THE INFLUENCE OF PRODUCT QUALITY AND FULFILLMENT SPARE PART ON CUSTOMER SATISFACTION AFTER SALES SPARE PART DIVISION OF PT ABC INDONESIA

Yanthy Mardiana

Master of Management, Universitas Widyatama, Bandung 40125, Indonesia

Muhammad Irfan Rizki♣

Master of Management, Universitas Widyatama, Bandung 40125, Indonesia

Sri Astuti Pratminingsih

Faculty of Economic and Business Universitas Widyatama, Bandung 40125, Indonesia

ABSTRACT

After Sales has a positive contribution to the profit growth of PT. ABC spare part demand. The company is the sole agent of commercial vehicle brand holders in Indonesia which has a vision to become the largest market share globally in the international market. An important role played by PT ABC is to meet all the needs of domestic or export demand with efforts to increase the role of marketing strategy, namely how to make customers feel that the products offered by the company, in this case, commercial vehicle spare parts, customers are satisfied. So it is necessary to know the factors that affect customer satisfaction, so the method used by researchers in this study is the multiple linear regression method with a sample of 100 respondents. Based on the results of the research that has been carried out, it is found that the product and fulfillment have a significant influence on the level of customer satisfaction and both have a positive influence, which means that when the quality of the product and the fulfillment of spare parts are good or increasing, it will increase customer satisfaction as well, when viewed from the R-Square value of 56%, this value indicates that the Product Quality and Fulfillment variables simultaneously contribute or influence customer satisfaction by 56%. Based on the results obtained, it is suggested that because product quality and fulfillment are one of the main determinants of customer satisfaction and thus company management must build interactive metrics that will track the level of quality of their products based on customer perceptions, because a decrease or increase in product quality can reduce or increase the level of customer satisfaction.

Keywords: After Sales, Customer Satisfaction, Fulfillment, Product Quality

---

♣Corresponding author: Master of Management, Universitas Widyatama, Indonesia, E-mail: irfan.rizki@widyatama.ac.id

INTRODUCTION

The need for vehicles from year to year, especially cars, in Indonesia is increasing, from 2012-2022 the number of passenger cars in Indonesia has increased by 6.74 million units or a growth of around 65%. The reason is, Indonesia is a developing country and continues to increase development, especially in the transportation sector. The vehicle category that is in great demand, especially to support people's business processes, is the commercial vehicle category that can be used to support personal needs (Mardianto, 2021). With the increasing demand for commercial vehicles resulting in high demand for vehicle spare parts, the availability of spare parts services needs to be paid attention to by the company PT ABC After Sales Division because it affects the value of the level of consumer satisfaction (Ramadhan, 2021).

A consumer is anyone who gets goods or services to use for a particular purpose, in general, consumers are always faced with various considerations before buying a product. In particular, consumers pay attention to the quality of the products they buy, and the higher the quality of the product, the more customers buy the product, which allows consumers to choose the best product according to their needs (Hertina & Wulandari, 2022). The quality from the consumer's point of view is different from the quality from the manufacturer's point of view when launching a product, and has its own range and is generally called actual quality. Product quality is characterized by several indicators, such as ease of use, resistant data, different features, and various product sizes (Hertina & Wulandari, 2022).

All commercial vehicle companies always continue to innovate in an effort to meet the needs and desires of consumers in order to survive in business competition and become market leaders for commercial vehicles in the global market, so they need to determine the right marketing strategy and companies must be able to analyze different consumer behavior. so that the products offered can be superior and can meet consumer needs and desires (Hertina & Wulandari, 2022). Consumer decisions are influenced by various factors, such as product quality and fulfillment.

Fulfillment shows the extent to which the company can fulfill its promises to consumers, system availability shows the extent to which the technology applied by the company PT ABC Division After Sales Indonesia, namely the Marketing Application System (MAS) can meet consumer needs (Blut, 2015). Hopefully, by knowing the order fulfillment, customer satisfaction will increase towards the services provided by the company (Supriyantini, 2014). Therefore, PT ABC Division After Sales Indonesia companies need to pay attention to quality standards for the products they produce wisely (Anam, Nadila, et al., 2021) to the conclusion that has a significant influence on customer satisfaction.

Based on the problems of PT ABC in the process of implementing core values, namely Fast and Easy Process, Customer Engagement and Product Fit, the research will find out whether product quality and fulfillment have a simultaneous or partial effect on customer satisfaction of PT ABC Division After sales Indonesia, with the statistical method to be used, namely multiple regression analysis, this method is to test whether there is an influence between one variable and another, which is expressed in the form of a regression model equation.

LITERATURE REVIEW

2.1 Product Quality

Fulfillment (fulfilment of promises) Fulfillment is, according to (Fauzan & Ute, 2021), a dimension of electronic service quality, fulfillment is defined as the level of fulfillment of promises offered by the system. According to (Fauzan & Ute, 2021), fulfillment of promises has three dimensions: 1) Availability, refers to the ability of a website to respond to the availability of a product or service. 2) time means fulfilling promises of timely delivery of products or services promised on the website. 3) Condition refers to whether the ordered product arrives in good condition and as shown on the system screen.

Kotler and Armstrong (2018) argued that product quality is an attribute of a product/service based on its ability to satisfy expressed or implied customer needs or wants. It is generally known that the quality of this product can affect evaluation, intention to switch, buy more than once, company service quality, customer loyalty and ultimately customer satisfaction (Suhud, Allan, Wibowo, Sabrina & Willson, 2020).

2.2 Fulfillment

Implementation is a dimension of electronic service quality, implementation is defined as the level of fulfillment of the promises offered by the system (Fauzan & Ute, 2021). Koufteros, et al. (2014), promise fulfillment has three dimensions: 1) Availability, refers to the ability of a website to respond to the availability of a product or service. 2) time means fulfilling promises of timely delivery of products or services promised on the website. 3) Condition refers to whether the ordered product arrives in good condition and as shown on the system screen. According to (Fauzan & Ute, 2021), the accuracy of promises is an important factor in evaluating the quality of online business, because the fulfillment of service promises and the accurate fulfillment of orders are part of service quality that leads to customer satisfaction. or dissatisfaction.
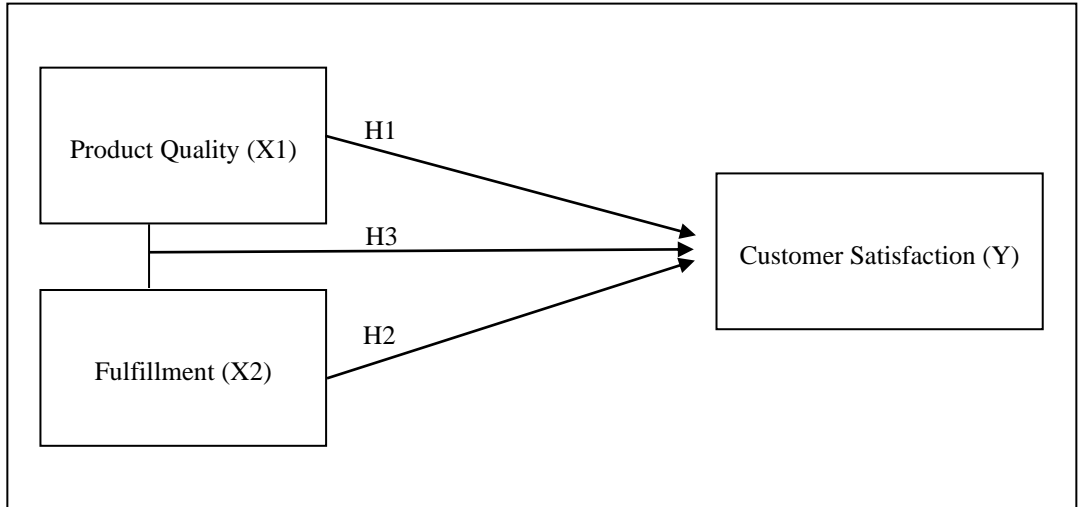
2.3 Satisfaction

According to Kotler and Keller (2016: 153), customer satisfaction is the level of someone's feelings after the perceived performance or results have been compared with their expectations. According to Fauzan and Ute (2021:83), online customer satisfaction is the result of consumers' perception of online ease of use, business/transaction methods, website design, security and service.

2.4 Conceptual Framework

Based on the empirical studies reviewed above and previous studies, it was determined that the relationship between product quality and product fulfillment is important in terms of customer satisfaction, especially in this study, the researchers were interested in customer satisfaction (Figure 1). Therefore, to explain the effect of independent variables, in this study, product quality

and fulfillment is the dependent variable, which is customer satisfaction. The researchers are interested in continuing the research, describing the research and framework as follows:
Figure 1 Model Relationships Between Product Quality and Fulfillment towards Customer Satisfaction

The following hypotheses are proposed:
H1 : Product quality has a direct influence on customer satisfaction.
H2 : Fulfillment has a direct influence on customer satisfaction.
H3 : Product quality and Fulfillment has a simultan direct influence on customer satisfaction.

METHODOLOGY

3.1 The Questionnaire

The questionnaires used in this study were subjected to validity and reliability testing and expert literature for content validity and relevance to the research objectives or definitions. The results of these tests were then used to calculate the Conformance Index, and then the Item objective before selecting only those questionnaires that had an average score range of 0.396 to 1.00. In addition, reliability was analyzed by trying 100 questionnaires with the sample group before calculating Cronbach's alpha coefficient, the calculated value was 0.826. Thus, the questionnaire used in this study is practically reliable for collecting data. The following is the definition and measurement points for questionnaire item variables based on the literature study that has been carried out.

Table 1: Definition and Points of Variable Measurement

Variable	Indicator
Customer Satisfaction	C1. Provide a positive opinion on spare part products and services provided C2. Purchase the product again C3. Recommend the product to colleagues C4. Make the product the first choice
Product Quality	PQ1. Spare part products have good performance for commercial vehicles. PQ2. Spare part products are well packaged so that they can maintain product durability. PQ3. The period of use of spare part products is relatively long so that it can be used for a long time PQ4. Spare part products are able to provide results from product use as desired by customers PQ5. PT ABC spare part products provide satisfaction with the benefits that consumers have received
Fulfillment	F1. The Marketing Application System service application that I use provides services according to the promised time. F2. Demand and Supply are fulfilled quickly and precisely on the same day. F3. Spare part distribution delivers products according to the promised time. F4. Spare part distribution makes accurate promises about product delivery

3.2 Variables Description

Sugiyono (2017: 38) suggests that variables are anything in the form of anything that is determined by the researcher to study so that information is obtained about it, and then conclusions are drawn. In this study, there are two variables used, namely the independent variable and the dependent variable.

3.2.1 Independent Variable

Sugiyono (2017:39) defines an independent variable as a variable that influences or is the cause of the change or emergence of the dependent variable. This is research independent variable is poduct quality and fulfilment.

3.2.2 Dependent Variable

Sugiyono (2017:39) defines a dependent variable as a variable that is influenced by or is a result of the existence of an independent variable. The dependent variable in this research is the purchase decision which is given the symbol (Y). Kotler and Keller (2016: 192) state "In the evaluation stage, the consumer forms preferences among the brands in the choice and may also form an intention to buy the most preferred brand". This is research dependent variable is customer satisfaction.

3.3 Method Research

The number of respondents is 100 Customer PT ABC Division After Sales and to process and analyze data using Regression Analysis. The respondents or samples in this study are customers PT ABC Division After Sales is dealers is available Indonesia.

RESULTS AND DISCUSSION

1.1. Quantitative Data Analysis: Respondents' Profile

From the 100 respondents in this study, 36% of respondents were male respondents and 64% were female respondents. With the largest group for the education level variable being the senior high school group, namely 34% and 29% from the undergraduate group. In the occupational variable, the largest occupation is in the Mechanical group at 40%.

4.2 Regression Model Analysis

Linear regression analysis aims to see whether there is an influence of the independent variable (Variable X) on the dependent variable (Variable Y). In this research, there are 2 independent variables, namely Product Quality and Fulfillment, which can be seen from their influence on the customer satisfaction variable because there is more than one independent variable, so the analysis used is multiple linear regression.

4.2.1 Classical Assumption Testing

Assumption testing is carried out with the aim of estimating the regression coefficients obtained as BLUE estimates (Best Linear Unbiased Estimators). The tests carried out were heteroscedasticity tests, autocorrelation tests, normality tests (Wardhono, 2004:56).

4.2.1.1 Normalitas

The normality test is part of the classical assumption test requirements. The normality test aims to determine whether the frequency distribution of scores for each variable is normally distributed or not (Ghozali, 2016). At this stage, a residual normality test was carried out using the Kolmogorov Smirnov test. Based on the analysis carried out using SPSS software, the p-value (Asymp.Sig.) = $0.67 > \alpha = 0.05$, then H0 is accepted, meaning that at a significance level of 0.05 the residual data is normally distributed so that it meets the normality assumption.

4.2.1.2 Multikolinearitas

The multicollinearity test aims to test whether in the regression model a correlation is found between the independent variables (Ghozali, 2016). The results of multicollinearity testing are seen from the VIF values, to find out whether there are symptoms of multicollinearity or not. If the VIF value is > 10, multicollinearity occurs in the independent data variables. The results obtained were VIF values < 10 for all variables so it could be concluded that there was no multicollinearity in the independent variables. This shows that the test results meet the assumptions and the analysis can be continued.

4.2.1.3 Heteroskedastisitas

The results of the SPSS software output show a p-value (Sig.) of more than 0.05, namely 0.615, so H0 is accepted, meaning that at a significance level of 0.05 there are no symptoms of heteroscedasticity and it fulfills the assumption of homoscedasticity.

4.2.2 Partial Test

The partial t test aims to see whether each independent variable, namely the product quality and fulfillment variables, has an influence on the response variable, namely customer satisfaction.

Table 2: Partial Test- Regression Model

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.248	3.456		3.254	.002
	PDQ	.333	.125	.245	2.659	.009
	FLM	.686	.117	.540	5.857	.000
a. Dependent Variable: Customer Satisfaction						

Based on Table 2 above, the regression equation can be as follows:

$$Y = 11{,}248 + 0{,}333 \text{ (Product Quality)} + 0{,}686 \text{ (Fulfillment)}$$

From the linear regression equation that has been formed, the following information can be obtained:

a. Constant of 11.248. states that if the value of the Product Quality and Fulfillment variables (values zero), then the variable Y or Customer satisfaction will have a value of 11, 248

b. The X1 coefficient value of 0.333 states that if there is an increase of one unit of product quality, the customer satisfaction value will increase by 0.333 The positive value indicates that the relationship between variable X1 and variable Y is directly proportional, namely if product quality increases, customer satisfaction will increase.

c. The X2 coefficient value of 0.686 states that if there is an increase of one unit of Fulfillment, the purchasing decision increases by 0.686. The positive value indicates that the relationship between the Fulfillment variable and the customer satisfaction variable is directly proportional, namely if Fulfillment increases, customer satisfaction increases.

4.2.3 Simultan Test

The F test is a test conducted to see whether the independent variables simultaneously or simultaneously have a significant effect on the response variable. With a significance level of 5%, the p-value (Sig.) = $0.000 < \alpha = 0.05$, so based on the test criteria, H0 is rejected, meaning that there is a significant effect of the independent variables simultaneously on the response variable, namely the purchase decision.

4.2.4 R-Square

From the results of the SPSS software, it was found that the R Square was 0.564 or 56.4%. This value shows that the Product Quality and Fulfillment variables simultaneously contribute or influence customer satisfaction by 56%. Meanwhile, the remaining 44% is the contribution of other variables not included in the model proposed in the research. To see the magnitude of the influence of each independent variable on the dependent variant.

4.3 Discussion

Based on the output product quality results, it was found that there is a significant influence between product quality and positive customer satisfaction. Product quality is important as a form of customer satisfaction. If the quality of the product provided is high, the satisfaction felt by customers will also be higher. This is in accordance with several studies, one of which is research conducted by Sambo (2022), namely that a fall or rise in product quality can either reduce or increase the level of customer satisfaction and This is in line with the position of Kotler and Keller, (2012), A customer can only re-purchase a goods and service if and only if such good and service were able to meet their expectations meaning that there are similarities between

the performance of the goods and services with the expectations of the customers which will spur them to repurchase the product again.

According to Lee & Wong (2016) fulfillment has a significant relationship with customer satisfaction. This is in accordance with this research that fulfillment has a significant influence on customer satisfaction. This is due to the fact that if the customer orders then full, fast and precise supply needs to be done in order to make the customer feel satisfaction from fulfillment which is different if it is done partially which makes the waiting time longer.

CONCLUSION

Based on the analysis carried out, it is shown that simultaneously (F test) the independent variables (Product Quality and Fulfillment) simultaneously influence Customer satisfaction and based on the partial test that the Product Quality variable has an influence on Customer satisfaction and fulfillment also has a significant influence on Customer satisfaction, whereas if Judging from the correlation value, it shows that the relationship between the variables Product Quality (X1), Fulfillment (X2) and Customer Satisfaction (Y) is strong.

REFERENCES

1. Anam, M. S., Nadila, D. L., Anindita, T. A., & Rosia, R. (2021). Pengaruh kualitas produk, harga dan brand image terhadap keputusan pembelian produk hand and body lotion merek Citra. Jesya (*Jurnal Ekonomi Dan Ekonomi Syariah*), 4(1), 120-136.
2. Blut, M., Chowdhry, N., Mittal, V., & Brock, C. (2015). E-service quality: A meta-analytic review. *Journal of retailing*, *91*(4), 679-700.
3. Ghozali, Imam. 2016. Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Edisi 8). Cetakan ke VIII. Semarang : Badan Penerbit Universitas Diponegoro.
4. Hertina, D., & Wulandari, D. (2022). Pengaruh harga, kualitas produk dan brand image terhadap keputusan pembelian. Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan, 4(12), 5379-5384.
5. Lee, W. O., & Wong, L. S. (2016). Determinants of mobile commerce customer loyalty in Malaysia. *Procedia-Social and Behavioral Sciences*, *224*, 60-67.
6. Mardianto, T. (2021). Perhitungan Harga Pokok Produksi Sebagai Dasar Penentuan Harga Jual Pada Perusahaan Karoseri Kuda Terbang Malang. *JEA17: Jurnal Ekonomi Akuntansi*, 6(2), 263-278.
7. Ramadhan, D. I., & Santosa, B. (2021). Analisis Kinerja Peramalan dan Klasifikasi Permintaan Auto Parts Berbasis Data Mining. *Jurnal Teknik ITS,* 9(2), A162-A169.
8. Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung : Alfabeta, CV
9. Supriyantini, S. (2014). *Pengaruh Efficiency, Fulfillment, System Availability, Dan Privacy Terhadap Esatisfaction (Survei Pada Nasabah PT. Danareksa Sekuritas Cabang Universitas Islam Negeri Maulana Malik Ibrahim Malang)* (Doctoral dissertation, Brawijaya University).

10. Fauzan, R., & Ute, D. (2021). Analysis the effect of web quality and fulfillment on satisfaction and its impact on repurchase intention. *Performance: Jurnal Personalia, Financial, Operasional, Marketing dan Sistem Informasi*, *28*(1), 82-92.
11. Koufteros, X., Droge, C., Heim, G., Massad, N., & Vickery, S. K. (2014). Encounter satisfaction in e-tailing: are the relationships of order fulfillment service quality with its antecedents and consequences moderated by historical satisfaction?. *Decision Sciences*, *45*(1), 5-48.
12. Kotler, Philip dan Amstrong, Gary. 2013. Prinsip-prinsip Pemasaran, Edisi ke 12.Jakarta : Erlangga.
13. Kotler, P., & Armstrong, G. (2018). Principle of marketing (17th Edition). New Jersey: Pearson Prentice Hall.
14. Sambo, E., Ukpata, I. S., Atiga, M. M., & Fumba, J. (2022). Impact of product quality on customer satisfaction and loyalty. *Nigerian Academy of Management Journal*, *17*(2), 145-155.
15. Suhud, U., Allan, M., Wibowo, S. F., Sabrina, E., & Willson, G. (2020). Measuring customer satisfaction of a café and coffee shop colony at a traditional market. Journal of Foodservice Business Research, 23(1), 78-94. doi: https://doi.org/10.1080/15378020.2 019.1686897
16. Wardhono, Aditya. 2004. *Mengenal Ekonomitrika*. Teori dan Aplikasi. Fakultas Ekonomi. Universitas Jember