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# *Analysis the Effect of Brand Equity, Product Quality, and After-Sales Service on Customer Satisfaction through Purchasing Decisions at PTA Company*

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**Abstract** – From several diverse dimensions there are other factors that influence customer satisfaction through purchasing decisions and implicitly and explicitly but from some of these factors, The main coverage of variables according to the topic of discussion so that they can be processed from valid reference sources and determined what is considered for the direction of this research objective. Analyze and examine the variables of brand equity, product quality and after-sales service on customer satisfaction through purchasing decisions so that in comparison, knowing the influence (cause and effect), significance and correlation between the variables studied that are ultimately able to increase the company revenue with existing tactics and strategies. Quantitative methods are research strategies based on the ideology of positivism applied to a specific population or sample, data collection techniques are carried out with quantitative / statistical research tools. The quantitative approach seeks to test the presumption. Quantitative approaches take the form of numerical results obtained from measurements made using scales for research variables. Comparative research methodology is also used in this study. It has gotten 150 Sampling responder with Likert interval scale. Using SmartPLS software to obtain result. The effect of brand equity on customer satisfaction (T value 3.280 and P Value 0.001) and the effect brand equity to customer satisfaction through purchasing decisions (T value 5.055 and P Value 0.000), have a significant positive correlation and effect. The effect of product quality on customer satisfaction (T value 3.847 and P Value 0.000) and the effect of product quality on customer satisfaction through consumer purchasing decisions (T value 2.770 and P Value 0.006) have a significant positive correlation and effect. The effect of after-sales service on customer satisfaction (T value 2.546 and P Value 0.011) and the effect of after-sales service on customer satisfaction through consumer purchasing decisions (T value 3.425 and P Value 0.001) have a significant positive correlation and. The effect of customer satisfaction on purchasing decisions (T value 2.764 and P Value 0.006) have a significant positive correlation and effect. The customer satisfaction index through this tool and trending data has increased even though it did not reach the target expected by the company. All variables are influential and significant on exogenous variables and endogenous variables. In conducting this research, the author realizes that there are still limitations and shortcomings that need to be developed in the future, so far this research can at least answer the background of the problems raised.

**Keywords** – Brand Equity, Product Quality, After-Sales Service, Net Promoter Score, Smartpls, Exogenous, Endogenous.

## I. INTRODUCTION

### 1. Background

In the rapid development of technology and information today, making consumer behavior more critical, careful and clever in determining the attitude of decisions on tactical strategies towards needs, wants and demands needed in supporting business

and business run. The Net Promoter instrument in the I&E Department is the company's instrument to observe, determine and evaluate the achievement of customer satisfaction figures that are also not achieved. With a minimum target of 65% per year but on average from year to year also has not shown significant improvement results. NPS is one of the indicator *tools* to analyze consumer satisfaction figures after using products that are recognized by PTA, especially selected products in the I& E Department.

## **2. Identify the problem**

From this data, it is identified that there is a need for follow-up that must be done to improve the numbers relevant to the achievement of *the Net Promoter Score* by taking several feedback criteria from consumers after they fill out several questions on a scale of 1-10 sent by the principal through the online Link Survey with the aim of predicting business development and growth. NPS was sparked by Fred Reichheld (2003) in the book *The Ultimate Question* which contains customer loyalty metrics by estimating the recurrence of consumer transactions after making a purchase and referring customers to recommend to colleagues or other friends.

The ratings are categorized into (*Promoter*: customer response with a value between 9-10; *Passive*: customer response with a value between 7-8; *Detractor*: customer response with values between 0-6). Where the NPS parameters in this company consist of QSCI parameters (Quickserve Customer index and CPS (Customer Promptness Score) with indicators are: Satisfaction, Referral / recommend to other, Availability, Reliability, Dependability, Price, Respectfulness, Estimate cost as service event.

## **3. Research Problem Formulation.**

From several diverse dimensions there are other factors that influence customer satisfaction through purchasing decisions and implicitly and explicitly but from some of these factors, The main coverage of variables according to the topic of discussion so that they can be processed from valid reference sources and determined what is considered for the direction of this research objective.

And based on what is the background to the description that has been stated above and projected sourced from verified related literature, a Research formulation into several questions, namely:

- a. Whether brand equity has a positive and significant effect on customer satisfaction?
- b. Whether brand equity has a positive and significant effect on customer satisfaction through consumer purchasing decisions.
- c. Does Quality have a positive and significant effect on customer satisfaction?
- d. Whether quality has a positive and significant effect on customer satisfaction through consumer purchasing decisions.
- e. Does after-sales service have a positive and significant effect on customer satisfaction?
- f. Whether after-sales service has a positive and significant effect on customer satisfaction through consumer purchasing decisions.
- g. Whether customer satisfaction has a significant effect on purchasing decisions

## **4. Research Objectives**

Analyze and examine the variables of brand equity, product quality and after-sales service on customer satisfaction through purchasing decisions so that in comparison, knowing the influence (cause and effect), significance and correlation between the variables studied that are ultimately able to increase the company's revenue with existing tactics and strategies.

The main objectives of analyzing:

1. The effect of brand equity on purchase decision
2. The effect of brand equity on customer satisfaction through purchase decision

3. The effect of product quality on purchasing decision
4. The effect of product quality on customer satisfaction through purchase decision variables
5. The effect of after-sales service on purchasing decision
6. The effect of after-sales service on customer satisfaction through purchasing decision
7. The effect of purchasing decision on customer satisfaction

## **II. LITERATURE REVIEW**

### **1. Theory and Review of articles**

Sourced from literature studies by previous researchers, then this reference is used as a reference in analyzing the object of research based on the variables studied.

#### *1.1 Brand equity.*

According to (Khoshtaria et al., 2020), defining equity as a collection of assets or liabilities owned by a brand or symbol that has the power to increase and decrease the value of an item or services. Brand equity according to Aaker (2018) Their equity is a liability and asset set of brands related to a brand, its symbol and name are intended for addition or reduce the value that the product has incurred to the company and consumers. Research support also carried out by Dewi (2022) who made research on Ms. Glow's skincare consumers with the topic of the influence of brand equity on consumer satisfaction with purchasing decisions as mediation. With the results have a significant and positive effect either directly or indirectly.

#### *1.2 Product Quality*

According to Riadi, Muchlisin (2020) Product quality refers to the physical state, properties, and characteristics of a good or service, whether it is a good or service, based on expectations of quality levels, such as durability, reliability, accuracy, ease of use, product improvement and other product attributes, with the aim of meeting and satisfying consumer or customer needs. Wijaya (2018: 9) states that marketing standards, techniques, production, and maintenance, quality of goods and services are the entire set of qualities that ensure that the products used meet customer or consumer expectations. It is the customer who determines the quality. In other words, quality is determined by the real experience of customers or users of the product, which is evaluated based on predetermined standards and characteristics. In line with other research support by Mardiana (2022), with the topic of the influence of quality variables of a product and brand image regarding customer satisfaction intermediated mediation through purchasing decisions where all independent variables have a positive and significant effect either directly or indirectly on the intervening variable and dependent variable.

#### *1.3 After-sales service*

According to Kotler and Keller 2016 (in Alaudin et al, 2022) the services provided by sellers to post-purchase buyers. After-sales practices should be in place so that consumers feel comfortable with the products they buy because there may be problems if the product is problematic, allowing consumers to use the product longer with the assurance and support provided by the seller.

Dharmmesta and Handoko (in Noeryakin and Eriza, 2022) stated that after-sales service is a benefit offered by businesses to customers who have claims or complaints after the transaction ended. The goal is to increase customer loyalty regarding its products. Customer satisfaction is also improved through after-sales service. Providing warranty, providing spare parts or accessories, routine maintenance or consultation, and repair of *spare* parts are examples of after-sales service. Other research support Tesfaye (2022) states that after-sales service stimulates interest in customer satisfaction; these findings contribute to the literature related to after-sales service and has marketing implications for those who use the after-sales service component especially and is beneficial for increasing customer satisfaction.

#### *1.4 Purchase decision*

(Pasha and Hadibrata, 2019) Describe that the process of deciding on a purchase is where the consumer identifies a product through the way it searches and information the product is evaluated or the market is the extent to which the product is prioritized and the choice, to determine which product decision is most expected. As a result, the consumer's decision is to modify his choice to avoid risk.

Kotler and Keller in (Supriyatna, 2020) stated that there are 6 indicators of purchasing decisions, namely: (1) Product Options, (2) Dealer Options, (3) Brand options, (4) purchase quantity, (5) time of purchase, (6) Payment method.

Basu Swasta and Hani Handoko in the Journal (Fasha et al., 2022) Purchasing decisions are the suitability of consumer behavior which includes needs and wants, information search, evaluation of goods that acquired, purchase decisions, and consumer behavior after purchase to satisfy wants and needs

Research support by Rosyidah (2022) makes research on the topic of the influence of marketing in Islam, digital marketing, brand image on consumer satisfaction intermediated by purchasing decisions with the results of a positive and significant correlation on consumer satisfaction variables through purchase decisions.

Research support conducted by Pramesti et al., (2022) on the topic of the effect of after-sales service, price and promotion on consumer purchasing decisions, with the conclusion that there is a correlation and positive influence and significant on the variables studied.

#### *1.5 Customer Satisfaction*

Caddote, Woodruff & Jenkins in Tjiptono and Chandra (2019) explained that customer satisfaction arises from customer feelings after assessing the results of the product experience used.

Kotler and Keller in the journal (Anwar et al., 2022) customer satisfaction is defined as a sense of happiness or joy in individuals obtained in performance comparison with results obtained through comparison a product or service with a standard of excellence.

According to Sahir, et al (2020: 27) customer satisfaction indicators are experience, price, service, quality, other research support by Fitri (2022). With the topic of analyzing the effect of service quality, Brand equity and Product Quality on consumer satisfaction with the results of all variables positively and significantly both partially as well as simultaneous.

Other research support by Febriana et al., (2022). That product quality affects consumer satisfaction positively and significantly.

## **2. Conceptual Framework**

The quality of products, quality of service, level of behavior and emotions, price, cost, convenience, personal experience, experience of others, promotions or advertisements, that the company offers have an impact on positive customer satisfaction (Indrasari, 2019). In this scenario, the customer will evaluate the good and bad qualities of the company based on the goods and services it sells to customers. Consumers are also very critical to compare the performance of one company with another.

As an explanation of the schematic of the elaboration of the topic of the problem under study, so that the author makes a pattern of relationships between these variables such as elements forming intervening variables (mediation), independent and dependent determined to see the correlation part of the relationship presented systematically and conceptually in order to obtain a deeper study. Where reflected from the sources of literature review and previous research so that researchers formulate a conceptual framework with an illustration:

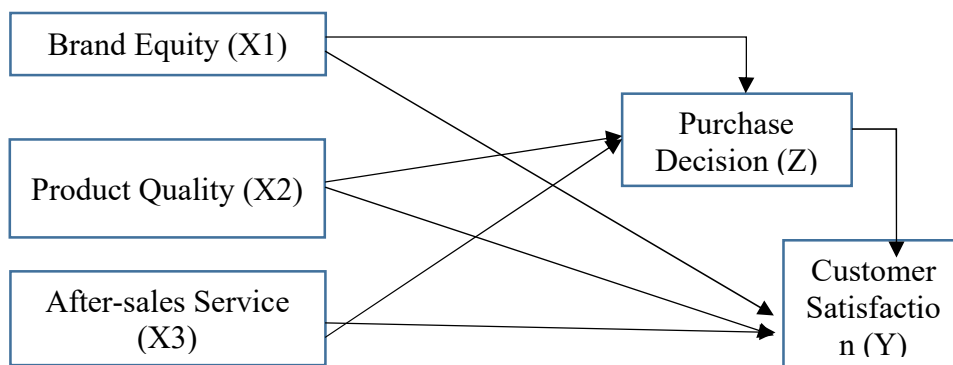


Figure 1. Thinking Paradigm Diagram

### 3. Hypothesis

According to Sugiyono (2018), the formula of research problems is sometimes carried out in the form of statements and questions because hypotheses are tentative statements or solutions intended for the formation of research problems.

In the discussion of this research, the tendency to concentrate on research and observation contains about:

1. It is suspected that there is a positive influence of brand equity on customer satisfaction (H1)
2. It is suspected that there is a positive influence of brand equity on purchasing decisions (H2)
3. It is suspected that there is a positive influence of brand equity on customer satisfaction through consumer purchase decisions (H3)
4. It is suspected that there is a positive influence of product quality on customer satisfaction (H4)
5. It is suspected that there is no positive influence of product quality on customer satisfaction (H5)
6. It is suspected that there is a positive influence of product quality on customer satisfaction through consumer purchase decisions (H6)
7. It is suspected that there is no positive influence of a product quality on customer satisfaction through consumer purchase decisions (H7)
8. It is suspected that there is a positive influence of after-sales service on customer satisfaction (H8)
9. It is suspected that there is no positive effect of after-sales service on customer satisfaction (H9)
10. It is suspected that there is a positive influence of after-sales service on customer satisfaction through consumer purchase decisions (H10)
11. It is suspected that there is a positive effect of customer satisfaction on purchasing decisions (H11)
12. It is suspected that there is no positive effect of customer satisfaction on purchasing decisions (H12)

### III. RESEARCH METHODS

A quantitative approach was applied in this study. According to Sugiyono (2015: 8), quantitative methods are research strategies based on positivism ideology applied to population distribution or specific samples, data collection techniques are carried out with quantitative/statistical research tools. The quantitative approach seeks to test against presumptions. The quantitative approach takes the form of numerical results obtained from measurements made using scales for research variables.

Comparative research methodology was also used in this study. According to Sugiyono (2015: 36), there are one or more variables in two or several separate samples compared using comparative research strategies.

### 3.1 Research design

In research design using *explanatory* model design because to find and measure the influence of relationships between research variables so as to analyze causal relationships between these variables in order to know the impact that each variable has. Where the design typology is survey design and case studies. While the experimental design was not studied in this study. As expressed by Sugiyono (2018) "The research design must be certain, clear and detailed, determined precisely from the beginning, being a step-by-step guide"

### 3.2 Population and Sample

For the sample method taken (Kuntjojo, 2009) using the non-random sampling sample method (*Non probability sampling*) and the selection method to be taken using the *purposive sampling* method. Using information and certain types of variable decisions, a non-random sample is obtained. (Indriantoro and Supomo, 2014)

Respondents who are the target of the survey are companies with a history of frequency of purchase transactions and previous use of machine tools and spare parts from specialized companies, specialist products are criteria or characteristics of the samples used in this study, and in this study have special characteristics as information. The population number can be tracing, but it is not entirely precise considering that from the number of circulating populations, some are no longer active.

### 3.3 Analysis Tools.

The Lemeshow Formula Formula is then applied to determine the number of samples in this study: (Riyanto &

Hatmawan, 2020). Using Sample size 2.0 software and Formula  $n = \frac{z^2 - a P(1-P)}{d^2}$

Based on the above formula and calculation, it produces a minimum sample of 151 and will be rounded to 150 samples.

Analysis results the results of the questionnaire in the form of a likert scale from respondents were processed using SmartPLS platform software. The survey was conducted to more than 150 people and there were 25 correlation and influence questions between variables. In this case, the SmartPLS software platform runs based on PLS calculations-algorithms that will automatically calculate the outer model (evaluation of measurement models), so that it is determined how much correlation indicators with factor or latent variables.

### 3.4 Time Period and Place

#### 1. Research time

The time carried out by the researcher at the time of issuance of permission from the study in a period of less than 3 months which contained 1 month of primary data collection in the field combined with secondary data If any, then 1 month for data processing, and 1 month for data analysis and conclusion combined with guidance from the university supervisor.

#### 2. Place of study

The end consumer environment as well as the users and connectors of products that have been marketed in this case PTA as a distributor company.

### 3.5 Instruments, Techniques, Measurement scales, Types of Research

1. The research instrument made a questionnaire in the form of a questionnaire through *Google Forms* by making several statements related to the dependent variable.

2. The type of research to be carried out is correlation (relationship) and experimental (cause and effect) research.

3. Fundamental measurement scale with Likert scale questionnaire method using *Google Forms* with values:

Value 1 strongly disagree, Value 2 disagree,

Value 3 is neutral, Value 4 agrees, and Value 5 strongly *agrees*

3.6 Modeling Test

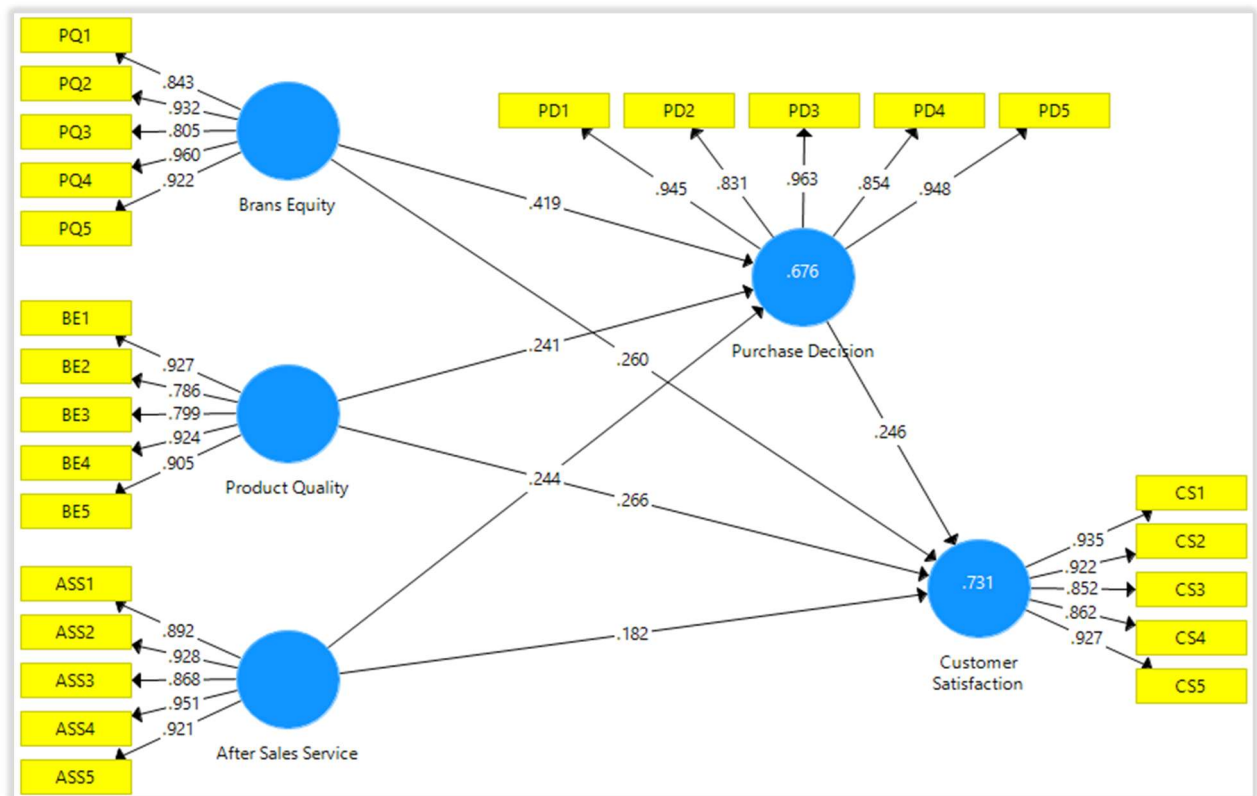


Figure 2. Structure PLS Outer Loading

IV. RESULTS AND DISCUSSION

4.1 Research results

Smart PLS calculations on questionnaires with 25 questions distributed to respondents are:

Step 1 :

1. Convergent Validity

The reliability of a construct is high so that it can be validated so that the relationship between latent variables and indicators can be fulfilled.

**A. Outer Loadings evaluation**

<u>Indikator</u>	<u>Variabel</u>	X1	X2	X3	Y	Z
<b>Brand Equity</b>	X1-1	0.843				
	X1-2	0.932				
	X1-3	0.805				
	X1-4	0.960				
	X1-5	0.922				
<b>Product Quality</b>	X2-1		0.927			
	X2-2		0.786			
	X2-3		0.799			
	X2-4		0.924			
	X2-5		0.905			
<b>After Sales Service</b>	X3-1			0.892		
	X3-2			0.928		
	X3-3			0.868		
	X3-4			0.951		
	X3-5			0.921		
<b>Customer Satisfaction</b>	Y-1				0.935	
	Y-2				0.922	
	Y-3				0.852	
	Y-4				0.862	
	Y-5				0.927	
<b>Purchase Decision</b>	Z-1					0.945
	Z-2					0.831
	Z-3					0.963
	Z-4					0.854
	Z-5					0.948

Figure 3. Table of Outer Loading

In table 12. obtained outer loading evaluation with an average value above  $> 0.70$  means that this value has met the *convergent validity* prerequisites that have been determined so that it is considered feasible and valid for research.

**B. Factor Loading - Construct Reliability and Validity**

<u>Indicator</u>	<u>Var.</u>	<u>Average Variance Extracted (AVE)</u>
<b>Brand Equity</b>	X1	0.800
<b>Product Quality</b>	X2	0.757
<b>After Sales Service</b>	X3	0.832
<b>Customer Satisfaction</b>	Y	0.810

Figure 4. Table of Loading Factor

Table 13 explains that the AVE Indicator also above  $(\lambda)$  Lamda  $> 0.50$  indicates a diversity of constructs and conditions for achieving discriminant validity. So, it has good reliability.

## 2. Discriminant Validity

Describes the extent to which the construct under study differs from other constructs or indicates a certain uniqueness.

### A. Fornell-Larcker Criterion

	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>Y</b>	<b>Z</b>
<b>X1</b>	0.894				
<b>X2</b>	0.759	0.870			
<b>X3</b>	0.723	0.697	0.912		
<b>Y</b>	0.784	0.769	0.731	0.900	
<b>Z</b>	0.778	0.729	0.715	0.772	0.910

Figure 5. Table of Results Fornell- Larcker Criteria

Parameter The square root value of the construct > the correlation value between constructs and other constructs

### B. Cross Loading

	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>Y</b>	<b>Z</b>
<b>X1-1</b>	0.843	0.542	0.534	0.545	0.619
<b>X1-2</b>	0.932	0.751	0.730	0.819	0.769
<b>X1-3</b>	0.805	0.551	0.565	0.582	0.561
<b>X1-4</b>	0.960	0.671	0.673	0.728	0.699
<b>X1-5</b>	0.922	0.824	0.698	0.780	0.794
<b>X2-1</b>	0.674	0.927	0.624	0.724	0.613
<b>X2-2</b>	0.571	0.786	0.564	0.601	0.556
<b>X2-3</b>	0.531	0.799	0.493	0.537	0.522
<b>X2-4</b>	0.703	0.924	0.693	0.717	0.718
<b>X2-5</b>	0.785	0.905	0.636	0.738	0.730
<b>X3-1</b>	0.674	0.684	0.892	0.644	0.687
<b>X3-2</b>	0.620	0.581	0.928	0.639	0.605
<b>X3-3</b>	0.632	0.617	0.868	0.661	0.561
<b>X3-4</b>	0.637	0.606	0.951	0.600	0.666
<b>X3-5</b>	0.722	0.680	0.921	0.771	0.725
<b>Y-1</b>	0.705	0.704	0.658	0.935	0.681
<b>Y-2</b>	0.738	0.709	0.709	0.922	0.720

<b>Y-3</b>	0.654	0.670	0.580	0.852	0.633
<b>Y-4</b>	0.662	0.594	0.601	0.862	0.643
<b>Y-5</b>	0.762	0.770	0.726	0.927	0.783
<b>Z-1</b>	0.691	0.688	0.640	0.708	0.945
<b>Z-2</b>	0.675	0.598	0.550	0.579	0.831
<b>Z-3</b>	0.739	0.672	0.660	0.743	0.963
<b>Z-4</b>	0.618	0.591	0.564	0.638	0.854
<b>Z-5</b>	0.801	0.748	0.803	0.814	0.948

Figure 6. Table of correlation of the construct with the item must be greater than the other construct and the value > 0.7 (Ghozali and Latan, 2015)

### C. Heterotrait-Monotrait Ratio (HTMT)

	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>Y</b>	<b>Z</b>
<b>X1</b>					
<b>X2</b>	<b>0.798</b>				
<b>X3</b>	<b>0.757</b>	<b>0.740</b>			
<b>Y</b>	<b>0.822</b>	<b>0.818</b>	<b>0.766</b>		
<b>Z</b>	<b>0.816</b>	<b>0.772</b>	<b>0.743</b>	<b>0.809</b>	

Figure 7. Table of Heterotrait-Monotrait Ratio

Based on the principle that each indicator should have a close correlation with its construct, the purpose of discriminant validity is to determine whether a particular reflective indicator is indeed a useful gauge for its construct. (Ghozali & Latan, 2015). It is called good discriminant validity if the value of a construction < 0.90

### 3. Internal Consistency Reliability (Cronbach's Alpha, and Composite Reliability)

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>
<b>X1</b>	<b>0.937</b>	<b>0.952</b>	<b>0.952</b>
<b>X2</b>	<b>0.919</b>	<b>0.932</b>	<b>0.940</b>
<b>X3</b>	<b>0.949</b>	<b>0.954</b>	<b>0.961</b>
<b>Y</b>	<b>0.941</b>	<b>0.946</b>	<b>0.955</b>
<b>Z</b>	<b>0.947</b>	<b>0.958</b>	<b>0.960</b>

Figure 8. Table of Parameter result > 0.70

In Figure 8. Table explained to stated that the level of ability of indicators to measure their latent constructs (Memon et al., 2017). Reliability indicators intend to assess the extent to which indicators of measurement of latent variables reliably or not, which are assessed from *composite* reliability between 0.60 – 0.70 are acceptable in explanatory research (Sarstedt et al., 2017) and between 0.70 – 0.95 between representing a satisfactory level of reliability or reliability well (Hair et al., 2021). *Cronbach's alpha* value is above 0.70 (Ghozali & Latan, 2015). Also called the undimensionality test is to give confidence that there are no more distortions and deviations in measurements. Cronbach's alpha testing consistency of

respondents in answering statements and questions. Rho A value: >0.7 (Vinzi, Trinchera, & Amato, 2010). Composite Reliability: >0.6 if exploratory research type. (Bagozzi and Yi, 1988; Chin & Dibbern, 2010) and 0.7 confirmatory research.

**Stage 2.**

Structural Model Evaluation inner model.

At this stage analyze the extent of the relationship between latent constructs / variables (exogenous and endogenous relationships).

**A. Variance Inflation Factor**

*Collinearity* is a term to describe a correlation between latent variables in a model, the predictive power of which is unreliable and unstable.

	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>Y</b>	<b>Z</b>
<b>X1</b>				3.394	<b>2.851</b>
<b>X2</b>				<b>2.824</b>	<b>2.645</b>
<b>X3</b>				<b>2.537</b>	<b>2.353</b>
<b>Y</b>					
<b>Z</b>				3.090	

Figure 9. Table of Inner VIF value < 5

**B. R-Square Testing**

Evaluation of determinant correlation R<sup>2</sup> obtained the following values:

	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Y</b>	0.731	0.723
<b>Z</b>	0.676	0.670

Figure 10. Table of R Square

Considered models with substantially strong model values. The R-squared value (R<sup>2</sup>) is used to measure how much influence a particular exogenous latent variable has on endogenous latent variables. (R<sup>2</sup> >0.67)

**C. Q Square Testing**

Run in Blindfolding obtained the following values:

	<b>SSO</b>	<b>SSE</b>	<b>Q<sup>2</sup> (=1-SSE/SSO)</b>
<b>X1</b>	750.000	750.000	
<b>X2</b>	750.000	750.000	
<b>X3</b>	750.000	750.000	
<b>Y</b>	750.000	311.514	0.585
<b>Z</b>	750.000	336.281	0.552

Figure 11. Table of Q Square

A Q2 value of > 0 indicates that the model has a very accurate level of predictive relevance with respect to the current construction, while a Q2 value of < 0 indicates that the model has only a moderate or weak level of predictive relevance (Sarstedt et al., 2017)

**Stage 3.**

**Test the hypothesis**

Path Coefficients (Inner Model) - Mean, STDEV, T-Values, P-Values (Running Bootstrapping)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV)	P Values
X1 -> Y	0.260	0.262	0.079	3.280	0.001
X1 -> Z	0.419	0.416	0.083	5.055	0.000
X2 -> Y	0.266	0.265	0.069	3.847	0.000
X2 -> Z	0.241	0.242	0.087	2.770	0.006
X3 -> Y	0.182	0.182	0.071	2.546	0.011
X3 -> Z	0.244	0.245	0.071	3.425	0.001
Z -> Y	0.246	0.252	0.089	2.764	0.006

Figure 12. Table of Path Coefficients

Figure 12 explain about Result of hypothesis that was built from inner structural model base on variable and phenomenon correlation between variable measured. All T value and P value are within target specification and significant positive impact.

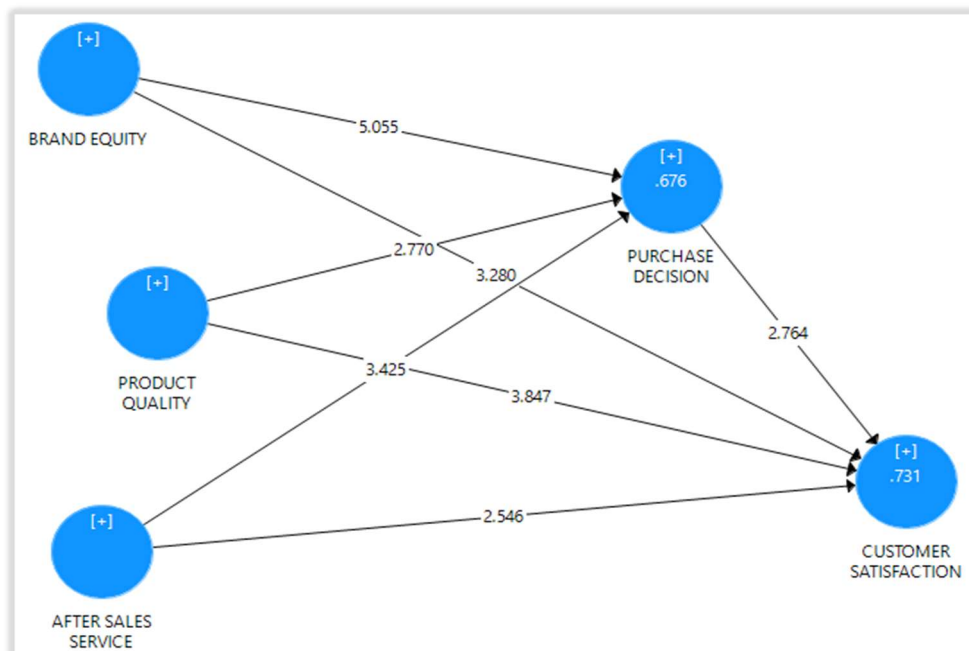


Figure 13. Structural model (Inner Model/Path Coefficient) T Statistics

**D. Evaluate Effect Size ( $f^2$ )**

	X1	X2	X3	Y <sub>-</sub>	Z <sub>-</sub>
X1				0.074	<b>0.191</b>
X2				0.093	0.068
X3				0.048	0.078
Y <sub>-</sub>					
Z <sub>-</sub>				0.073	

Tabel 13. F square

Apart from the assessment of the absence of a significant relationship between variables, it is also necessary to assess how much influence between variables with *Effect Size* or *f-square* (Wong, 2013).

To answer the hypothesis under study, it is summarized into a summary of analysis as follows:

**The first hypothesis** can be accepted, *Brand equity* has a positive effect (on the flow of path coefficient: 0.260) and significant (P Values is  $0.001 < 0.05$ ) on *customer satisfaction*.

**The second hypothesis** is stated to be accepted, *Brand equity* has a positive effect (on the flow coefficient: 0.419) and significant (P-Values  $0.000 < 0.05$ ), on *the Purchase decision*.

**The third hypothesis** is stated to be accepted, *Brand equity* has a positive effect (on the flow coefficient: 0.103), and significant with (P-Values  $0.025 < 0.05$ ) on *customer satisfaction* through *Purchase decision*.

**The fourth hypothesis** is stated to be accepted, *Product quality* has a positive effect (on the flow coefficient: 0.266 and and significant (P -Values  $0.000 < 0.05$ ), on *customer satisfaction*.

**The fifth hypothesis** was rejected, because the fourth hypothesis had been accepted.

**The sixth hypothesis** is accepted, *Product quality* has a positive (on the flow coefficient: 0.059) and significant (P-Values  $0.047 > 0.05$ ) on *customer satisfaction* through purchasing decisions.

**The seventh hypothesis** was rejected, because the sixth hypothesis had been accepted.

**The eighth hypothesis** is accepted, *After Sales Service* has a positive effect (on the flow coefficient: 0.182) and significant (P-Values  $0.011 < 0.05$ ), on *customer satisfaction*.

**The ninth hypothesis** is rejected, since the eighth hypothesis is accepted.

**The tenth hypothesis** is accepted, *After Sales Service* has a positive (on the flow coefficient: 0.060) and significant (P-Values  $0.044 > 0.05$ ) on *customer satisfaction* through *purchase decisions*.

**The eleventh hypothesis** is accepted, *Customer satisfaction* has a positive effect (on the flow coefficient of 0.246) and significant (P-Values  $0.006 < 0.05$ ) on *Purchase decisions*.

**The twelfth hypothesis** was rejected, because the eleventh hypothesis had been accepted.

**4.2 Research Discussion**

- a. The effect of brand equity on customer satisfaction and the effect of customer satisfaction equity through purchasing decisions. The results of the hypothesis through respondents' analysis of this variable have a significant positive correlation and affect customer satisfaction and purchase decisions. P Values 0.001 and T-values 3.280 on  $X1 \rightarrow Y$ , and P-Values 0.000 and T-values 5.055 on  $X1 \rightarrow Z$
- b. The effect of product quality on customer satisfaction and the effect of product quality on customer satisfaction through consumer purchasing decisions.

Referring to the hypothesis studied, it also has a positive correlation analysis and significantly affects customer

satisfaction and purchase decisions. P Values 0.000 and T-values 3,847 on  $X_2 \rightarrow Y$ . And P-Values 0.006 and T-values 2,770 on  $X_2 \rightarrow Z$

- c. The effect of after-sales service on customer satisfaction and the effect of after-sales service on customer satisfaction through consumer purchasing decisions.

The hypothesis built on this variable is that the after-sales service variable has a positive correlation analysis and significantly affects customer satisfaction and purchase decisions. P Values 0.0 11 and T-values 2.546 on  $X_3 \rightarrow Y$ .

P-Values 0.001 and T-values 3.425 on  $X_3 \rightarrow Z$ .

- d. The effect of customer satisfaction on purchasing decisions

In this formulated hypothesis, a positive and significant relationship is obtained and is able to influence both of them. P values 0.0 06 and T-values 2.764 on  $Z \rightarrow Y$ .

## V. CONCLUSIONS AND ADVICE

### 5.1 Conclusion

After the research is carried out based on the formulation and purpose of the problem that occurs and the relevance of the variables studied by collecting questionnaire results from customers and PTA so that it is consolidated with the topic under discussion, one conclusion is obtained that there is a positive relationship and significant correlation based on the hypothesis that has been discussed. This phenomenon is based on the findings of the Net Promoter score which several variables expressed are related to research. The customer satisfaction index through this tool and trending data increased even though it did not reach the target expected by the company. All variables have an effect and are significant on exogenous variables and endogenous variables.

### 5.2 Advice

In conducting this research, the author realizes that there are still limitations and shortcomings that need to be developed in the future, to that extent this research can at least answer from the background of the problems raised. Some suggestions to consider are:

For companies, although all variables affect purchasing decisions and consumer satisfaction, while to increase sales from consumers, brand equity is basically the hallmark of the product in the agency, the product must have added value, be competitive and be able to expand market share in a growing business environment, especially in various sectors of modern sectors that can increase maximum profits for the company. Product quality must be maintained where although currently the principal as production is carried out in the center of the USA but in recent years several countries in the network have developed production outside of the country of origin with consideration of production time, production costs, distribution to the nearest country of demand, regulations of each country, and cheaper raw materials available in other countries. This makes a positive impact on the company by reducing production costs, innovation and others but still prioritizes the quality standards of international guarantee funds. The hope is that this research can provide implications and positive contributions to the progress of the company with internal policies that are able to direct the company to be better in the future.

For academics need to develop and consider other variables that are more comprehensive and their relevance to the improvement of *Net Promoter Score* as an indicator of success in customer service. So as to be able to find out the consumer satisfaction index that influences purchasing decisions, other variables that can influence such as: Consumer interest in the product purchased, purchasing power, repeat purchases, loyalty, lead time supply, price, experiential marketing and others, situational macroeconomic, microeconomic global market and so on.

For researchers need to find references and data sources for another broader research. So as to be able to enrich knowledge and add insight in the field of marketing, of course, with different backgrounds and different types of problems for the progress of the company in the future.

**REFERENCES**

- [1] Aaker, David, A. (2018). *Manajemen ekuitas merek, memanfaatkan nilai dari suatu merek*. Jakarta: Mitra Utama.
- [2] Alaudin, S. A., Triyono, T., & Kurniawan, E. N. (2022). Layanan Purna Jual, Citra Merek dan Harga Jual Kembali dalam mempengaruhi Proses Keputusan Pembelian Mobil di Jabodetabek. *MASTER: Jurnal Manajemen Strategik Kewirausahaan*, 2(2), 191-200.
- [3] Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.
- [4] Chin, W. W., & Dibbern, J. (2010). An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services Between Germany and the USA. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares Concepts, Methods and Applications* (pp. 171-194). Berlin: Springer.
- [5] Dewi, Y. P. (2022). *Pengaruh Ekuitas Merek terhadap kepuasan konsumen melalui keputusan pembelian sebagai variabel intervening (Studi pada Konsumen Skincare Ms. Glow Di Universitas Muhammadiyah Malang)* (Doctoral dissertation, Universitas Muhammadiyah Malang).
- [6] Anwar, R. S., Ikhwan, S., & Khojin, N. (2022). Pengaruh Customer Relationship Management Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan (Studi Kasus pada Kedai Kopi He Kafei). *Aurelia: Jurnal Penelitian Dan Pengabdian Masyarakat Indonesia*, 1(1), 88-95.
- [7] Fasha, A. F., Robi, M. R., & Windasari, S. (2022). Determinasi Keputusan Pembelian Melalui Minat Beli: Brand Ambassador Dan Brand Image (Literature Review Manajemen Pemasaran). *Jurnal Manajemen Pendidikan Dan Ilmu Sosial*, 3(1), 30-42.
- [8] Febriana, F. D., & Prabowo, R. E. (2022). Pengaruh Kualitas Produk, Citra Merek dan Persepsi Harga Terhadap Kepuasan Pelanggan Pada Tanam Coffee Shop Kaligarang Semarang. *Jurnal Mirai Management*, 7(1), 298-306.
- [9] Fitri, Y. E. (2022). *Pengaruh Kualitas Pelayanan, Ekuitas Merek dan Kualitas Produk Terhadap Kepuasan Konsumen PT. Kristal Komputerindo Perkasa* (Doctoral dissertation, Prodi Manajemen).
- [10] Ghozali, I., & Latan, H. (2015). *Partial Least Squares Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0*. Ed. Ke-2. Badan Penerbit Universitas Diponegoro: Semarang.
- [11] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage publications.
- [12] Indrasari, M. (2019). *Pemasaran dan Kepuasan Pelanggan*. Surabaya: Unitomo Press.
- [13] Indriantoro, Nur dan Bambang Supomo. (2014). *Metodologi Penelitian Bisnis untuk Akuntansi dan Manajemen*. Edisi Pertama. Yogyakarta: BPFE.
- [14] Khoshtaria, T., Datuashvili, D., & Matin, A. (2020). The impact of brand equity dimensions on university reputation: an empirical study of Georgian higher education. *Journal of Marketing for Higher Education*, 30(2), 239-255.
- [15] Kuntjojo. (2009). *Metodologi Penelitian*. Kediri: Universitas Nusantara PGRI.
- [16] Memon, M. A., Salleh, R. and Baharom, M. N. R. (2017) 'the Mediating Role of Work Engagement Between Pay Satisfaction and Turnover', *International Journal of Economics, Management and Accounting*, 1(1), pp. 43-69
- [17] Mardiana, V. R. (2022). *Pengaruh kualitas produk dan citra merek terhadap kepuasan konsumen yang dimediasi oleh keputusan pembelian (Studi kasus Smartphone samsung Di Jakarta)* (Doctoral dissertation, Sekolah Tinggi Ilmu Ekonomi Indonesia).

- [18] Noeryakin, F., & Eriza, F. (2022). Pengaruh Purna Jual dan Kualitas Pelayanan terhadap Loyalitas Konsumen Indihome Pt. Telkom Indonesia Medan (Studi pada Masyarakat Kota Medan). *Regress: Journal of Economics & Management*, 1(3), 89-99.
- [19] Pasha, K., & Hadibrata, B. (2019). The Impact of Brand Awareness, Brand Association and Perceived Quality on Consumer Purchase Decision of Sampoerna A Mild Products. <https://doi.org/10.21276/sjef.2019.3.1.9>
- [20] Pramesti, A. A. P., Hartono, H., & Hidayat, M. S. (2022). Pengaruh Layanan Purna Jual, Harga dan Promosi Terhadap Keputusan Pembelian Motor Honda Pada CV. Laris Motor Canggü. *Prosiding SNABM 1th 2022*, 1(1), 109-118.
- [21] Reichheld, Fred. (2003). *The Ultimate Questions 2.0 (How Net Promoter Companies Thrive in a Customer-Driven World)*. Cambridge: Harvard Business Review Press.
- [22] Riadi, Muchlisin. (2020). Keputusan Pembelian (Pengertian, Dimensi, Jenis dan Proses Tahapan). Diakses pada 9/9/2022, dari <https://www.kajianpustaka.com/2020/05/keputusan-pembelian-pengertian-dimensi-jenis-dan-proses-tahapan-pembelian.html>
- [23] Riyanto, Slamet., Hatmawan Aglis Andhita. (2020). *Metode Riset Penelitian Kuantitatif Penelitian Di Bidang Manajemen, Teknik, Pendidikan Dan Eksperimen*. Yogyakarta Deepublish.
- [24] Rosyidah, M. (2022). Pengaruh islamic marketing, digital marketing, dan brand image terhadap kepuasan konsumen dengan keputusan pembelian sebagai variabel intervening (studi kasus batik wido kencana kabupaten karanganyar). Skripsi <http://erepository.perpus.iainsalatiga.ac.id/id/eprint/14718>
- [25] Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial Least Square Structural Equation Modeling. in : Homburg C., Klarmann M., Vomberg A. (eds) *Handbook of Marketing Research*. Springer, Cham.
- [26] Sahir, Syafrida Hafni., et al., (2020). *Keterampilan Manajerial Efektif*. Yayasan Kita Menulis.
- [27] Supriyatna, Yuda. (2020). Analisis Pengaruh Harga, Desain Produk, dan Citra Merek Terhadap Keputusan Pembelian (Studi pada Produk Yamaha Mio di Kota Cilegon). *Jurnal Sains Manajemen*. 6(1), 36-50
- [28] Sugiyono (2015). *Metode Penelitian Kombinasi (Mix Methods)*. Bandung: Alfabeta.
- [29] Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, penerbit Alfabeta, Bandung.
- [30] Tesfaye, B. (2022). *Effect of after-sales services on customer satisfaction: the case of wanza furnishing industry plc* (Doctoral dissertation, ST. MARY'S UNIVERSITY).
- [31] Tjiptono, F & Chandra. G (2019). *Service, Quality & Satisfaction*, Edisi 5, ANDI, ISBN: 978-623-01-0303-2 Yogyakarta.
- [32] Vinzi Esposito, V., Chin, W. W., Henseler, J., & Wang, H. (2010). *Handbook of partial least squares: Concepts, methods and applications*. Heidelberg, Dordrecht, London, New York: Springer.
- [33] Wong, K. K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24(1), 1–32. <http://doi.org/10.1108/EBR-10-2013-0128>
- [34] Wijaya, Tony. (2018), *Manajemen Kualitas Jasa*, Edisi Kedua, Jakarta: PT. Indeks