Effect of Service Quality and Quality of Products to Customer loyalty with Customer Satisfaction as Intervening Variable in PT. Nano Coating Indonesia

Nuridin. SE. MM
Lecturer
Faculty of Economics
Krisnadwipayana University Jakarta
Campus UNKRIS Jatiwaringin
P.O. Box 7774/Jat CM. Jakarta 13077
Email: h.nuridin58@gmail.com
Indonesia

Abstract

Quality of service and product quality is a determinant factor of customer satisfaction because the service and good product quality will create customer satisfaction. Basically, the purpose of a company is to create a satisfied customer. The creation of customer satisfaction can provide several benefits such as the influence between the company and the customer to be harmonious, providing a good foundation for repeat purchase and the creation of customer loyalty, and forming a mouth-to-mouth recommendation that is profitable for the company.

This study aims to analyze the effect of service quality and product quality on customer loyalty with customer satisfaction as intervening variable at PT. Nano Coating Indonesia. This research uses saturated sample technique (census) with all 100 respondents (customers) at PT. Nano Coating Indonesia. In solving this research problem, the author uses path analysis as a research design. The results showed that the quality of service directly positive and insignificant effect on customer loyalty PT. Nano Coating Indonesia and product quality have the positive and significant impact on customer loyalty of PT. Nano Coating Indonesia. Quality of service and product quality indirectly have a positive and significant influence on customer loyalty through customer satisfaction PT. Nano Coating Indonesia.

Keywords: Service Quality, Product Quality, Customer Satisfaction, Customer Loyalty

I. Introduction

Along with the rapid development of the era at this time, all human needs are increasing from various aspects. Basically, humans are never satisfied so this is what causes humans to think more creative by making new innovations and develop all the ability to compete with each other. The most obvious development is in terms of technology. Here is PT. Nano Coating Indonesia comes as one of the new breakthroughs of technological developments that have been increasingly sophisticated.

PT. Nano Coating Indonesia is one of the companies engaged in the field of coating services on metal objects that officially established since October 2010. In Indonesia alone, there are only 2 companies Coating, Namely PT. Nano Coating Indonesia and PT. Oerlikon Balzer Indonesia which has been established since October 2008. Coating or coating is a method to control corrosion by applying a coating to the metal surface. Coating type owned by PT. Nano Coating Indonesia is a PVD (Physical Vapor Deposition) coating which is a surface treatment method that is widely used by various applications in various types of industries around the world. Its capability is to increase surface hardness from a variety of tools, molds to dies which are key factors in improving productivity and product quality.

Quality of service and product quality is a determinant factor of customer satisfaction because the service and good product quality will create customer satisfaction. Basically, the purpose of a company is to create a satisfied customer. The creation of customer satisfaction can provide several benefits such as the influence between the company

and the customer to be harmonious, providing a good foundation for repeat purchase and the creation of customer loyalty, and forming a mouth-to-mouth recommendation that is profitable for the company.

Loyalty arises without any coercion, then this is the target of a company to get loyalty from customers. The hope is to generate repetition of purchases from customers of mutual relationships that existed within a certain period of time.

Customer loyalty at PT. Nano Coating Indonesia is created to the satisfaction that customers get. Satisfaction is certainly the impact of competitive prices, good service quality and also product quality that is able to meet expectations. With the creation of these things, customers will not hesitate to promote products owned by PT. Nano Coating Indonesia to other companies. The concrete example is some customers of competitors that is PT. Oerlikon Balzer Indonesia switch and even just use the product from PT. Nano Coating Indonesia.

Service is usually related to customer satisfaction where the company strives to provide the best service so that customers feel satisfied and paid attention properly and correctly, resulting trust in the company. The importance of good service to customers is also one of the strategies to compete with competitors, but not enough just to provide a sense of satisfaction and attention to the customer, the service must also be supported by the quality of human resources. The company must constantly improve the ability of its service personnel to keep providing the best service to the customers.

PT. Nano Coating Indonesia is a company that provides coating services and products. Tools, molds, and dies are owned by customers in the coating process about 3 (three) days, and this is a product produced by PT. Nano Coating Indonesia. Before and after the coating process, there are several treatments that must be done and the treatment is not always the same for all goods, depending on the type of goods. Schedule for the coating process is fixed, so customers who have to adjust to the schedule. Sometimes there are some customers with urgent goods conditions that must be prioritized and must finish the process faster than usual, this is one form of service that can be given.

The product has an important meaning for the company because, in the absence of the product, the company cannot do anything from its business. Customers will buy the product if they feel fit, therefore the quality of the product must be tailored to the desires and needs of the customer for the product sold. It also concerns the trust that customers provide. If the product quality is still far from the expectations or needs of customers then customers will be reluctant to re-purchase products sold.

Currently PT. Nano Coating Indonesia is competing with PT. Oerlikon Balzer Indonesia, one of them in terms of product quality. There are some customers who say that the product of PT. Nano Coating Indonesia is better, and vice versa. Because customers are entitled to assess quality by comparing what is received and what is expected. With the information, then PT. Nano Coating Indonesia always strives to improve quality and make product improvements to better and match the expectations and needs of customers.

As an effort to meet customer satisfaction, the company must be able to provide the best quality products. If there is still a shortage or complaint from the customer, then the company should immediately review what the causal factor. In addition, good service should also be considered, because it will affect customer purchasing power. From the quality of service provided and also the quality of good products, it will create loyalty from customers.

2. Literature Review

2.1. Customer Loyalty

According to Tjiptono(2006), customer loyalty is "consumer commitment to a brand, store or supplier based on a very positive nature in long-term purchases". From this sense, it can be concluded that customer loyalty is created because of a combination of satisfaction and complaints. Meanwhile, according to both quoted from Vanessa(2007) customer loyalty "as customers who are satisfied with the products or services of the company and they become enthusiastic word of mouth promotion, loyalty not only to the company's products and services, but also the overall portfolio of products and services company as part of the life of loyalty to the brand forever ".

According to Griffin(2005), Another concept of customer loyalty says that "the concept of loyalty leads more to behavior compared to attitudes and a loyal customer because it exhibits buying behavior that can be interpreted as a regular and long-term

purchasing pattern, unit maker or decision maker". Meanwhile, according to Sheth and Mittal in Tjiptono(2015) argued customer loyalty is "customer commitment to a brand, store, and supplier, based on a very positive attitude and reflected in a positive repurchase". Further, according to Baloglu(2002), it can be concluded that loyalty "is the attitude and behavior of customers that indicate a repeat purchase of a good or service other than it also shows a high commitment on the brand or company.

2.1.1. Customer Loyalty Dimension

There are four kinds of customer loyalty dimensions according to Griffin(2005), namely:1)"Make purchases regularly; Customers who have engaged in a transaction with the company and are satisfied with what is in the process will form a close relationship between the customer and what he wants, so that the customer will make a purchase regularly.2) Buy inter-line products and services; Customers are not just buying one type of product after another, but they are buying accessories for their product, which is where customers may add items from the product they buy.3) Recommend products to others (refers other); The customer who always recommends the product to others is the greatest asset for the company, in this customer besides recommending always to buy the company's product and brand, the customer will be a good spokesperson to other customers and the customer will be angry if there is someone else to vilify the company's brand.4) Demonstrate immunity to the pull of competitors; Customers refuse to acknowledge any other types of products, they are confident with the products they are using right now, and it's hard to switch to other products, they brand the products used today are perfectly suited and beautiful, and a lot of them already believe in the product currently in use ".

2.1.2. Factors Affecting Customer Loyalty

A customer can be a loyal customer because of several factors that determine loyalty to a product or service. In building and improving customer loyalty, the company must pay attention to the factors that influence it.

According to Robinette(2001) the factors that influence customer loyalty are 1) Attention, the company must be able to see and overcome all the needs, hopes, and problems faced by customers. With that attention, customers will be satisfied with the

company and re-transact with the company, and eventually, they will become loyal customer companies. The more the company shows its attention, the greater the customer's loyalty arises. 2) Trust, trust arises from a long process until both sides trust each other. If trust is established between customers and companies, the effort to develop it will be easier; the company and customer relationships are reflected in the level of customer trust. If the customer's trust level is high, then the firm and customer relationships will be strong. One of the ways in which a company can engage in relationships with customers is that all kinds of products produced by a company must have the quality or perfection as it should or as promised so that customers do not feel cheated, which may result in customers moving to competing products.3) Protection, the company should be able to provide protection to its customers, whether in the form of product quality, service, complain or after-sales service. Thus, customers are not worried about making transactions and dealing with companies, because customers feel the company provides the protection they need.4) And Accumulative Satisfaction, accumulative satisfaction is the overall valuation based on total purchases and consumption of goods and services in a given period. Accumulative satisfaction is determined by various components such as satisfaction with agent attitudes and satisfaction with the company itself. Therefore, the company must be able to give satisfaction to the customer in doing all transactions with the company, so in this case; the company should pay attention and improve the function and usefulness of all facilities and resources owned so that customers can use it anytime and anywhere.

2.2. Customer Satisfaction

Some experts give the understanding of customer satisfaction. According to Swastha(2000), customer satisfaction is "an impulse of individual desire directed at the goal to gain satisfaction". In this case, we need to know that a desire must be created or encouraged before fulfilling the motive. The source that drives the creation of a desire can be different from the person himself or in his environment.While Kotler(2005) mentions that customer satisfaction is "the level of one's feelings after comparing the performance (or outcome) that he felt compared to his expectations". When performance exceeds

expectations they will feel satisfied and vice versa, if performance does not match their expectations, will be disappointed.

According to Schiffman and Kanuk(2007), customer satisfaction is "individual perceptions of performance or service in relation to their expectations". Meanwhile, according to Kotler and Armstrong (2008), namely "the extent to which the performance of products received in accordance with customer expectations".

2.2.1. Factors Affecting Customer Satisfaction

According to Lupiyoadi(2006), there are five main factors that must be considered by the company in determining the level of customer satisfaction, namely as follows: 1) "Product Quality; Customers will be satisfied when the results of their evaluation indicate that the products they use are qualified. Rational customers always demand a quality product for every sacrifice they make to obtain the product. In this case, the quality of a good product will provide added value in the minds of customers. 2). Service quality; Quality of service especially in the field of services, customers will feel satisfied if they get good service or as expected. 3) Emotional; The customer will feel proud and gain confidence that others will be amazed by him/her when using a product with a particular brand that tends to have a higher level of satisfaction. Satisfaction gained not because of product quality but the social values that make customer become satisfied to the certain brand. 4) Price; Products that have the same quality but set a relatively cheap price will give higher value to its customers. 5) Cost; Customers do not need to incur additional costs or do not need to waste time to get a product or service tend to be satisfied with the product or service.

2.2.2. Indicators of Customer Satisfaction

According to Hawkins and Lonney quoted in Tjiptono(2015), the attributes of customer satisfaction can be through 3 indicators, namely:1) "Conformity of expectation is the level of conformity between product performance expected by customers with perceived by customers, including products, services and supporting facilities which are obtained in accordance or exceeded with the expected.2) Interest visiting again is a willingness of customers to visit again or make the repurchase of related products, including services provided satisfactory, the value and

benefits obtained after consuming the product, and supporting facilities provided adequately. 3) The willingness to recommend is the willingness of customers to recommend products that have been felt to friends or family, including suggesting friends or relatives buy products offered for satisfactory services, adequate supporting facilities, and the value or benefits obtained after customer products.

2.3. Service Quality

According Tjiptono(2015) definition of service quality can be interpreted "as an effort to meet the needs and desires of customers and the accuracy of delivery in counterbalance customer expectations". Meanwhile, according to Kotler(2005), the definition of service is "any action or activity that can be offered by one party to another party, which is basically intangible and does not result in any ownership".

According to Supranto(2006), service quality is "a word for service providers is something that must be done well". Meanwhile, according to Moenir(2008) Service is essential "a series of activities, because it is a process. As a process, service takes place on a regular and continuous basis covering all organizational life in society ".

2.3.1. Service Quality Dimension

There are dimensions of service quality according to Parasuraman, Zeithaml, and Berry in Saleh(2010), namely:1) "Reliability, includes two main things, namely consistency of work and ability to be trusted. This means the company is delivering its services right from the first moment. It also means that the company concerned fulfills its promise, for example delivering its services according to the agreed schedule.2) Responsiveness, that is the willingness or readiness of employees to provide services required customers.3) Competence that is every person in a company has the skills and knowledge needed in order to provide certain services.4) Accessibility, which includes ease of contact and contact. This means the location of service facilities that are easily accessible, waiting time is not too long, the company's communication channel easily contacted, and others.5) Courtesy, including polite attitude, respect, attention, friendliness possessed by personal contact.6) Communication, meaning to provide information to customers with a language they easily understand and always listen to customer complaints and

suggestions.7) Credibility, which is honest and trustworthy. Credibility includes company name, company reputation, personal characteristics of personal contact and customer interaction.8) Security, that is safe from danger, risk, or doubt. These aspects include physical security, financial security, and confidentiality.9) Understanding or knowing the customer, that is an effort to understand customer needs.10) Tangibles, that is physical evidence of services, may be physical facilities, equipment used or appearance of personnel.

2.4. Product Quality

According to Tjiptono(2015), product quality is "a dynamic condition related to products and services, people, processes and environments that meet or exceed expectations". Meanwhile, according to Kotler and Armstrong(2008) product quality is "the ability of a product in performing its function, it includes overall durability, reliability, accuracy, ease of operation and product reparation also other product attributes". Furthermore, Lupiyoadi(2006) states that "customers will be satisfied if their evaluation results show that the products they use are qualified".

According to Kotler (2005), Product quality is "the whole feature and of a product or service on the ability to satisfy the stated/implied needs". Furthermore, Mc Charty and Perreault(2008) argue that "the product is the result of production to be thrown to the customer for distribution and use by customers to meet their needs". Meanwhile, according to Saladin(2007) Products are "everything that can be offered to a market to be noticed, owned, used or consumed so as to satisfy the wants and needs".

2.4.1. Product Quality Dimensions

According to Kotler and Armstong(2008), product quality can be incorporated into 9 dimensions, namely: 1) Form; The product can be clearly distinguished from others based on the shape, size, or physical structure of the product. 2) Product features; Secondary or complementary characteristics that are useful for adding basic functions related to product choices and their development.3) Performance; Relates to the functional aspect of a good and is the main character that the customer considers in purchasing the item.4) Accuracy or conformance; Relates to the level of conformity with the specified specifications based on the wishes of the customer. Conformity reflects the degree of accuracy

of product design characteristics and the characteristics of established standard quality.5) Durability; Relate to how long a product can be used. 6) Reliability; With regard to the probability or probability of a good performing its function every time it is used within a certain period of time and under certain conditions as well.7) Reparability; Related to the ease of repair of the product is damaged. Ideally, the product will be easily repaired by the user if it is damaged. 8) Style; Product appearance and customer's impression of the product. 9) Design; Overall product features that will affect the appearance and function of the product to the customer's wishes.

2.4.2. Product Attribute

According to Kotler and Armstrong (2008) several attributes that accompany and complement the product (product attribute characteristics) are: 1) "Brand is a name, term, sign, symbol, or design, or combination of all of these intended to identify the product or service from one or a group of sellers and distinguish them from competitors' products. Branding is a key issue in product strategy. Branding is expensive and time-consuming and can make the product work or fail. A good brand name can add great success to the product. 2) Packaging is the activity of designing and making container or wrapping of a product. 3) Product Quality is the ability of a product to perform its functions includes reliability, the accuracy of ease of operation and improvement, and other valuable attributes.

2.4.3. Product Quality Classification

According to Kotler and Armstrong(2008) product classification is divided into two parts, namely: 1) "Customer goods that are goods consumed for the benefit of end customers themselves, not for business purposes. Generally, customer goods can be classified into four types, namely: a) Daily necessities are goods that are often purchased by customers(have high purchase frequency), needed in the immediate time, and require minimal time in comparison and purchase. b). Goods are goods that are characteristic in comparison to the various alternatives available to customers based on their suitability, quality, price, and power in the selection and purchase process. c). Specialty goods are goods with unique characteristics and or identification, for which a group of large buyers is willing to always make a special effort to

purchase them. d). Goods that are not sought are goods that are not known to customers or though it is known to general customers have not thought to buy it. 2) Industrial goods are goods consumed by an industrialist (customer between or a business customer) for purposes other than direct consumption, that is: to be converted, manufactured into other goods and then resold by the manufacturer, to be resold by traders without physical transformation (production process).

3. Research Methods

This research uses quantitative explanative methods that give an explanation. According to Suryabrata (2005), explanative research is "research that aims to explain the relationship of a variable with other variables to test a hypothesis or problem-solving". The purpose of design selection of this study is that researchers want to explain the influence of service quality and product quality to customer loyalty with customer satisfaction as a mediation variable.
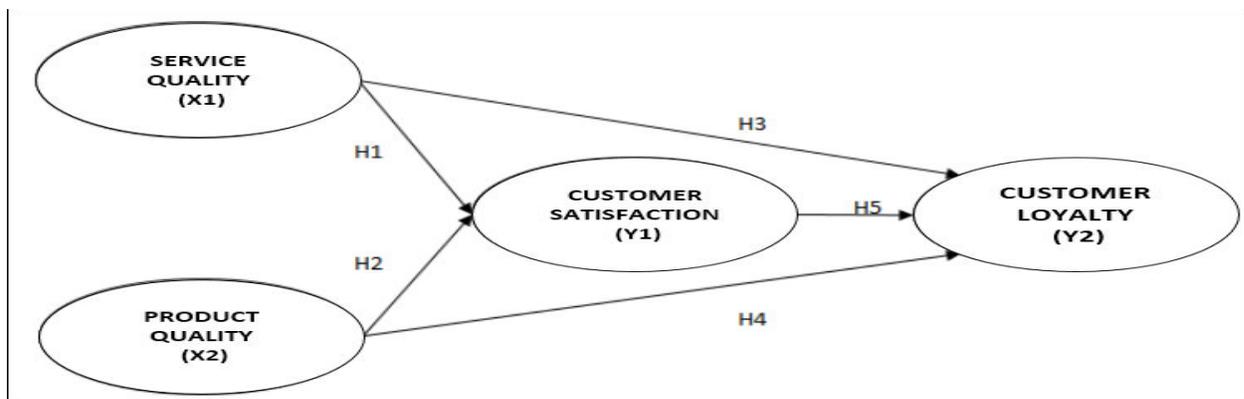

Figure 1. Concept of Research Model

In this study, the population used is customers at PT. Nano Coating Indonesia. The number of customers always increases every year, based on the marketing department report. As of December 2016 the total number of customers of PT. Nano Coating Indonesia as many as 100 customers. Given the total population of 100 customers, then all members of the population are sampled, that is with saturated sampling technique (census).Statistical analysis technique used is path analysis, using correlation, regression, and path, so it can be known to arrive at the last bound variable, must be through the direct path, or through intervening variable. (J. Sarwono, 2007).

4. Results and Discussion

4.1. Research result

4.1.1. Data Quality Test

Based on research and data obtained, then to be able to determine whether the correct variable quality of service and product quality can be used as a gauge of customer loyalty with variable customer satisfaction as intervening variable at PT. Nano Coating Indonesia, but before the data processed first

tested the variables studied, whether the data is accurate and reliable.

4.1.2. Validity test

This validity test is performed to test whether each item of statement has represented the indicator to be investigated. The validity of these measurements can be seen with the help of SPSS software ver.22.0. For data that amounts to 100, alpha 5%, the instrument is considered valid when r = 0.195. So if the correlation between the grains with a total scores of less than 0.195 then the granules in the instrument are declared invalid. Validity test is done by looking at the correlation between the score of each item statement with the total score.

4.1.3. Validity Test of Data Instruments

From the calculation of the correlation coefficient score of each item statement of service quality, product quality, customer satisfaction and customer loyalty of 100 respondents with the number of statements of each variable 8 and 9 statements with the total score of each respondent results are presented in the table as follows:

Table 1: Validity Test of Data Instruments

Statement	R Calculate				R Table; n= 100; α = 5%	Description
	Service Quality	Product Quality	Customer Satisfaction	Customer Loyalty		
Instrument 1	0.599	0.704	0.696	0.623	0.195	Valid
Instrument 2	0.628	0.726	0.697	0.545	0.195	Valid
Instrument 3	0.520	0.645	0.738	0.572	0.195	Valid
Instrument 4	0.525	0.754	0.697	0.642	0.195	Valid
Instrument 5	0.591	0.726	0.749	0.582	0.195	Valid
Instrument 6	0.620	0.742	0.687	0.584	0.195	Valid
Instrument 7	0.533	0.619	0.658	0.525	0.195	Valid
Instrument 8	0.527	0.530	0.588	0.580	0.195	Valid
Instrument 9	-	0.628	0.650	-	0.195	Valid

Source: Data is processed in 2017

Based on Table 1, it can be seen that from 8 and 9 point statement of service quality, product quality, customer satisfaction and customer loyalty result is valid.

4.1.4 .Test of Reliability

Test reliability to know the extent to which the measurement results are reliable and consistent. In table 2 below, the following test results note that all variables have alpha above 0.60 which means that all variables in this study are reliable.

Table 2: Reliability Test Results

Variable	Cronbach Alpha	Critical Value(α) = 5%	Description
Service Quality	0.692	0.600	Reliable
Product Quality	0.850	0.600	Reliable
Customer Satisfaction	0.856	0.600	Reliable
Customer Loyalty	0.831	0.600	Reliable

Source: Data is processed in 2017

Based on the results of Cronbach alpha reliability test it appears that all existing statements form a reliable measure of service quality, product quality, customer satisfaction and customer loyalty to form a reliable measure of each dimension.

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4.2. Discussion
Substructure I

The structural equation: $Y1 = PY1X1 + PY1X2 + \varepsilon1$

Table 3: Effect of Service Quality and Product Quality on Customer Satisfaction PT. Nano Coating Indonesia

Relationship of Variables	Parameter						
	Mult. R	R Square	Beta	Coef. B	t arithmetic	Sig.	α
Service Quality	0.690	0.476	0.504	0.655	5.574	0.000[*)]	5%
Product Quality			0.262	0.265	2.901		
Testing Significance							
F arithmetic> F table = 44024> 3.090							

Description: Customer Satisfaction Variable
Source: Data is processed in 2017

The value of R square(R2)in table 3 above is 0.476 or 47.6%. The number has meaning big influence exogenous variable of service quality and product quality to an endogenous variable of customer satisfaction of PT. Nano Coating Indonesia. While the rest of 52.4% influenced by other variables outside this research.

Hypothesis testing by comparing the level of significance level (sig) of research with the significance level of 5%. The results showed that the number of signatures is smaller than the level of significance or sig prob. is 0.000 *) <0.05 so reject Ho and accept Ha; meaning there is a linear relationship between service quality and product quality with customer satisfaction. Thus, the above regression model is feasible and correct. The conclusion is the quality of service and product quality combined to affect customer satisfaction PT. Nano Coating Indonesia.

Influence Quality Service and Product Quality Partially Against Customer Satisfaction PT. Nano Coating Indonesia

To see hypothesis test of variable service quality and product quality to customer satisfaction PT. Nano Coating Indonesia individually, in use Test-t and while to see the magnitude of influence, used the number Beta or Standardized Coefficient.

Relationship between Service Quality and Customer Satisfaction PT. Nano Coating Indonesia

To see whether there is a linear relationship between service quality and customer satisfaction of PT. Nano Coating Indonesia, we can perform the following analysis steps: 1) Determine the hypothesis: Ho: there is no linear relationship between service quality and customer satisfaction; Ha: there is a linear relationship between service quality and customer

satisfaction. 2) Calculate the number of t research: Based on the calculation of SPSS research t rate obtained for 5,574. 3) Calculating the number of t table with the following conditions: 0.05 and degrees of freedom (DK) with the terms DK = n - 2, or 100 - 2 = 98, with the result t table = 1.984. 4) Define criteria; if t research> t table then Ho rejects and Ha receives; if t research <t table then Ho accept and Ha reject. 5) Make a decision; from the calculation, obtained t count of 5.574> t table of 1.984 so Ho is rejected and Ha accepted. This means there is a linear relationship between service quality and customer satisfaction PT. Nano Coating Indonesia. The amount of influence quality of service to customer satisfaction PT. Nano Coating Indonesia of 0,504 or 50.4%.
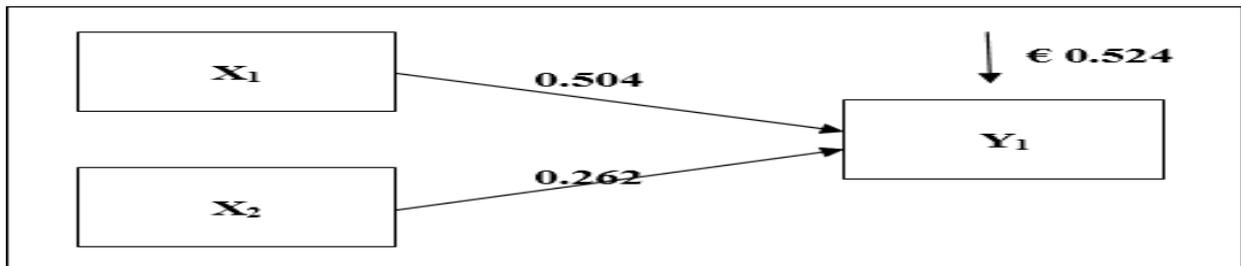
Relationship between Product Quality and Customer Satisfaction PT. Nano Coating Indonesia

To see whether there is a linear relationship between product quality and customer satisfaction of PT. Nano Coating Indonesia, we can do the following analysis steps: 1) Determine the hypothesis: Ho: there is no linear relationship between product quality and customer satisfaction; Ha: there is a linear relationship between product quality and customer satisfaction. 2) Calculate the number of t research: Based on the calculation of SPSS research t value obtained for 2.901. 3) Calculating the number of t table with the following conditions: 0.05 and degrees of freedom (DK) with the terms DK = n - 2, or 100 - 2 = 98, with the result t table = 1.984. 4) Define criteria; if t research> t table then Ho rejects and Ha receives; if t research <t table then Ho accept and Ha reject. 5) Make a decision; from the calculation, obtained t count of 2.901> t table by 1984 so that Ho is rejected and Ha accepted. This means there is a linear relationship between product quality and

customer satisfaction PT. Nano Coating Indonesia. The magnitude of the effect of product quality on

customer satisfaction PT. Nano Coating Indonesia is 0.262 or 26.2%.

Substructure Equation 1: Y1 = 0.504 + 0.262 + 0.524

Figure 2. Relationship between Service Quality and Product Quality of Customer Satisfaction PT. Nano Coating Indonesia

Substructure 2

The structural equation: Y2 = PY2X1 + PY2Y1 + PY2X2 + ε2

Table 4: Influence Service Quality, Product Quality and Customer Satisfaction against Customer Loyalty PT. Nano Coating Indonesia

Relationship of Variables	Parameter						
	Mult. R	R Square	Beta	Coef. B	t arithmetic	Sig.	α
Service Quality			0.058	0.067	0.825		
Product Quality	0.875	0.765	0.200	0.181	3.161	0.000[*)]	5%
Customer Satisfaction			0.706	0.631	10.336		
Testing Significance							
F arithmetic> F table = 104.355 > 2.694							

Description: Variable Customer Loyalty
Source: Data is processed in 2017

The value of R square (R^2) in table 4 above is 0.765 or 76.5%. The number has the meaning of the effect of exogenous variables of service quality, product quality and customer satisfaction on the endogenous variable of customer loyalty PT. Nano Coating Indonesia. While the rest of 23.5% influenced by other variables outside this research.

Hypothesis testing by comparing the level of significance level (sig) of research with the significance level of 5%. The results showed that the number of signatures is smaller than the level of significance or sig prob. is 0.000 *) <0.05 so reject Ho and accept Ha; meaning there is a linear relationship between service quality, product quality and customer satisfaction with customer loyalty.

Thus, the above regression model is feasible and correct. The conclusion is the quality of service, product quality and customer satisfaction combined affect customer loyalty PT. Nano Coating Indonesia.
Effect of Service Quality, Product Quality and Customer Satisfaction Partially on Customer Loyalty PT. Nano Coating Indonesia

To see hypothesis test of service quality variable, product quality and customer satisfaction to customer loyalty PT. Nano Coating Indonesia individually, in use Test-t and while to see the magnitude of influence, used the number Beta or Standardized Coefficient.

Relationship between Service Quality and Customer Loyalty PT. Nano Coating Indonesia

To see whether there is a linear relationship between service quality and customer loyalty PT. Nano Coating Indonesia, we can perform the following analysis steps: 1) Determine the hypothesis: Ho: there is no linear relationship between service quality and customer loyalty; Ha: there is a linear relationship between service quality and customer loyalty. 2) Calculate the number of t research: Based on the calculation of SPSS research t rate obtained for 0825. 3) Calculating the number of t table with the following conditions: 0.05 and degrees of freedom (DK) with the terms DK = n - 2, or 100 - 2 = 98, with the result t table = 1.984. 4) Define criteria; if t research> t table then Ho rejects and Ha receives; if t research <t table then Ho accept and Ha reject. 5) Make a decision; from the result of calculation, obtained t research value equal to 0,825 <t table equal to 1,984 so Ho accepted and Ha rejected. This means there is no linear relationship between service quality and customer loyalty PT. Nano Coating Indonesia. The amount of influence the quality of service to customer loyalty PT. Nano Coating Indonesia of 0.058 or 5.8%.
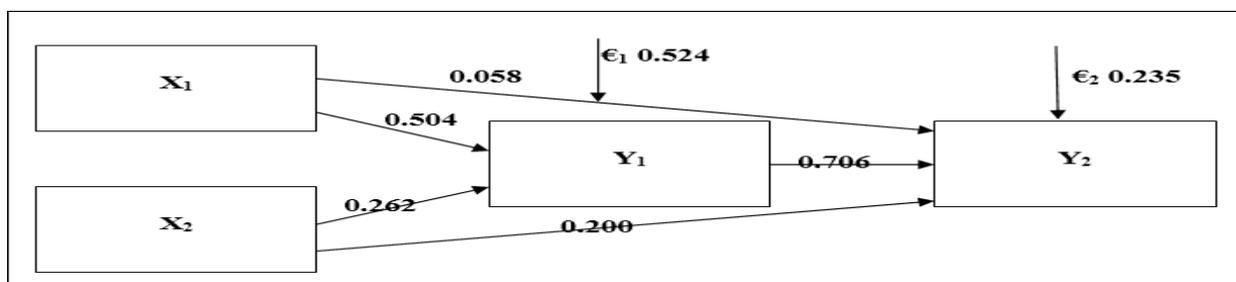
Relationship between Product Quality and Customer Loyalty PT. Nano Coating Indonesia

To see whether there is a linear relationship between product quality and customer loyalty PT. Nano Coating Indonesia, we can perform the following analysis steps: 1) Determine the hypothesis: Ho: there is no linear relationship between product quality and customer loyalty; Ha: there is a linear relationship between product quality and customer loyalty. 2) Calculate the number of t research: Based on the calculation of SPSS research t obtained for 3.161. 3) Calculating the number of t table with the

following conditions: 0.05 and degrees of freedom (DK) with the terms DK = n - 2, or 100 - 2 = 98, with the result t table = 1.984. 4) Define criteria; if t research> t table then Ho rejects and Ha receives; if t research <t table then Ho accept and Ha reject. 5) Make a decision; from the calculation, obtained t count of 3.161> t table for 1.984 so Ho rejected and Ha accepted. This means there is a linear relationship between product qualities with customer loyalty PT. Nano Coating Indonesia. The magnitude of the effect of product quality on customer loyalty PT. Nano Coating Indonesia is 0.200 or 20.0%.

Relationship between Customer Satisfaction and Customer Loyalty PT. Nano Coating Indonesia

To see whether there is a linear relationship between customer satisfaction and customer loyalty PT. Nano Coating Indonesia, we can perform the following analysis steps: 1) Determine the hypothesis: Ho: there is no linear relationship between customer satisfaction and customer loyalty; Ha: there is a linear relationship between customer satisfaction and customer loyalty. 2) Calculate the number of t research: Based on the calculation of SPSS research t rate obtained for 10336. 3) Calculating the number of t table with the following conditions: 0.05 and degrees of freedom (DK) with the terms DK = n - 2, or 100 - 2 = 98, with the result t table = 1.984. 4) Define criteria; if t research> t table then Ho rejects and Ha receives; if t research <t table then Ho accept and Ha reject. 5) Make a decision; from the result of calculation, obtained t count equal to 10336> t table equal to 1,984 so Ho rejected and Ha accepted. This means there is a linear relationship between customer satisfactions with customer loyalty PT. Nano Coating Indonesia. The magnitude of the effect of product quality on customer loyalty PT. Nano Coating Indonesia of 0.706 or 70.6%.

Substructure Equation 2: Y2 = 0.058 + 0.706 + 0.200 + 0.235
Figure 3. Service Quality, Product Quality and Customer Satisfaction ofCustomer Loyalty PT. Nano Coating Indonesia
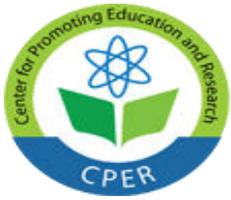
Calculation of Influence:

a. Direct Effect

- Effect of service quality variable on customer satisfaction

X1Y1 → = 0.504

- Effect of product quality variable on customer satisfaction

X2 → Y1 = 0.262

- Effect of service quality variable on customer loyalty

X1 Y2 → 0.058

- Effect of product quality variable on customer loyalty

X2 Y2 → = 0.200

- Effect of customer satisfaction variable on customer loyalty

Y → Y2 = 0.706

b. Indirect Influence

- Effect of service quality variable on customer loyalty through customer satisfaction

X1 Y1 → Y2 → = (0.058 x 0.706) = 0.041

- Effect of product quality variable on customer loyalty through customer satisfaction

X2 Y1 → Y2 → = (0.262 x 0.706) = 0.185

c. Total Influence

- Effect of service quality variable on customer loyalty through customer satisfaction

X1 Y1 → Y2 → = (0.058 + 0.706) = 0.764

- Effect of product quality variable on customer loyalty through customer satisfaction

X2 Y1 → Y2 = (0.262 + 0.706) = 0.968

- Effect of service quality variable on customer loyalty

X1 Y2 → = 0.058

- Effect of product quality variable on customer loyalty

X2 Y2 → = 0.200

- Effect of customer satisfaction variable on customer loyalty

Y1 Y2 → = 0.706

5. Conclusions and Suggestions

5.1. Conclusion

From the results of the calculation analysis above, the researcher can take the following conclusion: 1) There is no significant influence of service quality to customer loyalty PT. Nano Coating Indonesia directly. 2) There is a significant effect of product quality on customer loyalty PT. Nano Coating Indonesia directly. 3) There is a significant effect of customer satisfaction on customer loyalty PT. Nano Coating Indonesia directly. 4) There is a significant influence on service quality, product quality and customer satisfaction on customer loyalty PT. Nano Coating Indonesia in combination. 5) There is a significant influence of service quality on customer satisfaction PT. Nano Coating Indonesia directly. 6) There is a significant effect of product quality on customer satisfaction PT. Nano Coating Indonesia directly. 7) There is a significant influence on service quality and product quality on customer satisfaction PT. Nano Coating Indonesia in combination.

5.2. Suggestion

Based on the results of analysis and discussion of empirical testing of a conclusion presented above, Researchers in this sub-section try to provide recommendations or suggestions that may be acted upon for PT. Nano Coating Indonesia is as follows: 1) Quality of service provided to customers is good, but the quality of service does not make customers become loyal, therefore a companies need to improve the quality of service to customers so that customers will feel more comfortable, satisfied and loyalty increasing(strong) and the company more often to

establish relationships with customers so that customers do not run to competitor products. 2) For the quality of existing products is good and customers are satisfied and loyal to use the product, keep the product is good and improve the quality according to the wishes of the customers, the company must try to design the latest products so that the appeal of the customers. 3) To complement this research, it would be possible for future researchers to develop the results of this study by adding some variables that are not discussed in this study.

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