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PERCEPTION OF ELECTRIC CAR PRODUCTS ON PURCHASE INTENTION MEDIATED BY TRUST IN JABODETABEK AREA

Aryanto[1], Hery Winoto Tj[2], Melitina Tecoalu[3]

[1,2,3]FacultyFaculty of Economic and Business, Krida Wacana Christian University, Jakarta
E-mail: [1]aryanto0483@gmail.com

Abstract— **Cars have become an important mode of transportation for humans, the growth of the automotive industry, especially cars, still sets aside air pollution which is getting higher day by day. The solution to industrial pollution by cars is the emergence of electric car technology. The purpose of this study is to examine consumer perceptions of the interest in buying electric cars which are influenced by trust in Jabodetabek. By using a sample of 100 people who have driven an electric car. The data analysis technique used in this research is inferential statistics as a data analysis tool, namely the PLS (Partial Least Square) approach. The results obtained from this study indicate that consumer perceptions and trust affect the interest in buying electric cars. Consumer perceptions also affect trust and trust mediation variables affect consumer perceptions of purchase intention in electric cars.**

Keywords— ***Consumer Perception, Purchase Intention, Trust, Electric Car***

1. Introduction

The car is a mode of transportation that uses an internal combustion engine (ICE) system with fossil fuels as a power source. Cars with ICE (Internal Combution Engine) models have caused serious environmental problems because they are considered the main cause of global warming and environmental air pollution (Tupe et al., 2020) by emitting harmful greenhouse gases and exhaust fumes (Ju et al., 2021). On the other hand, the availability of fossil fuels in nature is limited (Covert et al., 2016) and is neither renewable nor sustainable (Milev et al., 2020). Rosyadi in (https://www.republika.co.id.2016) said fossil energy, such as coal, oil, and natural gas will run out in 2050.

To reduce the negative impact of using ICE model cars, currently many electric cars are being developed that produce zero emissions so that they contribute to reducing greenhouse gas emissions from the transportation sector (Milev et al., 2020). This type of car also saves on the use of fossil fuels or uses other energy sources to replace fossil fuels (Ju et al., 2021). Therefore electric cars are associated with environmental friendliness because of the absence of emissions and cheap fuel that uses electricity (Gelmanova et al., 2018).

The world electric car market is still in its infancy with consumers being early adopters. According to data from the International Energy Agency/IEA (2021), in a decade the growth of electric cars has occurred very quickly, in 2020 the total electric cars that have been circulating globally reached 10 million, an increase of 43% from 2019, and representing a market share of 1%.

Electric cars have higher barriers to market entry due to various problems such as poor charging infrastructure and high prices (Ju et al., 2021). Through the sustainable development scenario, several countries have joined the EV30 campaign which collectively aims to achieve a 30% market share for electric cars in all modes by 2030. Various countries have introduced a series of policies to support the electric car industry. The substance of the policy is an approach to reduce adoption barriers and to promote and build the required charging infrastructure (IEA, 2021).

The Indonesian government has issued Presidential Regulation (Perpres) No. 55 of 2019 concerning the Acceleration of the Battery-Based Electric Motor Vehicle (KBLBB) Program for Road Transportation and came into effect after being promulgated on 12 August 2019 (Wirabrata, 2019). Based on the Grand National Energy Strategy, the use of battery-based electric motorized vehicles (KBLBB) in 2030 is targeted to reach 2 million units for electric cars and 13 million units for electric motorcycles. In 2025, it is targeted that at least

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20% of electric car vehicles or approximately 400 thousand electric cars will be circulating in Indonesia (www.cnbcindonesia.com. 2021).

In 2019, sales of electric cars in Indonesia were only 40 units (28 e-taxi and 12 passenger cars) or only reached 0.01% of the 2025 sales target (IESR, 2019). Meanwhile, the number of conventional car sales in retail (from dealers to consumers) was recorded at 1,043,017 units throughout 2019 (www.gaikindo.or.id. 2019). In 2020, where there was a COVID-19 pandemic, conventional car sales declined while electric car sales reached 1,212 units, but still far below conventional car sales on a wholesale basis which reached 532,407 units.

The majority of consumers still consider electric cars to be less profitable than traditional cars (Bessenbach & Wallrapp, 2013). Consumers' understanding of environmentally friendly electric car technology is not enough to drive the intention to adopt electric cars (Jiang et al., 2020). Electric cars have a higher barrier to market entry than conventional cars due to various problems such as high prices and poor charging infrastructure (not fast charging and limited availability) giving rise to coverage concerns (Ju et al., 2021; Whittle et al. , 2019).

According to Bhalla et al (2018), the lack of acceptance of electric cars by consumers is due to consumer experiences with comfort, safety and reliability in conventional cars. Meanwhile, according to the results of Bansal's research (2020) that obstacles in the adoption of electric vehicles by consumers are due to poor consumer perceptions and trust such as consumer perceptions of high upfront costs, lower mileage (after charging), and lack of trust in consumers. electric vehicle technology.

In order to achieve the electric car sales target, the role of the government and the electric car industry players is needed to be able to increase the level of acceptance and public purchase intention in electric cars. An increase in purchase intention is important because purchase intention is correlated and can predict future sales (Morwitz, 2012). Although the correlation and prediction are not perfect, purchase intention is still a strong predictor of future buying behavior (Jobber & Lancaster, 2016). In order to change the trend of electric car acceptance, it is necessary to propagate positive perceptions and build trust in the electric car segment (Bhalla et al., 2018). According to Deloitte (2020) a number of factors include positive changes in consumer perceptions, technological advances and greater government intervention to focus attention on electric car adoption. This is in accordance with the opinion of Wee et al (2014) which states that perception is one of the psychological factors that can influence consumer buying behavior and knowledge about consumer perceptions is important to improve marketing strategies (Mothersbaugh & Hawkins, 2016). Trust in institutions and service providers is also an important prerequisite for consumer acceptance of electric cars (Whittle et al., 2019).

Based on the description above, an analysis related to consumer perceptions and trusts about electric vehicles is considered very important to be able to increase consumer purchase intention in electric vehicles in Indonesia. Therefore, this study aims to determine

1. Does consumer perception affect purchase intention?
2. Does trust affect purchase intention?
3. Does consumer perception affect trust?
4. Does consumer perception affect purchase intention mediated by trust?

2. Literature Review

Purchase Intention

Purchase intention is an indication of the willingness of individuals or potential consumers to make a purchase (Jobber & Lencester, 2016). Purchase intention is part of consumer behavior and one of the stages in the buying decision process (Kotler & Keller, 2016). Purchase intention can change at the purchase decision stage because it is influenced by unexpected factors, such as price increases or other people's opinions (Melitina et al, 2021). When a product or brand has been evaluated and a product is selected for purchase but due to changes in interest there may be no purchase (Lancester & Massingham, 2011).

The Theory of Planed Behavior (TPB) is often used to explain the factors that influence interest, explaining that interest in individual behavior is determined by attitudes toward behavior, subjective norms, and perceived behavioral control (Zang et al., 2018). This theory was also used by Moons et al. (2015) to predict consumer interest in using or adopting electric cars where the research results show that the factors that determine interest in using electric cars in the subjective norm group are environmentally friendly behavior, environmental care, innovation and personal values. In the attitude group, there are media and perceptions of complexity, perceptions of compatibility, and perceptions of relative advantages, emotions towards electric cars and reflective emotions towards driving cars have a strong influence on usage

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intentions. Car driving habits and perceived behavioral control (facilitator and constraint) did not substantially affect use intention.

Purchase intention comes from learning and thinking processes that shape perceptions (Astuti & Putri, 2018). The adoption of any innovation by consumers is based on the awareness and perception of the innovation. Literature review shows that the perception and adoption of electric vehicles is studied with a focus on reducing Co emissions (pro-environmental lifestyle), technology (speed, distance, efficiency), cost, infrastructure (charging points), social acceptance (Bhalla et al., 2018) , design, safety (Ghasri et al, 2019) as well as the role and government policies in the electric car market such as promotion of environmentally friendly and providing incentives (Jiang et al., 2020).

Trust

Trust is a complex construction, therefore experts or previous researchers have defined it non-uniformly according to different perspectives and disciplines. Trust can be categorized into three perspectives. First, trust is considered an individual feature from the point of view of personality theorists. Second, trust is considered a part of the relationship. Third, trust is part of social and economic exchange (Paliszkiewicz & Klepacki, 2013). Although trust is defined differently in each perspective, all of these perspectives emphasize that trust only occurs in conditions of risk and uncertainty. This means that if there is no risk then trust is not needed. Risk can be seen as an antecedent of trust because the need for trust only arises in risky situations which makes the concept of risk important in terms of trust (Pennanenn, 2009). Before trust is formed, some credibility evaluation should be carried out to ensure that the words of the potential partner are considered credible (Zur et al., 2012)

Trust is the belief that a person has in the promises or actions of another person, brand, or company (Cannon et al., 2014). Meanwhile, according to the commitment-trust theory of Morgan & Hunt (1994) that consumer trust can be defined as something that exists when one party has confidence in the reliability and integrity of the exchange partner. Trust is also defined as the expectation held by consumers that a service provider can be relied on to fulfill its promises. (Sirdeshmukh et al., 2002). The building of trust will have an impact on customers, including staying committed to doing business with providers of goods and services for a long time (Wahyoedi and Saparso, 2019), influencing customer attitudes towards product reuse (Rivai, 2017) Wahyoedi & Winoto, 2017), and consumers. can promote or recommend to other consumers. (Martinayanti, 2016). Therefore, building trust can increase profits and build a strong and reliable customer base. (Paliszkiewicz & Klepacki, 2013). The results of other researchers revealed the benefits of customer trust, namely a positive effect on commitment, loyalty, sales effectiveness, and collaborative, cooperative, and successful exchange relationships (Isaeva et al, 2020)

Several studies have adopted a conceptualization of trust as a set of specific trust beliefs that are beneficial features that consumers think the other party (exchange partner) has, including perceptions of the other party's abilities, virtues, and integrity (Lin & Zang, 2011).

According to Walczuch & Seelen (2000) if several theories are combined to form a complete picture of all psychological factors that influence trust then these factors are divided into the following five categories, namely personality-based factors; perception-based factors; experience-based factors; knowledge-based factors; and attitude. The results of research by Mulyana, et al (2017) prove that providing a better experience for customers can increase customer trust.

The research of Seuwou et al. (2020) related to electric car trust explains that consumer trust is a belief in the reliability, correctness, or ability of a car to match the advertised with the reality. Similarly, the dissemination of information about the operation of electric vehicles (including battery life, recharging times, charging point locations, types and costs of repairs) can help increase consumer confidence in the vehicle (IREA, 2012).

According to Li et al (2008) there are two dimensions to measure trust, namely producer competence and policy competence. This statement is almost the same as the opinion of Whittle et al.,(2019) which measures consumer confidence in electric cars with aspects of trust in institutions and service providers. While Bansal (2020) adds to the technological aspect of electric cars.

Perception

Perception is the process by which people select, organize, and interpret information to form a meaningful picture of an object (Armstrong & Koteler., 2018). These perceptions in turn will affect individual actions and behavior towards an object (Baines et al., 2013).

In a marketing context, perception can be defined as a process that begins with consumer exposure and attention to marketing stimuli and ends with consumer interpretation (Mothersbaugh & Hawkins, 2016).

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Perception is one of the psychological factors that can determine how consumers perceive and interact with their environment and influence the final decisions consumers make (Lamb et al, 2017). Therefore, for marketers, knowledge of consumer perceptions is important to improve marketing strategies (Mothersbaugh & Hawkins, 2016)

Perception is about consumers' subjective understanding and not objective reality (Schiffman & Wisenblit, 2015). Therefore, people can form different perceptions of the same stimulus because it is influenced by personality, experience and mood (Brassington & Pettit, 2013)

Ghasria et al. (2019) uses the theory of diffusion on innovation (DOI) in determining the dimensions of a special perception of electric vehicles where in the DOI theory there are four dimensions to assessing new innovations, namely relative advantage, suitability, complexity, and ability to try. Based on one dimension, namely the relative advantage dimension, Ghasria et al. (2019) made three indicators which are the advantages of electric vehicles, namely design, impact on the environment, and safety. In contrast to Ghasria et al. (2019) which only uses one dimension of the DOI theory, Bessenbach & Wallrapp (2013) uses four or all of the dimensions of the DOI theory (relative benefit, suitability, complexity, and trialability plus perception of risk to measure perceptions of electric cars.

He et al. (2018) not only use dimensions that provide relative or positive advantages but also use dimensions that are considered negative based on rational choice theory. Dimension groups that are considered to have positive uses include perceptions of monetary gain, environmental perceptions, and symbol perceptions. Meanwhile, the dimensions included in the negative group are perceptions of risk and perceptions of fees. Valency theory is almost the same as rational choice theory, showing that there are positive and negative consumer perceptions of the product, namely as perceived risk and perceived benefit, and they are the two main aspects of consumer decision-making behavior that maximize net value (reduction between benefits and benefits). risk). Intuitively, valence theory is a good model because it considers positive and negative decision-making attributes (Lin & Zang, 2011).

Positive and negative perceptions are also used by Yang et al., (2020) where positive perceptions use the benefit perception group and negative perceptions use the risk group. The benefits that consumers perceive from electric cars can be divided into financial and non-financial benefits. Regarding financial benefits, subsidies for purchasing electric cars are high. Meanwhile, zero fuel consumption of electric cars and good after-sales service from manufacturers are two reasons why consumers choose electric cars. In terms of non-financial benefits, zero oil consumption of electric cars shows that electric cars are environmentally friendly. In addition, the electric car features zero noise, high technology, and stable acceleration. Perceived risk refers to the negative effects that consumers predict regarding electric cars. Since electric cars are not widely used yet, many consumers are still biased against them when it comes to safety, reliability and battery life. These are the factors that influence consumer selection of electric cars.

Conceptual Framework and Hypothesis Development

Referring to the literature, both theory and previous research related to the relationship between the variables of perception, trust, and purchase intention, a conceptual framework can be made as shown in the following figure:

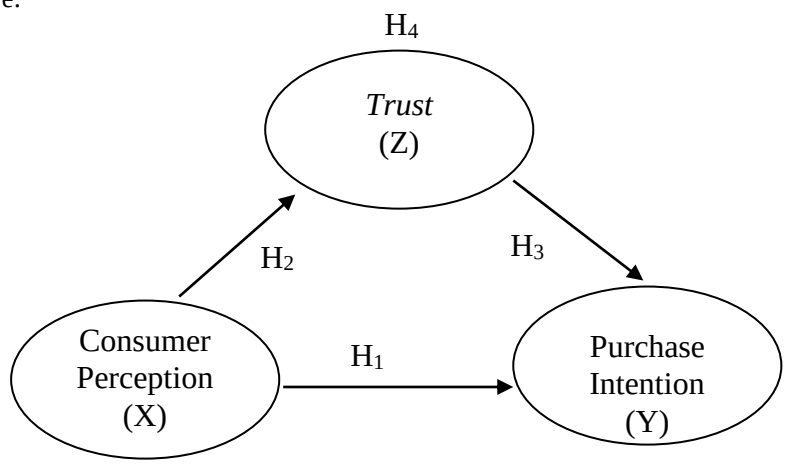

Figure1. Conceptual Framework

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The Influence of Consumer Perception on Intention to Buy Electric Cars

Perception is one of the psychological factors that can influence consumer buying behavior (Wee et al., 2014) because perception determines what consumers see and feel (Cannon et al., 2014). This opinion is reinforced by the statement of Schiffman & Winesblit (2015) that consumers act and react on the basis of their perceptions, not on the basis of objective reality and perceptions will create consumer images of certain objects that affect the consumer purchasing decision process. Before arriving at the purchase decision stage, perception will first influence purchase intention (Kotler & Keller, 2016). The results of He et al.(2018) research support the opinion of these experts where one conclusion is that consumer perceptions have a significant effect on purchase intention in electric cars in China.

H1: perception affects consumers' interest in buying electric cars

The Effect of Trust on Interest in Buying Electric Cars

Trust is the determining factor of loyalty, the establishment of trust will have an impact on customers to remain committed to doing business with providers of goods and services for a long time (Wahyoedi and Winoto, 2017). In research conducted by Tecoalu et al (2020) said that trust has a very strong relationship on customer satisfaction so that the quality of products/services that do not meet the expectations of customers will have an impact on reducing trust from customers on providers of goods and services. because trust is a determining factor of loyalty.

Trust encourages hope because when people believe, they expect the other party to fulfill a promise or do well. Trust is one of the factors that must be considered in explaining consumer behavioral intentions, because it plays an important role in the event of uncertainty and risk (Yang et al., 2020). Trust affects the acceptance, adoption, and sustainable use of automation technology and will be a key factor associated with the future use of electric vehicles (Whittle et al., 2019). Consumers prefer to buy from and are more loyal to trusted brands (Cannon et al., 2014).

Trust also affects the psychological value of consumers to consider the product to be purchased, including the level of consumer tolerance for vulnerabilities received in transactions (Sirdeshmukh et al., 2002). If consumer confidence increases, consumer purchase intention tends to be higher (Leeraphong & Mardjo, 2013). Belief in the effectiveness of green products such as electric vehicles in overcoming environmental problems is one of the main motivations for consumers to buy them (Chen, 2010). The results of Ng et al.(2018) research also show that trust in electric cars has a positive and significant effect on purchase intention.

H2: Trust has an effect on purchase intention in electric cars

The Influence of Consumer Perception on Electric Car Trust

One of the psychological factors that influence trust is the category of factors based on perception (Walczuch & Seelen, 2000). Trust is formed from consumer perceptions of the risks and benefits of transactions (Hidayat et al., 2021). Therefore, fostering a good customer perception is an effective way to improve trust (Isavea et al., 2020). The results of the study by Promongsatorn et al. (2012) on the factors that influence consumer trust in online shopping concluded that consumer perceptions (with its six dimensions of reputation, security, privacy, ease of use, usability, and integrity) have a significant effect on consumer trust.

H3: Perception affects Electric Car Trust

Trust Mediates the Indirect Effect of Consumer Perception on Interest in Buying Electric Cars

One of the psychological factors that influence trust is the category of factors based on perception (Walczuch & Seelen, 2000). On the other hand, trust is one of the factors that must be considered in explaining consumer behavioral intentions, because it plays an important role in the event of uncertainty and risk (Yang et al., 2020). The results of research Ponte et al. (2008) shows that perception has a significant effect on trust, and trust has a significant effect on purchase intention. In other words, trust mediates the indirect effect of perception on purchase intention.

H4: The mediating role of trust on the indirect effect of consumer perceptions on purchase intention in electric cars

3. Method

Population and Sample

The population in this study were all community members who had enough money to buy an electric car and had done a test drive. The population size is not known with certainty

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According to Hair et al. (2017), if the number of populations cannot be known, then to determine the number of samples, you can use the 5 -10 times rule (5-10 times rule)". The purpose of the rule is that the number of samples is 5-10 times the number of indicators used in the study. The number of indicators from the three variables used in this study was 16 so that the number of samples considered sufficient was 80 – 160 respondents. Based on these calculations, this study used 100 respondents as a sample.

Determination of the sample was carried out using a non-probability sampling technique, with purposive sampling, namely the selection of the sample intentionally based on an assessment (certain criteria) that was considered the most likely by the researcher to answer questions and to fulfill the research objectives. The sample criteria in this study are adult age (minimum age 17 years), have enough money to buy an electric car and have done a test drive.

Operational Variables

This study uses three variables, each of which has a different role, namely the dependent/endogenous variable (purchase interest), intervening (trust), and independent/exogenous (consumer perception). The following are operational definitions and indicators for each research variable :

Table 1. Research Variables

Variable	Definition	Indicator
Purchase Intention (Y)	Purchase intention is consumer behavior regarding the willingness to make purchases of goods/services after going through an evaluation of various alternative choices that can be measured by transactional intentions, reference intentions, preference intentions, and explorative intentions.	1. Transactional intent 2. Reference intent 3. Preference intention 4. Intention of exploration Source: ferdinan (2014)
Trust (Z)	Trust is the subjective belief of consumers that electric car technology, manufacturers, and policy makers (governments) will fulfill their obligations as promised	1. Producer competence 2. Competence of government agencies 3. Technology Source: Whittle et al.,(2019) and Bansal (2020)
Consumer Perception (X)	Perception is a consumer's subjective assessment of electric cars from the aspect of financial benefits, non-financial benefits, and risk aspects	1. Perception of monetary/financial gain 2. Environmental perception 3. Perception of symbols 4. Risk perception (safety, reliability and battery life) 5. Perceived cost/price Source: Hee et al.(2018)

Measurement of variables is done with a Likert scale (1-5 or from strongly agree to strongly agree) which applies to all indicators (1 = STS, 2 = TS, 3 = N, 4 = S, and 5 = SS).

Data Collection Techniques

This study uses primary data sources from respondents where data is collected by questionnaires and in-depth interviews. The data collected by the questionnaire is the main data that will be used to test the research hypothesis. Meanwhile, in-depth interviews are to encourage respondents to talk in depth about the topic being studied without the researcher using predetermined, focused, and short-answer questions (Given, 2008).

Data Analysis Techniques

In order to answer the problem formulation, the data were analyzed using the Partial Least Square (PLS) approach with the following stages:

1. **Evaluation of the measurement model (Outer Model)**

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This evaluation is a form of testing the validity and reliability of the research instrument (questionnaire). The instrument validity includes convergent validity and discriminant validity. The questions in the questionnaire are considered convergently valid if the loading factor is > 0.7 and discriminantly valid if the Fornel-Larker criterion value is > 0.7. The questionnaire is considered reliable if the value of composite reliability or Cronbach's alpha 0.7 (Latan and Ghozali, 2015).

2. Evaluation of the Structural Model (Inner Model)

This evaluation aims to predict the relationship between latent variables according to the path or research model. The indicators used for evaluation include the Goodness of Fit / R-square test and the path coefficient test.

The goodness of the model is assessed by the model by looking at the R-square.

According to Latan and Ghozali (2012), the R-square results of 0.67, 0.33, and 0.19 indicate that the model is "good", "moderate", and "weak". . The path coefficient test which is a test of the significance of the influence between variables by looking at the parameter coefficient values and the T statistical significance value is through the bootstrapping method using an error rate (α) = 5%.

The mediating role of the trust variable is carried out by analyzing the role of the mediating variable by referring to the opinion of Goodhue et al (2012), where

A. **There is no mediation**, when the perception variable affects the mediating variable (trust) and the purchase intention variable, but the trust variable has no effect on the purchase intention variable. Or it occurs when the consumer perception variable affects the purchase intention variable but has no effect on the trust variable and the trust variable affects the purchase intention variable.
B. **Partial Mediation**, when the consumer perception variable affects the purchase intention and trust variables, and the trust variable affects the purchase intention variable
C. **Full Mediation**, when the consumer perception variable has no effect on the purchase intention variable but does affect the trust variable and the trust variable affects the purchase intention variable

4. Result And Discussion

In the PLS analysis, there are two evaluation models, namely the outer model and the inner model, some of which can be seen in the following figure:

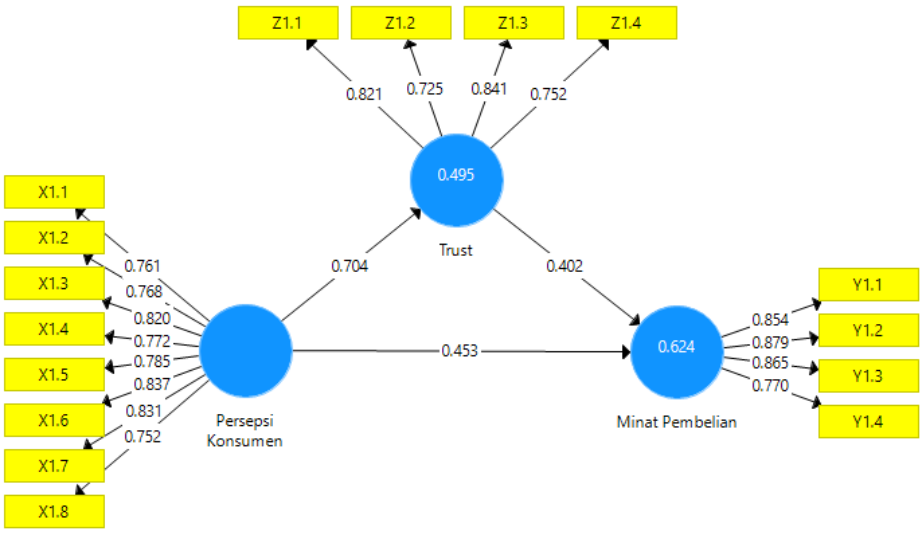

Figure 2. Partial Least Square (PLS) Schematic

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Evaluation of the Outer Model

Evaluation of the outer model is carried out to evaluate the questions that measure each variable that meets the validity and reliability requirements or not. There are two types of validity and reliability tests that can be performed on PLS. The following is an explanation of each test:

A. Convergent Validity

Convergent validity relates to the principle that the quantifiers (manifest variables/statements) of a construct should be highly correlated. The statement items are considered convergently valid if the loading factor is greater than 0.7 (Latan and Ghozali, 2012). Figure 2 shows that all statement items for all variables are valid because all statement items have a loading factor greater than 0.7. In addition to looking at the loading factor of each indicator, convergent validity can also be seen from the Average Variance Extracted (AVE) value where the instrument is considered convergently valid if the AVE value is > 0.50. The results of the analysis show that all variables have an AVE value > 0.50 (Table 2) so it can be concluded that the instrument for all variables is valid.

Table 2. Convergent Validity Test Results Based on AVE Value

Variable	AVE	Description
Perception	0,626	Valid
Trust	0,619	Valid
Purchase Intention	0,711	Valid

B. Discriminant Validity

Discriminant validity was tested with the Fornel-Larker criteria where a variable is considered valid if it has a value greater than 0.7 and the value is greater than the value for all other constructs. Table 3 shows that the variables have met the discriminant validity requirements.

Table 3. Discriminant Validity Test Results Based on Criteria Fornell-Larcker

	Consumer Perception	Trust	Purchase Intention
Consumer Perception	0,791		
Trust	0,704	0,786	
Purchase Intention	0,736	0,721	0,843

C. Reliability

Table 4 shows that all variables have Cronbach Alpha and composite reliability 0.7, so it can be concluded that the instrument for all variables is reliable.

Table 4. Reliability Test Results Based on Cronbach's Alpha and Composite Reliability values

Variable	Cronbach's Alpha	Composite Reliability	Description
Consumer Perception	0,914	0,917	Reliabel
Trust	0,793	0,803	Reliabel
Purchase Intention	0,863	0,865	Reliabel

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Structural Model Test or Inner Model Evaluation

A. Test of Goodness (Goodness of Fit)

Figure 2 shows that the R-Square value for the equation with the dependent variable trust (the independent variable perception) is 0.495. This value means that 49.5% change in the trust variable is influenced by variations in the perception variable. While 55.5% (100-49.5%) is influenced by other variables that are not in the model. Thus, the trust equation model is categorized as good enough because the coefficient of determination is between 41% - 60%.

The R-Square value for the equation with the dependent variable of purchase intention (independent variable of perception and trust) is 0.624. This value means that 62.4% change in purchase intention variable is influenced by variations in perception and trust variables. While 37.6% (100-62.4%) is influenced by other variables that are not in the model. Thus, the purchase intention equation model is categorized as good because the coefficient of determination is between 61% - 80%.

B. Hypothesis Test/Path Coefficient Test

The research hypothesis is tested by looking at the path coefficient and comparing the t-statistics with the t-table or comparing the p-value with (0.05) where the path coefficient shows the form of influence (positive/negative) and the p-value shows the significance of that influence. When the p-value <0.05, the research hypothesis is accepted.

Table 5. Summary of Hypothesis Testing Results

Model	Coefficient	*P-Values*	Conclusion
Consumer Perception-> Purchase Intention	0,453	0,000	Hypothesis accepted
Trust -> Purchase Intention	0,402	0,000	Hypothesis accepted
Consumer Perception -> Trust	0,704	0,000	Hypothesis accepted
Consumer Perception ->Trust-> Purchase Intention	0,283	0,000	Hypothesis accepted

1. The Influence of Consumer Perception on Interest in Buying Electric Cars

Table 5 shows that consumer perceptions have a positive and significant effect on consumer purchase intention in electric cars. The better the perception of electric cars, the higher the purchase intention. These results strengthen the opinion of Wee et al. (2014) which states that perception is one of the psychological factors that can influence consumer buying behavior. Another opinion Schiffman & Winesblit (2015) states that consumers act and react on the basis of their perceptions, not on the basis of objective reality and perceptions will create consumer images of certain objects that affect the consumer purchasing decision process. Before arriving at the purchase decision stage, perception will first influence purchase intention (Kotler & Keller, 2016). The results of He et al.(2018) research support the opinion of these experts where one conclusion is that consumer perceptions have a significant effect on purchase intention in electric cars in China.

These results mean that when producers or the government expect high public interest in buying electric cars, producers or the government can use a strategy by building public perception of electric cars in a more positive direction. good. The respondent's purchase intention is already high (average score of 4.18) but it is still possible to improve again because the achievement of the score has only reached 83.6%. Likewise, consumer perceptions of responses are still possible to be improved because the achievement score has not been maximized, namely 84%.

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2. The Effect of Trust on Interest in Buying Electric Cars

Table 5 shows that trust has a positive and significant effect on consumer purchase intention in electric cars. The better the trust, the higher the purchase intention. These results support the results of Ng et al.(2018) research which shows that trust in electric cars has a positive and significant effect on purchase intention. According to Chen (2010), belief in electric cars, especially in the effectiveness of green products such as electric vehicles in overcoming environmental problems, is one of the main motivations for consumers to buy them. Whittle et al. (2019) argues that trust influences the acceptance, adoption and sustainable use of automation technology and will be a key factor associated with the use of electric vehicles in the future.

Theoretically, trust is one of the factors that must be considered in explaining consumer behavioral intentions, because it plays an important role in the event of uncertainty and risk (Yang et al., 2020). Trust also affects the psychological value of consumers to consider the product to be purchased, including the level of consumer tolerance for vulnerabilities received in transactions (Sirdeshmukh et al., 2002). If consumer confidence increases, consumer purchase intention tends to be higher (Leeraphong & Mardjo, 2013).

The results of this hypothesis test indicate that in addition to improving public perception, purchase intention in electric cars can also be increased by improving public trust in producers, government, and electric car technology itself. The trust of potential customers is already very good (average score of 4.34) but can still be improved because the achievement score has only reached 86.8% $(= \frac{4,34}{5} x100\%)$

3. The Influence of Consumer Perception on Electric Car Trust

Table 5 shows that perception has a positive and significant effect on trust. The better the perception, the better the trust. These results support the research results of Promongsatorn et al. (2012) on the factors that influence consumer trust in online shopping which concludes that consumer perceptions (with its six dimensions of reputation, security, privacy, ease of use, usability, and integrity) have a significant effect on consumer trust. According to Walczuch & Seelen, 2000), one of the psychological factors that influence trust is the category of factors based on perception. Trust is formed from consumer perceptions of the risks and benefits of transactions (Hidayat et al., 2021). Therefore, fostering a good customer perception is an effective way to improve trust (Isavea et al., 2020). Based on these results, the improvement of consumer trust can not only be improved by seeking improvements to the indicators of trust itself, trust can also be improved by improving consumer perceptions.

4. Trust Mediates the Indirect Effect of Consumer Perception on Interest in Buying Electric Cars

The results of hypothesis testing indicate that trust mediates the indirect effect of perception on interest in buying electric cars. By referring to the criteria of Goodhue et al (2012), it can be concluded that the role of trust partially mediates the effect of perception on purchase intention. The conclusion is based on the effect of perception on purchase intention is significant, the effect of perception on trust is significant, and the effect of trust on purchase intention is also significant.

The results of this study support the results of research by Ponte et al. (2008) which shows that perception has a significant effect on trust, and trust has a significant effect on purchase intention.

5. Conclusion

Based on the results and discussion, the conclusions is consumer perceptions of electric cars have a positive effect on purchase intention in electric cars. The better the consumer's perception of electric cars, the

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higher the consumer's purchase intention in electric cars; consumer trust in electric cars has a positive effect on purchase intention in electric cars. The higher consumer trust in electric cars, the higher consumer purchase intention in electric cars will be; Consumer perception has a positive effect on consumer trust. The better the consumer's perception of the car, the higher the consumer's trust in electric cars; trust mediates the indirect effect of consumer perceptions on purchase intention in electric cars. Consumer perceptions of electric cars that are getting better will increase customer satisfaction which in the end will increase purchase intention in electric cars. Based on the results and discussion, practical and theoretical suggestions can be made as in order to increase public interest in buying electric cars, producers and the government can seek to improve public perception and trust regarding electric cars; Improvement of perceptions of electric cars can be pursued by prioritizing the indicator that has the lowest score, namely price affordability. The government or manufacturers are advised to reduce the cost of electric cars, for example by reducing the price of batteries because the price of batteries contributes 40% to the price of electric cars; Improvement of trust can be pursued by prioritizing the indicator that has the lowest score, namely the government's competence in providing facilities for electric car users. The government is advised to immediately build infrastructure that supports the use of electric cars such as battery charging centers. From the aspect of the sampling technique methodology, this research is still not representative because the samples taken are not evenly distributed among consumers who test drive electric cars from several manufacturers so that the measurement of the trust variable for the producer competency indicator is biased. Therefore, it is recommended for further researchers to be able to take a more representative sample.

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