THE EFFECT OF SELLING PRICE AND QUALITY OF PEST CONTROL SERVICES ON CUSTOMER SATISFACTION AT PT SOLUSI PRIMA CARAKA

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Abstract

This study aims to determine the effect of selling price and service quality on customer satisfaction simultaneously and partially, as well as to find out the problems and efforts that have been made in overcoming the problems that exist in PT Solusi Prima Caraka. The analysis technique in this study uses a questionnaire technique, data collection comes from ordinal data which includes answers to questions or written statements to respondents. The method used in this study is a quantitative method with multiple linear regression analysis. Based on the research results obtained stated that the selling price and service quality have a positive and significant influence simultaneously and partially on customer satisfaction. However, in the implementation of a selling price determination, service quality in order to get customer satisfaction, sometimes there are problems or complaints. To overcome these obstacles PT Solusi Prima Caraka has made efforts to create a work program for coordination meetings between divisions every two weeks, provide flexibility to carry out internal discussions between service supervisors, service managers and field teams, create an in-house training (IHT) work training program.

Keywords: Selling Price, Sevice Quality, Customer Satisfaction

Introduction

Residential pests can be defined as all kinds of insects, spiders and rodents that live or settle in the vicinity of human dwellings, buildings or human settlements and can cause discomfort, health problems or damage to property (Mullen and Koehler, 2016). Some examples of settlement pests described by Mullen and Koehler include mosquitoes, flies, ants, cockroaches, fleas, mites, rodents such as mice, and wood insects such as termites. In the context of pest management in urban environments, it is necessary to emphasize the importance of an integrated and sustainable pest management approach by utilizing various control methods, including the use of selective and science-based biological, mechanical and chemical agents, so as to reduce negative impacts on the environment and human health. (Schal and Hamilton, 2019).

Rapid population growth has resulted in emerging problems, one of which is an increase in pests in settlements and urban areas. Problems that occur due to rapid population growth, accompanied by the construction of settlements which disrupt animal habitats (Ni Putu, 2021). Therefore, one of the solutions in controlling pests is pest control. Control measures consist of control measures (spraying), condensation (misting), baiting, powdering (dusting), and fumigation.

The development of the residential pest control industry (pest control) is very rapid, marked by the emergence of many companies that provide these services. Pest control service providers in Indonesia are diverse, ranging from small to large scale. Large scale companies are dominated by foreign companies, such as Rentokil Indonesia.

The increasingly fierce competition in the world of pest control services business requires a good marketing strategy to gain consumer interest in buying the services offered by service providers. Therefore, service providers are increasingly developing a better goal, namely how to grow satisfied consumers for the services provided towards loyal consumers. However, to grow customer loyalty is not an easy thing to form, because service providers must first provide satisfaction to their customers. This satisfaction can be achieved by providing optimal service quality and affordable prices to customers. Customer satisfaction can be formed when customers are satisfied with the level of service received and customers tend to choose products or services that have advantages but at relatively low prices.

Price is one of the main factors that affect customer satisfaction. High prices can reduce customer satisfaction, while affordable prices can increase customer satisfaction. Good service quality can increase customer satisfaction. Customers who feel valued and treated well will be more satisfied with the service received. The interaction of price and service quality of these two factors are interrelated and affect customer satisfaction. Customers who feel the price paid is in accordance with the quality of service received will be more satisfied than customers who feel the price paid is not proportional to the quality of service received.

PT Solusi Prima Caraka (SPC) is a pest control service company that offers pest control services with personal protective equipment (PPE) and chemicals that are friendly and safe for the environment and their use complies with HACCP (hazard analyze critical control point) standards set forth in the regulations of the national pesticide agency/pesticide commission.

In its development, the number of customers of PT Solusi Prima Caraka has fluctuated along with the intense competition. There is a decrease in service consumers, the service provider, in this case PT Solusi Prima Caraka, must re-evaluate the price and quality of service to customers so that customers are satisfied and ultimately loyal to the company.

From several studies on customer satisfaction as conducted by Kurnia (2015) stated that the results of service quality have a partial influence on customer satisfaction. Sintya (2018), in her research related to online transportation services in Manado, with the results showing that there is an effect of price on service quality and customer satisfaction. Ade Syarif (2016), in his research related to the effect of service quality and price on customer satisfaction PT TOI shows that there is an effect of service quality and price on customer satisfaction.

However, in contrast to the research conducted by Agung (2018), regarding consumer satisfaction in the Islamic Economic Perspective, it is concluded that prices do not affect Indomaret customer satisfaction. Likewise the research conducted by Fitriani (2016) that price, service quality do not affect customer satisfaction.

After evaluating several research results with different findings, there is a gap between whether or not there is an effect of price on service quality and customer satisfaction. On this basis, researchers are interested in conducting research entitled "EFFECT OF SELLING PRICE AND QUALITY OF PEST CONTROL SERVICES ON CUSTOMER SATISFACTION AT PT SOLUSI PRIMA CARAKA".

Research Method

The method used in this study is an associative method with a quantitative approach. This method requires data collection through questionnaires given to respondents, using a Likert scale or nominal scale to measure the level of customer satisfaction with the selling price and quality of pest control services. The data is then analyzed to determine the effect of selling price and service quality on customer satisfaction.

The population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2017:80).

The population in this study were customers of pest control services at PT. Prima Caraka Solutions which consists of Hospitals, Hotels, Commercial, Industry and Agencies, namely more than 150 customers. However, taking into account the limitations, the researcher limited the research data by taking the population and hotel sampling, namely a total of 31 clients.

Data analysis technique

Data analysis techniques used statistical methods and in calculating data used SPSS (Statistical Package for the Social Sciences) version 29.

Validity test

Significance test is done by calculating the r value compared to the r table value. Determining whether or not an item is feasible is determined by a significance test of the correlation coefficient at a significance level of 0.1, which means that an item can be said to be valid if it has a significant correlation with the total score. If r count is greater than r

table and the value is positive then the item is declared valid whereas if r count is less than r table then the item is declared invalid.

Reliability Test

The reliability test is used as a tool to measure the questionnaire, which is an indicator of the construct variable. A variable can be said to be reliable or reliable if one's response to the statement is consistent or stable from time to time. The reliability of these 48 questionnaires was tested using the Cronbanch Alpha technique. According to Ghozali (2018) shows that Cronbach's Alpha can be accepted if > 0.6. The closer Cronbach's alpha to 1, the higher the internal consistency reliability.

Classic assumption test

1. Normality Test

The normality test is carried out to test whether in the regression model the independent variables and the dependent variable or both have a normal distribution or not (Ghozali, 2018: 145). The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. As it is known that the t and F tests assume that the residual values follow a normal distribution. If this assumption is violated, the statistical test becomes invalid for a small sample size. There are two ways to detect whether the residuals are normally distributed or not, namely by graphical analysis and statistical tests. To test whether the data is normally distributed or not, the Kolmogorov-Smirnov statistical test is carried out. The residual test is normally distributed if it has a significance value > 0.05 (Imam Ghozali, 2012).

2. Multicollinearity Test

The multicollinearity test was carried out with the aim of testing whether in the regression equation model a correlation was found between the independent variables or not (Ghozali, 2013, p. 105). The multicollinearity test can be seen from the Variation Inflation Factor (VIF). If the value of VIF is < than 10 and the tolerance value is > 0.1, it means that there is no multicollinearity.

3. Heteroscedasticity Test

The heteroscedasticity test was carried out with the aim of testing whether in the regression equation there is an inequality of variance from the residuals of one observation to another (Ghozali 2013, p. 139). The test uses a significance level of 0.05. If the correlation between the independent variables and the residuals is obtained with a significance of more than 0.05, it can be said that there is no heteroscedasticity problem in the regression model.

Correlation Coefficient Analysis

Decision making for this simple analysis includes the value of the Pearson correlation shown in the SPSS output and significance. If the significance is < 0.05 then it is correlated, but if on the contrary (count significance > 0.05) then it is not correlated.

Multiple Linear Regression Analysis

Multiple linear regression analysis serves to find out how much and the direction of influence between the independent variables on the dependent variable (Sugiyono, 2017). The independent variables in this study are selling prices and service quality, while the dependent variable in this study is customer satisfaction. The calculation of multiple linear regression is calculated as follows, namely:

 $\begin{array}{l} Y = B0 + B1X1 + B2X2 + \varepsilon\\ \text{Information:}\\ Y = \text{Customer Satisfaction Variable}\\ X1 = \text{Selling Price Variable}\\ X2 = \text{Service Quality Variable}\\ B0 = \text{Constant}\\ B1 B2 = \text{Regression Coefficient}\\ \varepsilon = \text{Standard Error} \end{array}$

T test

The t test is a test used to determine the effect of the independent variable (X) individually on the dependent variable (Y). To calculate the significance test between variable X and variable Y, use the following formula:

T = t (a / 2; n - k - 1)

Information:

a = Confidence Level

k = Number of Variables X

The basis for making decisions on the partial t test is as follows:

If Sig t count > 0.05 then Ho is accepted

If Sig t count <0.05 then Ho is rejected

F test

The F test was conducted to determine whether there is a simultaneous (together) effect between the independent variables and the dependent variable. to determine the simultaneous relationship between variables can use the following formula:

f = (k; n - 2)

Information:

- n = Number of Samples
- k = Number of Variables X

To find out the significance of the correlation X1 and X2 to Y after using Fcount, the next step is to compare it with Ftable and the basis for making decisions in the F test based on the values of Fcount and Ftable as follows:

If Fcount > Ftable (sig. > 0.05) then it is said to have a significant effect.

If Fcount <Ftable (sig. <0.05), then it is said to have an insignificant effect.

Results and Discussion

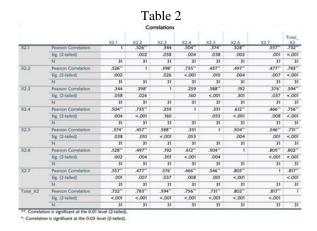
Test the Validity of Variable X1 Table = N = 31 = 0,355

			Corr	elations				
		X1.1	X1.2	X1.3	X1.4	X1.5	X1.6	Total XI
X1.1	Pearson Correlation	1	.094	.538**	.354	.244	.332	.643*
	Sig. (2-tailed)		.617	.002	.051	.186	.068	<,00
	N	31	31	31	31	31	31	31
X1.2	Pearson Correlation	.094	1	.461**	.170	.444*	.296	.618"
	Sig. (2-tailed)	.617		.009	.360	.012	.106	<,00
	N	31	31	31	31	31	31	3
X1.3	Pearson Correlation	.538**	.461**	1	.254	.540**	.310	.778*
	Sig. (2-tailed)	.002	.009		.168	.002	.090	<.00
	N	31	31	31	31	31	31	3
X1.4	Pearson Correlation	.354	.170	.254	1	.502**	.469**	.639"
	Sig. (2-tailed)	.051	.360	.168		.004	.008	<.00
	N	31	31	31	31	31	31	3
X1.5	Pearson Correlation	.244	.444'	.540**	.502**	1	.462**	.774*
	Sig. (2-tailed)	.186	.012	.002	.004		.009	<,00
	N	31	31	31	31	31	31	3
X1.6	Pearson Correlation	.332	.296	.310	.469**	.462**	1	.654*
	Sig. (2-tailed)	.068	.106	.090	.008	.009		<.00
	N	31	31	31	31	31	31	3
Total_XI	Pearson Correlation	.643**	.618**	.778**	.639**	.774**	.654**	
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	<,001	<,001	
	N	31	31	31	31	31	31	3

Based on the data above, it shows that the correlation value between each item and the total score. From these data the correlation between X1.1; X1.2 (price affordability), X1.3 (price conformity with product quality), X1.4 (price in

accordance with benefits), X1.5; X1.6 (price competitiveness) with a total score respectively as follows 0.643; 0.618; 0.778; 0.639; 0.774; 0.654 while r table = 0.355. So it can be concluded that the six selling price indicators are valid with a significance of 1% exceeding the standard normally used in research, namely 5%. So that the questionnaire is feasible and valid if it is used to measure the selling price of the sample test.

Test the Validity of Variable X2



Based on the data above, it shows that the correlation value between each item and the total score. From these data it can be seen that the correlation between X2.1 (physical evidence), X2.2; X2.3; X2.4 (reliability), X2.5 (responsiveness), X2.6 (Assurance), X2.7 (Empathy) with a total score of 0.732 respectively; 0.783; 0.594; 0.756; 0.731; 0.802; 0.817 while r table = 0.355. So it can be concluded that the seven service quality indicators are valid with a significance of 1% exceeding the standard normally used in research, namely 5%. So that the questionnaire is feasible and valid if it is used to measure the quality of service or the level of customer satisfaction in the sample test.

			Tab					
			Correla	ations				
		Y.1	Y.2	Y.3	Y.4	Y.5	Y.6	Total Y
Y.1	Pearson Correlation	1	.245	.450*	.380*	.668**	.681**	.831"
	Sig. (2-tailed)		.184	.011	.035	<,001	<,001	<,001
	N	31	31	31	31	31	31	31
Y.2	Pearson Correlation	.245	1	.020	.547**	.302	.271	.559"
	Sig. (2-tailed)	.184		.915	.001	.099	.140	.001
	N	31	31	31	31	31	31	31
Y.3	Pearson Correlation	.450*	.020	1	.236	.267	.267	.510"
	Sig. (2-tailed)	.011	.915		.201	.147	.147	.003
	N	31	31	31	31	31	31	31
Y.4	Pearson Correlation	.380*	.547**	.236	1	.358*	.271	.644"
	Sig. (2-tailed)	.035	.001	.201		.048	.141	<,001
	N	31	31	31	31	31	31	31
Y.5	Pearson Correlation	.668**	.302	.267	.358°	1	.789**	.830"
	Sig. (2-tailed)	<,001	.099	.147	.048		<,001	<.001
	N	31	31	31	31	31	31	31
Y.6	Pearson Correlation	.681**	.271	.267	.271	.789**	1	.805"
	Sig. (2-tailed)	<.001	.140	.147	.141	<.001		<,001
	N	31	31	31	31	31	31	31
Total_Y	Pearson Correlation	.831**	.559**	.510**	.644**	.830**	.805**	1
	Sig. (2-tailed)	<,001	.001	.003	<,001	<.001	<,001	1
	N	31	31	31	31	31	31	31

Test the Validity of Variable Y

Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Based on the data above, it shows that the correlation value between each item and the total score. From these data it can be seen that the correlation between Y1.1 to Y1.4 (confirmation of expectations), Y1.5 (purchasing value of money), Y1.6 (willingness to recommend) with a total score respectively is as follows 0.831; 0.559; 0.510; 0.644; 0.830; 0.805 while r table = 0.355. So it can be concluded that the six indicators of customer satisfaction are valid. So that the questionnaire is feasible and valid if it is used to measure the level of customer satisfaction in the sample test.

Classic assumption test

1. Normality Test

N	ormality Test Re	esults	
	5		Unstandardize d Residual
N			31
Normal Parameters ^{a,b}	Mean		.0000000
	Std. Deviation		1.63774801
Most Extreme Differences	Absolute	.079	
	Positive	.079	
	Negative		074
Test Statistic			.079
Asymp. Sig. (2-tailed) ^c			.200 ^d
Monte Carlo Sig. (2-	Sig.		.883
tailed) ^e	99% Confidence Interval	Lower Bound	.875
		Upper Bound	.891

Table 4

a. Test distribution is Normal.

b. Calculated from data.

Based on table 7 above, it can be seen that the significance value is 0.200, which is above 0.05. This is in accordance with Ghozali's statement (2012) that to test whether the data is normally distributed or not, the Kolmogorov-Smirnov Test statistical test is normally distributed if it has a significance value > 0.05.

2. Multicollinearity Test

	М	ulticol	Tab lineari Coeffic	ty Test	Resu	lts		
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	7.352	2.422		3.035	.005		
	Harga Jual (X1)	.358	.116	.494	3.095	.004	.467	2.141
	Kualitas Pelayanan (X2)	.282	.117	.384	2.407	.023	.467	2.141

a. Dependent Variable: Kepuasan Pelanggan (Y)

Based on table 3.8 it is known that the VIF value of the selling price variable (X1) and the service quality variable (X2) is 2.141 < 10 and the tolerance value is 0.467 > 0.1, so that the data does not have multicollinearity.

Correlation coefficient

		Tab Correlatio	le 6 n Analys	is	
			Harga Jual (X1)	Kualitas Pelayanan (X2)	Kepuasan Pelanggan (Y)
1	Harga Jual (X1)	Pearson Correlation	1	.791	.487
		Sig. (2-tailed)		<.001	.006
		N	31	31	31
	Kualitas Pelayanan (X2)	Pearson Correlation	.791**	1	.744
		Sig. (2-tailed)	<.001		<.001
		N	31	31	31
	Kepuasan Pelanggan (Y)	Pearson Correlation	.487**	.744**	1
		Sig. (2-tailed)	.006	<.001	
		N	31	31	31

Based on Table 6 it can be seen that N or the amount of research data is 31, the value of sig. (2-tailed) variable X1 to variable X2 is 0.001 while the sig. (2-tailed) variable X1 to variable Y is 0.006. The sig (2-tailed) value of variable X2 to variable X1 is 0.001 while the sig. (2-tailed) variable X2 to variable Y is 0.001. As the basis for decision making,

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it can be concluded that the calculated significance in this study is <0.05, so there is a significant relationship between selling prices and service quality on customer satisfaction.

Table 6 shows that the correlation coefficient between the selling price (X1) and customer satisfaction (Y) is 0.487, which has a moderate degree of relationship, while the correlation coefficient between service quality (X2) and customer satisfaction (Y) is 0.791, which has a strong relationship.

Multiple Linear Regression Analysis

	Multiple		ble 7 Regress Coeffic	ion Anal ^{ientsª}	ysis	
Model		Unstandardize B	d Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	7.352	2.422		3.035	.005
	Harga Jual (X1)	.358	.116	.494	3.095	.004
	Kualitas Pelayanan (X2)	.282	.117	.384	2.407	.023

From table 10, the regression equation is obtained as follows:

 $Y = 7.352 + 0.358X1 + 0.282X2 + \epsilon$

Based on the regression equation above, the following explanation can be obtained:

a = Constant = 7.352

Shows that if the selling price and service quality variables have a constant value, then the customer satisfaction variable will have a value of 7.352.

b1 = Regression coefficient for product quality (X1) = 358

Shows that if there is an increase in the selling price variable, it will cause the customer satisfaction variable to increase by 0.358.

b2 = Regression coefficient for price (X2) = 0.282

Shows that if there is an increase in the service quality variable, it will result in an increase in customer satisfaction by 0.282.

 $\varepsilon =$ Other factors not examined.

T test

T table = t (a/2; n - k - 1) = t(0.005/2;31-2-1) = t(0.025;28) = 2.048

			Coeffic	ients ^a				
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		8	Std. Error	Beta.	t	Sig.	Tolerance	VIF
1	(Constant)	7.352	2.422		3.035	.005		
	Harga Jual (X1)	.358	.116	.494	3.095	.004	.467	2.141
	Kualitas Pelayanan (X2)	.282	.117	.384	2.407	.023	.467	2.141

From the results of the analysis above testing the first hypothesis (H1) it is known that the Sig value, for the effect of X1 on Y is 0.004 < 0.05 and the t count value is 3.095 > t table 2.048, so it can be concluded that H1 is accepted which means that there is an influence of X1 on Y. Whereas for testing the Second Hypothesis (H2), it is known that the Sig value for the effect of X2 on Y is 0.023 < 0.05 and the t count value is 2.407 > t table 2.048, so it can be concluded that H2 is accepted which means that there is an effect of X2 on Y.

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F test

F table = F (2; 31 - 2) = F (2; 29) = 3.32

F	Tabel test res	-	
	ANOVAª		
Sum of			

Model		Squares	df	Mean Square	F	Sig.
1	Regression	161.533	2	80.767	28.104	<.00
	Residual	80.467	28	2.874		
	Total	242.000	30			
a. De	pendent Varial	ble: Kepuasan Pe	langgan ()	0		

b. Predictors: (Constant), Kualitas Pelayanan (X2), Harga Jual (X1)

Based on the output above, it is known that the significance value for the effect of X1 and X2 simultaneously on Y is 0.001 < 0.05 and the calculated F value is 28.104 > F table 3.32, so it can be concluded that H3 is accepted, which means that there is an effect of X1 and X2 simultaneously on Y.

Conclusion

Based on the results of the research and discussion in this study, it can be concluded that selling prices have a positive and significant influence on customer satisfaction at PT Solusi Prima Caraka. Whereas Service Quality has a positive and significant influence on customer satisfaction at PT Solusi Prima Caraka confirmed by the routine Quality Control (QC) program carried out by the SPC team that is running well and providing recommendations according to standard procedures for carrying out residential pest control work, In House Training (IHT). carried out by the SPC team has been carried out properly and optimally, the supervision of visits carried out by the service supervisor (SPV) is carried out routinely 2x/month and has good results and quality. Selling price and service quality have a positive and significant impact on customer satisfaction at PT Solusi Prima Caraka. Selling Price and Service Quality on Customer Satisfaction that is equal to 76.3%. That is, 76.3% of customer satisfaction is determined by selling prices and service quality.

References

Ghozali, Imam. (2012-2013-2018). Aplikasi Ananlisis Multivariate dengan Program IBM SPSS. Yogyakarta: Universitas Diponegoro.

G. R., &. Koehler, P. G. (2016). Urban Entomology: Insect and Mite Pests in the Human Environment (2nded). Springer

Kotler Philip & Amstrong Gary. (2008). Prinsip-prinsip Pemasaran. Edisi Kedua Belas. Jakarta: Erlangga Jilid 1.

Kotler, Philip and Kevin Kane Keller. (2016). Marketing Management. 15th Pearson Pretice Edition New Jersey: Hall, Inc.

Mundir, M. (2013). Metode Penelitian Kualitatif dan Kuantitatif. STAIN Jember Press.

Nafis, F. (2009). Persepsi masyarakat perkotaan terhadap hama permukiman serta pengujian perangkap dan pestisida untuk mengendalikan tikus dan kecoa. Bogor: Universitas IPB.

Nafisa Choirul Mar'ati. (2016). Pengaruh kualitas pelayanan dan harga terhadap kepuasan pelanggan jasa transportasi ojek online (studi pada konsumen Gojek di Surabaya). Jakarta Pusat: LPPM Universitas Bina Sarana Informatika.

Schal, C. & Hamilton, R. L. (2019). Intergrated Pest Managemennt in Urban Environments. Annual Review Of Entomology, 64,, 251-272.

Sodikin. (2015). Akuntansi Management. Yogyakarta: UPP STIM YKPN.

Sugiyono. (2017-2018-2019). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta, CV.

Tjiptono, Fandy. (2014). Pemasaran Jasa: Prinsip, Penerapan, Penelitian. Yogyakarta: Andi (kualitas pelayanan) Edisi ke-3.

Windarti, T. & Ibrahim, M. (2017). Pengaruh Kualitas Produk dan Kualitas Pelayanan Terhadap Kepuasan Konsumen Produk Donat Madu. Phyton Cookbook, 706.

Yuliani, T. S. (2012). Perilaku penggunaan pestisida oleh ibu rumah tangga di wilayah DKI Jakarta. Bogor: Sekolah Pascasarjana Institut Pertanian Bogor.