
Brand Image and Product Quality as Determinants of Electric Car Purchase Decisions in Depok City

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Abstract

This study aims to analyze the influence of Brand Image and Product Quality on the Purchase Decision of Wuling electric cars in Depok City. The research method used was quantitative with a survey approach, and data was collected through questionnaires from 100 respondents who used Wuling electric cars. Data analysis was carried out using multiple linear regression. The results showed that partially, Brand Image did not have a significant effect on purchase decisions, while Product Quality had a significant effect. Simultaneously, the two variables had a significant effect on the purchase decision with an F value of 21.888 and a significance of < 0.001 . An Adjusted R Square value of 0.297 indicates that 29.7% of the variation in purchasing decisions is explained by Brand Image and Product Quality. These findings make a theoretical contribution to the consumer behavior literature as well as a practical contribution to automotive companies, particularly in formulating electric vehicle marketing strategies. The study also suggests strengthening branding strategies, improving product quality, and exploring other external factors such as price, promotion, and after-sales service. The limitations of the study include a limited geographical scope.

Keywords

Brand Image, Product Quality, Purchase Decision, Electric Car.

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1. INTRODUCTION

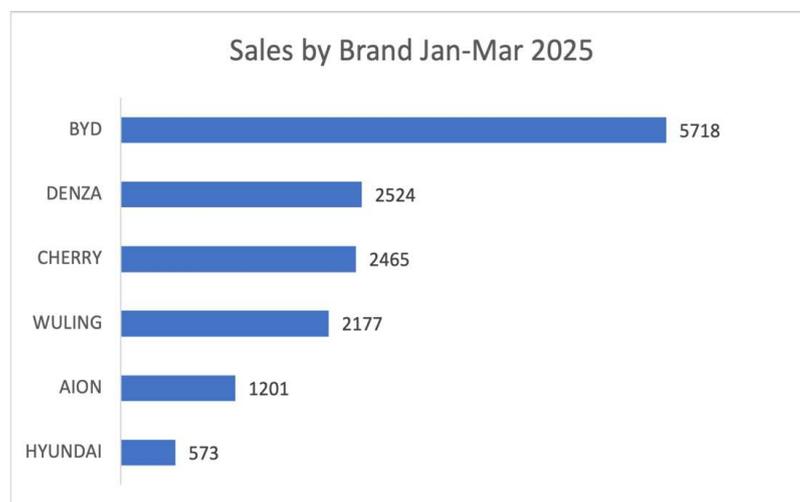
The advancement of the times demands the use of technology across various sectors as a key support in everyday life. This progress has led to a transformation in public behavior, shifting from activities that were previously done manually to those based on digital systems (Sudari, 2024). Transportation is one of the many aspects of human life that has changed due to the presence of digital technology. It plays a vital role in supporting daily routines in society (Jumhadi & Mulyani, 2023). One of the most widely recognized online transportation services in Indonesia is Gojek. This company offers transportation services by acting as an intermediary, connecting drivers with customers through an application-based technology (Maulidi et al., 2024).

Electric vehicles (EVs) have gained significant attention in Indonesia as a crucial component of the national strategy to reduce emissions and combat climate change (Sudjoko, 2021). The push for

electrification is driven by the clear advantages EVs offer over conventional gasoline-powered cars, including superior energy efficiency and a notable reduction in greenhouse gas emissions. Despite these environmental and economic benefits, the widespread adoption of EVs in Indonesia has remained sluggish. High initial vehicle prices, a primary concern for many consumers, along with an underdeveloped charging infrastructure, continue to pose significant barriers to entry (Khairi et al., 2023). Furthermore, a general lack of public awareness and understanding about the technology and its benefits contributes to the slow adoption rate. Even with the government's implementation of various incentives and a growing national awareness of environmental issues, these persistent challenges still effectively limit the widespread integration of EVs into Indonesia's transportation landscape (Taufik et al., 2024).

PT SGMW Motors Indonesia (Wuling) has been a pioneering force in the local electric vehicle (EV) market since it began producing the Wuling Air EV in 2017. Initially, the brand gained attention by positioning its vehicles as an affordable solution for urban transportation. However, Wuling now faces intensifying competition from several rivals. By the first quarter of 2025, Wuling had fallen to fourth place in national EV sales, according to Gaikindo (2025). It was surpassed by BYD, Denza, and Chery, which all posted higher sales figures. This drop in ranking underscores the increasing intensity of competition within the Indonesian EV market. Consequently, Wuling must enhance its product appeal and market strategy to regain its competitive standing.

Figure 1. Sales by Brand Jan-Mar 2025



Source: Gaikindo (2025)

In the first quarter of 2025 (January–March), Wuling faced significant competition in the EV market, with several rivals outselling it. The data shows that Wuling, with 2,177 units sold, was surpassed by three other brands. BYD emerged as the dominant market leader, achieving sales of 5,718 units more than double Wuling's volume. Denza and Chery also exceeded Wuling's sales, with 2,524 and 2,465 units, respectively. This performance indicates that despite Wuling's established presence, newer competitors are successfully capturing a larger share of the market. The high sales figures from these

competitors highlight an increasingly competitive environment and a potential shift in consumer preference away from Wuling's offerings. This intensifying rivalry underscores the need for Wuling to adapt its strategies to maintain market relevance.

In addition to competition, consumer complaints have emerged regarding the Wuling Air EV's performance, significantly affecting public perception. A major point of contention involves the vehicle's factory-installed tires. Multiple user reports on social media describe tire durability issues, with tires bursting within months of ownership and showing rapid wear after just 20,000-30,000 km, which is exacerbated by the vehicle's heavier weight (Prastya, 2025; Priyantoro & Kurniawan, 2023). This problem is compounded by a lack of spare parts, particularly the rare 12-inch 145/60 tires, and what users describe as unprepared after-sales service from dealers (IDN Times, 2023).

Beyond these service and component issues, the vehicle's design has also raised concerns. The Wuling Air EV is noted for its design limitations, including a tilt-only steering wheel and limited cabin space that makes second-row access difficult for larger individuals. Furthermore, the car's small trunk and instability at highway speeds (85-90 km/h) suggest it is better suited for low-to-medium speed urban driving. These combined issues directly impact consumer satisfaction and purchase intentions, highlighting a crucial need for Wuling to address product quality and service readiness.

Consumer behavior is critical to understanding the success or failure of products in competitive markets. In Indonesia, many buyers still trust Japanese car brands due to their strong reputation for quality and resale value (Kotler & Keller, 2022). In contrast, Chinese brands like Wuling often face negative perceptions related to country-of-origin bias (Yuniar & Aji, 2022). This poses a unique challenge for Wuling in building consumer trust despite its innovations.

Previous studies have shown inconsistent results regarding the influence of brand image and product quality on purchase decisions. Akbar and Wasino (2024) found that brand image did not significantly affect purchase decisions, suggesting that in certain product contexts, brand perception may be secondary to functional product attributes. Conversely, Rosmayanti (2023) reported that brand image does play a significant role, implying it can influence buyer choices, especially in competitive markets. Similarly, Efendi and Aminah (2023) concluded that product quality significantly affects purchasing decisions across sectors, while Pratama and Hayuningtias (2022) found no significant effect of product quality. In addition, studies by Solihin et al. (2024) and Apriani & Bahrin (2021) demonstrated that brand image and product quality simultaneously influence purchase decisions. These contrasting results emphasize the need to re-examine both variables in a focused context, such as the purchase of Wuling electric vehicles, where consumer trust and technical features are both at stake.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Brand Image

Dynamic pricing is a pricing strategy that adjusts in real-time based on market conditions, demand, availability, location, and consumer attributes (Kotler et al., 2024; Kusumastuti et al., 2024; Rachmawati, 2024). This strategy enables companies to maximize profits through the use of algorithms and technology in setting optimal prices. Although effective in enhancing competitiveness, this strategy can potentially lead to perceptions of unfairness and consumer dissatisfaction if not applied transparently (Permadi et al., 2023; Yin & Han, 2021). Previous research generally discussed the application of dynamic pricing in the context of the hospitality industry, while this research examines its influence on the use of bold transportation applications such as Gojek, especially among Generation Z.

According to Kotler and Keller (2022), brand image serves as an identity marker that distinguishes a company's product or service from its competitors. A brand builds its market presence through reputation and awareness developed over time. When consumers become familiar with a brand, they begin to associate it with a specific image. Brand image significantly influences consumer attitudes and behaviors toward a product. One of the key purposes of a brand is to implant a visual representation in the consumer's mind. As Tjiptono (2019) explains, trademarks often represent the brand itself. Therefore, brand image management aims to establish a strong and mutually beneficial relationship between the company and the consumer. This image is shaped by the consumer's memories and experiences with the brand. In essence, brand image refers to the perception left in the minds of customers. A consistently upheld positive brand image creates a strong and favorable impression, thereby increasing the likelihood of consumers choosing the product.

2.2. Product Quality

Product quality, according to Tjiptono (2019), encompasses everything that provides value to satisfy an individual's needs or desires. It represents a product's overall characteristics and ability to function optimally, including aspects such as durability, reliability, ease of use, ease of maintenance, and other features valuable to consumers. This perspective extends beyond physical products to include services, processes, human resources, and the supporting environment. Tjiptono also emphasizes that quality reflects a company's effort to meet or exceed customer expectations, and that the perception of quality is dynamic, evolving over time. Therefore, understanding product quality means focusing on both technical specifications and the product's alignment with ever-changing consumer needs and expectations. Ultimately, it ties into how products, services, people, and the environment align with customer expectations.

Kotler and Keller (2022) define product quality as encompassing all attributes intended to satisfy both explicit and implicit desires. They cite former General Electric CEO John F. Welch Jr., who stated, "Quality is the best guarantee of customer loyalty in the face of global competition and a way to maintain growth and revenue."

Assauri (2019) asserts that a product's quality is determined by its ability to fulfill its intended function. He highlights product quality as a crucial factor for businesses aiming to establish a strong market position. Based on these definitions, product quality can be summarized as the combination of

features—such as accuracy, reliability, durability, and simplicity of use—that consumers evaluate to determine whether a product meets their expectations.

This research is based on the consumer behavior theory proposed by Kotler and Armstrong (2024), which explains that purchasing decisions are influenced by the consumer's perceptions of product quality and brand image. In this framework, product quality is seen as a critical evaluative criterion that shapes perceived value and satisfaction, which in turn affect purchasing behavior. A positive perception of product quality increases consumer confidence, reduces perceived risk, and enhances the likelihood of purchase decisions.

2.3. Purchase Decision

According to Kotler & Armstrong (2024), the purchase process involves consumer behavior in discovering, selecting, and acquiring goods that satisfy their desires or preferences. They outline a five-step decision-making process: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. This entire procedure, they note, starts long before the actual purchase and can have long-term effects afterward.

Tjiptono & Diana (2019) define the Customer Purchase Decision as a series of steps leading up to the final purchase choice, beginning with the realization of a problem that needs solving. Following this, customers research specific brands or products and evaluate alternatives to determine how well each can meet their needs or solve their problem. The decision to purchase is ultimately the culmination of this process.

Firmansyah (2018) posits that customers make purchases when they have a specific desire or goal they wish to fulfill. Throughout this process, customers decide what steps to take to address the problem at hand. This continuous interaction involves consumer behavior, cognitive and emotional processes, and environmental elements. Based on these definitions, a purchase decision can be concluded as a selection process consisting of several stages to determine the most desired brand among many available options.

This research adopts the Consumer Decision-Making Process Theory as proposed by Kotler and Armstrong (2024). This theory explains that purchasing decisions are the result of a sequential process involving problem recognition, information gathering, evaluation of alternatives, and post-purchase reflection. In this context, product quality and brand image play important roles during the evaluation and decision stages, shaping consumers' perceptions of value and influencing their final choice. This framework guides the analysis of how these factors affect consumer decisions to purchase Wuling electric vehicles.

2.4. Brand Image's Influence on Purchase Decisions

In marketing strategy, a company's or product's brand image is crucial for success. Creating a favorable brand image can directly influence consumer purchasing decisions, ultimately increasing sales revenue for the business. Research by Sipahutar et al. (2023) indicates that brand image has a significant effect on purchase decisions.

Consumers are more likely to prefer and accept products with a positive brand image compared to those with a poor or neutral one. Customers often use brand image as a guide when making purchasing decisions, especially in situations where they lack direct experience or in-depth product knowledge. However, this finding contrasts with research by Akbar and Wasino (2024), which suggests that customer purchase decisions are not positively influenced by brand image. Based on the theoretical framework and previous research, the following hypotheses are proposed:

H1: Brand image has a significant effect on the purchase decision of Wuling electric vehicles.

2.5. Product Quality's Influence on Purchase Decisions

Product quality has a significant impact on marketing strategies and the overall success of a company or product. A high-quality product has the power to influence consumer purchasing decisions, which ultimately boosts sales and business profits. The importance of quality in shaping customer behavior is demonstrated by research from Efendi and Aminah (2023), which found that product quality has a positive impact on purchase decisions.

Consumers are more likely to favor and accept high-quality goods over those of low quality. Customers often prioritize product quality, particularly when they lack sufficient knowledge or expertise about a particular item. However, a study by Pratama and Hayuningtias (2022) showed that product quality does not have a significant effect on purchasing decisions, suggesting that other factors may be more dominant in influencing consumer behavior. Based on the theoretical framework and previous studies, the following hypothesis is formulated:

H2: Product Quality has a significant effect on the purchase decision of Wuling electric vehicles.

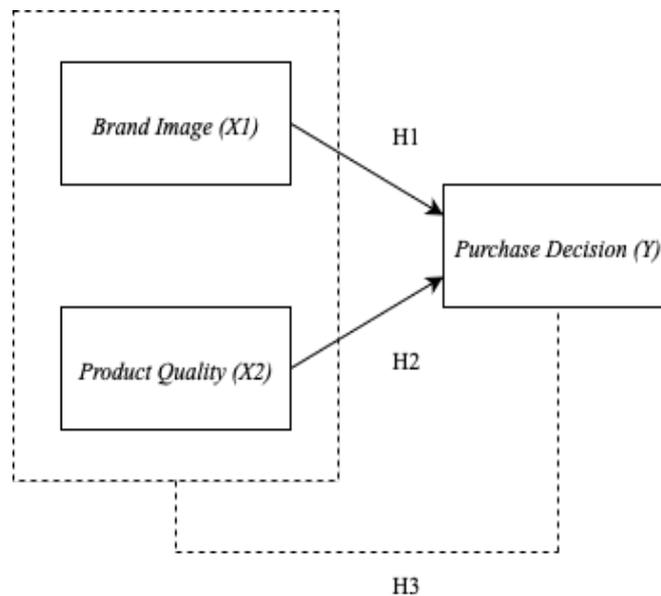
2.6. The Simultaneous and Significant Influence of Brand Image and Product Quality on Purchase Decisions

Product quality and brand image work together to influence a consumer's decision to buy. This is supported by research from Solihin et al. (2024), which demonstrates that both product quality and brand image have a beneficial and substantial combined impact on purchase decisions. This leads to the rejection of the null hypothesis (H03), which states that brand image and product quality do not have a simultaneous influence on purchase decisions. In other words, when considered together, these two factors have a significant effect on whether a consumer chooses to purchase a product.

H3: Brand Image and Product Quality have a significant simultaneous effect on the purchase

The relationship among the variables in this study, along with the corresponding hypotheses, is illustrated in Figure 2.

Figure 2.
Conceptual Framework



3. RESEARCH METHOD

This study aims to examine the influence of several variables on the purchase decision of Wuling electric cars in Depok City using a quantitative approach. Data was collected through the distribution of questionnaires to Wuling electric car users, with a sample of 100 respondents. The sampling technique used was nonprobability sampling with the incidental sampling method. The questionnaire employed a 5-point Likert scale to measure respondents' perceptions of each variable. Data analysis was carried out through several stages, including instrument validity and reliability tests, classical assumption tests (normality test, multicollinearity test, heteroskedasticity test), multiple linear regression analysis, and hypothesis testing. The entire data processing process is carried out using the help of SPSS software version 27.

4. RESULTS AND DISCUSSIONS

The Results and Analysis section presents the findings of the data analysis, hypothesis testing, answers to research questions, as well as the interpretation of the findings.

4.1. Validity and Reliability Tests

The results of the validity test for all questionnaire items indicate that the calculated r-values for each item under the variables Brand Image (X1), Product Quality (X2), and Purchase Decision (Y) are greater than the r-table value of 0.361. This finding indicates that all statement items in the instrument meet the validity criteria, as each item's r-value exceeds the critical threshold. Therefore, all items are considered valid as measurement tools for their respective research variables

Table 3. Validity Test Result

No	Variable	Item Number
1	Brand Image (X1)	1,2,3,4,5,6,7,8,9
2	Product Quality (X2)	10,11,12,13,14,15,16,17,18,19,20,21
3	Purchase Decisions (Y)	22,23,24,25,26,27,28,29,30,31,32,33

Source: Data Processed (2025)

Tabel 2. Reliability Test Results

No	Variable	Cronbach's Alpha
1	Brand Image (X1)	0,744
2	Product Quality (X2)	0,941
3	Purchase Decisions (Y)	0,930

Source: Data Processed (2025)

4.2. Classical Assumption Test

4.2.1. Normality Test

Based on the One-Sample Kolmogorov-Smirnov Test presented in the table, the normality test results for the unstandardized residuals show a significance value (Asymp. Sig. 2-tailed) of 0.200. Since this significance value (0.200) is greater than the commonly used threshold of 0.05, it can be concluded that the residual data in the regression model are normally distributed. Normally distributed residuals indicate that prediction errors are randomly and symmetrically distributed around zero, supporting the suitability of the regression model for further analysis. Therefore, the assumption of residual normality has been met in this study, making the regression model appropriate for subsequent parametric statistical analysis.

Tabel 3. Normality Test

Test Statistic	Unstandardized Residual
N	100
Normal Parameters	
- Mean	00.00
- Std. Deviation	03.07
Most Extreme Differences	
- Absolute	0.047
- Positive	0.047
- Negative	-0.041
Test Statistic	0.047
Asymp. Sig. (2-tailed) ^c	0,138888889
Monte Carlo Sig. (2-tailed) ^d	0,6
99% Confidence Interval	
- Lower Bound	0,59375
- Upper Bound	0,60625

Source: Primary Data Processed by SPSS (2025).

4.2.2. *Multicollinearity Tests*

Based on Table above, it can be concluded that the independent variables (Brand Image and Product Quality) do not exhibit multicollinearity. This is indicated by the tolerance values of 0.846 (> 0.1) and VIF values of 1.182 (< 10) for each variable. These results imply that each independent variable contributes uniquely to the dependent variable without excessively influencing one another. Therefore, it can be concluded that there is no indication of multicollinearity in the regression model used in this study.

Tabel 4. Multicollinearity Test

Predictor Variable	Tolerance	VIF
Brand Image	0.846	1.182
Product Quality	0.846	1.182

Note. Dependent variable: Purchase Decision.

Source: Primary Data Processed by SPSS (2025).

Based on Table above, it can be concluded that the independent variables (Brand Image and Product Quality) do not exhibit multicollinearity. This is indicated by the tolerance values of 0.846 (> 0.1) and VIF values of 1.182 (< 10) for each variable. These results imply that each independent variable contributes uniquely to the dependent variable without excessively influencing one another. Therefore, it can be concluded that there is no indication of multicollinearity in the regression model used in this study

4.2.3. *Heteroscedasticity Test*

Based on the data above, it can be observed that each independent variable – Brand Image and Product Quality – has a significance value (Sig.) greater than 0.05. The significance value for the Brand Image variable is 0.360 (> 0.05), and for Product Quality, it is 0.335 (> 0.05). Therefore, it can be concluded that there is no heteroscedasticity in this regression model. This means that changes in variables such as Product Quality or Brand Image do not cause irregular fluctuations in the error variance, indicating that the model can be reliably used for further analysis and drawing valid conclusions. Thus, the heteroscedasticity assumption is fulfilled, and the regression model is appropriate for continued research use.

Table 5. Heteroscedasticity Test Results

Predictor	B	SE B	β	<i>t</i>	<i>p</i>
(Constant)	-0.462	1.678	–	-0.275	.784
Brand Image	0.038	0.042	0,06944444	0,63888889	.360
Product Quality	0.039	0.041	0,07291667	0,67291667	.335

Note. Dependent variable: *abs*.

Source: Primary Data Processed by SPSS (2025).

The calculated F-value, as shown by the F-test output in the table above, is 189.870. The table F-value, with $df_1 = k - 1 = 3 - 1 = 2$, $df_2 = N - k - 1 = 100 - 3 - 1 = 96$, and a significance threshold of $\alpha = 0.05$, shows 3.09. All three independent variables—dynamic pricing, user interface, and user experience—have a significant influence on the dependent variable, namely the usage decision, simultaneously, as shown by the calculated F-value (189.870), which is higher than the table F-value (3.09), and its significance value is also less than 0.05.

4.3. T Test

The criteria for the t-test are based on the probability value (p-value). With a significance level of 5% (or $\alpha=0.05$), the alternative hypothesis (H_a) is considered not significant if its probability value is greater than 0.05. Conversely, if the probability value is less than 0.05, the result is considered significant.

Table 6. Heteroscedasticity Test Results

Predictor	B	SE B	β	t	p
(Constant)	35.696	3.495	—	10.212	< .001
Brand Image	0,0771	0.085	0,08333333	1.309	.193
Product Quality	0,2444	0.065	0,34583333	5.420	< .001

a. Dependent Variable: Purchase Decision

Source: Primary Data Processed by SPSS (2025)

Based on the provided table, the t-test (partial) results indicate that Brand Image has a significance value of 0.193, which is greater than 0.05. Furthermore, the calculated t-value for Brand Image is 1.309, which is less than the t-table value of 1.985. These findings suggest that Brand Image does not have a significant influence on Purchase Decision. This non-significance implies that brand perception may not be a dominant factor in the consumer decision-making process, which is likely more affected by other attributes such as product quality. This result aligns with previous research by Akbar and Wasino (2024), which also showed that in the context of certain products, Brand Image is not always the primary determinant of purchase decisions. Thus, while brand image plays an important long-term role, its influence on purchase decisions might be less significant if product attributes already optimally meet consumer expectations.

Conversely, Product Quality shows a significance value of < 0.001, which is well below 0.05. The calculated t-value for Product Quality is 5.420, which is significantly greater than the t-table value of 1.985. This means that Product Quality has a significant influence on Purchase Decision. Therefore, the hypothesis stating that Product Quality affects Purchase Decision can be accepted

4.4. F Test

Table 7 presents the results of the ANOVA test, which evaluates the overall significance of the regression model in explaining the variance in Purchase Decision. This analysis determines whether the independent variables—Brand Image and Product Quality—collectively have a statistically significant impact on the dependent variable. Both the F-value and the significance level ($p < .05$) serve as indicators of whether the regression model provides a good fit for the data and if the predictors significantly contribute to variations in Purchase Decision.

Table 7. ANOVA Results for the Regression Model

Source	SS	df	MS	F	p
Regression	679.083	2	339.541	21.888	< .001
Residual	1.504.707	97	15.512	—	—
Total	2.183.790	99	—	—	—

a. Dependent Variable: Purchase Decision

b. Predictors: (Constant), Product Quality, Brand Image

Source: Primary Data Processed by SPSS (2025)

The regression sum of squares (SS) is 679.083, indicating the variation in Purchase Decision explained by the independent variables—Brand Image and Product Quality. The residual sum of squares (SS) is 1504.707, representing the unexplained variation due to other factors not included in the model. The total sum of squares (SS) is 2183.790, which accounts for the overall variance in Purchase Decision.

The degrees of freedom (df) for regression is 2, corresponding to the two independent variables (Brand Image and Product Quality), while the residual df is 97, representing the remaining observations. The mean square for regression is 339.541, calculated by dividing the regression sum of squares by its degrees of freedom ($679.083 / 2$). The mean square for residuals is 15.512, obtained by dividing the residual sum of squares by its degrees of freedom ($1504.707 / 97$).

The F-statistic (21.888) is used to determine whether the independent variables significantly contribute to predicting Purchase Decision. A high F-value indicates that the model explains a substantial portion of the variance in the dependent variable. The significance level ($p = <.001$) confirms that the regression model is statistically significant at $p < .05$, meaning that Brand Image and Product Quality collectively have a significant effect on Purchase Decision.

Furthermore, while the R-squared value is not explicitly provided in the table, it can be calculated as $(\text{Regression SS} / \text{Total SS}) = (679.083 / 2183.790)$ approx. 0.3109. This suggests that the independent variables—Brand Image and Product Quality—collectively explain approximately 31.09% of the variability in Purchase Decision. The remaining approximately 68.91% of the variability is influenced by other external factors that were not included in this study, highlighting the potential influence of additional variables that future research may explore.

4.5. Multiple Linear Regression Analysis

Multiple linear regression analysis is employed to ascertain the magnitude and direction of the influence that independent variables exert on a dependent variable. The extent of this direct influence is represented by the path coefficient, which is fundamentally the standardized regression coefficient (Beta, β).

Table 8. Results for the Regression Model

Predictor	B	SE B	β	t	p
(Constant)	35.696	3.495	—	10.212	< .001
Brand Image	0,077083333	0.085	0,08333333	1.309	.193
Product Quality	0,244444444	0.065	0,34583333	5.420	< .001

a. Dependent Variable: Purchase Decision

Source: Primary Data Processed by SPSS (2025)

This equation represents the relationship between Brand Image (X1) and Product Quality (X2) as independent variables and Purchase Decision (Y) as the dependent variable. The interpretation of each coefficient is as follows:

The constant ($\alpha=35.696$) indicates that if Brand Image and Product Quality have a value of zero, the baseline Purchase Decision remains at 35.696. This suggests that other unaccounted factors may still contribute to purchase decisions beyond the two variables studied.

The coefficient $\beta_1=0.111$ for Brand Image implies that for every one-unit increase in Brand Image, Purchase Decision is expected to increase by 0.111, assuming all other variables remain constant. This positive relationship suggests that a stronger brand image leads to a greater likelihood of purchase.

Similarly, the coefficient $\beta_2=0.352$ for Product Quality suggests that a one-unit increase in Product Quality would lead to a 0.352 increase in Purchase Decision, assuming no changes in the other variables. This positive relationship indicates that higher product quality significantly contributes to a higher purchase decision.

In conclusion, both Brand Image and Product Quality positively influence Purchase Decision. While both factors contribute to a customer's decision to buy, Product Quality (0.352) appears to have a stronger impact on Purchase Decision compared to Brand Image (0.111), given its larger coefficient. This suggests that businesses should prioritize delivering high-quality products to significantly drive purchase decisions, while also recognizing the valuable role of a strong brand image.

4.6. Coefficient Determination

The coefficient of determination is a method used to ascertain the extent to which variations in the independent variables can explain the variations occurring in the dependent variable. The value of the coefficient of determination ranges from 0 to 1, where a value closer to 1 indicates that the independent variables are more effective in explaining changes in the dependent variable. The calculation of the coefficient of determination is derived from squaring the correlation coefficient (R^2), which can then be expressed as a percentage (Sugiyono, 2020). However, in this study, the Adjusted R

Square value is utilized, as it is considered to provide a more accurate representation of the independent variables' influence on the dependent variable (Ghozali, 2021). The results of the coefficient of determination test are presented as follows:

Table 1. Model Summary results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558 ^a	.311	.297	3.93858

a. Predictors: (Constant), Product Quality, Brand Image

b. Dependent Variable: Purchase Decision

Source: Primary Data Processed by SPSS (2025)

Based on the results from the Model Summary table, an Adjusted R Square value of 0.297 was obtained. This indicates that Product Quality and Brand Image collectively account for 29.7% of the variability in the dependent variable (Purchase Decision). The remaining 70.3% of the variability is influenced by other factors not examined in this study.

4.7. Discussions

Based on the results of the multiple linear regression analysis and partial significance tests (t- test), significant findings were obtained regarding the influence of Brand Image and Product Quality on the Purchase Decision for Wuling electric vehicles. This research provides empirical insights into the factors that influence consumers in their decision-making process for electric vehicle purchases. Using a quantitative approach, it was found that each variable contributes differently to the dependent variable. The significance of each variable was assessed to test the previously formulated hypotheses. The analysis emphasizes the results of the t-test for each variable partially, as well as the F-test for their simultaneous effect. Furthermore, multiple linear regression was used to determine the direction and magnitude of the influence of the independent variables on the dependent variable. All these findings will be discussed in detail in the following paragraphs.

4.7.1. The Role of Brand Image in Wuling EV Purchase Decisions

The research found that brand image does not have a significant partial effect on the purchase decisions of Wuling electric cars in Depok City. With a significance value of 0.169 (greater than 0.05) and a t-statistic of 1.385 (less than the t-table value of 1.985), the null hypothesis (H01) was accepted. This suggests that while consumers may appreciate the product's design, Wuling's brand reputation is not yet a dominant factor in their decision-making process. The insignificance of this variable aligns with research by Akbar and Wasino (2024), indicating that for some products, brand image may not be the primary driver of purchase behavior.

Descriptive analysis provides further insight into this finding. Consumers highly rated the design and aesthetics of the Wuling electric car, perceiving it as modern and trendy. However, the lowest scores were consistently related to brand popularity and recognition. This suggests a disconnect while the product itself is appealing, the brand's image remains weak and not yet on par with more established automotive brands in Indonesia. This lack of brand strength may be attributed to limited promotional campaigns, newness in the market, or a focus on product-driven marketing over brand- building strategies.

The limited impact of brand image may also be explained by the dominance of other factors, particularly price. The Wuling Air EV is positioned as the most affordable electric car in Indonesia, making it highly attractive to budget-conscious buyers (Widiutomo, 2025). This pricing strategy suggests that for many consumers, value for money is a more critical determinant than brand reputation. Furthermore, many consumers view EVs as a lifestyle trend or a secondary vehicle rather than a purchase driven by environmental concerns, a perception noted by Yannes Martinus Pasaribu (Widya & Wicaksono, 2024)

4.7.2. The Significant Role of Product Quality

In contrast to brand image, product quality was found to have a significant partial effect on purchase decisions. The t-test results, with a significance value below 0.001 and a t-statistic of 4.422 (exceeding the critical value), led to the acceptance of the alternative hypothesis (Ha2). This finding is supported by a positive regression coefficient of 0.286, indicating that improvements in product quality have a tangible impact on consumer purchasing behavior. This aligns with research by Efendi and Aminah (2023), confirming that product quality is a primary factor for consumers when making a purchase.

Descriptive analysis on product quality further reveals both strengths and weaknesses. While consumers highly appreciate the car's aesthetic design, the lowest-rated aspect was related to customer service, specifically dealer responsiveness and the ordering process. This highlights a crucial area for improvement, as poor service experiences can undermine satisfaction even when the product itself is well-designed. The car's futuristic design, affordable price, easy charging, and low maintenance costs are key features that have driven its strong sales, as noted by Zainal Abidin (OLX.co.id, 2023), proving that Wuling has successfully addressed consumer needs through quality and functionality

4.3.2. The Combined Effect of Brand Image and Product Quality

Finally, the study found that brand image and product quality have a significant simultaneous effect on purchase decisions, as confirmed by the F-test. With a significance value below 0.001 and an F-statistic of 15.532 (exceeding the critical threshold), the alternative

hypothesis (Ha3) was accepted. This indicates that even though brand image alone is not a strong motivator, it plays a complementary role when combined with strong product quality. These findings support the consumer decision-making model by Kotler & Armstrong (2024), which suggests that consumers evaluate multiple factors together. This conclusion is also consistent with previous studies, such as those by Solihin et al. (2024) and Apriani & Bahrin (2021), which found that both factors jointly influence consumer behavior

5. CONCLUSION

This study finds that product quality has a significant and dominant effect on consumers' purchase decisions of Wuling electric vehicles, while brand image, when examined partially, does not show a significant influence. However, when analyzed simultaneously, both variables significantly affect purchasing decisions, with a combined contribution of 29.7% to the variance in decision-making, while the remaining 70.3% is influenced by other factors not included in the current model.

Theoretically, these findings reaffirm the multi-stage consumer decision-making model proposed by Kotler & Armstrong (2024), particularly highlighting the importance of the *evaluation of alternatives* and *purchase decision* stages. The strong influence of product quality reflects consumers' rational evaluation of functional benefits in high involvement purchases like electric cars. Moreover, this study contributes to the broader understanding of consumer behavior in emerging markets, where practical product attributes can often outweigh emotional or symbolic brand associations.

From a managerial perspective, the results offer strategic guidance for Wuling. Given the dominant role of product quality, the company must maintain its focus on enhancing vehicle performance, battery durability, energy efficiency, safety features, and driving comfort. Quality control in production must be prioritized to ensure consistent delivery to consumers. At the same time, although brand image showed no significant effect in isolation, it still contributes jointly and thus should be strengthened through integrated marketing campaigns. Tactics may include leveraging social media, engaging with relevant public figures, and using customer testimonials to build trust and emotional attachment. The demographic insight that most respondents are female opens further strategic opportunities such as emphasizing compact design, gentle color palettes, and ease of use in product messaging. Furthermore, integrating both product quality and brand image into a holistic promotion strategy can elevate Wuling's market position and drive long-term customer loyalty. Improving after-sales services including spare parts availability, servicing ease, and warranty guarantees can further reinforce customer satisfaction and brand credibility.

Despite these contributions, the study is subject to several limitations. It focuses solely on two independent variables brand image and product quality without considering other potentially influential factors such as price, after-sales service, credit access, promotions, or social influences, which limits the model's overall comprehensiveness. The geographic scope is also narrow, as data collection was limited to consumers in Depok, which may not reflect the behavior of consumers in other regions

of Indonesia with different socioeconomic or cultural backgrounds. Additionally, the cross-sectional design captures data at only one point in time, making it difficult to observe changes in consumer preferences over a longer period. Furthermore, the use of Likert-scale questionnaires introduces the possibility of bias due to the subjective nature of respondents' perceptions.

Future research is encouraged to adopt a broader variable set and cover more diverse geographical areas to enhance generalizability. Additionally, longitudinal studies would be beneficial to examine shifts in consumer behavior over time. Finally, employing a mixed-methods approach that integrates both quantitative and qualitative data could offer richer insights into the motivations behind electric vehicle purchasing decisions in Indonesia.

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