicates that product quality has a significant effect on consumer purchase intention at PT. Vivo Mobile Communication. Therefore, there is a positive and significant influence of product quality (X<sub>1</sub>) on consumer purchase intention (Y), leading to the acceptance of the alternative hypothesis (H<sub>a</sub>) and the rejection of the null hypothesis (H<sub>0</sub>). Consequently, the hypothesis stating "There is an effect of product quality on consumer purchase intention at PT. Vivo Mobile Communication" is accepted.

#### 3.1.4.2. Second Hypothesis

The second hypothesis tested in this study is "The Effect of Price on Consumer Purchase Intention at PT. Vivo Mobile Communication." This hypothesis was examined using simple regression analysis with one predictor, conducted using IBM SPSS Statistics 26 on Windows 10, as presented in Table 13.

<b>Table 13.</b> Summary of the Second Hypothesis Test Results $(X_2-Y)$								
(r)	(r²)	(β)	(Cons)	(Sig.)	t-value (Calculated)	t-value (Table)	Description	
0.475	0.226	0.595	15.043	0.000	6.890	1.974	Positive and Significant	

### 3.1.4.2.1. Simple Regression Equation

Based on the summary of the second hypothesis test results in the table above, the regression equation can be expressed as follows:

#### $Y = 0.595X_2 + 15.043 Y = 0.595X_2 + 15.043$

This regression equation shows that the coefficient for the price variable  $(X_2)$  is 0.595, meaning that every one-point increase in price results in a 0.595-point increase in consumer purchase intention (Y). The positive regression coefficient indicates a positive effect of price  $(X_2)$  on consumer purchase intention (Y).

#### 3.1.4.2.2. Correlation Coefficient (r) and Coefficient of Determination (r<sup>2</sup>)

Based on the summary of the second hypothesis test in Table 13, the correlation coefficient (r) between price and consumer purchase intention is 0.475. The table also shows an r<sup>2</sup> value of 0.226, indicating that 22.6% of the variation in consumer purchase intention (Y) is explained by price  $(X_2)$ , while the remaining 77.4% is influenced by other factors not examined in this study.

#### 3.1.4.2.3. t-Test

The summary of the second hypothesis test in Table 13 shows a calculated ttt-value of 6.890 with a significance level of 0.000. Compared to the critical t-value of 1.974 at a 5% significance level, the calculated ttt-value is greater than the critical value and the significance level is less than 0.05. This indicates that price significantly affects consumer purchase intention at PT. Vivo Mobile Communication. Therefore, there is a positive and significant effect of price (X2) on consumer purchase intention (Y), leading to the acceptance of the alternative hypothesis (H₃) and rejection of the null hypothesis (H<sub>0</sub>). Thus, the hypothesis "There is an effect of price on consumer purchase intention at PT. Vivo Mobile Communication" is accepted.

#### 3.1.4.3. Third Hypothesis

The third hypothesis in this study is "The Effect of Product Quality and Price on Consumer Purchase Intention at PT. Vivo Mobile Communication." This hypothesis was tested using multiple regression analysis with two predictors, conducted using IBM SPSS Statistics 26 on Windows 10, as presented in Table 14.

**Table 14.** Summary of the Third Hypothesis Test Results  $(X1, X_2 - Y)$ 

(r) (r <sup>2</sup>	) (β)	(Cons)	(Sig.)	F-value (Calculated)	F-value (Table)	Description
0.617 0.3	81 0.566 (Product Quality), 0.328 (Price)		0.000	49.873	3.05	Positive and Significant

Based on the data in Table 14, the significance value of 0.000 is less than 0.05, and the calculated F-value of 49.873 exceeds the critical F-value of 3.05. This indicates a positive and significant simultaneous effect of product quality and price on consumer purchase intention at PT. Vivo Mobile Communication. Therefore, the alternative hypothesis ( $H_a$ ) is accepted, and the null hypothesis ( $H_0$ ) is rejected.

#### 3.1.4.3.1. Multiple Regression Equation

Based on the summary of the third hypothesis test results above, the regression equation can be written as:

$$Y = 0.566X_1 + 0.328X_2 - 4.159Y$$

This equation shows a negative constant (K) value of -4.159, meaning that if product quality and price are both zero, consumer purchase intention would decrease. Furthermore, the coefficient for  $X_1$  (product quality) is positive at 0.566, indicating a positive effect of product quality on consumer purchase intention (Y). Similarly, the coefficient for  $X_2$  (price) is positive at 0.328, indicating a positive effect of price on consumer purchase intention (Y). Therefore, it can be concluded that simultaneous increases in product quality and price will lead to an increase in consumer purchase intention.

#### 3.1.4.3.2. Correlation Coefficient (r) and Coefficient of Determination (r<sup>2</sup>)

According to the summary of the third hypothesis test in Table 14, the correlation coefficient (r) is 0.617, and the coefficient of determination ( $r^2$ ) is 0.381. This means that, collectively, product quality ( $X_1$ ) and price ( $X_2$ ) influence consumer purchase intention (Y) by 38.1%, while the remaining 61.9% is affected by other variables not analyzed in this study.

#### 3.1.4.3.3. F-Test

The summary of the third hypothesis test in Table 14 shows that the calculated F-value is 49.873 with a significance level of 0.000. Compared to the critical F-value of 3.05 at the 5% significance level, the calculated F-value exceeds the critical value, and the significance is less than 0.05. Therefore, it can be concluded that product quality and price simultaneously have a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication. This indicates a positive and significant influence of product quality  $(X_1)$  and price  $(X_2)$  on consumer purchase intention (YYY), leading to the acceptance of the alternative hypothesis  $(H_a)$  and rejection of the null hypothesis  $(H_0)$ . Thus, the hypothesis "There is a simultaneous effect of product quality and price on consumer purchase intention at PT. Vivo Mobile Communication" is accepted.

#### 3.1.4.3.4. Effective Contribution (EC) and Relative Contribution (RC)

Based on the results of the multiple regression analysis conducted, the values of Effective Contribution (EC) and Relative Contribution (RC) of each independent variable to the dependent variable are presented as follows, as shown in Table 15.

Table 15. Results of Effective Contribution and Relative Contribution Calculation

Variable	Effective Contribution (EC)	Relative Contribution (RC)
Product Quality (X <sub>1</sub> )	25,7%	67,4%
Price (X <sub>2</sub> )	12,4%	32,5%
Total	38,1%	100%

Based on the table above, it can be seen that the effective contribution of the product quality variable  $(X_1)$  is 25.7%, while the price variable  $(X_2)$  contributes 12.4%. Additionally, the relative contribution of product quality  $(X_1)$  is 67.4%, whereas price  $(X_2)$  accounts for 32.5%.

#### 3.2. Discussion

## 3.2.1. The Effect of Product Quality on Consumer Purchase Intention at PT. Vivo Mobile Communication

The results of the study indicate that product quality has a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication, thus supporting the acceptance of the first hypothesis. This evidence is derived from the t-test, which yielded a calculated t-value of 8.923 with a significance level of 0.000, and a regression coefficient of 0.723. The contribution of product quality's influence on consumer purchase intention is 32.8%. The positive regression coefficient signifies that an increase in product quality will enhance consumer purchase intention, whereas a decrease in product quality will reduce consumer purchase intention.

The effective contribution of product quality to consumer purchase intention is 25.7%, with a relative contribution of 67.4%. The study conducted by Nurmin Arianto and Sabta Ad Difa [25], titled "The Effect of Service Quality and Product Quality on Consumer Purchase Intention at PT Nirwana Gemilang Property," demonstrated that product quality has a positive and significant effect on consumer purchase intention. This means that the better the product quality perceived by consumers when purchasing or using the product, the higher the consumer purchase intention will be. Conversely, if product quality decreases, consumer purchase intention will also decline.

This finding is further supported by the opinion of Zainuddin in [10], who stated that by producing high-quality products, consumers will prefer those products, thereby increasing sales volume due to higher consumer purchase intention. On the other hand, a decline in product quality will negatively impact consumer purchase intention. The product quality of PT. Vivo Mobile Communication is considered moderate, as evidenced by the questionnaire results showing that 33% of the 165 respondents rated the product quality in the medium category.

Based on the opinions and research findings described above, it can be concluded that there is a positive and significant effect of product quality on consumer purchase intention at PT. Vivo Mobile Communication. The positive regression coefficient indicates a direct relationship between product quality and consumer purchase intention, such that the higher the product quality, the higher the consumer purchase intention. Conversely, if product quality decreases, consumer purchase intention will also decline.

#### 3.2.2. The Effect of Price on Consumer Purchase Intention at PT. Vivo Mobile Communication

The results of the study show a positive and significant effect of price on consumer purchase intention at PT. Vivo Mobile Communication, thus supporting the acceptance of the second hypothesis. This is evidenced by a calculated t-value of 6.890, a significance level of 0.000, and a regression coefficient of 0.595. The contribution of price to consumer purchase intention is 22.6%. The positive regression coefficient indicates that the higher the price, the higher the consumer purchase intention; conversely, the lower the price, the lower the consumer purchase intention. The effective contribution of price to consumer purchase intention is 12.4%, with a relative contribution of 32.5%.

This finding aligns with the research conducted by Ahmad Fauzan and Abdul Rohman [15], titled "The Effect of Price and Product Quality on Kawasaki Motorcycle Purchase Intention," which showed that price has a positive and significant effect on purchase intention among students at STIE

Muhammadiyah. This means that the higher the price of a product, the greater the consumer purchase intention; conversely, if the product price decreases, consumer purchase intention will also decrease.

The study is further supported by Andriyanti & Farida [16], who state that price is one of the factors consumers consider before deciding to be interested in or have an intention toward a product. Pricing strategies by companies can influence sales because price plays an important role in affecting consumer purchase intention. If a company sets the price appropriately, it can increase consumer purchase intention and expand market share [18]. Therefore, setting the right price can enhance consumer purchase intention at PT. Vivo Mobile Communication. The price at PT. Vivo Mobile Communication is considered low, as evidenced by the questionnaire results showing that 28% of the 165 respondents rated the price in the low category.

Based on the results of this study, it can be concluded that price has a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication. The positive regression coefficient indicates a direct relationship between price and consumer purchase intention, where the higher the product price, the higher the consumer purchase intention. Conversely, if the price decreases, consumer purchase intention will also decline.

3.2.3. The Effect of Product Quality and Price on Consumer Purchase Intention at PT. Vivo Mobile Communication

The results of the study demonstrate a positive and significant effect of product quality and price on consumer purchase intention at PT. Vivo Mobile Communication, thus supporting the acceptance of the third hypothesis. This is evidenced by an F-value of 49.873 with a significance level of 0.000, as well as regression coefficients of 0.566 for product quality and 0.328 for price. The combined contribution of product quality and price to consumer purchase intention is 38.1%. With positive regression coefficients, the results indicate that the higher the product quality and price, the higher the consumer purchase intention. Conversely, decreases in product quality and price will result in a decline in consumer purchase intention.

These findings align with the study conducted by Adrian Hidayat and Gustin Hartanto [15], titled "The Effect of Product Quality and Price on Consumer Purchase Intention of Distributor-Warranted Smartphones at PT. Tiga Agung." Their research showed that product quality and price have a positive and significant effect on the purchase intention of distributor-warranted smartphones at PT. Tiga Agung.

Based on the findings, it can be summarized that product quality and price have a positive and significant impact on consumer purchase intention at PT. Vivo Mobile Communication. The positive regression coefficients indicate a proportional relationship between product quality, price, and consumer purchase intention, the higher the product quality and price, the higher the purchase intention. Conversely, if product quality and price decrease, consumer purchase intention will also decrease. Besides product quality and price, other factors such as advertising and brand image also influence consumer purchase intention.

#### 4. Conclusions

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

1. Product quality has a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication. This is evidenced by a calculated t-value of 8.923, a significance level of 0.000, and a regression coefficient of 0.723. The contribution of product quality to consumer purchase intention reaches 32.8%. This indicates that product quality has a positive and significant impact on consumer purchase intention at PT. Vivo Mobile Communication, thus the first hypothesis is accepted.

- 2. Price has a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication. This is supported by a calculated t-value of 6.890, a significance level of 0.000, and a regression coefficient of 0.595. The contribution of price to consumer purchase intention is 22.6%. This indicates that price has a positive and significant influence on consumer purchase intention at PT. Vivo Mobile Communication, thus the second hypothesis is accepted.
- 3. Product quality and price simultaneously have a positive and significant effect on consumer purchase intention at PT. Vivo Mobile Communication. This is evidenced by an F-value of 49.873 with a significance level of 0.000, and regression coefficients of 0.566 for product quality and 0.328 for price. The combined contribution of these variables to consumer purchase intention reaches 38.1%. This indicates that product quality and price have a positive and significant impact on consumer purchase intention at PT. Vivo Mobile Communication, thus the third hypothesis is accepted.

#### **Conflict of interest**

The authors declare no conflict of interest.

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#### References

- [1] Shafitri, M., Aryani, L., & Nobelson. (2021). Pengaruh Kualitas Produk, Harga, dan Promosi Terhadap Minat Beli Konsumen Smartphone Vivo. 2, 201–212.
- [2] Ramdhani, D., & Widyasari, S. (2022). Pengaruh Kualitas Produk, Persepsi Harga, dan Citra Merek terhadap Kepuasan Konsumen dan Minat Beli Ulang Smartphone Oppo. 4(3), 1651–1667.
- [3] Badan Pusat Statistik. (2023). Statistik Telekomunikasi Indonesia 2023. https://www.bps.go.id/id/publication/2023/08/31/131385d0253c6aae7c7a59f a/statistik-telekomunikasi-indonesia-2022.html
- [4] Jariyanto. (2023). Smartphone Aktif di Indonesia Capai 354 Juta, Peringkat Empat Pengguna Terbanyak di Dunia. Tribunsorong.Com. https://sorong.tribunnews.com/2023/10/20/smartphone-aktif-di-indonesia- capai-354-juta-peringkat-empat-pengguna-terbanyak-di-dunia
- [5] PT. Vivo Mobile Communication. (2024). Tentang Vivo. https://www.vivo.com/id/about-vivo/culture
- [6] Ahdiat, A. (2024). Kalahkan Pasar Merek Lokal, Apple Jadi Smartphone Terlaris di China 2023. Databoks. https://databoks.katadata.co.id/datapublish/2024/01/29/kalahkan-merek-lokal-apple-jadi-smartphone-terlaris-di-china-2023
- [7] Dewi, I. R. (2022). Samsung, Xiaomi & Vivo Minggir Dulu, Ini Dia Raja HP di RI. CNBC Indonesia. https://www.cnbcindonesia.com/tech/20220325131237-37-326014/samsung- xiaomi-vivo-minggir-dulu-ini-diaraia-ho-di-ri
- [8] Wardani, A. S. (2023). Kalahkan Samsung dan Vivo, Oppo Rajai Pasar Smartphone Indonesia pada 2022. Liputan 6. https://www.liputan6.com/tekno/read/5212052/kalahkan-samsung-dan-vivo- oppo-rajai-pasar-smartphone-indonesia-pada-2022
- [9] Santika, E. F. (2023). Pengiriman Smartphone RI Tumbuh 8,8% per Kuartal III- 2023, OPPO Terlaris. Databoks. https://databoks.katadata.co.id/datapublish/2023/11/21/pengiriman- smartphone-ri-tumbuh-88-per-kuartal-iii-2023-oppo-terlaris
- [10] Ningsih, C. S., & Anah, L. (2021). Pengaruh Brand Image, Kualitas Produk dan Harga Terhadap Minat Beli Produk Oriflame (Studi Kasus Pada Mahasiswa di Universitas Hasyim Asy'ari Jombang). 3, 165–184.

- [11] Maulidah, F., & Russanti, I. (2021). Faktor Faktor yang Mempengaruhi Minat Beli Konsumen terhadap Pakaian Bekas. 10, 62–68.
- [12] Purwanto, A. (2021). Faktor-Faktor Yang Mempengaruhi Minat Beli Konsumen Terhadap Produk PT. Semen Tonasa di Kabupaten Wajo. 6(1), 1–13.
- [13] Febrian, F. (2019). Pengaruh Kualitas Produk dan Harga terhadap Minat Beli Lembur Batik. 13(1), 41–55.
- [14] Antonia, M., & Alexander. (2022). Pengaruh Kualitas Produk, Harga, dan Online Customer Review Terhadap Minat Beli Marketplace Blibli (Studi Kasus Pada Pelanggan di Kota Tangerang). 2(2).
- [15] Hidayat, A., & Hartanto, G. (2019). Pengaruh Kualitas Produk dan Harga Terhadap Minat Beli Konsumen Smartphone Bergaransi Distributor Pada PT. Tiga Agung. 2(1), 16–29.
- [16] Andriyanti, E., & Farida, S. N. (2022). Pengaruh Viral Marketing Shopee Affiliate, Kualitas Produk, dan Harga Terhadap Minat Beli Konsumen Shopee Indonesia (Studi pada Generasi Z Pengguna Tiktok di Sidoarjo). 11(2), 228–241.
- [17] Setiawan, W., & Safitri, K. (2019). Pengaruhkualitas Produk dan Harga terhadap Minat Beli Ulang Beras Batang Gadis di Agen S. Riyadi melalui Kepuasan Konsumen sebagai Variabel Intervening. 3(3). https://doi.org/10.31955/mea.vol3.iss3.pp223-231
- [18] Fauzan, A., & Rohman, A. (2019). Pengaruh Harga dan Kualitas Produk terhadap Minat Beli Sepeda Motor Kawasaki. 9, 104–113.
- [19] Kasman, K., Abdillah, D. J., & Yusuf, M. (2023). Pengaruh Kualitas Produk dan Harga terhadap Minat Beli Konsumen Marketplace Lazada. 2(September), 2274–2293.
- [20] Namora, I., Siregar, P., Gurning, H. R., Ekonomi, F., & Prima, U. (2019). Pengaruh Rekrutmen dan Komitmen Organisasi terhadap Kinerja Karyawa pada PT. Budi Raya Perkasa. 5, 71–80.
- [21] Tamping, N. U., N. Taroreh, R., & Jan, A. H. (2021). Pengaruh Beban Kerja, Kompensasi Dan Rotasi Kerja Terhadap Kepuasan Kerja Melalui Stres Kerja Pada PT. Bank Sulteng Luwuk Banggai. 619–632.
- [22] Sugiyono. (2020). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta.
- [23] Robby Gunawan. (2021). Pengaruh Kualitas Produk Dan Harga Terhadap Minat Beli Konsumen Pada Masa Covid-19 Pada Konsumen Umkm Ikan Lele Di Desa Purwodadi Kecamatan Pagar Merbau. Jurnal Samudra Ekonomi Dan Bisnis, 3, 7.
- [24] Fatma, N., Irfan, N. F., & Latiep, I. F. (2021). Analisis Keputusan Pembelian Produk Menggunakan Persepsi Harga dan Kualitas Produk. 4(2), 533–540.
- [25] Arianto, N., & Difa, S. A. (2020). Pengaruh Kualitas Pelayanan dan Kualitas Produk terhadap Minat Beli Konsumen pada PT. Nirwana Gemilang Property. 3(2), 108–119.