

Analysis of the Effect of Product Quality and Service Quality on Customer Satisfaction PT. Hargen Nusantara Tangerang

Dian Permata Sari
Mercu Buana University

Dr. M. Mukti Ali, MM
Mercu Buana University

Abstract:- The purpose of this research is to analyze the effect of Product Quality and Service Quality on Customer Satisfaction of PT. Hargen Nusantara. The research data is annual data for the observation period of 3 years (2015-2017). The sampling method used is non probability sampling. The population is 380 customers, from the population there are 300 customers meeting the criteria as sample. The sample is 300 customers who have purchased generator sets at PT. Hargen Nusantara. The analytical method used in this study is multiple linear regression. Data was collected from interviews and questionnaires. Data was analyzed using SPSS Version 25. The research results showed that: (1) Product Quality partially affects Customer Satisfaction; (2) Service Quality partially affect Customer Satisfaction; (3) Product Quality and Service Quality simultaneously affect Customer Satisfaction.

Keywords:- Product Quality, Service Quality and Customer Satisfaction.

I. INTRODUCTION

The Indonesian economy in 2017 measured by Gross Domestic Product (GDP) based on current prices reached Rp 13,588.8 trillion and GDP per capita reached Rp 51.89 million or US \$ 3,876.8. Indonesia's economy in 2017 grew 5.07 percent higher than the achievement in 2016 of 5.03 percent (Source: Indonesian Central Statistics Agency, 2018) National electricity consumption continues to show an increase with increasing access to electricity or electrification and changes in people's lifestyles. Based on data from the Ministry of Energy and Mineral Resources in Figure 1.1 Indonesia's electricity consumption in 2017 reached 1,012 Kilowatts per Hour (KWH) / capita, up 5.9 percent from the previous year. The level of electricity demand that is so large on a national scale is not able to be met by PT. PLN as the only SOE that serves Indonesia's electricity needs.

The Indonesian Electricity Society (MKI) estimates that electricity demand in Indonesia will increase rapidly in the next few years. For this reason, private and regional participation in electricity supply needs to be increased. The General Plan for Electricity Supply (RUPTL) of PT Perusahaan Listrik Negara (Persero) in 2010-2019 states, electricity demand is estimated at 55,000 Mega Watt (MW). So the average increase in electricity demand per year is 5,500 MW. Of the total power, 32,000 MW (58%) will be built by PLN alone. While the remaining 23,000 MW

(42%) will be met by private electricity developers. (Source: Kompas.com, 2011)

With the increasing number of business people who need generators, the companies in the business of generator sales are growing rapidly. Total annual turnover achievements also continue to increase as experienced by PT. Hargen Nusantara, which started in this business since 2007. customers from 2015-2017 experienced a decrease in transactions.

This has become one of the problems found at PT. Hargen Nusantara, because repurchase is one indicator of customer satisfaction. With so many companies engaged in the generator industry, consumers can selectively choose the generator that they will buy. Factors such as product price, product quality, service, after sales guarantee, and spare parts are the main concerns before consumers buy.

Therefore companies are competing to always be better than competitors so that consumers want to buy the products they offer. Customer assessment of the generator company is influenced by how the customer interprets the generator product, the price provided or the service received. Providing high quality services is a must for achieving customer satisfaction. For consumers, service quality and customer satisfaction come from organized services.

Consumer satisfaction is also an aspect that must be considered, if consumers are satisfied with the services provided, of course, will have a positive psychological impact, which may have an impact on loyalty to the company that provides such satisfaction. If consumers already have a feeling of satisfaction with the services provided, we can be sure that consumers will become loyal customers and will not turn to other products. The significance of consumer loyalty is closely related to the company's survival and to the company's strong growth in the future.

II. LITERATURE REVIEW

A. Definition of Marketing

According to Danang Sunyoto (2014: 84) Marketing is a human activity that aims to satisfy the needs and desires of customers through an exchange process from the parties concerned in the company. According to Prof. Dr. Sofjan Assauri (2014: 5) Marketing is an effort to provide and **deliver** the right goods and services to the right people

at the right place and time and at the right price with the right promotion and communication.

In the context of marketing the desires and needs of customers are distinguished. Needs are a state of feeling that they do not have satisfaction and desires are certain satisfying desires of needs (Fandi Tjiptono 2014: 11).

B. Product

According to Kotler and Armstrong (2008: 266) product is defined as everything that can be offered to the market in order to attract attention, acquisition, use, or consumption that can satisfy a desire or need. Products include more than tangible goods. In a broad sense, products include physical objects, services, events, people, places, organizations, ideas, or a mix of these entities.

Products themselves are classified into two broad groups based on the type of customer who uses them, namely customer products and industrial products. Customer products are products and services purchased by end customers for personal consumption.

- **Daily necessity products (convenience products)** are products and services that are usually frequently and immediately purchased by customers with a minimum comparison and purchase effort. For example soap, candy, newspapers and fast food.
- **Shopping products** are products and services that are less frequently purchased and customers carefully compare the suitability, quality, price and style of the product.
- **Special products** are products and services with unique characteristics or brand identification where a group of significant buyers is willing to make a special purchasing effort. Examples of specific products include certain brands and types of cars
- **An unsought product** is a product that the customer might not know or the product that the customer might know but usually the customer does not think of buying it. Most major new innovations are not sought after until the customer is aware of the existence of the product through advertising. Classic examples of products and services that are known but not sought are life insurance, funeral pre-planning services and blood donations for the Red Cross.
- **Industrial products** are products that are purchased for further processing or for use in running a business. Therefore, the difference between a customer's product and an industrial product is based on the purpose for which the product was purchased.

C. Product Quality

Product is anything that can be offered by producers to be considered, requested, sought, bought, used or consumed by the market as meeting the needs or desires of the relevant market. Product is something that can be offered to the market to be considered, owned, used, or consumed so that it can satisfy wants and needs (Sudaryono 2014: 354)

By definition, quality is the level of good or bad of a product produced whether it complies with specified specifications or its suitability to needs.

In developing a program to reach the desired market, a company must start with a product or service that is designed to satisfy the desires of consumers. Companies must try to win the hearts of customers to smooth the course of production.

Tjiptono (2015) revealed that there are eight dimensions of product quality, namely:

- Performance
- Product diversity (featured)
- Reliability
- Conformance
- Durability or durability
- Repairability
- Aesthetics (Aesthetics)
- Perceived Quality

D. Service Quality

According to Tjiptono (2011: 23) Quality of service is something that is perceived by the customer. Customers will judge the quality of a service that is felt based on what they describe in their minds. Customers will turn to other service providers who are better able to understand the specific needs of customers and provide better services.

The level of service quality cannot be judged from the company's point of view but must be viewed from the customer's point of view. Therefore, in formulating service strategies and programs, companies must be oriented to the interests of customers by taking into account the quality of service components.

To analyze the level of service quality the SERVQUAL (Service Quality) model consists of five dimensions according to Parasuraman in the book Fandi Tjiptono (2011), namely:

- Reliability
- Responsiveness
- Assurance
- Empathy (Empathy)
- Physical evidence (Tangible)

E. Customer Satisfaction

Schiffman & Kanuk (2009) states that customer satisfaction is an individual's perception of the performance of a product or service in relation to the expectations (expectations) of the customers themselves where each individual will have different expectations.

A customer will give high value to a company's product or service if he feels the benefits obtained are greater than the costs incurred, and other products or services from competitors are not able to provide better benefits. If the company's performance is better than what is expected by the customer or at least the same as expected, then the customer will be satisfied (Kotler & Keller 2015).

If the company's performance is below customer expectations, then the customer will feel dissatisfied.

F. Dimensions of Customer Satisfaction

Customer satisfaction according to Oliver in Tjiptono (2015) there are three dimensions:

- Repurchase (repurchase), i.e. when the customer wishes to repurchase the product.
- Patrization, i.e. when customers feel comfortable becoming permanent customers.
- Recommend (Recommended), where customers are willing to provide recommendations to others.

III. RESEARCH METHODOLOGY

In a study entitled "Analysis of the Effect of Product Quality and Service Quality on Customer Satisfaction of PT. Hargen Nusantara Tangerang "This uses quantitative explanative research methods. According to Abadi (2011) in his journal said quantitative research methods have inherent special characteristics such as variables and hypotheses, aspects of explanation and potential errors. Variables are variants that have a value at the focus of the research object. While hypotheses are propositions or temporary answers that need to be tested for truth. So, the result of the quantitative method must be data and numbers. According to Bungin (2009) explanatory research is research that aims to explain the relationship of a variable with other variables to test a hypothesis. The purpose of choosing the explanative method is because the researcher wants to explain the relationship between product quality variables, and service quality on customer satisfaction.

The calculation process of this research uses SPSS. Based on the hypotheses raised in the study in brief the design of this study

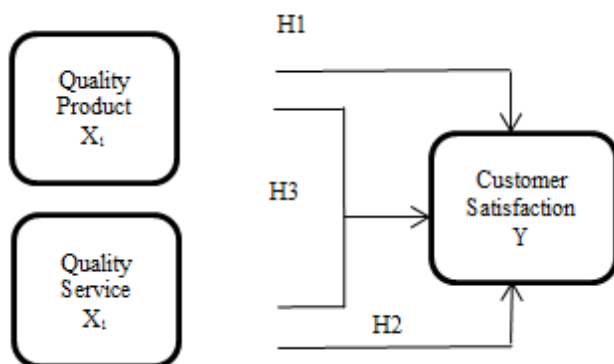


Fig 1:- Theoretical framework

Based on the previous thought and research framework above, a general research hypothesis can be formulated namely:

- H1: There is a positive and significant influence on product quality on satisfaction customer
- H2: There is a positive and significant influence on service quality on satisfaction customer

H3: There is a positive and significant influence on product quality and service quality on customer satisfaction simultaneously

A. Sample And Population

The population in this study are all customers who have made purchases or transactions at PT. Hargen Nusantara. Based on sales data of PT. Hargen Nusantara in 2015-2017, there were around 380 business or industrial sector customers who had purchased generators to support their business activities.

The sampling technique is to use a non probability sampling method, ie the sampling technique is not chosen randomly. In this study the sample was determined using the Slovin formula, The sample of this research is 300 sampling.

B. Data Gathering Technique

Researchers choose the method of data collection using a questionnaire. Questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer (Sugiyono, 2013). The questionnaire contains questions made on a 1-5 Likert scale. Likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena. Each answer has a gradation from very positive to very negative, the answer can be given a score indicated

C. Data Analysis Technique

Data analysis techniques are useful for solving research problems. The steps in the data processing procedure performed are:

- Validity test
- Reliability test
- Classic assumption test
- Multiple Linear Regression Analysis
- Hypothesis test

IV. RESULTS AND DISCUSSION

A. Results

1. Based on the above output it is known that the majority of respondents in this study (81.7%) were male
2. In the industrial sector at 36.3% and the lowest in other sectors (hotels, shopping centers) with a value of 6.7%.
3. With data on the number of respondents as much as 67%, and 33% of the total number of respondents making purchases with the aim of resale.
4. Who bought the largest portion 3 times or more amounted to 42.7%.

➤ Validity Test

The validity test was performed on items of product quality, service quality and customer satisfaction variables to 300 respondents so that the formula $df = n-2$ obtained $t_{table} 0.113$. The results of this validity test show that all items in rcount statement are greater than t_{table} . This

shows that all statement items on each variable are valid so

that statements can be used as research instruments.

Variable	Indicator	r Count	r table	Description
Customer Satisfaction (Y)	Y1.1	0,609	0,113	Valid
	Y1.2	0,464	0,113	Valid
	Y1.3	0,479	0,113	Valid
	Y1.4	0,755	0,113	Valid
	Y1.5	0,686	0,113	Valid
	Y1.6	0,761	0,113	Valid

Table 1:- Test results of variable indicator validity

➤ *Reliability Test*

reliability test is known that the value of Cronbach's Alpha on product quality, service quality and customer

satisfaction variables get results of more than 0.600. This shows that all statement items on each variable are reliable and can be used as research instruments.

Variable	Nilai Cronbach's Alpha	Requirement	Note
Product Quality	0.889	0.600	Reliabel
Service Quality	0.917	0.600	Reliabel
Customer Satisfaction	0.698	0.600	Reliabel

Table 2:- Results of reliability test

➤ *Classic Assumption Test*

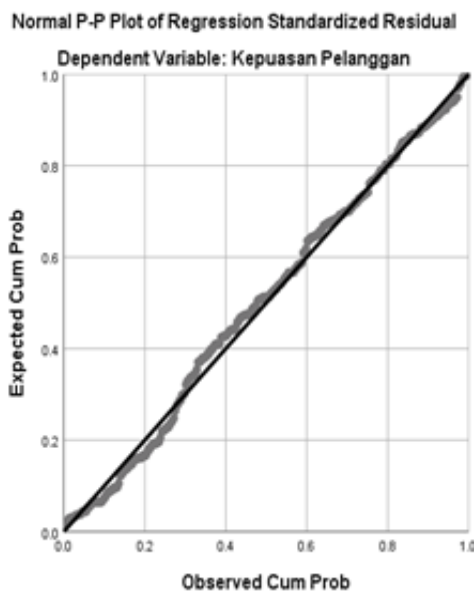


Fig 2:- P-P diagram of research data plot

To take a graph analysis decision in Fig explains that the residual standardized regression display forms an image as it slopes upward with a diagonal line. And based on the normal view of the standarized p-plot regression it appears that the points spread around the diagonal line. Therefore, based on the normality test a regression analysis is feasible to use.

➤ *Multicollinearity Test*

Model				Tolerance	VIF
	B	Std. Error	Beta		
1 (Constant)	12,782	1,010			
Product Quality (X1)	,225	,033	,679	0,242	4,141
Service Quality (X2)	,159	,032	,151	0,242	4,141

Table 3:- Multicollinearity Test

Based on the multicollinearity test results, obtained value of all variables used as predictors of the regression model shows a small VIF value, where all are below 10 and the tolerance value of all variables is above 0.10. This means that the independent variables used in the study do not show the presence of multicollinearity symptoms, which means that all of these variables can be used as independent variables.

➤ *Results of Multiple Linear Regression Analysis*

From the results of SPSS calculations the multiple linear regression equation is obtained for all independent variables on the dependent variable as follows:

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	12,782	1,010		12,655	,000
Product Quality (X1)	,225	,033	,679	6,902	,000
Service Quality (X2)	,159	,032	,151	2,531	,000

Table 4:- Results of Multiple Linear Regression Analysis

The multiple linear regression equation can be interpreted as follows:

- Constants (a) = 12,782 means that if the product quality and service quality variables are considered constant, then customer satisfaction (Y) is 12.782. If the independent variable does not increase in value, then the average value of customer satisfaction at PT. Hargen Nusantara amounted to 12,782. This shows that the respondents in this study felt that the quality of the products and the quality of services provided by PT. Hargen Nusantara is able to make customers feel satisfied after making a purchase at PT. Hargen Nusantara.
- The number of regression coefficients for the product quality variable (X_1) is 0.225, this explains that there is a positive influence on the product quality variable (X_1) means that if the coefficient of the product quality variable (X_1) is increased it will increase the customer satisfaction coefficient (Y) and also otherwise. The positive influence of product quality variables in this study can be interpreted that if the dimensions of this study are improved it will make customers more satisfied with the generator products purchased at PT. Hargen Nusantara.
- The regression coefficient number for the service quality variable (X_2) is 0.159, this explains that there is a positive influence on the service quality variable (X_2) means that if the service quality variable coefficient (X_2) is increased it will increase the customer satisfaction coefficient (Y) and also otherwise. In this study, through multiple linear regression tests showed a positive effect on service quality variables. This shows that the role of service quality in the generator business is indeed very important, because service quality can be used as a reference or consideration for customers to buy a product. Respondents in this study indicate that after getting good service provided by PT. Hargen Nusantara will affect customer satisfaction.

From the explanation above the product quality and service quality variables can be concluded that both of them have a significant effect on customer satisfaction of PT. Hargen Nusantara.

➤ *UJI Hipotesis*

• *Statistical Test t*

T test results for the product quality variable (X_1) obtained tcount of 6.902 with a significance level of 0.000 using t table 1.967 (significance value 0.05), then tcount $6.902 > 1.967$ which means H_0 is rejected so it can be said that product quality has an influence on customer satisfaction. In addition to the sig value of product quality variable 0,000 ($<\alpha = 5\%$) it can be concluded that product quality has a positive and significant effect on customer satisfaction at PT. Hargen Nusantara.

Service quality variable (X_2) obtained tcount of 2.531 with a significance level of 0.000 using ttable 1.967 (significance value 0.05), then tcount $2.531 > 1.967$ which means H_0 is rejected so it can be said that service quality has an influence on customer satisfaction. In addition, the sig value of service quality variable 0,000 ($<\alpha = 5\%$) can be concluded that the quality of service has a positive and significant effect on customer satisfaction at PT. Hargen Nusantara..

• *Test Statistics f*

Based on the results of the statistical test f in Table 4.11 it can be seen that the value of sig. of 0,000 ($<$ test level $\alpha = 5\%$), it was concluded together the product quality (X_1) and service quality (X_2) influence customer satisfaction at PT. Hargen Nusantara (Y). From the data in Table 4.11 also obtained the value of fcount = 65.367 while the value of ftabel = 2.322, with the results obtained conclusions H_0 was rejected because fcount $>$ ftabel. So that simultaneously product quality (X_1) and service quality (X_2) have a positive and significant effect on customer satisfaction at PT. Hargen Nusantara (Y).

• *Analysis of the Coefficient of Determination (R^2)*

Based on the test results of the coefficient of determination (R^2), R square value of 0.306, meaning that the independent variable product quality and service quality can explain the dependent variable customer satisfaction by 30.6% while the remaining 69.4% is influenced by other variables outside the existing variables in this research.

➤ *Interdimensional Correlation Test*

Based on Correlation between dimensions in each variable obtained the following results:

- Correlation of dimensions on product quality variables with customer satisfaction it is known that the highest correlation value between product quality variables on customer satisfaction lies in the perceived quality dimension with a value of 0.594 to the Recommendation dimension, while the lowest correlation value lies in the Performance dimension of 0.054 located in the dimension Patinization. So it can be concluded that the perceived quality relationship both in product quality and service quality affects respondents to buy a generator compared to the performance provided.
- Correlation of dimensions on the variable service quality with customer satisfaction The highest correlation value between the service quality variables to the customer satisfaction variable lies in the Physical Evidence dimension (tangible) with a value of 0.398 against the Recommendation dimension. While the lowest correlation value is in the Assurance dimension with 0.006 for the Repurchase dimension. It can be seen that respondents prefer physical evidence with PT. Hargen Nusantara which has a workshop for Test Commissioning is compared to assurance such as knowledge about the generator set provided.

B. Discussion

➤ *Relationship between Product Quality and Customer Satisfaction at PT. Hargen Nusantara Tangerang (Hypothesis 1)*

PT. Hargen Nusantara in making the purchase of generators for their needs prioritizes the prevailing generator set standards, especially the durability of the optimal generator set when used continuously.

The results showed that the product quality variable had a positive effect on customer satisfaction at PT. Hargen Nusantara. The first factor affecting customer satisfaction is product quality. Quality is closely related to customer satisfaction.

PT. Hargen Nusantara must provide complete information about the generator being sold because if a customer who lacks information and is inexperienced about the generator offered will use the price as a measure compared to customers who have enough information and experience. As a result, if the customer has a negative mindset on PT. Hargen Nusantara then the possibility of customers will not use the Hargen generator again. Therefore PT. Hargen Nusantara must pay attention to the quality of the generator set sold so that the customer will recommend his relatives to buy the generator set at PT. Hargen Nusantara. Fulfillment of customer expectations really need to be considered to attract customers to become loyal customers. This is in line with research by Achmad Rozi (2018) and Ester Agustina (2017) who also found that product quality has a significant positive effect on customer satisfaction. This means that the higher the quality of the product, it will increase customer satisfaction. One of the main values expected by customers from producers is the highest quality products and services. In line with Kotler and Armstrong (2012: 283) which states that product quality is "The ability of a product to demonstrate its function, this includes overall durability, reliability, accuracy, ease of operation, and product repairs, as well as other product attributes". This certainly strengthens the results of research that the greater the product's ability to demonstrate its function, the higher the quality of the product, the higher the perceived satisfaction of consumers. A product can satisfy consumers when judged to meet or exceed their desires and expectations (Spreng et. Al. 1996). Quality is also the most fundamental of customer satisfaction and success in competition. In fact quality is what is required for all sizes of companies and for the purpose of developing quality products and showing consumers that they are able to find expectations for higher quality (Tata et al., 2000).

➤ *Relationship of Service Quality to Customer Satisfaction at PT. Hargen Nusantara Tangerang (Hypothesis 2)*

Every human being in general has both material and non-material needs. In meeting these needs they need good service. The service here is intended that PT. Hargen Nusantara must pay attention and understand what the customer wants in meeting their needs.

From the results of the study indicate that service quality has an influence on customer satisfaction PT. Hargen Nusantara. Customers choose the Hargen generator set as the first choice for their needs.

The most complicated thing about service is that its quality is greatly influenced by customer expectations. While customer expectations can vary from one customer to another customer, although the services provided are always consistent. Varying customer expectations for the satisfaction they get often leads to different perceptions. Therefore all staff of PT. Hargen Nusantara is consistent and responsive to complaints and requests and is polite in serving its customers.

In supporting customer satisfaction, PT. Hargen Nusantara also provides a complete workshop facility to conduct a Load Test on the generator set purchased and the maintenance division is available for maintenance as well as the spare parts of the generator in case of damage.

The results of this study are also in line with research by Bayhaqi (2006). Laura Nita br Purba, Endah Wartiningih and Dewi Winarni Susyanti (2016) also found that service quality had a significant positive effect on customer satisfaction, meaning that the higher the quality of services provided, the higher the satisfaction customer. Service quality is an effort to meet the needs and desires of consumers and the provision of service delivery in balancing consumer expectations (Fandi Tjiptono, 2014: 268).

According to Tjiptono (2011: 23) Quality of service is something that is perceived by the customer. Customers will judge the quality of a service that is felt based on what they describe in their minds. High-performance services are services that are able to exceed the expectations of consumers. Cronin and Taylor (1994) prove that consumer satisfaction is determined by consumer ratings of the quality of services provided and find a strong and positive relationship between overall service quality and satisfaction. Therefore, if the service received by the customer is very good, then the customer tends to be satisfied.

➤ *Implications of Research Results in Companies*

The results of this study indicate that product quality and service quality have a positive and significant relationship to customer satisfaction PT. Hargen Nusantara. In an effort to increase customer satisfaction, Hargen must keep the standards that apply to the generator and have optimal durability when the generator is used. In addition, with the increasingly fierce competition in the generator business, it is expected that Hargen can further develop features that can be useful so that when needed it can operate properly. PT. Hargen Nusantara must innovate in order to keep up with trends and still be able to carry out its stance to assist the government in meeting electricity needs in Indonesia.

One of the advantages in running this generator set business is the quality of products that can meet customer desires. If the generator has problems when operated and does not meet the criteria. the product will be rejected. even though the generator is still within the specified tolerance limits. For this reason. it should be considered in order to avoid greater mistakes in the future.

PT. Hargen also has to improve the quality of existing products because of the results of the research stating that generators that can be used optimally even more used continuously can make customers become more interested in choosing Hargen generators and making purchases.

PT. Hargen Nusantara must pay attention to customers in providing a fast guarantee. for example. a maximum of 3 days from the claim. in the sense that when the generator is damaged and the customer complains about the warranty. then the staff of PT. Hargen Nusantara must be fast and alert to provide after-sales service so that customers will recommend the Hargen generator set for the next project. Then in meeting customer satisfaction. PT. Hargen Nusantara must understand the needs of its customers by providing easy access to website updates and project portfolios that have been done in order to increase customer confidence when they want to buy PT. Hargen Nusantara.

V. CONCLUSIONS AND SUGGESTIONS

A. Conclusions

From the results of research conducted by the author. the authors draw conclusions that are adjusted to the determination of the objectives of this study.

- There is a positive and significant effect between product quality on customer satisfaction PT. Hargen Nusantara in Tangerang. This means that the higher the quality of the products sold. the higher the satisfaction obtained by the customers of PT. Hargen Nusantara.
- There is a positive and significant effect between product quality on customer satisfaction PT. Hargen Nusantara in Tangerang. This shows the higher the quality of services provided by staff in the company. the higher the satisfaction obtained by customers of PT. Hargen Nusantara.
- There is a positive and significant effect simultaneously between product quality and service quality on customer satisfaction PT. Hargen Nusantara in Tangerang.

B. Suggestions

Based on the results of research that has been done regarding the influence of product quality and service quality on customer satisfaction PT. Hargen Nusantara. can be given the following advice:

- *For PT. Hargen Nusantara*
 - From the results of the study. there is a mean value that is included in the low category in the product quality variable regarding the features of the Hargen generator set. PT. Hargen Nusantara must develop features that

can be useful for the generator set offered so that when needed it can operate properly

- PT. Hargen Nusantara must provide complete information about the generator being sold because if a customer who lacks information and is less experienced about the generator offered will use the price as a measure compared to customers who have enough information and experience. Complete information can make customers loyal to the company
- The availability of complete facilities provided by PT. Hargen Nusantara such as workshops for Test Load (Test Commissioning). the completeness of spare parts (spare parts). and maintenance of generators must be maintained

➤ *For Further Research*

- Conducting the same research for other generator set brands whether product quality and service quality factors affect customer satisfaction
- For further research. it is expected that further researchers can examine the preferences of other variables outside the variables that have been studied to get more varied results. This is intended because the development of the genset industry is currently experiencing rapid progress so as to make many new genset products appear with attractive offers

REFERENCES

- [1]. Agustina, Ester. 2017. Pengaruh Kualitas Produk Dan Harga Terhadap Kepuasan Pelanggan Pada PT. Sri Indah Modern. Tugas Akhir Permata Harapan
- [2]. Alexander, Flavodia Patrick Soentpiet. 2012. Pengaruh Kualitas Produk, Harga Dan Distribusi Terhadap Kepuasan Konsumen Cat NAX Autolux Di Kota Semarang.
- [3]. Ali, Mohammad Hajizadeh Gashti. 2011. Study The Effects Of Customer Service And Product Quality On Customer Satisfaction And Loyalty (Automotive Industry). Vol. 1 No. 7; [Special Issue –June 2011]
- [4]. Amineha, Hadi and Nataliya Kosacha. 2016. Assesment of Consumers' Satisfaction with The Automotive Product Quality. International Journal Of Environmental & Science Education 2016, Vol. 11, No. 16, 8726-8739
- [5]. Assauri Sofjan (2014) “Manajemen Pemasaran (Dasar Konsep dan Strategi)” cetakan ke 13, Interpratama Offset, Depok
- [6]. Atiyah, Latif. 2016. Product Quality and Its Impact on Customer Satisfaction A Field Study In Diwanayah Dairy Factory.
- [7]. Bayhaqi, Yuzza. 2006. Analisis Pengaruh Kualitas Layanan Dan Keunggulan Produk Terhadap Kepuasan Pelanggan Dan Dampaknya Pada Minat Pembelian Ulang.
- [8]. Cronin Jr., J., & Taylor, S. (1994). SERVPERF versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality. Journal of Marketing, 58, 125-131.

- [9]. Deitiana, Tita (2011) "Manajemen Operasional Strategi dan Analisa" Mitra Wacana Media, Jakarta.
- [10]. Edwin, Purnomo Setyo. 2012. Pengaruh Kualitas Produk Dan Harga Terhadap Kepuasan Konsumen Best Autoworks. Volume 1, Nomor 6, Februari 2017:755 - 764
- [11]. <https://www.bps.go.id/pressrelease/2018/02/05/1519/ekonomi-indonesia-triwulan-iv-2017--tumbuh-5-19-persen.html>
- [12]. http://www.oocities.org/markal_bppt/publish/slistrk/sl much.pdf
- [13]. Ibrahim, Ishaq Bani Melhem. 2016. Product Quality and Customer Satisfaction
- [14]. (Case Study Proton Holdings Berhad). The International Journal Of Business & Management. Vol. 4 Issue 4 April, 2016
- [15]. Juhaya S. Pradja (2014) "Pengantar Ilmu Ekonomi" Pustaka Setia, Jakarta.
- [16]. Ninta, Laura br Purba, Endah Wartaningsih dan Dewi Winarni Susyanti. 2016.
- [17]. Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan PT. Global Knowledge Indonesia. Epigram Vol. 13 No. 2 Oktober 2016
- [18]. Prasetyo, Unggul Guruh Taufan. 2012. Pengaruh Kualitas Produk, Kualitas Pelayanan Dan Harga Terhadap Kepuasan Konsumen Sepeda Motor Kawasaki Di Semarang
- [19]. Prastiwi, Asti. 2012. Pengaruh Kualitas Produk, Harga Dan Promosi Terhadap Kepuasan Konsumen PT. Matahari Sakti Surabaya.
- [20]. Razak, Ismail. 2016. The Impact of Product Quality and Price on Customer Satisfaction with the Mediator of Customer Value. Journal of Marketing and Consumer Research. Vol 30, 2016
- [21]. Rian, Riski Fauzi. 2015. Pengaruh Kualitas Layanan Pada Unit EDC Terhadap Kepuasan dan Implikasinya Terhadap Kepercayaan Pelanggan". Pada PT Mitra Usaha Jaya Utama.
- [22]. Rimawan, Erry. 2017. The Influence of Product Quality Service Quality and Trust on Customer Satisfaction and Its Impact on Customer Loyalty Case Study PT ABC Tbk. International Journal of Scientific & Engineering Research Volume 8, Issue 7, July-2017
- [23]. Rosita, 2017. Pengaruh Kualitas Produk Dan Promosi Terhadap Kepuasan Konsumen PT. Yamaha Alfa Scorpii Batam. Tugas Akhir Permata Harapan Rosyid, Saifur. 2015. Analisis Pengaruh Kualitas Layanan, Harga Dan Kualitas Produk Terhadap Kepuasan Konsumen Menggunakan Jasa Fotografi Komersial Roshvisual.
- [24]. Rosyidi, Suherman (2014) "Pengantar Teori Ekonomi" Raja Grafindo Persada, Jakarta.
- [25]. Rozi, Achmad. 2018. "Pengaruh Kualitas Produk Motor Honda Terhadap Kepuasan Konsumen Pada Mahasiswa STIE Al-Khairiyah Cilegon. Vol. 2 No. 1 May 2018
- [26]. Saparuddin. 2016. Pengaruh Kualitas Produk Dan Brand Image Terhadap Kepuasan Konsumen Kamera Canon Digital Single Lens Reflex (DSLR) (Studi Kasus Komunitas Pontianak Photografer Community). Jurnal Manajemen Pemasaran Agustus 2016
- [27]. Sasimath, Kavia dan Dr. Mallikarjun N L. 2016. Customer Satisfaction and Service Quality In Automobile Service Sector, Review of Literature. Volume 2, Issue 3, September 2016
- [28]. Shammari, Al – Minwir and Ahmad Samer Kanina. 2014. Service Quality and Its Relationship With Customer Satisfaction And Loyalty In A Saudi Arabian Automobile Company. Volume 14 Issue 8 Version 1.0 Year 2014
- [29]. Sholeh, M. Bagus. 2007. Pengaruh Kualitas, Merek Dan Harga Terhadap Kepuasan Produk OLI TOP 1 Di Kota Gresik
- [30]. Sudaryono (2014) "Perilaku Konsumen Dalam Perspektif Pemasaran" Cetakan Pertama, Lentera Ilmu Cendekia, Jakarta.
- [31]. Sunyoto Danang (2014) "Dasar-Dasar Manajemen Pemasaran" Buku Seru. Jakarta
- [32]. Syahri, Alfi Lubis dan Nur Rahmah Andayani. 2017. "Pengaruh Kualitas Pelayanan (Service Quality) Terhadap Kepuasan Pelanggan PT. Sucofindo Batam". Journal of Business Administration Vol 1, No 2, September 2017, hlm. 86-97
- [33]. Tanuwijaya, Melissa dan Mohamad Yusak Anshori. 2013. Pengaruh Kualitas Layanan Dan Kualitas Produk Terhadap Kepuasan Pelanggan Pipop Copy. Volume 7, No 1, Juni 2013
- [34]. Tjiptono Fandy (2014) "Pemasaran Jasa" Alfa Beta, Bandung.
- [35]. Tjiptono Fandy & Anastasia Diana (2015) "Pelanggan Puas? Tak Cukup!" Andi, Yogyakarta
- [36]. Tjiptono Fandy & Chandra Gregorius (2012). "Pemasaran Strategi" edisi 2, Andi, Yogyakarta
- [37]. Tjiptono Fandy & Gregorius Chandra (2011) "Service, Quality & Satisfaction" Andi, Yogyakarta
- [38]. Wacana, Satya. 2012. Pengaruh Karakteristik Produk, Diferensiasi, Kualitas Layanan, Persepsi Harga Dan Nilai Jual Kembali Terhadap Kepuasan Konsumen.
- [39]. Wambui, Beatrice. 2014. Analysis Of Service Quality Dimension On Customer Satisfaction.
- [40]. Wardhani, Evrina. 2010. Analisis Pengaruh Kualitas Produk, Kualitas Pelayanan & Nilai Pelanggan Terhadap Kepuasan Pelanggan (Studi pd Pelanggan Kedai Digital 23 Semarang).
- [41]. Warren, Clinton J. 2011. Understanding The Impact Of Core Product Quality On Customer Satisfaction, Team Identification, And Service Quality
- [42]. Wati, Erdiana, Abd. Salam Rasak dan Adrian Tawai. Pengaruh Kualitas Pelayanan Karyawan Terhadap Kepuasan Konsumen Pada Toko Kolombus Kota Kendari. Volume 12 150
- [43]. Yildiz, Emel. 2017. Effects Of Service Quality On Customer Satisfaction, Trust, Customer Loyalty And Word Of Mouth : An Application On Cargo Companies In Gumushane. Volume: 6 Issue: 12 (81-88)