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DETERMINANTS OF PURCHASE INTENTION FOR ELECTRIC MOTORCYCLES IN DENPASAR CITY

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Abstract

Global warming poses a significant challenge to sustainable development. Various countries are exploring deeper strategies to achieve a low-carbon and sustainable economy. Indonesia is among the largest contributors to carbon emissions, particularly from the transportation sector. Electric vehicles have substantial potential to reduce carbon emissions and support a cleaner energy transition. The implementation of electric vehicles is expected to reduce dependence on fossil fuels and improve energy efficiency. Therefore, this study aims to analyze the influence of perceived usefulness, perceived ease of use, motor vehicle tax (PKB) incentives, and income on the purchase intention of electric motorcycles in Denpasar City. The sampling method employed was purposive sampling, a type of non-probability sampling, with a total of 100 respondents. Data collected through questionnaires were analyzed using multiple linear regression analysis. The findings indicate that perceived usefulness, perceived ease of use, motor vehicle tax (PKB) incentives, and income simultaneously have a significant effect on the purchase intention of electric motorcycles in Denpasar City. Partially, the results also show that each of these variables perceived usefulness, perceived ease of use, motor vehicle tax (PKB) incentives, and income has a positive and significant effect on purchase intention.

Keywords: purchase intention, perceived usefulness, perceived ease of use, motor vehicle tax (PKB), income, electric motorcycles

INTRODUCTION

Sustainable development integrates economic, ecological, and social dimensions to balance growth with environmental preservation, with the green economy serving as a key strategy through the use of renewable energy, resource efficiency, and the creation of environmentally friendly jobs. One of the greatest challenges comes from global warming, with the transportation sector being among the largest contributors to carbon emissions in Indonesia. To address this, the UN, through the SDGs, promotes innovations such as electric vehicles, which have the potential to support decarbonization, reduce pollution, and create sustainable transportation systems, despite existing infrastructure and technological limitations. In Indonesia, electric vehicle development began in 2012 and has been supported by regulations such as Presidential Regulation No. 55 of 2019, offering significant potential to cut emissions and reduce dependence on fossil fuels. If adoption becomes widespread as seen in India converting a substantial share of vehicles to electric could

save billions of dollars and eliminate millions of tons of CO_2 annually, making it a vital driver for achieving a green economy and sustainable development.

Table 1. Development of the Number of Motor Vehicles in Indonesia by Type (Unit) 2019-2023

No	Types of Motor Vehicles	2019	2020	2021	2022	2023
1	Passenger Car	15,592,419	15,797,746	16,413,348	17,168,862	18,285,293
2	Bus	231,569	233,261	237,566	243,450	269,710
3	Goods Car	5,021,888	5,083,405	5,299,361	5,544,173	6,091,822
4	Motorcycle	112,771,136	115,023,039	120,042,298	125,305,332	132,433,679
Amount		**133,617,012**	**136,137,451**	**141,992,573**	**148,261,817**	**157,080,504**

Source: Central Statistics Agency (BPS), 2023

Table 1 shows the increase in the number of motorized vehicles in Indonesia. It can be seen that the number of motorcycles in Indonesia continues to increase. In 2023, the number of motorized vehicles in Indonesia was 157,080,504 million units. Motorcycles had the largest number of units, at 132,433,679 million units, or 84.31 percent of the total number of motorized vehicles in Indonesia (BPS, 2023). The high price of cars is one of the reasons why Indonesians prefer using motorcycles, as motorcycles are considered more practical than other forms of transportation.(Ade, 2020). In addition, the price of motorbikes is quite affordable and motorbikes are considered to save time and money, which is why motorbikes are popular with the Indonesian people.(Acuviarta & Permana, 2023). Research conducted by Rahmawati (2019) states that the number of motor vehicles has a positive influence on oil energy consumption, which means that as the number of vehicles increases, energy needs will also increase.

The number of electric motorcycles and electric cars in Indonesia. The number of electric motorcycles reached 85,838 thousand units and electric cars reached 21,593 units in 2023. Although there has been an increase from previous years, the number of electric vehicles is still very small compared to the total number of motorized vehicles. In 2023, the number of motorcycles reached 132,433,679 million units while electric motorcycles only 85,838 thousand units, or it can be concluded that electric motorcycles only cover 0.06 percent of all motorized vehicles in Indonesia. In the same year, the number of passenger cars reached 18,285,293 million units while electric cars only 21,593 thousand units, or it can be concluded that electric cars only cover 0.12 percent of all cars in Indonesia (IESR, 2024). Problems in the desire to purchase electric vehicles by consumers are caused by poor consumer perceptions and trust, such as consumer perceptions of high costs, lower mileage compared to conventional vehicles, and a lack of consumer trust in electric vehicle technology.(Bansal et al., 2021).

Table 2. Number of Motorized Vehicles by Regency/City and Vehicle Type in Bali Province (units) in 2023

No	Regency/City	Number of Motor Vehicles			
		Car	Bus	Truck	Motorcycle
1	Jembrana	14,606	436	9,953	250,746
2	Tabanan	39,142	915	28,965	421,599
3	Badung	128,816	2,233	29,564	885,934
4	Gianyar	49,177	655	14,211	486,450
5	Klungkung	15,280	208	7,883	170,966
6	Bangli	10,148	82	9,824	124,491
7	Karang Asem	15,874	420	10,954	221,683
8	Buleleng	29,855	2,288	16,081	476,575
9	Denpasar City	221,721	4,347	49,447	1,264,822
	Bali	**524,619**	**11,584**	**176,882**	**4,303,266**

Source:Central Statistics Agency (BPS) of Bali Province, 2023

Table 2 shows the number of motorized vehicles in regencies/cities in Bali Province in 2023. Motorcycles had the largest number of units at 4,303,266 million units, with Denpasar City as the largest contributor at 1,264,822 units (BPS, 2023). This data indicates that motorcycles are the most widely used vehicle in Bali Province. As the capital of Bali Province, Denpasar City plays a strategic role in supporting the implementation of environmental policies due to its high rate of urbanization and the ever-increasing number of motorized vehicles. With the number of motorcycles in Denpasar City reaching 1,264,822 million units, or approximately 29.39 percent of the total motorized vehicles in Bali, Denpasar City has the potential to become a primary target for reducing greenhouse gas emissions through the adoption of electric vehicles.

Fure et al (2013) states that purchase intention is a behavior that consumers have that underlies a purchasing decision they wish to make. According to Saad et al (2012) Purchase intention is a type of decision that specifically studies why consumers buy a brand. Purchase intention has a close relationship with demand, because demand is not only determined by price, but also by other factors such as willingness to buy indicates the presence of interest to buy, which is referred to as taste or preference and ability to buy which is indicated by the level of income. (Klingensmith, 2019). According toKotler (2005: 13) demand is interest in a product supported by the ability to buy or interest will turn into demand if supported by purchasing power. The thing that influences consumer purchasing power is the amount of income of the consumer himself because purchasing power is the consumer's ability to buy a good or service that suits the consumer's ability.(Supawi, 2016).

Coordinating Ministry for Economic Affairs (2024)stated that the development of electric vehicles is a crucial part of the economic transformation towards a sustainable green economy. In the development of electric vehicles, consumer and sustainability factors are also crucial. From a consumer perspective, affordable prices and information about the benefits of electric vehicles are important considerations. From a sustainability perspective, electric vehicles contribute to reduced carbon emissions, energy efficiency, and reduced dependence on fossil fuels. In addition to

reducing environmental pollution and saving energy, electric vehicles also save on operational costs, both for individuals and regional and national expenditures.(Ministry of Transportation, 2022).

User acceptance of a technology can be explained through the Technology Acceptance Model (TAM). The Technology Acceptance Model (TAM) is a theory first introduced by Fred D. Davis in 1986 and is an adaptation of the Theory of Reasoned Action (TRA).(Davis, 1989)TAM focuses on understanding and analyzing the factors that influence user acceptance or rejection of a particular technology. This model identifies two main constructs, namely perceived usefulness and perceived ease of use, which play a significant role in determining user acceptance of technology.(Astari et al., 2022)This perception will influence behavioral intention, where interest in using technology will arise if a technology is considered useful and easy to use.(Engko et al., 2023). Research conducted byWilson & Prayitno (2023)concluded that perceived ease of use and perceived usefulness have a positive and significant impact on Indonesian people's purchasing decisions regarding electric motorbikes.

In supporting the use of battery-based electric motor vehicles, the government provides tax incentives which are included inRegulation of the Minister of Home Affairs of the Republic of Indonesia Number 6 of 2023 Article 10 Paragraph 1 which reads "The imposition of Motor Vehicle Tax on Battery-Based Electric Motor Vehicles for people or goods is set at 0% (zero percent) of the PKB tax base". Definition of Motor Vehicle Tax in Article 1 Paragraph 3 Regulation of the Minister of Home Affairs Number 82 of 2022Regarding the Basis for Imposing Motor Vehicle Tax, Motor Vehicle Transfer Fee, and Heavy Equipment Tax in 2022, it is a tax on ownership and/or control of motor vehicles.

Table 3. Realization of Motor Vehicle Tax (PKB) Achievements of Regencies/Cities in Bali Province for 2021-2023

No	Regency/City	PKB Realization		
		2021	2022	2023
1	Denpasar City	535,681,076,300	633,984,401,150	641,509,201,400
2	Tabanan	117,798,252,950	134,727,530,650	140,223,084,300
3	Badung	331,914,014,300	409,749,319,600	421.141.169.700
4	Gianyar	137,262,890,350	171,589,920,550	177,387,460,100
5	Klungkung	37,727,558,900	44,940,898,050	47,572,667,600
6	Bangli	34,994,897,435	40,563,241,100	42,000,837,400
7	Karangasem	61,462,482,700	72,219,494,100	75,886,825,000
8	Buleleng	109,316,149,700	125,741,707,550	132,590,988,500
9	Jembrana	49,580,067,900	58,075,693,200	61,676,962,100
	Bali	**1,415,737,390,535**	**1,691,592,205,950**	**1,739,989,196,100**

Source:One Data for Bali Province, 2023

Table 3 shows the realization of motor vehicle tax in Bali Province. In line with the largest number of motorized vehicles in Bali Province, Denpasar City is also the largest contributor to the Motor Vehicle Tax (PKB) in Bali Province. As a contributor to PKB and the largest number of motorized vehicles in Bali Province, Denpasar City can

be a primary focus in accelerating the adoption of electric vehicles, especially motorcycles, which far outnumber other motorized vehicles. Motor vehicle tax is a fee or price paid for ownership and control of a motorized vehicle, calculated based on the vehicle's selling price.(Iskandar & Aqbar, 2019; Wibisono & Sriningsih, 2020).Mankiw (2018: 70), explains that when the price of a good decreases, the quantity demanded will increase, ceteris paribus, and this is called the law of demand. Based on the law of demand, motor vehicle tax incentives will reduce the cost of purchasing electric motorcycles, thereby increasing purchasing interest. Research conducted byAzhar et al (2024) explained that the PKB for electric cars, which is not subject to annual tax rates, will also encourage individuals to purchase electric cars in Indonesia.

Table 4. Minimum Wages for Districts/Cities in Bali Province 2023-2025

No	Regency/City	Regency/City Minimum Wage (Rupiah)		
		2023	2024	2025
1	Denpasar	2,994,646	3,096,823	3,298,116
2	Badung	3,163,837	3,318,628	3,534,338
3	Klungkung	2,714,642	2,813,672	2,996,571
4	Gianyar	2,837,680	2,928,713	3,119,080
5	Tabanan	2,824,613	2,913,164	3,102,520
6	Bangli	2,713,672	2,813,672	2,996,571
7	Karangasem	2,730,264	2,813,672	2,996,571
8	Buleleng	2,716,206	2,813,672	2,996,571
9	Jembrana	2,738,698	2,813,672	2,996,571

Source: Central Statistics Agency (BPS) of Bali Province, 2024; Governor of Bali, 2024

Purchasing power refers to consumers' ability to buy goods or services, which is influenced by their income (Supawi, 2016). Higher income levels reflect greater purchasing power, enabling consumers to buy more and increasing demand for goods (Adiputri & Jati, 2018). According to the Ministry of Manpower Regulation No. 15 of 2018, the Regency/City Minimum Wage (UMK) represents the minimum monthly, daily, or weekly wage within a given region, calculated based on monthly wages. As shown in Table 4, UMK serves as one indicator of the public's purchasing power, with Badung Regency and Denpasar City recording the highest UMKs from 2023 to 2025, suggesting a greater potential to purchase electric vehicles compared to regions with lower UMKs. In line with the law of demand, Mankiw (2018:70) explains that higher income shifts the demand curve to the right, meaning that the quantity of goods or services consumed increases. Conversely, lower income limits consumers' ability to spend and meet needs (Anggraeni & Mudiarti, 2022). Azhar et al. (2024) found that income has a positive and significant effect on consumers' interest in purchasing electric cars.

To promote the adoption of electric motorcycles, it is important to understand the factors influencing purchase intention. Within the Technology Acceptance Model (TAM), perceived usefulness and perceived ease of use are key aspects in explaining public acceptance of new technology, such as electric motorcycles. In addition, government policies offering motor vehicle tax (PKB) incentives aim to increase the attractiveness of electric motorcycles by reducing ownership costs. Public income also plays a role in determining purchasing ability. In Bali, motorcycles in Denpasar City account for 29.39% of all motor vehicles, with the city recording the second-highest UMK

in the province and being the largest PKB contributor, making it a strategic location for this study. The research aims to contribute to accelerating electric motorcycle adoption in Denpasar City.

METHOD

This study employs a quantitative associative approach to analyze the effect of perceived usefulness, perceived ease of use, PKB incentives, and income on electric motorcycle purchase intention in Denpasar City. The location was selected due to its high motorcycle ownership and significant PKB contribution. The population consists of Denpasar residents aged 17 and above who possess a motorcycle driving license (SIM C) and have an income. The sample size was determined using Slovin's formula with purposive sampling, resulting in 100 respondents. Data includes primary data from closed-ended questionnaires using a 5-point Likert scale and secondary data from official institutions. The dependent variable (Y) is purchase intention, while the independent variables are perceived usefulness (X1), perceived ease of use (X2), PKB incentives (X3), and income (X4) (Sugiyono, 2018; Yuliarmi & Marhaeni, 2019).

Data collection involved non-behavioral observation and structured interviews. The questionnaire's validity was tested using Pearson correlation, and reliability was measured with Cronbach's Alpha (>0.60) to ensure accuracy and consistency. Quantitative data were processed using multiple linear regression analysis with Stata software, preceded by classical assumption tests (normality, multicollinearity, and heteroskedasticity). The Shapiro-Wilk method was used for normality, tolerance and Variance Inflation Factor (VIF) for multicollinearity, and the Breusch-Pagan test for heteroskedasticity. These steps ensured the regression model was unbiased and suitable for hypothesis testing (Ghozali, 2018; Wooldridge, 2020).

Data analysis included an F-test to assess the simultaneous influence of all independent variables on purchase intention and a t-test to evaluate the partial effect of each variable. Hypothesis acceptance or rejection was based on a significance level of $\alpha = 0.05$ and comparisons between calculated and table values of t or F. The findings are expected to provide empirical insights into the factors influencing electric motorcycle purchase intention in Denpasar City, serving as valuable input for both policymakers and manufacturers in promoting eco-friendly vehicle adoption (Schiffman & Kanuk, 2008; Aprili et al., 2023; Anggraeni & Mudiarti, 2022; Azhar et al., 2024).

RESULTS AND DISCUSSION

Validity Test Results

Table 5. Validity Test Results

No	Variables	Instrument Code	r count	Information
1	Perceived Usefulness (X1)	X1_1	0.8558	Valid
		X1_2	0.6697	Valid
		X1_3	0.7628	Valid
		X1_4	0.8298	Valid
2	Perceived Ease of Use (X2)	X2_1	0.7856	Valid
		X2_2	0.8304	Valid
		X2_3	0.8450	Valid

		X2_4	0.8613	Valid
3	PKB (X3)	X3_1	0.7545	Valid
		X3_2	0.8134	Valid
		X3_3	0.7413	Valid
4	Income (X4)	X4_1	0.7968	Valid
		X4_2	0.8813	Valid
		X4_3	0.8663	Valid
5	Purchase Inention t (Y)	Y_1	0.7467	Valid
		Y_2	0.7014	Valid
		Y_3	0.6532	Valid
		Y_4	0.5393	Valid
		Y_5	0.6605	Valid

Source: Processed primary data, 2025

The results of the validity test in Table 5 show that all research instruments on the variables of perceived usefulness, perceived ease of use, PKB incentives, income, and purchase intention have a Pearson correlation value greater than the r table (0.1946) so that they are declared valid.

Reliability Test Results

Reliability testing aims to measure the stability of data from questionnaire results. A research instrument is considered reliable if its Cronbach's Alpha value is greater than 0.60.

Table 6. Reliability Test Results

No	Variables	Cronbach's Alpha	Information
1	Perceived Usefulness (X1)	0.6771	Reliable
2	Perceived Ease of Use (X2)	0.8491	Reliable
3	PKB (X3)	0.6281	Reliable
4	Income (X4)	0.8053	Reliable
5	Purchase Intention (Y)	0.6739	Reliable

Source: Processed primary data, 2025

The reliability test results in Table 6 show that all variables in this study had Cronbach's Alpha values above 0.60, indicating that all instruments were reliable. The highest alpha value was found in the perceived ease of use variable, at 0.8491, while the lowest value was found in the PKB incentive variable, at 0.6281. Therefore, all questions in this research questionnaire are suitable for further testing.

Classical Assumption Test Results

1) Normality Test

The normality test aims to determine whether the data in a regression model is normally distributed. The Shapiro-Wilk test, which can be run in Stata with

the swilk command, is used. If the probability value is greater than 0.05, the data is normally distributed.

Table 7. Normality Test Results

No	Variables	Prob > z
1	Y	0.08245
2	X1	0.05799
3	X2	0.99103
4	X3	0.11017
5	X4	0.11659

Source: Processed primary data, 2025

Based on the test results shown in Table 7 through the Prob value > z, all variables have values above the 0.05 significance level, namely Y (0.08245), X1 (0.05799), X2 (0.99103), X3 (0.11017), and X4 (0.11659). Thus, it can be concluded that the data is normally distributed and meets the classical assumptions of normality.

2) Multicollinearity Test

A multicollinearity test was conducted to examine the correlation between independent variables in a multiple linear regression model. This study examined tolerance values and the Variance Inflation Factor (VIF). If the tolerance value is greater than 0.1 or the VIF is less than 10, multicollinearity is considered absent.

Table 8. Multicollinearity Test Results

No	Variables	Tolerance	VIF
1	X1	0.882714	1.13
2	X2	0.924772	1.08
3	X3	0.783040	1.28
4	X4	0.694714	1.44

Source: Processed primary data, 2025

Based on the test results in Table 8, all independent variables in this study have a Tolerance value above 0.10 and a VIF value below 10. Thus, it can be concluded that there is no multicollinearity in the model, so that the independent variables can be used simultaneously in regression analysis.

3) Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is inequality in the variance of the residuals from one observation to another in a regression model. A regression model is considered free from heteroscedasticity if the probability value is more than alpha 0.05.

Table 9. Results of Heteroscedasticity Test

No	Test Statistics	Value
1	chi2(1)	2.89
2	Prob > chi2	0.0893

Source: Processed data, 2025

The test results show a Prob value > chi² = 0.0893, which is greater than the 0.05 significance level. Thus, it can be concluded that there is no heteroscedasticity in the regression model used.

Results of Multiple Linear Regression Analysis

Multiple linear regression analysis was used to determine the effect of independent variables on the dependent variable. This study conducted multiple linear regression analysis using the Stata statistical program, as shown in the following table.

Table 10. Results of Multiple Linear Regression Analysis

No	Variables	Coefficient	Std. Error	T Statistic	P > t
1	Constant	3,884	1,069	3.63	0.000
2	X1	0.303	0.053	5.72	0.000
3	X2	0.345	0.048	7.26	0.000
4	X3	0.202	0.055	3.68	0.000
5	X4	0.193	0.072	2.67	0.009

Source: Processed data, 2025

Based on the results of the multiple linear regression analysis in the previous table, the regression equation can be formulated as follows:

$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \mu$

$Y = 3.884 + 0.304X_1 + 0.345X_2 + 0.202X_3 + 0.193X_4 + \mu$ .....(4.3)

Based on the results in the table above, it is known that all independent variables (X_1, X_2, X_3, and X_4) have a positive and significant partial influence on purchasing interest, indicated by the respective p-values being less than 0.05 or alpha 5 percent.

Results of the Coefficient of Determination (R2) Test

Table 11. Results of the Determination Coefficient (R2) and F-Test

No	Test Statistics	Value
1	Coefficient of Determination (R2)	0.668
2	F-test	47.78
3	Prob > F	0.000

Source: Processed data, 2025

The coefficient of determination (R^2) value of 0.6680 indicates that 66.80 percent of the variation in the variable "interest in purchasing electric motorcycles" can be explained by the independent variables used in the model, namely perceived usefulness (X_1), perceived ease of use (X_2), vehicle tax incentives (PKB) (X_3), and income (X_4). The remaining 33.20 percent is explained by other factors outside the model that were not included in this study.

Results of the Simultaneous Significance Test for Regression Coefficients (F-Test)

Based on the results of multiple linear regression analysis presented in Table 11, the calculated F value is 47.78, while the F table value at a 5 percent significance level with $df_1 = 4$ and $df_2 = 95$ is 2.47. Since the calculated F value (47.78) is greater than the F table value (2.47) and the significance value (Prob > F) = 0.000 is less than 0.05, H_0 is rejected and H_1 is accepted. This means that perceived usefulness, perceived ease of

use, PKB incentives, and income simultaneously have a significant effect on the interest in purchasing electric motorcycles in Denpasar City. Thus, the regression model used is deemed appropriate for explaining the joint influence of the four independent variables on the dependent variable in this study.

Results of the Partial Significance Test for Regression Coefficients (t-Test)

The t-test was conducted to partially test the influence of each independent variable on the dependent variable, i.e., the interest in purchasing electric motorcycles in Denpasar City. The t table value at a 5 percent significance level and degrees of freedom (df) = n–k = 100 – 5 = 95 is 1.984. The test results can be interpreted as follows:

1. Variable X_1 (Perceived Usefulness) has a coefficient value of 0.304 with a calculated t value of 5.72, which is greater than the t table value (5.72 > 1.984), and a significance value of 0.000, which is less than 0.05. Therefore, H_0 is rejected and H_1 is accepted, meaning that X_1 has a significant effect on purchase intention. If perceived usefulness of electric motorcycles increases by one unit, the purchase intention in Denpasar City will increase by 0.304 units, assuming other independent variables remain constant.
2. Variable X_2 (Perceived Ease of Use) has a regression coefficient of 0.345, a calculated t value of 7.26 (greater than 1.984), and a significance value of 0.000 (< 0.05). Therefore, H_0 is rejected and H_1 is accepted, meaning that X_2 significantly affects purchase intention. An increase of one unit in perceived ease of use will increase purchase intention by 0.345 units, assuming other independent variables remain constant.
3. Variable X_3 (Vehicle Tax Incentives / PKB) has a regression coefficient of 0.202, a calculated t value of 3.68 (greater than 1.984), and a significance value of 0.000 (< 0.05). Therefore, H_0 is rejected and H_1 is accepted, meaning X_3 significantly affects purchase intention. If the desire to utilize PKB incentives increases by one unit, the purchase intention will increase by 0.202 units, assuming other variables remain constant.
4. Variable X_4 (Income) has a regression coefficient of 0.193, a calculated t value of 2.67 (greater than 1.984), and a significance value of 0.009 (< 0.05). Therefore, H_0 is rejected and H_1 is accepted, meaning X_4 significantly affects purchase intention. If income increases by one unit, purchase intention will increase by 0.193 units, assuming other variables remain constant.

Discussion

Effect of Perceived Usefulness on Electric Motorcycle Purchase Intention in Denpasar City

The multiple linear regression analysis results show that perceived usefulness (X_1) has a positive and significant effect on electric motorcycle purchase intention in Denpasar City. This is evidenced by the regression coefficient value of 0.304, a calculated t value of 5.72 (greater than 1.984), and a significance value of 0.000 (far below 0.05). Therefore, H_0 is rejected and H_1 is accepted. This finding statistically reinforces that perceived usefulness is one of the key determinants in encouraging consumer interest in electric motorcycles in Denpasar.

Effect of Perceived Ease of Use on Electric Motorcycle Purchase Intention in Denpasar City

The regression analysis results indicate that perceived ease of use (X_2) positively and significantly affects purchase intention. This is supported by a regression coefficient of 0.345, a calculated t value of 7.26 (greater than 1.984), and a significance value of 0.000 (< 0.05). Therefore, H_0 is rejected and H_1 is accepted. The ease of operating electric motorcycles—whether in terms of technology, adaptation process, or understanding features—encourages consumers to be more confident in their purchasing decisions. Denpasar residents tend to buy products that are easy to understand, flexible, and free from operational barriers.

Effect of Vehicle Tax Incentives (PKB) on Electric Motorcycle Purchase Intention in Denpasar City

The regression analysis shows that PKB incentives (X_3) have a positive and significant effect on purchase intention, with a regression coefficient of 0.202, a calculated t value of 3.68, and a significance value of 0.000 (< 0.05). Therefore, H_0 is rejected and H_1 is accepted. The 0% PKB policy stipulated in the Indonesian Ministry of Home Affairs Regulation No. 6 of 2023 is proven to attract consumers, mainly by reducing annual tax costs. Such incentives represent an indirect price reduction, aligning with demand theory, which states that when costs decrease, demand tends to rise. These findings are consistent with studies by Azhar et al. (2024), Anggraeni & Mudiarti (2022), and Gallagher & Muehlegger (2011), which show that tax incentives play an important role in driving eco-friendly vehicle purchases.

Effect of Income on Electric Motorcycle Purchase Intention in Denpasar City

Regression results indicate that income (X_4) positively and significantly influences purchase intention, with a coefficient of 0.193, a t value of 2.67, and a significance value of 0.009 (< 0.05). Therefore, H_0 is rejected and H_1 is accepted. Higher income provides consumers with greater financial flexibility to consider innovative and environmentally friendly products. This supports demand theory, which states that higher income shifts the demand curve to the right, increasing the quantity demanded.

CONCLUSION

Based on the research results, the following conclusions can be drawn:

1. Perceived usefulness, perceived ease of use, PKB incentives, and income simultaneously have a significant effect on electric motorcycle purchase intention in Denpasar City.
2. Each of these variables individually has a positive and significant effect on purchase intention.

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