

Influence of Product and Price on Electric Motorcycle Purchases in Pontianak

Dio Suhadi^{1*}, Sumiyati Sumiyati²

Universitas Muhammadiyah Pontianak, Pontianak, Indonesia^{1,2}

diosuhady123@gmail.com^{1*}, sumiyati@unmuhpnk.ac.id²



Article History:

Received 10 June 2025

1st Revision 12 June 2025

2nd Revision 25 June 2025

3rd Revision 05 August 2025

Accepted on 12 December 2025

Abstract

Purpose: This study aims to evaluate the influence of price and product characteristics on consumers' decisions to purchase electric motorbikes at CV Sinergi Grafika Perkasa in Pontianak City.

Methodology: An associative study design was employed, with 117 respondents selected using saturation sampling. Data were analyzed using multiple linear regression, the multiple correlation coefficient (R), the coefficient of determination (R²), an F-test (Simultaneous Test), and a t-test (Partial Test).

Results: The regression equation obtained was $Y = 2.33 + 0.123X_1 + 0.496X_2$. The multiple correlation coefficient (R) of 0.992 indicates a very strong relationship between product and price in the decision to purchase electric motorbikes. The coefficient of determination (R²) was 0.983, indicating that the variables explained 98.3% of the variance in purchasing decisions, with the remaining 1.7% attributed to external factors not explored in this study. The F test revealed that both price and product characteristics simultaneously influenced the purchasing decision. The t-test showed that while price did not significantly impact the decision to purchase, product characteristics had a significant partial effect.

Conclusions: This study highlights the critical role of product characteristics in purchasing decisions, suggesting a shift in consumer preferences towards product value over price, particularly for eco-friendly products.

Limitations: This study was limited by the exclusion of external factors that could also influence purchasing decisions.

Contributions: This study provides insights for marketing strategies, particularly for promoting environmentally friendly products in local markets.

Keywords: *Marketing Strategy, Product, Price, Purchase Decision' Sales*

How to Cite: Suhadi, D., Sumiyati, S. (2026). Influence of Product and Price on Electric Motorcycle Purchases in Pontianak. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 7(2) 379-391.

1. Introduction

Vehicles have become a basic necessity for supporting various human activities. This has encouraged many companies to compete in the production and marketing of motorized vehicles with the latest technology. Motorbikes are among the most favored vehicles among the Indonesian populace. Motorcycles encompass several categories, including scooters and sport bikes (Winasis, Widiyanti, & Hadibrata, 2022). In recent years, innovation has emerged in the form of electric motorbikes, which add to the variety of choices available to the community. Electric motorbikes have different characteristics from conventional motorbikes. Conventional motorbikes use fuel oil and carburetors and require oil as a lubricant, whereas electric motorbikes use electric power, are driven by electromagnets, and do not require oil (Mendur, Tawas, & Arie, 2021).

Electric motorbikes utilize electrical energy stored in batteries as their power source. This innovation was developed to reduce air pollution and dependence on fossil fuels. Electric motorcycles do not have an internal combustion system like conventional motorcycles and do not require routine maintenance, such as oil changes, spark plug replacements, or air filter cleaning ([Ariella, 2018](#)). Owing to fewer components, electric motorcycles are more economical in terms of maintenance. In addition, electric motorcycles are more environmentally friendly, reduce operational costs, and are quieter and cleaner when used ([Ulfa & Fikriyah, 2022](#)).

The distribution system for electric motorbikes is similar to that for conventional motorbikes. Electric motorbikes are sold through official dealers spread across various cities. In Pontianak City, there are eight dealers that have been officially registered with the Capital Investment and One-Stop Integrated Service Office in 2024, one of which is CV Sinergi Grafika Perkasa. CV Sinergi Grafika Perkasa is a CV-type company that was established in December 2019 and has an official business identification number. This company offers various brands of electric motorbikes, such as ECGO, Smoot, and Uwinfly, with prices ranging from IDR 15,200,000.00 to IDR 26,600,000.00.

This CV also provides various supporting services, such as service, fast charging, battery exchange systems, and vehicle delivery services. The design of electric motorbikes generally resembles that of conventional motorbikes but is equipped with modern features, such as digital screens, driving modes (urban and sport), and LED lights. Vehicle security is enhanced with an electronic locking system and anti-theft alarm. The company also provides warranty guarantees that vary depending on the motorcycle brand. In terms of sales, CV Sinergi Grafika Perkasa shows fluctuations. In 2021, 35 units were sold, dropping to 27 units in 2022, and rising again to 31 units in 2023. This decrease and increase can also be seen from the sales value (in Rupiah) ([Renaningtyas, Wahyuni, & Oktarina, 2022](#)).

Any factor can make a person, buyer, or customer finally make a decision to buy a product. Promotion and sales, and lower prices are factors that can make a person decide to buy a product ([Wulandari & Isa, 2025](#)). Effect of marketing can make person want to purchase brand or product ([Renaningtyas et al., 2022](#)). The impact of brand awareness, product quality, and pricing strategy can build the decision to purchase a brand or product ([Putri, Sisdiyanto, & Susanti, 2025](#)). In another study, it was explained that the influence of the product and branding success built the decision to purchase a product ([Yurionica & Yusrin, 2024](#)). The perception of a product in each person can also build a person to make a decision to purchase a product ([Pitino & Susanti, 2024](#)). Because there are many factors that influence people's decisions to buy, this research is possible and urgent to fill the research gap.

A pre-research interview with one of CV Sinergi Grafika Perkasa's consumers revealed that price is one of the main factors considered when purchasing an electric motorbike. Moreover, since March 2023, the government has provided a subsidy of IDR 7,000,000.00 for the purchase of electric motorbikes (not valid for the Uwinfly T3 brand). In addition, the efficiency of operational and maintenance costs is another reason consumers choose electric motorbikes. The prices of electric motorbikes offered by CV Sinergi Grafika Perkasa vary, depending on the brand, starting from IDR 15,200,000.00 to IDR 26,600,000.00.

The brochure that will be handed to consumers who visit CV Sinergi Grafika Perkasa directly or distributed in front of CV Sinergi Grafika Perkasa shows the pricing list of electric motorbikes accessible at CV Sinergi Grafika Perkasa. CV Sinergi Grafika Perkasa offers discounts to customers during holidays, including Eid al-Fitr, Christmas, Chinese New Year, and the end of the year. Discounts are also offered by CV Sinergi Grafika Perkasa to those who purchase more than one electric motorcycle or in a specific quantity. Electric motorcycles can be purchased with credit, cash, or cash on tempo. The electric vehicle trend in Indonesia is growing rapidly, driven by environmental awareness and government policies.

However, in Pontianak City, the sales volume of electric motorbikes is still fluctuating and has not shown promising consistency. In previous studies, factors that influence electric motorbike purchasing decisions often focus on environmental aspects, charging infrastructure, and climate change awareness.

Unfortunately, particularly in places like West Kalimantan, there are relatively few studies that particularly address the impact of product attributes and price policies on buying decisions. In previous literature, elements influencing customer purchase choices for electric vehicles often focus on environmental aspects, availability of charging infrastructure, and public awareness of climate change issues. However, there are still limited studies that specifically examine the influence of product characteristics and pricing strategies on purchasing decisions, especially in the context of local companies in developing areas such as Pontianak.

In addition, most previous studies were conducted in large cities such as Jakarta, Surabaya, and Bandung; therefore, the results cannot necessarily be generalized to areas such as West Kalimantan, which have different market dynamics. The gap in this research lies in the lack of empirical studies that integrate two important variables, namely, product perception (including quality, features, design, and durability) and pricing strategy (affordable, according to utility value, and competitiveness) in influencing electric motorcycle purchasing decisions, specifically at CV Sinergi Grafika Perkasa. In addition, there have been few studies describing how local consumers respond to new product offerings, such as electric vehicles, especially in terms of product appeal and price suitability with people's purchasing power.

The urgency of this study results from the need for a complete understanding of local consumer behavior, which helps companies create targeted marketing strategies. The aim of this study is to evaluate the impact of products and prices on electric motorbike buying decisions at CV Sinergi Grafika Perkasa in Pontianak City. CV Sinergi Grafika Perkasa, a Pontianak-based retailer of electric motorcycles, requires data-based information on the factors that most influence potential consumers' purchasing decisions. This research aims to contribute to academia by enriching the literature on electric vehicle consumer behavior, particularly in the context of non-metropolitan areas in Indonesia, and to provide practical insights into the development of targeted marketing strategies.

This research addresses the limited academic literature on electric motorcycle consumer behavior outside of major cities while maintaining high pragmatic relevance in supporting corporate strategic decision-making. The findings are expected to provide a basis for developing more effective and flexible sales strategies tailored to local market needs, thereby encouraging the acceptance of environmentally friendly vehicles in Pontianak. With this background in mind, the author designed a study entitled "The Influence of Product and Price on Electric Motorcycle Purchasing Decisions at CV Sinergi Grafika Perkasa in Pontianak City." This article has novelty in its local context (Pontianak), the use of practical variables (product and price), and a special focus on electric motorbikes, which have rarely been researched in academic studies in Indonesia.

2. Theoretical And Hypothesis Study

2.1 Marketing Theory

The marketing mix is a set of strategic instruments used by a firm to obtain the target market to react as anticipated. It encompasses all the actions a firm might undertake to affect demand for its products. These possibilities can be categorized into four variable groupings, referred to as the "four Ps": product, pricing, distribution, and promotion. Zeithaml and Bitner [Mufidah, Muslih, and Soedjoko \(2024\)](#) state that the usual marketing mix comprises four aspects: product, pricing, place, and promotion. In service marketing, an augmented marketing mix is needed, including non-traditional aspects, specifically people, physical evidence, and process, resulting in seven elements (7Ps).

According to Kotler & Armstrong in [Herman Djaya \(2023\)](#): "Product means a combination of goods and services offered by a company to the target market." Product dimensions according to Kotler & Armstrong in [Larika and Ekowati \(2020\)](#) are: "Variety, Quality, Design, Features, Brand Name, Packaging, Service." Price is the amount of money a customer must pay to obtain a product. Price List, Discounts, Rebates, Payment Period, Credit Terms." [Kumbara \(2021\)](#) defin: decision as "the selection of an action from two or more choice.". According to [Agustin and Amron \(2022\)](#), the purchasing decision process consists of five stages: need recognition, information search, alternative evaluation, purchase decision, and post-purchase behavior.

- a. Need Recognition
The purchasing process commences with the identification of a need, in which the buyer acknowledges a problem or requirement.
- b. Information Search
The interested customer may choose to seek additional information or not.
- c. Evaluation of Alternatives
We observed how consumers utilize information to determine their final brand selections.
- d. Purchase Decision
During the evaluation phase, consumers assess brands and establish their purchase intentions.
- e. Postpurchase Behavior
Marketers' responsibilities extend beyond the point of purchase. After acquiring the goods, consumers experience either satisfaction or dissatisfaction, thus engaging in post-purchase behavior that warrants the attention of marketers. What factors influence a buyer's happiness or discontent with a purchase? The solution lies in the correlation between consumer expectations and the perceived efficacy of the product. When the product fails to meet expectations, the consumer experiences disappointment; when it meets expectations, the consumer feels satisfied; and when it surpasses expectations, the consumer attains great satisfaction.

2.2 Products

A product is anything, either goods or services, that is presented to the market to satisfy consumer wants and demands ([Diyatma, 2017](#); [Hidayati & Harahap, 2024](#)). Products encompass both practical and emotional advantages experienced by users; thus, a product's worth is contingent upon the degree to which it delivers satisfaction. As stated by Kotler and Armstrong [Irvanto and Sujana \(2020\)](#), a product is a set of goods and services provided by a corporation to the intended market. Two categories of products exist: industrial products (for manufacturing operations, such as machinery and raw materials) and consumer products (for personal use, such as food and clothing) ([Andika, Sijabat, & Indriasari, 2023](#)). [Nurani \(2018\)](#) explains that products have five levels:

- a. Core product: the main benefits that consumers seek.
- b. Basic product: physical form of the product.
- c. Expected product—minimum expected attributes.
- d. CE - additional features that provide added value.
- e. Potential product: possibility of future development.

2.3 Price

Price is the amount of money consumers pay to obtain goods or services ([Adensa & Rochdianingrum, 2024](#); [Palelu, Tumbuan, & Jorie, 2022](#); [P. S. Sari, Respati, & Yasa, 2023](#)). Price reflects the value of a product in the form of money and is an important part of a marketing strategy ([Pramita & Manafe, 2022](#)). According to [Cakranegara, Budiasih, Tannady, and Suyoto \(2022\)](#), price can also be viewed as a means of exchange or the value of a product expressed in currency. Pricing principles, according to [Winarno \(2021\)](#), are as follows:

- a. Prices are set by considering objectives, demand, costs, and competitor prices.
- b. The purpose of pricing is not always to maximize profit, but can also be to gain market share or current income.
- c. Marketers must understand the sensitivity of demand to price changes.

2.4 Consumer Purchasing Decisions

[Ekasari, Setianingrum, and Pramudita \(2022\)](#) define decision as “the selection of an action from two or more alternative choices.” According to [Suryati and Yoga \(2021\)](#): “Making a decision to buy a product or service, consumers can evaluate to choose a product or service. The evaluation and selection used will result in a decision.” in [Pauzi, Hadita, and Dovina \(2023\)](#) said that: “The consumer decision process is an important thing that consumers do in buying a product”. According to [Wangi and Andarini \(2021\)](#) there are five stages of consumers in making purchasing decisions, namely:

- a. Problem Recognition
The buying process begins when a buyer identifies a need or an issue, inspired by either internal or external events.

- b. Information Search
Consumers frequently seek a restricted quantity of information. Surveys indicate that for durable items, half of consumers consider only a single store, while only 30% examine multiple brands.
- c. Evaluation of Alternatives
How do customers analyze rival brand information and perform conclusive value assessments? No uniform procedure is employed by all customers, or by any individual consumer across all purchasing scenarios.
- d. Purchase Decision
During the evaluation phase, customers establish brand preferences within the selection set.
- e. Post-Purchase Behavior
Subsequent to the acquisition, the consumer may experience dissonance while observing certain unsettling attributes or receiving positive feedback regarding alternative brands, while being vigilant to evidence that corroborates their decision.

The hypotheses in this study were as follows:

H₁: Product has a significant effect on the decision to purchase electric motorcycles at CV Sinergi Grafika Perkasa.

H₂: Price has a significant effect on the decision to purchase electric motorcycles at CV Sinergi Grafika Perkasa.

H₃: Product and price simultaneously have a significant effect on the decision to purchase electric motorcycles at CV Sinergi Grafika Perkasa.

3. Research Methods

This study uses an associative approach based on quantitative research techniques. This approach was chosen because the study aims to find the relationship between two independent variables, namely product and price, and the dependent variable, which is the choice to buy an electric motorbike from CV Sinergi Grafika Perkasa in Pontianak ([Sugiyono, 2017](#)). The associative approach is relevant for statistically testing the relationship between these variables to obtain generalized conclusions from the population studied.

Two types of sources, primary and secondary, were used for data collection for this investigation. The main data were obtained directly from the subjects using questionnaires and interviews. Interviews with CV Sinergi Grafika Perkasa's management as well as different customers helped to understand the trends and elements affecting purchase decisions. Questionnaires were distributed to all consumers who had purchased electric motorbikes from the company to obtain quantitative data that could be analyzed statistically. Secondary data were obtained from documents available at the company, including sales data, product price lists, technical information on electric motorbikes, and other relevant references from external sources, such as scientific publications and market data from government or private institutions.

With a total of 117 participants, the population of this study consisted of all users of CV Sinergi Grafika Perkasa who had purchased electric motorbikes between 2020 and 2023. Given the relatively small population and its accessibility, this study used a saturated sampling technique. This method is applied when every member of the population serves as a study sample so that all 117 customers become questionnaire responders. This study comprises two independent variables: price and product, which affect one dependent variable, the purchase choice, twofold. Consumer perceptions of the quality, design, features, and advantages of the electric motorbikes shown constitute the product variable.

Concurrently, the pricing variable incorporates consumer opinions of the compatibility of price with the advantages and quality of the obtained product. The purchase decision variable reflects the final action of consumers in choosing and purchasing products based on these various considerations. Respondents' perceptions of each variable were measured using a five-point Likert scale, ranging from strongly disagree to strongly agree. Prior to further analysis, the questionnaire was tested for validity and reliability. An item is considered valid if its correlation coefficient with the total score exceeds 0.3, and

reliable if Cronbach's alpha value is greater than 0.6. Once the instrument met the validity and reliability requirements, classical assumption tests were conducted in preparation for the regression analysis.

The Kolmogorov–Smirnov test was employed to assess normality, the linearity test examined the relationship between the dependent and independent variables, and multicollinearity was tested using tolerance and VIF values. For hypothesis testing, multiple linear regression was applied with the equation $Y = a + b_1X_1 + b_2X_2$, where Y represents purchasing decisions, X_1 is product, and X_2 is price. This analysis evaluates both simultaneous and partial influences of product and price on consumer decisions. The model fit was examined through the multiple correlation coefficient (R) and the coefficient of determination (R^2). Furthermore, the F-test was used to assess the simultaneous effect of independent variables, with the decision criterion being $p < 0.05$ and F-count greater than the F-table.

4. Results And Discussion

4.1 Result

4.1.1 Instrument Test

Measuring the relationship between every item and its total score helps to determine the validity of the test. Furthermore, the computed correlation coefficient (r count) is compared with the r table value at a significance level (α) of 5% (0.05), thereby establishing degrees of freedom (df) as $(n-2) = 117-2 = 115$. For $df = 115$, the r table value is 0.181. The results of the validity tests for variable X_1 show that, at a significance level of 0.05, the r count for the sixteen questionnaire items exceeds the r table value of 0.181.

At a significance level of 0.05, the r count value for ten questionnaire questions for variable X_2 exceeds the necessary r table value of 0.181. At a significance level of 0.05, the computed r value for 12 (fourteen) questionnaire items for variable Y exceeds the crucial r value of 0.181. The next instrument test is the reliability test, which is useful for determining whether the instrument (in this case, a questionnaire) can be used more than once. Reliability testing is conducted using Cronbach's alpha analysis.

Table 1. Reliability test results

No	Variables	Cronbach's Alpha	Reliability Standards	Decision
1	Product	0,867	0,60	Reliabel
2	Price	0,780	0,60	Reliabel
3	Buying decision	0,612	0,60	Reliabel

Table 1 shows that Cronbach's alpha of every variable is higher than 0.60. Therefore, it may be said that the measuring tools indicate dependability for the measured objects.

4.1.2 Classical Assumption Test

a.) Normality Test

Determining whether the residuals of the studied regression model follow a normal distribution is the aim of the normality test. Kolmogorov-Smirnov test-based assessment of normalcy Table 2 below presents the findings of the normalcy evaluation for the pricing and product aspects in relation to buying decisions:

Table 2. Normality test results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		117
Normal Parameters ^{a,b}	Mean	0.000000
	Std. Deviation	0.04814546
Most Extreme Differences	Absolute	0.114
	Positive	0.112

	Negative	-0.114
Test Statistic		0.114
Asymp. Sig. (2-tailed)		.127 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

The data are normally distributed because Table 2 normality test results reveal the asymp. sig value (2-tailed) 0.127 to be higher than 0.05.

b.) Linearity Test

The nature of the link between the dependent and independent variables was determined via a linearity test. The results of the linearity test on purchasing choices and products are presented in the following table:

Table 3. Results of linearity test of product variables (X_1) and purchase decisions (Y)

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Purchase Decision Product	Between Groups	(Combined)	15.743	24	0.656	342.410	0.000
		Linearity	15.644	1	15.644	165.677	0.000
		Deviation from Linearity	0.100	23	0.004	0.268	0.403
	Within Groups		0.176	92	0.002		
	Total		15.920	116			

Table 3 indicates a linear correlation between the product and purchasing choice, evidenced by a departure from linearity significant value of 0.403, which exceeds 0.05. The outcomes of the linearity assessment between price and purchasing choice are presented in the following table:

Table 4. Results of linearity test of price variables (X_2) and purchase decisions (Y)

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Purchase Decision Product	Between Groups	(Combined)	15.350	16	0.959	168.333	0.000
		Linearity	15.294	1	15.294	683.525	0.000
		Deviation from Linearity	0.056	15	0.004	0.654	0.823
	Within Groups		0.570	100	0.006		
	Total		15.920	116			

Table 4 shows a linear relationship between purchase decisions and price; the considerable magnitude of deviance from linearity indicates this. 0.823 stands above 0.05. This of the traditional assumptive test aims to find intercorrelation (strong relationship) among independent variables. This test aims to find intercorrelation (strong relationship) among the independent variables. Acceptance and Variance Whether multicollinearity exists can be determined using the Inflation Factor (VIF). Acceptance and Variance Whether multicollinearity exists can be determined using the Inflation Factor (VIF). For this investigation, the multicollinearity test findings are as follows:

Table 5. Multicollinearity test results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.022	0.628		3.221	0.194		
	Product	0.123	0.111	0.018	4.082	0.000	0.979	1.021
	Price	0.496	0.121	0.361	0.203	0.081	0.979	1.021

a. Dependent Variable: Purchase Decision

Table 5 indicates that the tolerance values for the product and price variables are both 0.979, which exceed 0.10. Furthermore, the Variance Inflation Factor (VIF) for the product variable is 10.00, and for the price variable, it is likewise 1.021. Consequently, in this study, the independent variables did not show any multicollinearity.

4.2 Multiple Linear Regression Analysis

Multiple linear regression analysis helped determine how pricing and product variables affect purchasing choice variables. The table below illustrates the results of the multiple linear regression analysis:

Table 6. Results of multiple linear regression analysis

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.022	0.628		3.221	0.194
	Product	0.123	0.111	0.018	4.082	0.000
	Price	0.496	0.121	0.361	0.203	0.081

a. Dependent Variable: Purchase Decision

One might view the multiple regression equation in Table 6 as follows: above as follows:

$$Y = 2,033 + 0,123X1 + 0,496X2 \tag{1}$$

The regression equation can be expressed as follows:

- The constant value (a) of 2.33 clarifies that the purchasing choice of 2.222 should the price and product be zero.
- The result of $b_1 = 0.123$ indicates that the purchasing choice will increase by 0.123 units if the product increases by one unit.
- The result of $b_2 = 0.496$ indicates that the purchasing choice will increase by 0.496 units if the price increases by one unit.

4.3 Multiple Correlation Coefficient (R)

Multiple correlation seeks to ascertain the degree of proximity of the relationship between pricing and consumers' item purchase choices. The several results of the multiple correlation coefficient and determination in the investigation are as follows:

Table 7. Results of multiple correlation coefficient and determination

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	0.983	0.983	0.04857

a. Predictors: (Constant), Price, Product
b. Dependent Variable: Purchase Decision

In Table 7, it can be seen that the correlation coefficient (R) value obtained is 0.992, meaning that there is a very strong relationship between the product, price and purchasing decision variables because it is in the correlation interval between 0.80-1,000.

4.4 Determination Coefficient (R^2)

The coefficient of determination, R^2 , evaluates the degree of variance in the dependent variable that the model can adequately explain. The coefficient of determination spans from zero to one. A value around one indicates that the independent variable practically offers all the information required to project the dependent variable. Table 7 reveals a coefficient of determination of 0.983, implying that, with the remaining 1.7% allocated to other variables not examined in this research, product and price account for 98.3% of the variance in purchase decisions.

4.5 Simultaneous Effect Test (F Test)

A simultaneous test was conducted to determine whether product and price variables simultaneously affect purchasing decision variables. The results of the simultaneous test in this study are as follows:

Table 8. Results of simultaneous influence test (F Test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.651	2	7.825	317.751	.000 ^b
	Residual	0.269	114	0.002		
	Total	15.920	116			
a. Dependent Variable: Purchase Decision						
b. Predictors: (Constant), Price, Product						

Table 8 indicates that H_o was rejected and H_a was accepted; therefore, the purchase choice (Y) of electric motorbikes at CV Sinergi Grafika Perkasa in Pontianak City was significantly influenced by the product (X_1) and price (X_2) taken together or simultaneously. The calculated F value was 317.751 > F table of 3.08 with a significance value of 0.000.

4.6 Partial Effect Test (t Test)

Partial tests were conducted to investigate the effect of product and price variables on purchase choice factors. The partial test results are as follows:

Table 9. Results of partial influence test (t-Test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.022	0.628		3.221	0.194
	Product	0.123	0.111	0.018	4.082	0.000
	Price	0.496	0.121	0.361	0.203	0.081
a. Dependent Variable: Purchase Decision						

From Table 9. shows that the partial value (t-test) between the product variable (X_1) and the purchasing decision (Y) shows a calculated t value of 4.082 > t table 1.658, and a significance value of 0.000 < 0.05 so it can be concluded that H_o is rejected and H_a is accepted meaning that the product partially has a significant effect on the decision to purchase an electric motorbike at CV Sinergi Grafika Perkasa in Pontianak City. H_o is accepted and H_a is rejected based on the computed t value of 0.203 t table 1 and a significance value of 0.081 > 0.05 thus it can be concluded that the price partially does not have a significant influence on the decision to purchase an electric motorbike at CV Sinergi Grafika Perkasa in Pontianak City.

4.7 Discussion

According to the study's findings, the two independent criteria, price (X_2) and product (X_1), together significantly affect buying decisions (Y). The projected F value of 317.751 above the F table value of 3.08 shows from the F test results that the significance value of 0.000 is less than the F05 significance requirement. Consequently, the null hypothesis (H_0) was disproven and the alternative hypothesis (H_a) was validated, suggesting that consumer purchase decisions about electric motorbikes from the company are significantly influenced by the product and price together.

These results indicate that consumers not only consider one aspect when making purchasing decisions but also see a combination of the quality and attractiveness of the product and the price offered. When both are well designed and communicated, purchasing decisions tend to increase. This is a positive signal for the management of CV Sinergi Grafika Perkasa that product development and pricing strategies are on track to meet market expectations. From a partial perspective, however, the two variables contribute differently to purchasing choices. The t-test results for the product variable (X_1) reveal that the buying decision is shaped by the product. Projected t value of 4.082 exceeds t table value of 1.658 with a significance level of 0.000 " <0.05 ."

Consequently, the null hypothesis was rejected, and the alternative hypothesis was accepted, implying that consumer decisions to purchase electric motorbikes provided by CV Sinergi Grafika Perkasa greatly rely on their design, durability, and quality of features. These results reinforce the view that in the electric vehicle industry, especially for motorcycles, consumers pay close attention to product aspects, such as battery efficiency, driving comfort, futuristic design, and embedded technology. This also shows that product innovation and clarity of technical specifications have a major impact on influencing customer perceptions and purchasing interest.

In contrast, the results of the price variable test (X_2) show that the choice to buy an electric motorcycle is not much influenced by price. With a significant threshold of 0.081, the computed t value 0.203 is lower than the t-table value of 1.658, thus surpassing 0.05. This suggests that, at CV Sinergi Grafika Perkasa, price is not the main determinant of purchase decisions as the null hypothesis is accepted and the alternative hypothesis is rejected. This finding is in line with previous research by [Hananto \(2021\)](#), who shows that, with regard to the procurement of Astra Honda Motor (AHM) replacement parts at UD. Rasa Motor Lumajang, the product significantly influences individual purchase decisions even if price and marketing have little impact on their own. Still, all of these factors simultaneously have a significant positive effect on buying behavior. This confirms that buyers often consider a composite of features overall, but when evaluated separately, the product itself always comes first.

Furthermore, the results of this study support the conclusions of [F. P. Sari and Kurniawan \(2022\)](#), who investigated how price, product quality, and promotion affected Honda motorbike purchase decisions in Bojong Gede, Bogor. This study concludes that purchase decisions are significantly influenced by these three variables simultaneously. However, it is interesting to note that only the promotion variable had a significant partial influence, and promotion was the dominant factor influencing purchasing decisions in this study. This shows that the partial influence of each variable is highly dependent on the characteristics of the market and product being studied.

This finding is interesting because it challenges the general assumption that price is always the dominant factor in consumer decisions. In this context, it could be that consumers in Pontianak, the company's target market, consider aspects of utility, quality, and uniqueness of the product more than just focusing on price. This also indicates that products that are considered to be of high value will still be chosen, even though the price is relatively more expensive, as long as they are comparable to the quality and benefits offered.

Therefore, the findings of the research at CV Sinergi Grafika Perkasa enhance the body of knowledge on the impact of marketing elements on purchase decisions by offering proof that, in the framework of electric motorbikes, quality and product perception have the main attraction for consumers. While pricing strategy remains important, it is not the sole driver of purchasing decisions, especially in market

segments that prioritize innovation and technological quality, such as electric vehicles. Moving forward, companies need to prioritize product innovation and market education while maintaining a competitive and realistic pricing strategy. This study is crucial for creating more successful marketing plans grounded on actual consumer preferences.

5. Conclusions

5.1. Conclusion

Based on the analysis results, most respondents were male consumers aged 21–30 years, self-employed, with monthly incomes between IDR 2,000,000 and IDR 2,999,999, and high school education, who purchased the ECGO 2 electric motorcycle in 2021. The multiple regression equation obtained was $Y = 2.522 + 0.123X_1 + 0.496X_2$, indicating that product and price influence purchasing decisions. The correlation coefficient ($r = 0.992$) shows a very strong relationship between product, price, and purchasing decisions. The coefficient of determination ($R^2 = 0.983$) indicates that product and price explain 98.3% of purchasing decisions, while 1.7% is influenced by other factors.

The simultaneous test ($F_{\text{count}} = 317.751 > F_{\text{table}} = 3.08$) confirms that product and price jointly have a significant effect on purchasing decisions. However, the partial test shows that product has a significant effect, while price does not significantly affect purchasing decisions. Overall, the findings indicate that product attributes are more influential than price in shaping consumer decisions to purchase electric motorcycles in Pontianak.

5.2. Research Limitations

This study has several limitations. First, the research was conducted only at CV Sinergi Grafika Perkasa in Pontianak, which may limit the generalizability of the findings to other regions or markets. Second, the study examined only two independent variables (product and price), while other factors that may influence purchasing decisions such as promotion, brand image, service quality, environmental awareness, and technological perception were not included in the analysis. Third, the study relied on a quantitative survey approach, which may not fully capture deeper consumer motivations and perceptions.

5.3. Suggestions and Directions for Future Research

Future studies are recommended to expand the scope of research by including additional variables, such as promotion strategies, brand trust, perceived environmental benefits, and technological innovation, to obtain a more comprehensive understanding of consumer purchasing behavior toward electric vehicles. Researchers are also encouraged to conduct studies in different regions or larger samples to improve the generalizability of the results. Furthermore, future research could apply mixed-method approaches, combining quantitative and qualitative methods, to gain deeper insights into consumer motivations, perceptions, and attitudes toward environmentally friendly transportation technologies.

Author Contributions

DS conceptualized the research, designed the study, conducted data collection and analysis, and drafted the manuscript. SS contributed to the study design, supervised the research process, reviewed and revised the manuscript critically, and approved the final version of the manuscript. All authors read and approved the final manuscript.

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