The Influence of Product Quality and After Sales Services on Customer Satisfaction of Services Company Making Moulding Injection (Study Kasus Cv Ata)

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Abstract:- National plastic consumption is around 10 kilograms (kg) per capita (Indonesia). That number is much lower than that of Singapore which is 80 kg, Malaysia 64 kg, Thailand 42 kg, Europe and the United States (US) more than 100 kg. Based on Ministry of Industry data, there are currently around 925 plastic producers in the country, with a total workforce of 37,327 people. National plastic needs are 4.6 million tons, with an average increase of 5% over the past five years. The purpose of this study was to determine the effect of product quality, and service quality on customer satisfaction in making plastic injection molding. Primary data used in this study were obtained through questionnaires taken directly from respondents as many as 28 people, where the respondents were CV ATA customers spread across Indonesia. The type of research used is associative research and analysis techniques using multiple linear regression. The results showed that product quality, and service quality had a positive effect on customer satisfaction on molding customers at CV ATA. Product quality is very influential on customer satisfaction, service quality has a significant effect on customer satisfaction. The company still has to improve the quality of its products and services, in order to keep customers who are always loyal and able to compete with other companies.

Keywords:- quality product, service quality, customer satisfaction.

I. INTRODUCTION

In the development of business world, especially with the rapid advances in technology and information, the pressure to carry out continuous improvement is enormous in the face of the changes that occur. In order to survive in the increasingly fierce competition in the global market, a company must focus on new businesses in running its business by using strategic steps that have significant and sustainable impacts so that the company's vision and mission can be achieved.

Plastic products have made rapid progress in the manufacturing industry because they are versatile and have high economic value. Science and technology are needed for the use and processing of polymers, so that plastic products can be produced with a high enough quantity and good quality.

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Based on Ministry of Industry data (Kemenprin), there are currently around 925 plastic producers in Indonesia, with a total workforce of 37,327 people. National plastic needs are 4.6 million tons, with an average increase of 5% over the past five years.

To meet consumer needs and respond to the challenges of an increasingly competitive business world, an integrated market development is needed, in this case the quality of products is something that must be considered by the company because it can affect customer satisfaction. Products produced by the company become something that is very much taken care of by customers. In marketing the company's products, both in the manufacturing and service industries, a service is needed to provide satisfaction to its customers, so that customers become loyal customers to the company.

Customer satisfaction is something that must be prioritized by the company for the sustainability of its business. To meet customer satisfaction, CV ATA pays attention to marketing factors such as product quality, and the quality of services offered to remain quality. Realizing these things, the company is trying to find ways that can always create customer satisfaction. Therefore, the company is required to pay attention to its performance through product quality, and service quality in order to be able to provide satisfaction to its customers. This is also considered important by the company so that it needs to be reevaluated about how much influence it has on users and as a basis for achieving company progress and success.

In the period 2012-2016, the number of subscribers decreased, as illustrated in Figure 2. If this goes on in the long run it can end in discrepancies that will break the strong ties between consumers and the company, in other words loyalty will decrease (Buttle ; Burton, 2001).
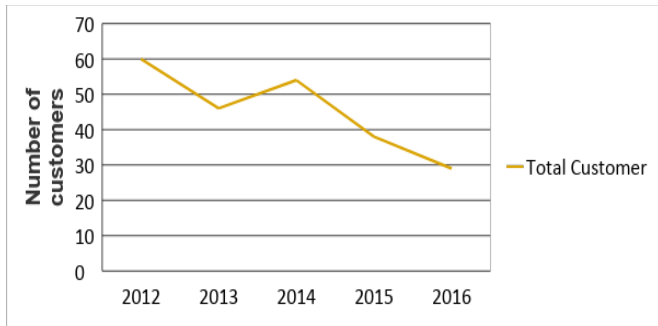
Fig 1:- Customer data of CV. ATA during 2012 – 2016

To maintain good relations with customers, a sales service is needed that can meet customer satisfaction itself. In addition, a close relationship is needed that must be maintained between producers and customers. This is needed so that customers feel closer to the supplier and it is expected that customers will remain loyal to their suppliers. Furthermore, the customer is expected to be able to tell others about the goodness of suppliers, which in turn is expected to increase the number of corporate consumers.

Companies generally expect that what is produced can be marketed smoothly and profitably. One of the things that companies do is to try to keep customers who have been created can be maintained forever. For example by making products that are tailored to the specifications provided by consumers, then adjusted to the technical processes in the field.
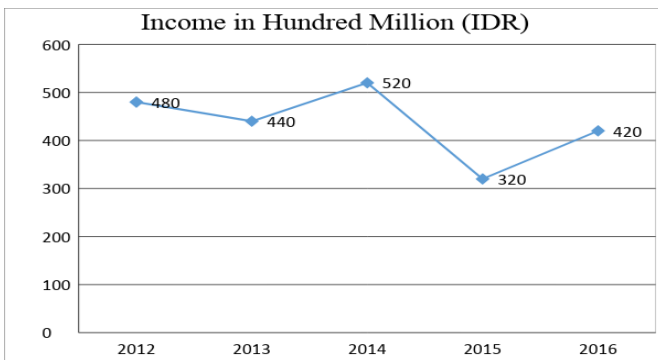

Fig 2:- Value of company income during 2012-2016

Based on the data obtained, the company experienced a drastic drop in profit from 2014 to 2015, then rose again in 2016. When viewed from customer data that has decreased but profit has increased in 2016, but not as high as in 2014, meaning the value of each molding made does not depend on the number of orders, but the quality and difficulty of the product made, in this case the molding construction is influential.

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(Kandampully, 1996). Value, has become an important factor in ensuring customer loyalty (Parasuraman, 1997; Woodruff, 1997). Value, is the overall assessment of consumers of the utility of a product or service based on the perception of what is received and what is given (Zeithaml, 1988).This study was used as a precautionary step so that the Injection Molding Company can create customer satisfaction in the future through the excellence of product quality, and the quality of after sales services provided.

II. RESEARCH PURPOSES

The purpose of this study was to find out:
- Effect of product quality, and service quality on customer molding satisfaction.
- Effect of product quality on customer satisfaction Molding orders.
- Effect of service quality on molding customer satisfaction.

III. LITERATURE REVIEW

A. Product Quality

Product quality is the ability of a product to carry out its functions, including reliability, durability, accuracy, ease of operation, and product improvement, as well as other valuable attributes (Kotler and Armstrong 2010: 27). Current quality is no longer a competitive weapon but a basic core that is expected by customers of all organizations (Kandampully, 1996). Quality is something that is decided by the customer, meaning quality is based on the actual experience of the customer or consumer on the product or service that is measured based on these requirements (Wijaya 2011: 11).

B. Service Quality

Service quality has been conceptualized as the difference between customer expectations about services to be received and perceptions of services received (Gronroos, 2001; Parasuraman, Zeithaml, and Berry, 1988). Service quality is the expected level of excellence and control over the level of excellence to fulfill customer desires (Tjiptono 2008: 59). Service quality is a measure of how well the level of service provided is in line with customer expectations (Wijaya (2011: 152).In some previous studies, service quality has been referred to as the extent to which services meet customer needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994).

C. Customer Satisfaction

Satisfaction is an emotional response when a customer evaluates differences regarding expectations of a service with perceptions of the results achieved. Perception of the results achieved is obtained through physical interaction with products or services (Salami, 2005: 39). Satisfaction is a feeling of pleasure or disappointment someone who appears

after comparing the performance or results of a product that is thought of the performance or results expected (Kotler and Keller 2009: 138). Satisfaction is the level of one's feelings after comparing the perceived (results) performance with their expectations (Supranto 2006: 233).
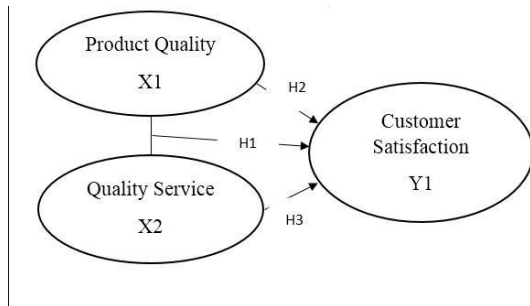
D. Framework of Research

Fig 3:- Framework of Research

E. Hypothesis

H_1: Product quality, and service quality affect customer satisfaction
H_2: Product quality has a partial effect on customer satisfaction.
H_3: Service quality has a partial effect on customer satisfaction.

IV. RESEARCH METHODS

A. Types of research
This research is associative research. According (Sugiyono2012: 100) associative research is research that aims to determine the effect of two or more variables.

B. Place and time of research
Research site at CV. ATA located on the Perancisstreet of Tangerang, Indonesia. Research time is August 2017 - September 2017.

C. Population and Sample
Population is a generalization area which consists of objects / subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions (Sugiyono 2012: 61). The sample is part of the number of characteristics possessed by the population (Sugiyono 2012: 62). The sample is as representing the population. The sample in this study amounted to 28 respondents.

D. Method of collecting data
Data collection methods used are:

- Observation Observation by making direct observations about the situation of the situation and the customer's daily life which are related to the research variables and aiming to obtain the data and information needed in this study.
- *Interview*
  Interview with direct dialogue with business owners and employees who aim to explore and obtain additional information about the research conducted.
- *Questionnaire*
  A method of collecting data using a set of statements that are compiled to be submitted to all respondents about their opinions regarding the influence of product quality, and service quality on customer satisfaction.

V. DATA ANALYSIS TECHNIQUE

Results obtained through data processing usingSPSS version 30.
The analytical tool used in this study is as follows:

- *Validity Test*
  This significance test is done by comparing the calculated r value (Corrected Item value - Total Correlation on Cronbach Alpha output) with r table values for degree of freedom (df) = n - k, in this case n is the number of samples and k is the number of independent variables (Ghozali, 2009: 49).

- *Reliability Test*
  Reliability test aims to measure the construct consistency or indicator (variable) research. A questionnaire is said to be reliable or reliable if someone's answer to the statement is consistent or stable over time (Ghozali, 2009: 46).

- *Multiple Linear Regression Analysis*
  Multiple linear regression analysis is an analysis conducted to measure the strength of the relationship between 2 or more independent variables on the dependent variable (Sugiyono 2012: 277):

- *Analysis of Correlation Coefficient (r) and Determination Coefficient (R)*
  Correlation coefficient (r) is used to measure the relationship between independent variables with the dependent variable simultaneously or partially while the coefficient of determination (R) is a value that describes how much change or variation of the dependent variable can be explained by changes or variations of the independent variables.

- *Hypothesis Testing*
  Hypothesis testing used F test statistics and T test. F test in this study simultaneous hypothesis testing is intended to measure the effect of independent variables namely, Product Quality (X1), and Service Quality (X2) simultaneously (together) on the dependent variable that is Satisfaction User (Y), while t test is used to examine the effect of each independent variable, Product Quality variable (X1), and

Service Quality (X2) influence partially (separately) on the dependent variable, namely User Satisfaction (Y).

VI. RESEARCH RESULTS AND DISCUSSION

A. Validity test

Validity test shows that the calculated r value of each statement item at the significance level of each variable is less than 0.05. With the following test results:

- *Product Quality Variables (X_1)*

Indicator with code $X_{1.1}$ r count of 0.718, $X_{1.2}$ of 0.672, $X_{1.3}$ count of 0.667, $X_{1.4}$ of 0.806, $X_{1.5}$ of 0.598, $X_{1.6}$ of 0.457, $X_{1.7}$ of 0.414. $X_{1.8}$ is 0.602 thus the r count of each statement item is greater than the standard r of 0.3 so the conclusion is valid.

- *Service Quality Variables (X_2)*

Indicator with code $X_{2.1}$ r count of 0.572, $X_{2.2}$ amounting to 0.687, $X_{2.3}$ calculated at 0.703, $X_{2.4}$ at 0.822, $X_{2.5}$ at 0.585, $X_{2.6}$ at 0.605 thus r count for each statement item greater than the standard r of 0.3 so the conclusion is valid.

- *Variable Customer Satisfaction (Y)*

Indicator with $Y_{1.1}$ code r count is 0.753, $Y_{1.2}$ is 0.542, $Y_{1.3}$ count is 0.603, $Y_{1.4}$ is 0.789, the r count of each question item is greater than r standard of 0.3 so the conclusion is valid.

B. Reliability Test

The variable reliability test is shown by the *Cronbach Alpha* coefficient> 0.60 of each construct or variable greater than 0.60 which means that the questionnaire indicators of the variable are reliable. This can be seen from the results of the tests that have been carried out as follows:

1. Product Quality Variable (X_1) *Cronbach Alpha* value is 0.752.
2. Service Quality Variable (X_2) *Cronbach Alpha* value is equal to 0.760.
3. Variable User Satisfaction (Y) *Cronbach Alpha* value is equal to 0.766.

C. Multiple Linear Analysis Results

Variabel	B	t	Sign.	informatio n
Constant	2.300			
Product quality (X_1)	0.290	4.008	0.000	Significant
Service Quality (X_2)	0.269	2.820	0.009	Significant

Table 1. Results of Multiple Regression Analysis, Correlation, Determination and Hypothesis Test

R = 0.810
R Square = 0.656
Sign. F = 0.000
Source: Primary data processed, 2018

Table 2 can be concluded that:
- The product quality variable (X_1) has a regression coefficient of 0,290 at a significant value of 0,000 smaller than α = 0,05. This means that if the product quality variable rises, customer satisfaction will also increase, and vice versa if the product quality variable drops, customer satisfaction will also decrease assuming other variables remain or constant.
- Service quality variable (X_2) has a regression coefficient of 0,269 at a significant value of 0,009 smaller than α = 0,05. This means that if the price variable rises then customer satisfaction will also increase, and vice versa if the price variable drops then customer satisfaction will also decrease assuming other variables remain or constant.

D. Correlation and Determination Coefficients

The influence between product quality and service quality can be seen through the correlation coefficient, especially used for customer satisfaction CV. ATA. The result of the correlation coefficient or R of 0.810 shows that the influence of product quality, and service quality on customer satisfaction CV. ATA has a positive effect. The results of the Determination Coefficient or R square (r2) are 0.656 which shows that CV.ATA's customer satisfaction in making molding is influenced by product quality, and service quality while the rest is influenced by other factors not examined in this study.

E. Hypothesis Test
- *Test Result F*

Simultaneous test results (F test) are: Based on the level of significance, where the significance level is 0,000. Therefore probability 0,000 is smaller than 0,05 and F counts 8,301. According to these results, the hypotheses X_1, and X_2, simultaneously affect the variable Y, accepted.

- *Test Result T*

Partial test results (t test) based on the results of calculations obtained as follows:

1. The value for the variable (X_1) is 4,008 with a significant level of 0,000 greater than 0.05 meaning variable (X_1) has a significant effect on variable (Y), this means it is accepted
2. The value for the variable (X_2) is 2.820 with a significant level 0.009 smaller than 0.05 meaning variable (X_2) has a significant effect on variable (Y), this means it is accepted.

VII. DISCUSSION

A. Effect of Product Quality, and Service Quality on Customer Satisfaction

The results of testing the H_1 hypothesis show that the product quality variable, and service quality together (simultaneously) affect CVATA's customer satisfaction. The results of this study are different from previous studies by(Rimawan, Mustofa, & Mulyanto, 2017), where in previous studies it was known that product quality, service quality and trust did not affect customer satisfaction and customer loyalty, but customer satisfaction influenced customer loyalty. This difference is due to CV ATA's customers prioritizing the quality of molding products for a long production period.

B. Effect of Product Quality on User Satisfaction

The results of testing the hypothesis H_2 shows that the product quality variable has a significant effect on customer satisfaction CV. ATA. This means that customers attach great importance to the quality of standard products from CV ATA. The results of this study reinforce previous research by(Herobe & Nurmahdi, 2014), where product quality has an effect on customer satisfaction.

C. Effect of Service Quality on Customer Satisfaction

The results of testing the H_3 hypothesis show that service quality variables have a significant effect on customer satisfaction. This means that users attach great importance to the quality of service received at CV. ATA. Hasil penelitian ini memperkuat penelitian sebelumnya oleh (Mugiono, 2010), dimana kualitas pelayanan berpengaruh signifikan terhadap kepuasan pengguna.

VIII. CONCLUSION

The conclusion of this research is as follows:
- Product Quality, and Service Quality simultaneously affect Customer Satisfaction in Mold making.
- Product Quality has a partial effect on Customer Satisfaction in Mold making.
- Service Quality has a partial effect on Customer Satisfaction in Mold making.

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