# An Analysis Of Purchase Decisions On Customer Satisfaction Through Customer-Based Brand Equity And Product Innovation: Concequences For Air Conditioner Panasonic In Medan

Bambang Suwarno

Faculty of Social Sains, Universitas Pembangunan Panca Budi
North Sumatra 20122, Indonesia.
*Corresponding Author:
Email: bambangsuwarno@dosen.pancabudi.ac.id

**Abstract**.
*The purpose of the study was to determine the effect of customer-based brand equity (CBBE) and product innovation on consumer satisfaction through purchasing decisions of Panasonic air conditioners in Medan. The research uses quantitative methods with a causal associative research approach. The population is the buyer of Panasonic air conditioners in the city of Medan. The research sample used purposive sampling technique. 100 respondents were obtained with the Slovin technique. Data collection techniques with questionnaires and interviews to be tested for validity and reliability. Data analysis with SEM-PLS. The results showed a significant positive effect for all research variables. CBBE on Customer Satisfaction 0.180 and P-Values 0.013, CBBE on Purchase Decision 0.230 and P-Values 0.008, Product Innovation on Customer Satisfaction 0.588 and P-Values 0.000, Product Innovation on Purchase Decision 0.365 and P-Value 0.000, Purchase Decision on Satisfaction Consumers 0.642 and P-Values 0.000, Product Innovation on Consumer Satisfaction through Purchase Decisions 0.084 and P-Values 0.016 and CBBE on Consumer Satisfaction through Purchase Decisions 0.148 and P-Values 0.008. The reaserch findings reveal that customers emotionally react to the product they want to buy, whether they are satisfied or not and this is very important for customer-based brand equity. The products offered related to their innovations influence the purchasing decisions of customers. And there is a significant relationship in handling customer complaints properly and correctly to the level of customer-based brand equity which will create a high level of customer satisfaction and customer loyalty.*

**Keywords**: *Product Innovation, Customer-Based Brand Equity, Purchase Decision, Consumer Satisfaction*

## I.      INTRODUCTION

Medan City has very long summers and short and warm winters. Generally, the air is very hot stinging [1]. So that this city becomes a potential market share for air conditioning manufacturers. What's more, Medan is the largest city in the eastern region of the Indonesian island of Sumatra. In the market place, there are many choices offered by air conditioning manufacturers with well-known brands from Europe, Japan, Korea, China and Indonesia. Products are offered at competitive prices and varied in quality so that consumers become selective in buying and choosing air conditioning products. Air Conditioner (AC) as an electronic home appliance product is very much

needed by urban people because it is part of the lifestyle to get the comfort of living in an increasingly hot city [2]. This is what makes Air Conditioner manufacturers carry out various kinds of innovations on their products. Such as Inverter products, Low-watt to save energy, body sensors and germ-killing sensors for health. The results of the study explain that product innovation has an effect on purchasing decisions [3][4][5]. New product development requires effort, time and ability including the magnitude of the risk and cost of failure for the company. So, this is important to note.In the process of purchasing Air Conditioners, the role of the customer as a past experience is also part of the promotion which is one of the things that influence consumers in choosing a brand [6]. If they have a good past experience with a certain Air Conditioner brand, it is more likely that consumers will repurchase the same brand. if the past experience is bad, consumers will not choose the brand as one that will be considered in their next product purchase.

Because customers often base their decision to buy or repurchase a product or service on the interaction of their past experiences [7][8][9].So that the role of the customer in building the power of the brand in his mind is a matter of concern for manufacturers. Customer satisfaction plays an important role in building brand credibility [10] and customer loyalty through customer-based brand equity [11][12]. Air Conditioner Panasonic always continues to innovate and strive to continue to improve the quality and service of its products according to the wishes of consumers who are constantly changing and the times are progressing. Panasonic continues to anticipate the needs and adjustments of products and product features in accordance with current conditions so that consumers remain satisfied by deciding to buy Panasonic products.Because the consumer purchasing decision process will go through stages, ranging from problem recognition, information search, evaluation of alternatives, purchase decisions, and post-purchase behavior. A process that starts long before the actual purchase is made and has an impact long after [13]. So that the customer's decision to buy a product has a very important tie to customer-based brand equity and product innovation offered. Furthermore, when the product is in accordance with the wishes and expectations of the customer, the feeling of pleasure or disappointment that arises after comparing perceptions and expectations of the resulting performance will create satisfaction.

Based on the discussion above, the research hypothesis is made as follows:

$H_1$: Customer-based brand equity is suspected to have a positive and significant effect on customer satisfaction.

$H_2$: Customer-based brand equity is suspected to have a positive and significant effect on purchasing decisions.

$H_3$: Product innovation is suspected to have a positive and significant effect on customer satisfaction.

$H_4$: Product innovation is suspected to have a positive and significant effect on purchasing decisions.

$H_5$: Purchase decision is suspected to have a positive and significant effect on purchasing decisions.

$H_6$: Customer-based brand equity has an indirect effect on customer satisfaction through purchasing decisions as an intervening variable.

$H_7$: Product innovation has an indirect effect on customer satisfaction through purchasing decisions as an intervening variable.

To answer these questions, a conceptual model was formed to explain the relationship between variables as presented in the following conceptual framework image:
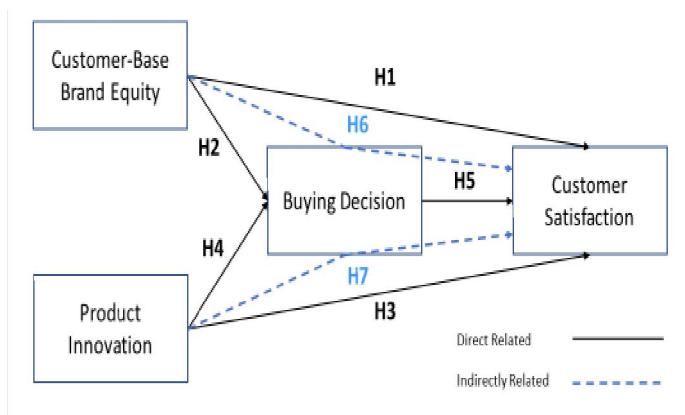


**Fig 1.1**. Concept Framework

## II.    LITERATURE REVIEW
### Customer Based Brand Equity (CBBE)

From a marketing perspective, brand equity is defined as the added value of a product. Brand equity is the value of a brand based on how strong the brand value has the value of brand loyalty, consumer awareness of the brand, perceived quality, brand associations, and various other assets such as patents, trademarks and distribution network relationships [14]. David A. Aaker provides an understanding that brand equity is a set of assets and liabilities associated with a brand, name, and symbol that adds to or the value provided by a product or service to the company and or customers [15].Keller's model focuses more on the perspective of consumer behavior. He developed a customer-based brand equity model by emphasizing that the strength of a brand lies in what consumers learn, feel, see and hear about the brand as a result of their experiences over time [16]. Customer-based brand equity will be positive if customers react favorably to the product and the way the product is marketed, until the brand is identified or not by the customer. When customers have formed strong and unique brand associations in their memory as positive values for a product, it means that the awareness and familiarity of the product has been high. An important part of supporting customer-based brand equity is to maintain customer brand awareness.

**Fig 2.1.** Panasonic AC Customer Based Brand Equity

As Figure 1. In the Pyramid Model CBBE Keller explained that Panasonic air conditioners will pass through the four levels necessary for the success of the brand. The formation of the Panasonic AC CBBE Pyramid through six main building blocks. Starting from Brand Salience, Brand Performance, Brand Imagery, brand judgments, Brand Feelings and Brand Resonance [17]. Brand Salience is a consumer's value to aspects of brand awareness, such as how often and easily the brand is remembered and recognized in various situations. Brand Performance is the value of the ability of products and services to meet the functional needs of consumers. Brand Imagery is related to the extrinsic properties of products or services, namely the brand's ability to meet psychological or social or customer needs. Brand Judgment is the value of the consumer's personal opinion and evaluation of the brand and its perceived image associations. Brand Feelings is the value of consumers' emotional responses and reactions to the brand. Brand Resonance is a value that refers to the characteristics of the relationship that customers feel with a specific brand.

**Product Innovation**

Product innovation can be defined as the practical implementation of an idea into a new product or process [18]. Companies will invest in R&D to develop new materials, new product designs, or new attributes to make their products useful for customers [19]. Furthermore, according to Kotler, product innovation is every good, service, or idea that is considered as something new [20]. The similarity in appearance and specifications of similar products from competitors are the things that underlie product innovation, because competitors' products usually appear without experiencing significant changes and even tend to be similar. According to Kotler & Keller, there are 6 dimensions of product innovation, which include new products, new product lines, and additions to existing product lines, improvement of existing products, redefinition, and cost reductions [21].

**Buying Decision**

Consumer purchasing decisions are the purchasing decisions of individual and household end consumers who buy goods and services for personal consumption [20], whereas according to Kotler and Armstrong, purchasing decisions are buying the most preferred brand, but two factors can be between purchase intentions and purchase decisions. [14]. The first factor is the attitude of others. The second factor is an unexpected situational factor.
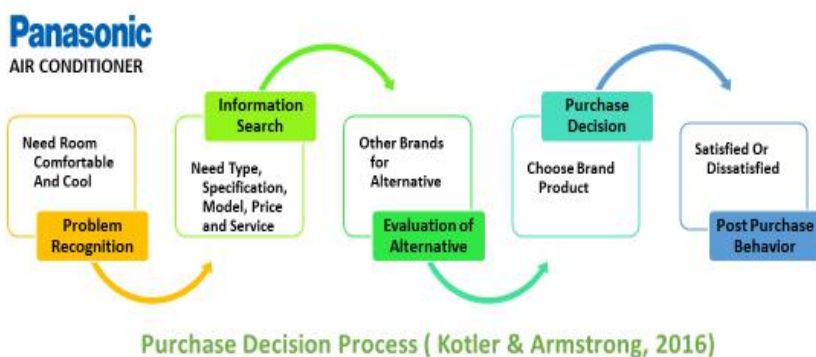


Fig 2.2. Panasonic AC Purchase Decision Process

As picture 2.1 When consumers buy Panasonic Air Conditioners, consumers generally follow a process or stage in making the decision. Kotler argues, there are 5 stages of the buying process, starting from Recognition of Needs, Information Search, Evaluation of Alternatives, Purchase Decisions and Post-Purchase Behavior [20]. Kotler and Keller define purchasing decisions as decisions where consumers actually decide to buy and enjoy goods or services among various alternative choices with dimensions consisting of Product Choice, Brand Choice, Dealer Choice, Purchase Time, Purchase Amount and Payment Method [13].

**Customer Satisfaction**

Customer satisfaction is a person's feelings of pleasure or disappointment that arise after comparing the performance (results) of a product that is thought of to the expected performance (results). If performance is below expectations, the customer is dissatisfied. If performance exceeds expectations, the customer is satisfied. If the performance further exceeds expectations, the customer is very satisfied [13]. While customer satisfaction according to Zeithaml. et al, is the customer's evaluation of a product or service itself in terms of whether the product or service has made their needs and expectations assumed to result in dissatisfaction with the product or service [22].

According to Lovelock at el., the dimensions of consumer satisfaction can be divided into four dimensions. First; Expectancy is the company's ability to provide adjustments to customers for a product or service that customers want. Second; The perceived delivery of a product or service is the ability of service to customers at the

time of selling the product or service. Third; Confirmation or disconfirmation is the company's ability to meet consumer needs with the aim that consumers are not disappointed and feel satisfied with the product or service in accordance with the company's promise or vice versa. Fourth; Complaining behavior is the company's capacity to explain negative consumer feedback into positive [23].

## III. METHODS

This type of research is a quantitative approach with an associative model. Quantitative research approach is defined as research based on the philosophy of positivism, used to examine a particular population or sample, data collection using research instruments, data analysis is quantitative/statistical [24]. Associative research is research that aims to determine the relationship between two or more variables. Research can be built from a theory that can function to explain, predict and control a symptom [24]. This study will explain the influence of purchasing decisions and their impact on customer satisfaction with Panasonic air conditioners in terms of customer-based brand equity and product innovation in the city of Medan.

Research data is primary data. Methods of data collection using a questionnaire. The research population is all customers using AC Panasonic in the city of Medan. The sample of this study amounted to 100 people obtained by the Slovin technique. The sample of this research was determined by purposive sampling method. Researchers use a Likert scale 5.0 as a tool to measure the variables that are the object of research [25]. Independent variables of this research are Customer-Based Brand Equity, Product Innovation. The dependent variable of this research is Customer Satisfaction and the Interventing Variable is Purchase Decision.The data analysis technique in this study used Partial Least Square (PLS). PLS is a Structural Equation Modeling (SEM) equation model with an approach based on variance or component-based structural equation modeling with data using a structural model (Inner Model) is a path coefficient test, goodness of Fit test and hypothesis testing is t test and regression equation test multiple linear [26].

## IV. RESULT AND DISCUSSION
### DATA DESCRIPTION

Table 4.1. Demographic characteristics of sample (n = 100).

| Demographic Characteristic | | f | % |
|---|---|---|---|
| Gender | Male | 76 | 76 |
| | Female | 24 | 24 |
| Age | Less than 20 | 6 | 6 |
| | 21 – 30 | 24 | 24 |
| | 31 – 40 | 41 | 41 |
| | 41 – 50 | 18 | 18 |
| | 51 – 60 | 7 | 7 |
| | More than 61 | 4 | 4 |

| Education | Middle School | 4 | 4 |
|---|---|---|---|
| | High School | 31 | 31 |
| | Assoc / Undergraduate Degree | 45 | 45 |
| | Postgraduate Degree | 20 | 20 |
| Occupation | Office Workers | 27 | 27 |
| | Entepreneur | 22 | 22 |
| | Government Employees | 20 | 20 |
| | Professional Job | 21 | 21 |
| | Housewife | 8 | 8 |
| | Student | 2 | 2 |
| Income | Less than 3 mio | 9 | 9 |
| | 3.1 – 8.0 mio | 36 | 36 |
| | 8.1 – 12.0 mio | 25 | 25 |
| | More than 12.1 mio | 30 | 30 |
| Purchase | First | 21 | 21 |
| | Second | 27 | 27 |
| | Three | 44 | 44 |
| | More than three | 8 | 8 |

Author's Source

From the description of the data. Respondents are buyers of Panasonic Air Conditioners who visit official Panasonic dealers in the city of Medan. Based on gender, the largest number of male respondents bought Air Conditioner. So, it can be concluded that men dominate the population of Air Conditioning purchasing decisions. Based on occupation, it shows that those who are more dominant are those who work as private employees, so it can be concluded that customers who earn more income dominate the purchasing decision population with income of 3 million to 8 million per month. Based on the characteristics of how many times have you bought a Panasonic Air Conditioner, the respondent with the third purchase is the most, so it can be concluded that the Panasonic brand has been embedded in the minds of the people of Medan City.

### DATA INSTRUMENT TEST
### Structural Model Analysis (Outer Model)

Analysis of the Measurement Model includes: (1) Internal Consistency/ Composite Reliability. (2) Convergent Validity / Average Variance Extracted / AVE) and, (3) Discriminant Validity.

### Internal Consistency / Composite Reliability

Internal consistency reliability is a form of reliability used to assess the consistency of results across items on the same test. To determine whether the items measure a similar construct in the score, if the correlation between items is large. The test uses the composite reliability value. A construct variable is said to be reliable if the composite reliability value is > 0.6 [27]. From table 4.1 it can be seen that the tested variables are valid and reliable so that the value of all variables in reliability testing with either Cronbach's Alpha or Composite Reliability is > 0.7. So, it can be continued to test the structural model.

**Table 4.1.** Composite Reability

| Composite Statistic | Cronbatch's Alpha | Rho_A | Composite Reability | AVE |
|---|---|---|---|---|
| Customer-Base Brand Equity | 0.854 | 0.870 | 0.892 | 0.579 |
| Product Innovation | 0.966 | 0.967 | 0.973 | 0.857 |
| Buying Decision | 0.852 | 0.878 | 0.894 | 0.633 |
| Customer Satisfaction | 0.810 | 0.814 | 0.876 | 0.638 |

Source: Smart PLS Data

**Convergent Validity / Average Variance Extracted / AVE)**

Convergent validity is the extent to which a measure is positively correlated with alternative measures of the same construct. If the outer loading value is greater than 0.7 then an indicator is declared valid [27].

**Table 4.2**. Hasil Avarage Variance Extracted (AVE)

| Items | Customer-Base Brand Equity | Innovation Product | Buying Decision | Customer Satisfaction |
|---|---|---|---|---|
| X1.1 | 0.912 | | | |
| X1.2 | 0.883 | | | |
| X1.3 | 0.916 | | | |
| X1.4 | 0.947 | | | |
| X1.5 | 0.951 | | | |
| X16 | 0.943 | | | |
| X2.1 | | 0.743 | | |
| X2.2 | | 0.669 | | |
| X2.3 | | 0.740 | | |
| X2.4 | | 0.810 | | |
| X2.5 | | 0.771 | | |
| X2.6 | | 0.823 | | |
| Z1 | | | 0.875 | |
| Z2 | | | 0.760 | |
| Z3 | | | 0.781 | |
| Z4 | | | 0.626 | |
| Z5 | | | 0.905 | |
| Y1 | | | | 0.820 |
| Y2 | | | | 0.744 |
| Y3 | | | | 0.848 |
| Y4 | | | | 0.780 |

Source: Smart PLS Data

The value of outer loading > 0.7 is the most expected/best value, but values >0.4 to <0.7 can also be considered, especially in new/explorative research. However, if the outer loading value is very low, namely < 0.4, the indicator must be removed from the variable [27]. In table 4.2, it can be seen that the conclusion of the relative outer loading value is > 0.7, meaning that each indicator latent variable is reliable.

**Discriminant Validity**

To assess an indicator of a construct / latent variable having good discriminant validity or not, it is seen from the Heterotrait-Monotrair Ratio of Correlation (HTMT)

criteria. In this criterion, if the HTMT value is < 0.9 then the variable has good discriminant validity [27].

**Table 4.3**. Discriminant Validity

| Discriminant (HTMT) | Customer-Base Brand Equity | Innovation Product | Buying Decision | Customer Satisfaction |
|---|---|---|---|---|
| Customer-Base Brand Equity | | | | |
| Product Innovation | | | 0.944 | 0.701 |
| Buying Decision | 0.693 | | | |
| Customer Satisfaction | 0.885 | | 0.872 | |
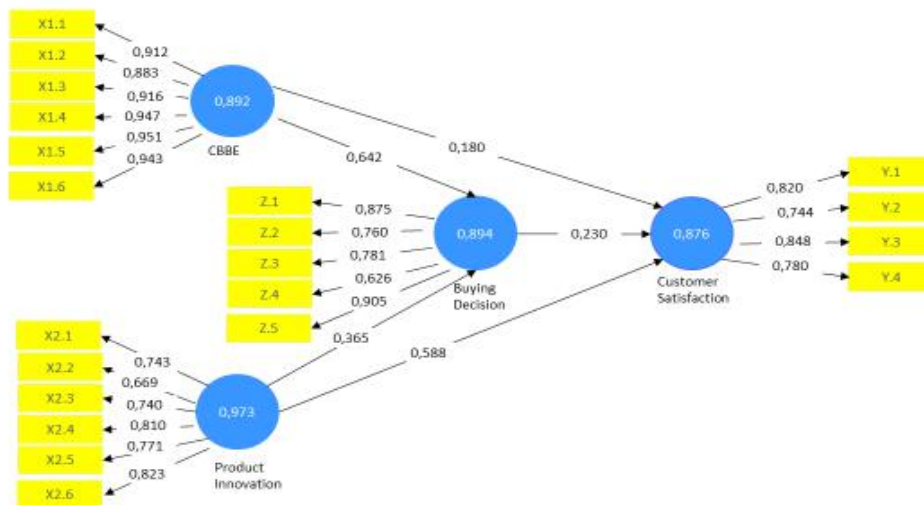


Source: Smart PLS Data

From table 4.3 it is known that the HTMT value < 0.90. Unless the value of the Innovation Product on the purchase decision is 0.944, it means that the discriminant is not good or not unique.

**Fig 4.1.** Standardized Loading Factor Inner dan Outer Model

**Structural Model Analysis (Inner Model)**

**Collinearity / Variance Inflation Factor / VIF**

To find out whether or not there is a collinearity problem, it can be seen from the value of the variance inflation factor (VIF). If the VIF value is < 10.00, it can be said that the data does not have a collinearity problem [26].

**Table 4.4**. Collinearity Validity

| Collinearity Statistic (VIF) | Customer-Base Brand Equity | Innovation Product | Buying Decision | Customer Satisfaction |
|---|---|---|---|---|
| Customer-Base Brand Equity | | | | 2.831 |
| Product Innovation | | | 1.218 | 1.738 |
| Buying Decision | | | | 3.908 |
| Customer Satisfaction | | | | |

Source: Smart PLS Data

In table 4.4 it can be seen that the overall value of the variance inflation factor (VIF) for each indicator is concluded to be < 10.00, so it can be said that the data does not have a collinearity problem.

### Goodness of Fit Test (R – Square)

R-square for each endogenous latent variable as the predictive power of the structural model. Changes in the value of R-squares can be used to explain the effect of certain exogenous latent variables on endogenous latent variables that have a substantive effect. The criteria are as follows:

If the value of $R_2 = 0.75$ the model is substantial (strong)

If the value of $R_2 = 0.50$ the model is moderate (medium)

If the value of $R_2 = 0.25$ the model is weak (bad)

The R-Square value for the effect of customer-based brand equity and product innovation on consumer satisfaction with purchase decisions as an intervening variable is as follows.

**Tabel 4.5**. R-Square

| R-Square Statistic | R-Square | R-Square Adjusted |
|---|---|---|
| Buying Decision | 0.744 | 0.739 |
| Customer Satisfaction | 1.758 | 0.750 |

Source: Smart PLS Data

So, it can be concluded, from the R-Square Adjusted Adjusted Model Path purchasing decision is 0.739. This means that the ability of the variables X1, X2, Z in explaining Y (customer satisfaction) is 73.9%, thus the model is classified as moderate. And the value of the R-Square Adjusted Model Line of customer satisfaction is 0.750. This means that the ability of variables X1, X2 in explaining Z (purchase decisions) is 75%, thus the model is classified as substantial (strong).

### F-Square Test

F-Square is a measure used to assess the relative impact of an influencing variable (exogenous) on the affected variable (endogenous).

The F-Square criteria are as follows:

If value $f_2 = 0.02$    Small effect of the exogenous variable on the endogenous.

If value $f_2 = 0.15$    Moderat effect of the exogenous variable on the endogenous

If value $f_2 = 0.35$    Large effect of exogenous variables on endogenous variables

**Table 4.4**. F-Square

| F-Square Statistic | Customer-Base Brand Equity | Innovation Product | Buying Decision | Customer Satisfaction |
|---|---|---|---|---|
| Customer-Base Brand Equity | | | 1.324 | 0.047 |
| Product Innovation | | | 0.427 | 0.821 |
| Buying Decision | | | | 0.056 |
| Customer Satisfaction | | | | |

Source: Smart PLS Data

So, from table 4.4, it can be seen that the Product Innovation Variable on Consumer Satisfaction has a $f_2$ value of 0.821, there is a strong effect of exogenous on

endogenous variables. The customer-based brand equity variable on consumer satisfaction has a $f_2$ value of 0.047, so there is a small effect of the exogenous variable on the endogenous variable. The Purchasing Decision Variable on Consumer Satisfaction has a value of $f_2$ 0.056, so there is a small effect of the exogenous variable on the endogenous variable. The Product Innovation Variable on Purchasing Decisions has a $f_2$ value of 0.427, so there is a strong effect of exogenous on endogenous variables. The Customer-Based Brand Equity Variable on Purchase Decisions has a $f_2$ value of 1.324, so there is a strong effect of exogenous variables on endogenous ones.

### Analisis Direct Effect

It is useful to test the hypothesis of the direct effect of a variable that affects (exogenous) on the variable that is affected (endogenous). If the path coefficient value is positive, it means that the effect of a variable on other variables is positive and it can also be interpreted that the increase in the value of the exogenous variable increases / increases will be followed by an increase in the endogenous variable if the value is negative, then vice versa. It can also be seen from the P-Value value. Where if the P-Value <0.05, then H0 is rejected. This means that the effect of a variable on other variables is significant, and vice versa [27].

**Table 4.5.** Direct Effect (Linier Weight Value)

| Coefficient | Original Sample | Sample Mean | Std. Deviation | t-Statistic (Ts) | t-table (Tt) | Result | P-Value | Note |
|---|---|---|---|---|---|---|---|---|
| CBBE→CS | 0.180 | 0.180 | 0.072 | 2.491 | 1.661 | Ts>Tt | 0.013 | + Sig |
| CBBE→BD | 0.230 | 0.225 | 0.087 | 2.653 | 1.661 | Ts>Tt | 0.008 | + Sig |
| PI → CS | 0.588 | 0.593 | 0.057 | 10.260 | 1.661 | Ts>Tt | 0.000 | + Sig |
| PI → BD | 0.365 | 0.369 | 0.057 | 6.375 | 1.661 | Ts>Tt | 0.000 | + Sig |
| BD → CS | 0.642 | 0.640 | 0.057 | 11.329 | 1.661 | Ts>Tt | 0.000 | + Sig |

Note: CBBE (Customer-Base Brand Equity), PI (Product Innovation), CS (Customer Satisfaction),

BD (Buying Decision). + Sig (Positive & Significan) Source: Smart PLS Data

**Table 4.6.** Direct Effect (Path Coefficient)

| Coefficient | Hypotesis | Direction | Weight | t-Statistic (Ts) | t-table (Tt) | Note |
|---|---|---|---|---|---|---|
| CBBE→CS | H1 | + | 0.180 | 2.491 | 1.661 | + Sig |
| CBBE→BD | H2 | + | 0.230 | 2.653 | 1.661 | + Sig |
| PI → CS | H3 | + | 0.588 | 10.260 | 1.661 | + Sig |
| PI → BD | H4 | + | 0.365 | 6.375 | 1.661 | + Sig |
| BD → CS | H5 | + | 0.642 | 11.329 | 1.661 | + Sig |

Note: CBBE (Customer-Base Brand Equity), PI (Product Innovation), CS (Customer Satisfaction),

BD (Buying Decision). + Sig (Positive & Significan) Source: Smart PLS Data

From table 4.5 and table 4.6, it can be seen that the test results of the direct influence of customer-based brand equity variables on customer satisfaction with the path coefficient value is 0.180 (positive). P-Value 0.013 < 0.05 means that the effect is positive and significant. It can be concluded.

H1 : Customer-based brand equity has a significant positive effect on customer satisfaction.

The results of the test of the direct influence of customer-based brand equity variables on purchasing decisions with a path coefficient value of 0.230 (positive). P-Value 0.008 < 0.05 means that the effect is positive and significant. It can be concluded.

H2 : Customer-based brand equity has a significant positive effect on purchasing decisions.

The results of the test of the direct effect of product innovation on customer satisfaction with the path coefficient value is 0.588 (positive). P-Value 0.000 < 0.05 means that the effect is positive and significant. It can be concluded.

H3 : Product innovation has a significant positive effect on customer satisfaction.

The results of the test of the direct effect of product innovation on purchasing decisions with a path coefficient value of 0.365 (positive). P-Value 0.000 < 0.05 means that the effect is positive and significant. It can be concluded.

H4 : Product innovation has a significant positive effect on purchasing decisions.

The results of the test of the direct influence of purchasing decision variables on customer satisfaction with the path coefficient value is 0.642 (positive). P-Value 0.000 < 0.05 means that the effect is positive and significant. It can be concluded.

H5 : Purchase decision has a significant positive effect on customer satisfaction.

### Indirect Effect Analysis

Indirect effect analysis is useful for testing the hypothesis of the indirect effect of a variable that affects (exogenous) on the influenced variable (endogenous) which is mediated by an intervening variable. If the coefficient of indirect effects produces a significant probability, if P-Values < 0.05, then the conclusion is that the actual effect is indirect or the intervening variable is able to mediate the effect of an exogenous variable on an endogenous variable [27].

**Table 4.7.** Indirect Effect (Linier Weight Value)

| Coefficient | Original Sample | Sample Mean | Std. Deviation | t-Statistic (Ts) | t-table (Tt) | Result | P-Value | Note |
|---|---|---|---|---|---|---|---|---|
| CBBE→CB→CS | 0.085 | 0.081 | 0.035 | 2.406 | 1.661 | Ts>Tt | 0.016 | + Sig |
| PI → CB → CS | 0.148 | 0.142 | 0.056 | 2.654 | 1.661 | Ts>Tt | 0.008 | + Sig |

Note: CBBE (Customer-Base Brand Equity), PI (Product Innovation), CS (Customer Satisfaction),

BD (Buying Decision). + Sig (Positive & Significan) Source: Smart PLS Data

**Tabel 4.8.** Indirect Effect (Path Coefficient)

| Coefficient | Hypotesis | Direction | Weight | t-Statistic (Ts) | t-table (Tt) | Note |
|---|---|---|---|---|---|---|
| CBBE→CB→CS | H6 | + | 0.180 | 2.406 | 1.661 | + Sig |
| PI → CB → CS | H7 | + | 0.148 | 2.654 | 1.661 | + Sig |

Note: CBBE (Customer-Base Brand Equity), PI (Product Innovation), CS (Customer Satisfaction),
BD (Buying Decision). + Sig (Positive & Significan) Source: Smart PLS Data

From table 4.7 above, it can be seen that the coefficient value of the indirect influence of customer-based brand equity on consumer satisfaction through purchasing decisions is 0.084 with P-Value, 0.016 <0.05 (significant), so it can be concluded that the influence of customer-based brand equity on customer satisfaction through purchase decision as an intervening variable is positively significant.

H6 : Customer-based brand equity has an indirect effect on customer satisfaction through purchasing decisions as an intervening variable.

The test results of the coefficient value of the indirect effect of product innovation on consumer satisfaction through purchasing decisions is 0.148 with a P-Value, 0.008 <0.05 (significant), so it can be concluded that the effect of product innovation on customer satisfaction through purchasing decisions as an intervening variable is positive and significant.

H7 : Product innovation has an indirect effect on customer satisfaction through purchasing decisions as an intervening variable.

Thus, it can be concluded that the relationship between all tests on the variables mentioned above is a partial mediation relationship.

## V.    CONCLUSION

Based on the results of the research analysis and discussion, it can be concluded that all hypotheses are supported with positive and significant results. This study also offers several managerial implications. Especially when the current market environment is very competitive, causing companies to have to redesign their strategies and create new product innovations as a result of lifestyle changes after the COVID-19 pandemic. So that by producing high quality products with functional products that fit the conditions highly desired by consumers. Innovation must continue to be carried out because many good products are continuously replaced and imitated due to the wishes of the consumer market. A new air conditioner design and features can be easily imitated by competitors. But of course, it will be more difficult to replicate the intangible components of a brand. To produce products with strong branding in the minds of customers, it is necessary to have a good and satisfied customer first impression of the products used to be an important factor for businesses to keep repeat purchases of the products offered. Therefore, the brand equity strategy must be continuously improved to get a high level of brand loyalty in the minds of customers.

Marketers in the company must understand and be aware that the brand image in the minds of customers is a determinant of customer-based brand equity. By increasing product innovation according to customer market tastes, it will be a determinant of purchasing decisions in increasing customer-based brand equity. Customers who have bought and tried the product must be cared for and paid attention

to to maintain the product's brand image. Managers must learn about the buying process and increase customer satisfaction which can be coupled with advertising and promotion.

Electronic companies must invest in improving the quality of their products and product innovation, but the role of marketer behavior in understanding the intangible factors of a brand must be further enhanced so that team members are excited to see the potential that exists in the business environment, with employee empowerment, motivation, the right orientation, and regular training to create product innovation that supports customer-based brand equity.How brand image can provide positive value for practitioners. Understanding the brand as an identity that they must support in their relationships in the social world. The desires that arise from the circumstances in the business environment become the key to a strong brand image in the minds of customers. Because it will make the brand identity will be well recorded by customers. Home appliances brand image is not just about the price, but the benefits that customers want to achieve from the product that is felt and used. The design, features, colors and durability of the products offered must be unique in order to differentiate them from competitors. Many things that are produced from electronic products create special value for customers so as to give a good image.

Marketers also need to create brand awareness. Price is useful for providing value to a product and advertising creates awareness. A marketer must be able to provide awareness that the brand they offer to consumers is in accordance with the price offered. So that the brand perception and brand image owned by customers will help promote and recommend products to others.Nowadays with the ease of technology affects brand awareness directly and has an influence on brand image. Social media and online sales platforms shape customer expectations. So, it is also important to study e-WOM, because it will be significant in the decision-making process because it attracts perceived trust and credibility, awareness, product acceptance, loyalty and ordering intention. Our findings reveal that customers' emotional responses and reactions to used brands are an important part of customer-based brand equity. Brand feelings will determine whether to buy a product or have become satisfied with the product they have chosen. Product innovation on the costs offered by manufacturers greatly influences customer purchasing decisions. And always handling customer complaints properly will be a very important thing that must be maintained by the company.

Finally, understanding customer-based brand equity becomes important to improve to create customer loyalty. Products that match the promise on the quality of the products offered to match the expectations offered by advertisements, are the key to creating trust as the right way to make purchasing decisions by customers. Because the brand experience resulting from customer satisfaction and trust is needed to get customer loyalty and repurchase decisions.

There are some limitations in the current study. First, data was collected from customers who only purchased air conditioners from one brand. This study did not consider the price, type and country of origin of the product. Future studies may investigate the impact of different prices on branding elements. Price-conscious customers may have different points of view on brand image. This study also ignores differences in the country of origin of the product. Different countries of origin of products may have different perceptions of branding and some countries may be more prone to loyalty. Further research is suggested to examine the differences in the country of origin of the product regarding customer-based brand equity in the electronics industry in household appliances. In future research, customer types can be included in the model. Future studies may investigate whether a particular customer in customer-based brand equity produces positive outcomes in purchasing decisions. Finally, the model proposed for the electronics industry provides insight into the mediator role of customer satisfaction and trust in the relationship between customer-based brand equity and purchasing decisions. More research is needed to improve this relationship and to provide further insight into the model.

## REFERENCES

[1] Weatherspark (https://id.weatherspark.com/y/112741/Cuaca-Rata-rata-pada-bulan-in-Kota-Medan-Indonesia-Sepanjang-Tahun).

[2] Mardana, Andi (2020). https://www.womanindonesia.co.id/wujudkan-gaya-hidup-modern-yang-praktis/.

[3] Agus Rahayu, Gita Anggarini. (2009). *Pengaruh Inovasi Produk Terhadap Keputusan Pembelian Produk Audio Sony* (Survei Pada Konsumen di Toko Aneka Irama Jalan ABC Bandung). *Stategi Jurnal Pendidikan Managemen Bisnis 8* (16), September; 12 -29.

[4] Andri Tri Setiawan, Achmad Fauzi D.H, Brillyanes Sanawiri. (2018). *Pengaruh Gaya Hidup dan Inovasi Produk Terhadap Keputusan Pembelian* (Survei Pada Mahasiswa S1 Jurusan Ilmu Administrasi Bisnis Angkatan 2014/2015 Fakultas Ilmu Administrasi Universitas Brawijaya Malang yang Membeli, Menggunakan, dan Mengetahui Smartphone Samsung Galaxy Series). *Jurnal Administrasi Bisnis (JAB)* 62 (1), September; 73 – 81.

[5] Leow Chee Seng, Ng Sook Ping. (2016). *The Infuence of Product Innovation Toward Consumer Purchase Intention*. *International Journal of Economics, Commerce and Management 16* (4), April; 773 – 782.

[6] Wahid (2013). https://marketing.co.id/langkah-lg-menaklukkan-pasar-pendingin-udara/.

[7] Ali, F., Amin, M., & Ryu, K. (2016). *The Role of Physical Environment, Price Perceptions, And Consumption Emotions in Developing Customer Satisfaction in Chinese Resort Hotels*. *Journal of Quality Assurance in Hospitality & Tourism, 17(1),* 45–70.

[8] Jeon, S., & Hyun, S. (2013). *Examining The Influence of Casino Attributes on Baby Boomers' Satisfaction and Loyalty in The Casino Industry*. *Current Issues Tourism, 16(4)*, 343–368. https://doi.org/10.1080/13683500. 2012.685703.

[9]   Prebensen, N. K., Woo, E., & Uysal, M. S. (2014). *Experience Value: Antecedents And Consequences.* **Current Issues Tourism, 17(10),** 910–928. https://doi. org/10.1080/13683500.2013.770451

[10]  Bougoure, U.S., R.R. Bennet, S.F.E. Hasan, and G. Mortimer. (2016). *The Impact of Service Failure on Brand Credibility.* **Journal of Retailing and Consumer Services 31**(1): 62–71.

[11]  Dwivedi, A., L.W. Johnson, D.C. Wilkie, and L.D. Araujo-Gil. (2018). *Consumer Emotional Brand Attachment with Social Media Brands and Social Media Brand Equity.* **European Journal of Marketing 43**(3): 276–292.

[12]  Suwarno, Bambang (2021). *Customer-Based Brand Equity, Product Quality, Price And Customer Loyalty In Electronic Industry Of Refrigerator.* **International Journal of Science, Technology & Management 2(6):** 2143-2154**.**

[13]  Kotler, Philip and Keller, Kevin Lane, (2016). **Marketing Managemen, 15th Edition**, Pearson Education, Inc.

[14]  Kotler, Philip dan Amstrong, Gary, (2015). **Principles Of Marketing, Edisi 14**, New Jersey: Prentice-Hall Published.

[15]  Aaker, David A. (2014). Aaker on Branding **20 Prinsip Mengelola dan Mengembangkan Brand**. Jakarta: Gramedia Pustaka Utama.

[16]  Romaniuk, J., Sharp, B., Paech, S. & Driesener, C., (2004). *Brand and Advertising Awareness: A Replication and Extension of a Known Empirical Generalisation.* **Australasian Marketing Journal**, 12(3), pp. 70 - 80.

[17]  Keller, K. L., (2003). **Strategic Brand Management: Building, Measuring, And Managing Brand Equity**. Boston: Pearson.

[18]  Tjiptono, Fandy. (2008). **Strategi Pemasaran**. Edisi Kedua. Yogyakarta: Andi.

[19]  Lee, B.C.Y., (2014). *Critical Decisions in New Product Launch: Pricing and Advertising Strategies on Consumer Adoption of Green Product Innovation.* **Asian Journal Technology Innovation.** **22**, 16–32. https://doi.org/10.1080/19761597.2014.907862.

[20]  Kotler, Philip. (2009). **Manajemen Pemasaran**. Edisi Kedua belas. Jilid Kesatu. Jakarta: PT. Indeks.

[21]  Kotler, Philip and Keller, Kevin Lane, 2016. **Marketing Management**, 15th Edition, Pearson Education, Inc.

[22]  Zeithaml, V.A. Bitner, Mary J. Gremler, Dwayne D. (2003), **Service Marketing Integrating Customer Focus Across the Firm**, International Edition, 3th Editon. New York: Mc Graw Hill Companies. Inc.

[23]  Lovelock, Christopher and Lauren Wright. (2004). **Principles of Service Marketing and Management**, 2nd ed. Upper Saddle River, NJ: Prentice Hall Inc.

[24]  Sugiyono (2018). **Metode Penelitian Manajemen: Pendekatan Kuantitatif, Kualitatif, Mixed Methods, Action Research**, Penelitian Evaluasi. Edisi 6, Bandung: Penerbit CV. Alfabeta.

[25]  Sugiyono (2019). **Statistika untuk Penelitian**, Bandung: Penerbit CV. Alfabeta.

[26]  Ghozali, I.H. (2018). **Aplikasi Analisis Multivariate dengan Program IBM SPSS 25** (9th ed). Semarang: Badan Penerbit Universitas Diponegoro

[27]  Hair, Joseph, E, Jr. et al (2014). **A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).** SAGE Publication, Inc. California. USA.