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Paving the Path to Green Mobility: An Analysis of Price, Knowledge, and Value Perception on E-Bike Purchase Intentions in Pekanbaru City

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ABSTRACT (10 PT)

This study was conducted with the aim of knowing the effect of product knowledge and price on perceived value and purchase intention of Uwinfly electric bicycles in Pekanbaru City. The population in this study were people in Pekanbaru City who were familiar with electric bicycles. Sampling was carried out using non-probability sampling techniques, with a sample size of 130 respondents based on the formula Hair et al. (2023). The data analysis method used is Partial Least Square-Structural Equation Modeling (PLS-SEM) with SmartPLS software version 4. The results showed that product knowledge has no significant effect on purchase intention, but price has a significant positive effect on purchase intention. In addition, product knowledge and price have a positive effect on perceived value, where perceived value acts as a mediator in the relationship. These findings provide important implications for Uwinfly in designing more effective marketing strategies to increase consumer purchase intention.

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1. INTRODUCTION

Air pollution is a global environmental problem that has serious impacts on public health and climate. In Indonesia, this problem is worsening due to rapid urbanization, uncontrolled industrial growth, and high emissions from motor vehicles. Based on [1], Indonesia is ranked 14th in the world in terms of PM2.5 pollution levels, indicating that the air quality is concerning. Pekanbaru City has high levels of air pollution, which is exacerbated by forest and land fires. Therefore, there is a need for an innovative and sustainable solution, one of which is the adoption of environmentally friendly transportation, such as electric bicycles [2]; [3].

The impact of air pollution is very broad, especially in children, who are a vulnerable group. [4] noted air pollution as the 5th leading risk factor for death in Indonesia, with a significant impact on respiratory, cardiovascular, and cancer diseases. Every day, almost 2,000 children die from diseases associated with air pollution [5]. The World Health Organization (WHO) states that 98% of children under five years of age are exposed to air pollution levels exceeding safe limits. Electric bicycles are considered an alternative mode of transportation that can reduce emissions and encourage a healthy

lifestyle, especially if supported by adequate infrastructure, such as bicycle lanes and charging stations [6].

Uwinfly is an electric bicycle brand that has attracted attention owing to its technological superiority. Based on an initial survey of 30 respondents in Pekanbaru, it was found that the majority (90%) agreed that the competition for Uwinfly electric bicycles was tight. However, only 40% of the respondents stated that Uwinfly was the most popular brand. Even so, 77% said that product information influenced their purchasing interest, and 83.3% considered price to be an important factor. Finally, 90% of the respondents agreed that the value provided by Uwinfly products influenced their purchasing decisions. This shows that perceived value and product knowledge play important roles in shaping people's purchasing interest.

Several studies have examined the relationship between product knowledge, price, and purchase intention. [7] stated that product knowledge has a positive effect on purchase intention, but [8] showed the opposite result. Similarly, [9] concluded that price has a significant effect on purchase intention, whereas [10] found no significant effect. The difference in results indicates that these variables cannot be generalized and require further research, especially in the context of electric bicycles in Pekanbaru. Perceived value is also believed to play an important mediating role between these variables ([11]; [12]; [13]; [14]).

This study aims to analyze the effect of product knowledge and price on the purchase intention of Uwinfly electric bicycles in Pekanbaru City, with perceived value as a mediating variable. By knowing the direct and indirect effects of each variable, companies can be more effective in designing marketing strategies and product communications to increase consumer purchase intentions towards more environmentally friendly electric bicycles.

This research is expected to contribute to various parties. Companies can gain a deeper understanding of the importance of product knowledge, price, and value perception in consumer purchasing decisions. Consumers can increase their awareness of the importance of choosing environmentally friendly products. The government and regulators can use the results of this study to formulate sustainable transportation policies. Academics and other researchers can use this study as a reference for further studies in the field of consumer behavior and environmentally conscious marketing.

2. LITERATURE REVIEW

2.1 Product Knowledge

Product knowledge is the information contained in a product that consumers use to make purchasing decisions [15]. This knowledge includes an understanding of the features, benefits, how to use, and where to purchase the product [16], and plays an important role in forming purchase intentions and reducing consumer risk perceptions towards the product [17]. According to [18], product knowledge consists of three dimensions: subjective knowledge (information held by consumers), objective knowledge (information stored in memory about brands, attributes, usage situations, etc.), and experiential knowledge (results of purchasing and using the product). This dimension contributes to consumer trust and purchasing decisions [19]. High product knowledge allows consumers to make more rational and appropriate decisions according to their needs and is an effective means of communication between companies and consumers [20]; [21]). Product knowledge indicators include knowledge of product attributes or characteristics, product benefits, and the satisfaction the product provides to consumers [18].

2.2 Price

Price is the amount of money exchanged by consumers to obtain a product or service and is an important element in marketing because it affects income and purchasing decisions [22]; [23]. Price is dynamic because it is influenced by inflation, distribution, and time [24], and functions as a measure of quality, a differentiator from competitors, and

a determinant of product value [25] [26]. Pricing must consider objectives, demand, and costs to create competitive prices [22] and be adjusted to consumer perceptions of benefits and quality [27]; [28]. According to [29], consumer perceptions of price can differ depending on sensitivity and purchasing power. Price dimensions include fair, reliable, and relative prices, as well as perceived and referenced prices [30]. Price indicators include affordability, suitability with quality and benefits, competitiveness, and suitability with income, services and facilities [30].

2.3 Value Perception

Perceived value is a consumer's assessment of the benefits obtained compared to the sacrifices incurred when purchasing a product, which is influenced by information, individual preferences, and the purchasing context [12]. Perceived value is a central aspect of marketing because consumers tend to choose products that are considered most appropriate to their needs [31]. Understanding perceived value helps companies design relevant marketing strategies and strengthen their relationships with consumers [32]. Perceived value includes perceptions of product attributes, costs, convenience, and the value of digital interactions and social media. The dimensions of perceived value consist of utilitarian, hedonic, and social values [33], as well as values based on the perception of the product as a good buy and the price being considered reasonable [34]. According to [35], value perception is influenced by emotional, social, functional, and price values, while [33] added that value can also be rational, based on pleasure and social recognition. This perception is formed through a comparison between benefits and sacrifices, which influences consumer purchase intentions and subsequent behavior [36].

2.4 Purchase Interest

Purchase interest is the initial stage in the consumer decision-making process, which reflects a person's desire or tendency to buy a product after considering information, personal preferences, and external influences such as the social environment and promotional activities [37]. Purchase interest reflects not only short-term intentions but also the consumer's likelihood of making repeat purchases in the long term [38]. According to [39], this process begins with awareness of needs, analysis of actual and ideal situations, information search, and the formation of beliefs about the product. Purchase interest is also influenced by cultural, social, personal, and psychological factors [40]. The dimensions of purchase interest include transactional, referential, preferential, and exploratory interests [40], as well as awareness, knowledge, liking, preference, conviction, and purchase intention [41]. The indicators include the urge to seek information, desire to try, consideration of the purchase, and a strong desire to buy [41], all of which play a role in determining whether a consumer will make a purchase.

3. METHODS

This study used a quantitative approach to test the influence of variables through statistically processed numerical data. The study was conducted in Pekanbaru City, Riau Province, with an implementation time of one semester, or approximately three months, after obtaining research permission from the Faculty of Economics and Business, University of Riau. The object of this study is Uwinfly electric bicycle consumers, with a focus on the variables of product knowledge, price, perceived value and purchase interest. The subjects of the study were residents of Pekanbaru City who were already familiar with electric bicycles. The main instrument used in the study was a Likert-based questionnaire, which was distributed offline and online and equipped with observation and documentation techniques.

Sampling used non-probability purposive sampling technique, with the criteria for respondents being at least 18 years old and knowledgeable about electric bicycles. To determine the number of samples, the researcher used the Hair formula, which is ten times the number of indicators. With 13 indicators used in this study, the number of samples obtained was 130. The data collected

consisted of both primary and secondary data. Primary data were obtained directly from respondents through questionnaires, observations, and field documentation, while secondary data were obtained from various supporting sources, such as journals, books, reports, and other relevant publications.

Data analysis was carried out in two stages, namely descriptive analysis and inferential analysis, using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method with the help of the SmartPLS application. Descriptive analysis was used to describe data characteristics using frequency tables, diagrams, or descriptive statistical values such as the mean and standard deviation. SEM-PLS analysis includes the evaluation of the outer model (validity and reliability of indicators), inner model (relationships between latent variables), and indirect effects. Hypothesis testing was conducted using the t-test, F-test, and coefficient of determination (R^2) to measure the strength and significance of the relationship between the variables in the research model.

4. RESULTS AND DISCUSSION

4.1 Demographich Profile of the Sample

The respondents in this study had various backgrounds that reflected the demographic diversity of the people of Pekanbaru City. Based on age, the majority of respondents were in the 18–24-year range (59.2%), an age group known to be more adaptive to technological innovations such as electric bicycles than older age groups. In terms of gender, most respondents were female (59.2%), indicating the importance of considering women's preferences in product marketing strategies. Based on occupation, respondents were dominated by students (38.4%) and private employees (31.5%), groups that were economically and socially active and had the potential to become early adopters of e-bicycles. In terms of education, the majority had a high school education (60.7%) or a bachelor's degree (30%), indicating that most respondents had the capacity to understand technical product information. The respondents' domiciles were spread across various sub-districts, with the highest concentrations in Binawidya (21.5%) and Marpoyan Damai (16.1%), indicating strategic areas for the market penetration of Uwinfly electric bicycles. In terms of income, the majority of respondents (70.7%) have an income between IDR 2,000,000 - IDR 4,000,000; therefore, pricing strategy is important to adjust the purchasing power of people in this segment. These characteristics provide a comprehensive picture of the profile of potential electric bicycle consumers in Pekanbaru.

4.2 Evaluation of Measurement Models

4.2.1 Convergent Validity

Convergent validity is the correlation between the reflective indicator and latent variable scores. In convergent validity testing, two types of tests are carried out: loading factor and Average Variance Extracted (AVE). To assess the validity of a variable, two criteria must be met: the load factor value must be greater than 0.70, and the AVE value must be more than 0.50. The results of the test are as follows:

Table 1. Loading Factor Results

	Product Knowledge (X1)	Price (X2)	Purchase Interest (Y)	Value Perception (Z)
X1.1	0.963			
X1.2	0.952			
X2.1		0.931		
X2.2		0.929		
X2.3		0.919		
Y1.1			0.862	
Y1.2			0.888	
Y1.3			0.819	
Y1.4			0.849	

Z1.1				0.911
Z1.2				0.934
Z1.3				0.928

Source: Researcher's processed results, 2025

In Table 1, it can be seen that the original sampling of each indicator of the Product Knowledge (X1), price (X2), Value Perception (Z), and Purchase Interest (Y) variables has a loading factor value above 0.7; thus, these indicators can be declared valid as measuring variables.

Table 2. Results of Average Variance Extracted

Variable	*Average Variance Extracted* (AVE)	Keterangan
Product Knowledge	0.917	Valid
Price	0.859	Valid
Purchase Interest	0.731	Valid
Value Perception	0.855	Valid

Source: Researcher's processed results, 2025

Based on the data in table 2, it can be seen that the value of each overall research variable is above 0.5. This indicates that all variables had a good level of validity and met the criteria set for testing. Thus, it can be concluded that these variables are worthy of further analysis.

4.2.2 Discriminant Validity Results

Discriminant validity is the level of success of a measurement in distinguishing the concept being measured from other concepts. Discriminant validity is used to ensure that each concept of a latent variable or construct is a different entity from other latent variables. In its testing, there are three commonly used methods: the Heterotrait-Monotrait Ratio (HTMT) criteria, Fornell-Larcker, and cross-loading analysis. The results of the tests are as follows:

Table 3. Heterotrait-Monotrait Ratio (HTMT) Results

	Product Knowledge (X1)	Price (X2)	Purchase Interest (Y)	Value Perception (Z)
X1				
X2	0.701			
Y	0.506	0.624		
Z	0.668	0.687	0.735	

Source: Researcher's processed results, 2025

Table 3 shows that the overall correlation value is <0.9, which is considered capable of meeting the discriminant validity value.

Table 4. Fornell-Lacker Criterion Results

	Product Knowledge (X1)	Price (X2)	Purchase Interest (Y)	Value Perception (Z)
Product Knowledge (X1)	0.957			
Price (X2)	0.643	0.927		
Purchase Interest (Y)	0.459	0.565	0.855	
Value Perception (Z)	0.611	0.632	0.662	0.925

Source: Researcher's processed results, 2025

Table 4 presents the results of the Fornell-Lacker Criterion analysis, which shows the convergent validity of the constructs in this study. All constructs, namely, Product Knowledge (X1), Price (X2), Purchase Intention (Y), and Perceived Value (Z), have reliability values above 0.7. This shows that the square root value of AVE along the diagonal line has a greater correlation between one construct and

another, so it can be concluded that the construct has a good level of validity.

Table 5. Cross Loading Results

	Product Knowledge (X1)	Price (X2)	Purchase Interest (Y)	Value Perception (Z)
X1.1	**0.963**	0.652	0.464	0.621
X1.2	**0.952**	0.575	0.413	0.545
X2.1	0.582	**0.931**	0.480	0.543
X2.2	0.628	**0.929**	0.558	0.602
X2.3	0.576	**0.919**	0.528	0.606
Y1.1	0.348	0.493	**0.862**	0.537
Y1.2	0.469	0.539	**0.888**	0.638
Y1.3	0.273	0.416	**0.819**	0.504
Y1.4	0.458	0.474	**0.849**	0.571
Z1.1	0.557	0.597	0.593	**0.911**
Z1.2	0.596	0.598	0.587	**0.934**
Z1.3	0.542	0.557	0.656	**0.928**

Source: Researcher's processed results, 2025

Table 5 presents the results of the cross-loading test used to measure the discriminant validity of the constructs in this study. The results of the cross-loading value met the standard of more than 0.7, and the discriminant validity test in this study was valid because it showed that all indicators had a higher loading on the relevant construct than on other constructs.

4.2.3 Validity Reliability Results

Reliability is a testing tool used to assess the indicators of a variable. Reliability testing was conducted based on two criteria: composite reliability and Cronbach's alpha. Composite Reliability was used to test the reliability value of variable indicators, where variables were considered to meet this criterion if the value of each variable was greater than 0.7. Meanwhile, in the Cronbach's alpha test, variables are considered reliable if they have a Cronbach's alpha value above 0.7. The test results were as follows:

Table 6. Results of Composite Reliability and Cronbach Alpha Tests

	Cronbach's Alpha	*Composite Reliability*
Product Knowledge (X1)	0.909	0.920
Price (X2)	0.918	0.921
Purchase Interest (Y)	0.877	0.884
Value Perception (Z)	0.915	0.915

Source: Researcher's processed results, 2025

Table 6 shows that all constructs in this study have Cronbach's Alpha and Composite Reliability values above 0.7, so they are declared reliable. Product Knowledge (X1) and Price (X2) each recorded high reliability with values above 0.9. Purchase Intention (Y) and Perceived Value (Z) also showed good internal consistency, with values above the minimum threshold.

4.2.4 Structural Model Evaluation (Inner Model)

The evaluation of a structural model describes the relationship between latent variables in a model based on research theory. This relationship includes interactions between the exogenous and endogenous variables. The pattern of the relationship was analyzed using statistical techniques, namely path analysis. From this model, the size of the influence of exogenous variables on endogenous variables can be obtained, both directly and indirectly. The structural model was evaluated using R-squared, t-statistics, and model fit. The following are the results of the tests performed.

Table 7. R-Square Results

	R-square	*R-square adjusted*
Purchase Interest (Y)	0.474	0.462

Value Perception (Z)	0.470	0.462

Source: Researcher's processed results, 2025

Table 7 shows that the R-squared value for Purchase Intention is 0.474 and for Value Perception is 0.470, which means that about 47% of the variation in both variables can be explained by the model. The adjusted R-squared value of 0.462 indicates that the model is quite effective, despite minor adjustments.

Table 8. Model Fit Results

	Saturated model	Estimated model
SRMR	0.052	0.052
d_ULS	0.212	0.212
d_G	0.202	0.202
Chi-square	165.122	165.122
NFI	0.869	0.869

Source: Researcher's processed results, 2025

In Table 8, it can be seen that the resulting Normed Fit Index (NFI) value is 0.869, which means that the research model has a fit of 86.9%. In addition, the Standardized Root Mean Square Residual (SRMR) value is recorded at 0.052, which indicates that this value is below the threshold of 0.08, so the model can be said to be a good fit. Thus, it can be concluded that this model is consistent with the existing data.

Table 9. F-Square Results (Effect Size)

	Product Knowledge (X1)	Price (X2)	Purchase Interest (Y)	Value Perception (Z)
Product Knowledge (X1)			0.000	0.135
Price (X2)			0.060	0.183
Purchase Interest (Y)				
Value Perception (Z)			0.265	

Source: Researcher's processed results, 2025

4.2.5 Hypothesis Testing

Hypothesis testing was conducted to assess the truth of the research statement using the partial least squares (PLS) method with a t-test. The influence between variables was declared significant if the t-statistics value> t-table and p-value <0.05. The test includes seven hypotheses to determine the extent to which the independent variables affect the dependent variable through the path coefficient value.

Table 10. Results of Research Hypothesis Testing

	Path Coefficient	*T statistics* (|O/STDEV|)	*P-value*
Product Knowledge (X1) -> Purchase Interest (Y)	-0.016	0.197	0.844
Price (X2) -> Purchase Interest (Y)	0.350	2.923	0.003
Product Knowledge (X1) -> Value Perception (Z)	0.251	3.730	0.000
Price (X2) -> Value Perception (Z)	0.407	4.455	0.000
Value Perception (Z) -> Purchase Interest (Y)	0.513	6.157	0.000

Source: Researcher's processed results, 2025

Table 10 presents the results of testing the five main hypotheses of this study. Product Knowledge (X1) has a positive and significant effect on Perceived Value (Z) with a path coefficient of 0.251, T-statistics 3.730 > 1.979, and P-value 0.000; therefore, Hypothesis 1 is accepted. Price (X2) also has a significant positive effect on Perceived Value (Z) with a path coefficient of 0.407, t-statistics of 4.455, and p-value of 0.000; therefore, Hypothesis 2 is accepted. However, Product Knowledge (X1) on Purchase Intention (Y) shows an

insignificant negative effect (path coefficient -0.016; T-statistics 0.197; P-value 0.844), so hypothesis 3 is rejected. On the other hand, Price (X2) has a significant positive effect on Purchase Intention (Y) with a path coefficient of 0.350, t-statistic of 2.923, and p-value of 0.003; thus, Hypothesis 4 is accepted. Finally, Perceived Value (Z) has the strongest positive influence on Purchase Intention (Y), with a path coefficient of 0.513, t-statistics of 6.157, and p-value of 0.000, so hypothesis 5 is also accepted.

Table 11. Results of Indirect Research Hypothesis Testing

	Path Coefficient	*T statistics (|O/STDEV|)*	*P-value*
Product Knowledge (X1) -> Value Perception (Z) -> Purchase Interest (Y)	0.179	3.230	0.001
Price (X2) -> Value Perception (Z) -> Purchase Interest (Y)	0.209	3.424	0.001

Source: Researcher's processed results, 2025

The results of testing hypotheses 6 and 7 indicate that Product Knowledge (X1) and price (X2) have a significant positive effect on Purchase Intention (Y) through the mediation of Perceived Value (Z). For Hypothesis 6, the path coefficient was 0.179, T-statistics 3.230 > 1.979, and P-value 0.001 < 0.05, so the hypothesis was accepted. Similarly, Hypothesis 7 shows a path coefficient of 0.209, T-statistics of 3.424, and P-value of 0.001, which also meets the significance requirements. Thus, both independent variables are proven to have a significant effect on Purchase Intention through Perceived Value as a mediating variable.

Based on the test results above, the following SmartPLS structural diagram model was obtained.

a. SmartPLS Loading Factor Structural Diagram

This study uses Structural Equation Modeling (SEM) analysis based on Partial Least Squares (PLS) through the SmartPLS 4 application, which was chosen because of its ability to handle complex models and non-normal data. SmartPLS allows for the simultaneous analysis of the relationships between variables and the evaluation of the strength and significance of the relationship. Researchers also utilize the model visualization feature and examine loading factor values to assess the contribution of each indicator to the latent construct. Indicators with loading factors >0.7 are considered strong representatives of the construct, while values below are considered less so. This approach ensured accurate, valid, and reliable analysis results.

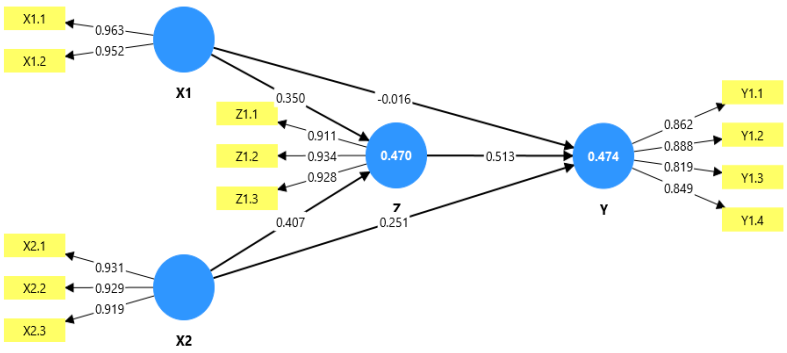

Figure 1. SmartPLS Loading Factor Structural Diagram

b. SmartPLS Bootstrapping Diagram

Bootstrapping is a resampling technique used in SmartPLS to improve the model's reliability and validity by producing more accurate parameter estimates through the calculation of means and standard deviations from multiple samples. This technique allows researchers to create confidence intervals and test the significance of model parameters such as path coefficients and loading factors. In this

study, bootstrapping was used to analyze the relationship between variables, with the relationship considered significant if the p-value <0.05 and t-statistic >1.97 at the 5% significance level. The resulting bootstrapping diagram helps to validate the strength of the causal relationship between the constructs and provides a strong empirical basis for drawing conclusions. The following is the SmartPLS bootstrapping diagram used in this study:

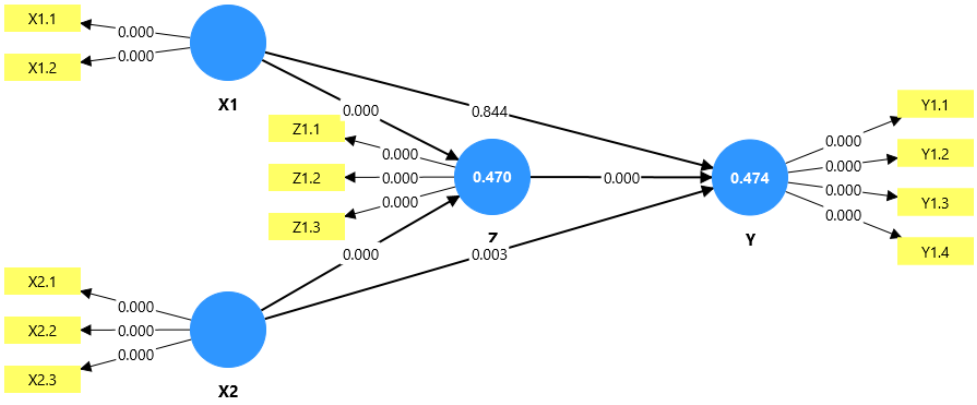

Figure 2. SmartPLS Bootstrapping Diagram

DISCUSSION

The Influence of Product Knowledge on Value Perception of Uwinfly Electric Bikes in Pekanbaru City

This study shows that Product Knowledge has a significant effect on the Perception of Value of Uwinfly electric bicycles in Pekanbaru, in line with the findings of [13], which state that consumer understanding of product features and benefits increases value perception. Respondents were dominated by the critical young generation, with attribute knowledge as the highest indicator and social value as the main perception of the product.

Uwinfly electric bicycles are seen not only as a means of transportation but also as a symbol of an environmentally friendly lifestyle. The practical implication is that Uwinfly needs to strengthen product education that emphasizes technical and social aspects through green campaigns and digital media to reach young consumers and improve their overall value perception.

The Influence of Price on Value Perception of Uwinfly Electric Bikes in Pekanbaru City

The results of this study show that price has a significant effect on the Perception of Value of Uwinfly electric bicycles in Pekanbaru. This finding is supported by [42] and [43], who state that the right price can form a positive perception of the value of the product. The majority of respondents were middle-class people with high price sensitivity, and the highest indicator in the price variable was reliable price, which reflects consumer attention to the suitability of price with product quality and benefits. Social value is also the highest indicator of the Perception of Value, indicating that consumers consider environmental and social aspects in their purchasing decisions.

In this context, price is seen not just as a cost but as a long-term investment for efficiency and sustainability. The increasingly environmentally conscious young generation of Pekanbaru strengthens this perception of the city. Therefore, Uwinfly must maintain a value-based pricing strategy by emphasizing long-term benefits. Strategies such as low ownership cost communication, user testimonials, financing programs, and collaboration with local governments can strengthen product value and competitiveness in the market [43].

The Influence of Product Knowledge on Consumer Purchase Interest in Uwinfly Electric Bicycles in Pekanbaru City

The results of the study showed that Product Knowledge did not have a significant effect on the Purchase Intention of Uwinfly electric bicycles in Pekanbaru, in line with the findings of [8], which stated that product

knowledge can have a negative effect on purchase intention. Although respondents understand product attributes (subjective knowledge), this is not enough to encourage purchase preferences, as evidenced by the high value of the preferential interest indicator. Factors such as preferences for other brands, limited infrastructure, and overly complex technical information can cause a lack of interest.

Respondents were dominated by the middle-income young generation, who tend to be open to innovation but are hampered by budget constraints and the perception that electric bicycles are still a secondary alternative to cars. The implication of this finding is the importance of a marketing strategy that not only focuses on technical education but also touches on emotional aspects and practical benefits. For example, through user testimonials or free trial programs to build emotional connections and increase purchase interest in real terms [8].

The Influence of Price on Consumer Purchase Interest in Uwinfly Electric Bicycles in Pekanbaru City

The study results show that price has a significant effect on the Purchase Interest of Uwinfly electric bicycles in Pekanbaru. This finding is supported by [10], who stated that competitive prices in accordance with product value can increase consumer purchase interest. The majority of respondents are in the middle-income group, so the suitability of price to quality (reliable price) is the highest indicator in the Price variable. Meanwhile, in Purchase Interest, the highest indicator is preferential interest, indicating that consumers are more likely to choose products that are considered to provide more value than other brands do.

The perception of long-term cost efficiency also strengthens the influence of price, where respondents realize that although the initial price is quite high, fuel and maintenance savings make it more economical than other options. Government incentive support also increases product attractiveness. The practical implication is that Uwinfly must maintain a competitive pricing strategy while emphasizing quality and long-term benefits. Installment programs, discounts, or trade-ins, as well as effective communication about value for money, can encourage purchase interest, especially in price-sensitive segments [10].

The Influence of Value Perception on Purchase Interest in Uwinfly Electric Bicycles in Pekanbaru City

The results of the study show that Perceived Value has a significant effect on the Purchase Intention of Uwinfly electric bicycles in Pekanbaru. This finding is supported by [11] and [44], who state that the higher the consumer's perceived value, the greater their tendency to buy. Respondents, who are mostly educated and environmentally conscious young generations, tend to see electric bicycles not only as a means of transportation but also as a symbol of an environmentally friendly lifestyle. Social value is the highest indicator of Perceived Value, while preferential interest dominates Purchase Intention, indicating that consumers tend to choose Uwinfly because of the high perception of social value.

In the midst of the growth of the city of Pekanbaru, electric bicycles are also seen as a form of self-expression, especially by students and private employees who pay attention to social image. The strategic implication is that Uwinfly needs to strengthen its branding based on social and environmental values through community campaigns, collaboration with local influencers, and engagement programs that emphasize a sustainable lifestyle. This strategy not only encourages purchase interest but also builds consumer loyalty through emotional attachment to brand values [44].

The Influence of Product Knowledge on Purchase Interest Through Value Perception on Uwinfly Electric Bikes in Pekanbaru City

The study results indicate that Product Knowledge indirectly influences Purchase Intention through Value Perception on Uwinfly electric bicycles in Pekanbaru. This finding is in line with [13], who stated that product knowledge forms a positive value perception that drives purchasing decisions. Respondents dominated by the educated young generation tend to understand the technical attributes of the

product (subjective knowledge), while social value is the highest indicator of Value Perception. This shows that technical understanding combined with environmental concern can form a strong preference for a product, as reflected in the dominance of preferential interest in the Purchase Intention variable.

Uwinfly electric bicycles in Pekanbaru are seen as symbols of modernity and environmental awareness, especially among students and private employees. Therefore, Uwinfly needs to strengthen product education that emphasizes not only technical aspects but also social values and sustainability. Strategies such as presenting interactive information on digital media, user testimonials, and forming user communities can strengthen value perceptions and indirectly increase purchasing interest [13].

The Influence of Price on Purchase Interest Through Value Perception on Uwinfly Electric Bikes

The study results show that price significantly affects Purchase Intention through Value Perception on Uwinfly electric bicycles in Pekanbaru. This is supported by [42] and [43], who state that competitive prices in accordance with product benefits can increase value perception and encourage purchase intention. The majority of respondents with middle incomes consider the importance of price suitability (reliable price) and quality. On the other hand, social value is the highest indicator in Value Perception, indicating that electric bicycles are viewed not only from an economic aspect but also as a form of concern for the environment. Preferential interest dominates Purchase Intention, indicating that a positive value perception makes consumers prefer Uwinfly over competitors.

In the context of Pekanbaru, which is starting to focus on environmentally friendly transportation, the perception of fair and valuable prices is very important, especially for students and private employees who are sensitive to price but care about social values. Uwinfly needs to optimize its value-based pricing strategy by emphasizing long-term efficiency and social contributions. Creative financing programs, campaigns that emphasize the balance of price and value, and strengthening positioning as a sustainable transportation solution will strengthen the perception of value and increase purchase interest [43].

5. CONCLUSION

This study shows that Price and Perceived Value have a significant effect on the Purchase Intention of Uwinfly electric bicycles in Pekanbaru, while Product Knowledge only has an indirect effect through Perceived Value. This finding confirms that consumers tend to consider emotional and social values, such as reasonable prices and environmentally friendly lifestyles, rather than just technical understanding of the product. Therefore, Uwinfly should focus on experiential marketing and emotional value, such as testimonial campaigns and free trial programs, and collaborate with local influencers. The government can also encourage public interest through environmentally themed events. Further research is needed to explore other variables, such as customer satisfaction and brand perception, to broaden and enhance the applicability of these results.

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