

Influence of Product Quality, Price and Services Quality towards Customer Satisfaction at the Auto-Detailing Workshop

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Abstract

The primary purpose of this research is to examine the effect or influence of product quality price and services quality towards customer satisfaction either partially or simultaneously. The research population is customers of HD Car Care in the Bekasi region, with a sample size of 120 respondents that were selected using judgmental sampling. The research employs multiple linear regression analysis. According to the data analysis results, only product and service quality significantly influence customer satisfaction. Quality of product is the main influential towards customer satisfaction. The price has no substantial influence on customer satisfaction, although product quality, quality services, and price all impact customer satisfaction. The product's quality is the dominant factor in this study. The adjusted coefficient of determination of R square of 0,987 suggests that product quality, service quality, and price can explain 98,7% of the variable of satisfaction, while the remaining 1,33% is explained by another variable not explored.

Keywords: Products, Price, Services, and Customer Satisfaction.

1. INTRODUCTION

With the development that allows easily obtained information in the globalization era, customers have become more discerning in their decision-making. As a result, most companies are required to continue developing and improving product quality to compete; the management is required to provide the best service that meets the customers' needs and desires (Priscilia, 2013).

Tight competition is categorized by many of the same businesses in auto-detailing that produce similar auto detailing products. Since basically, auto detailing is how to protect and add some layering to make the paint look glowing. Product quality, price, and services are determinant factors to create customer satisfaction. Therefore, to make our product one of the customer's choices, every company has to look at such variables. As stated by Assaur (2012), customer satisfaction is a future indication of a company's success as it gauges how well customers respond to the company's business future. Jahanshashi et al. (2011) explained customer satisfaction as the perceived value of the transaction acquired based on the price and acquisition cost.

Product quality has been an essential factor in the auto-detailing business because the customer will directly observe production output, so any experience and emotional sense felt instantly by customers will impact customer satisfaction. Kotler and Armstrong (2008) have stated that product quality illustrates the extent of the ability of these products to meet and satisfy consumer needs. The price is a dominant factor besides product quality that we should consider before applying to the market. Hassan et al. (2013) showed that customer satisfaction is positively affected by reasonable pricing. Etermad et al. (2013) stated that the pricing policy would positively influence consumer satisfaction. Product quality and price service quality are both determinants of customer satisfaction. According to Hassan et al. (2013), for businesses to achieve customer satisfaction, they should improve their service quality, eventually, to survive and remain competitive.

The business goal is to generate profits and customer satisfaction, as customer satisfaction offers several benefits, such as a harmonious relationship between the company and its customers, consumer loyalty, and potential word-of-mouth promotions (Tjiptono, 2008).

PT Esensi Maju Sejahtera is one of the licensees of HD Car Care in Bekasi, whereas the products and services produced are auto-detailing both four-wheeled wheels and two-wheeled vehicles. Currently HD Car Care is competing with other auto-detailing, there are some customers who say that the product of HD Care is better or vice versa, since as customers are entitled to assess the quality. As a effort to meet customer satisfaction, resulted the the company must be able to provide the best product, either still shortage or need to be kept the quality, therefore when customer satisfaction this will be leading to customer loyalty.

2. Literature Review

2.1 Product Quality

Product quality refers to a product's or service's ability in fulfilling customers' demands. According to Kotler (2005), product quality is the overall features of a product or service that meet consumer demands. Moreover, Lupiyoadi (2006) has also mentioned that customers will be happy when the results are qualified. Sun (2011) also defines a product as a feature of a product or service that fits the customers' demands. As explained in the description above, it can be summarized; product quality is a way of the company's strategy to provide to consumers, fulfilling whatever is desired or desired by these consumers. Kotler & Armstrong (2008) has stated that the product quality dimension is consists of reliability, quality, comfort, durability.

2.2 Price

Pricing is a pretty essential component in decision making, where consumers will determine the attitude before deciding to buy. Friani et al. (2018) explained that price is money to exchange products and services.

Price assist customers in obtaining the finest products or services based on their purchasing power. Customers perceive the price as an indicator of value related to the perceived advantages of goods or services. So it was summarized at a certain level that when consumers' perceived benefits increase, the value will also increase (Tjiptono, 2001). As explained in advance that price is also very decisive in determining company profits. According to Renneboog and Spaenjers (2015), price plays a part in determining a company's success as it dictates how much profit or revenue will be generated from the sale of both goods and services.

Price is the amount of money required for a product or service based on the quality and advantages offered, which is also impacted by psychological aspects and other elements. Tjiptono (2005) mentioned that the dimension of the price variable consists of price setting, affordability of price, price quality, and price competitiveness.

2.3 Service Quality

Service quality is defined as the expected level and control over excellence that meets customers desires. Meanwhile, service quality is referred to as the degree of service received that exceeds expectations. According to Hassan et al. (2013), service quality is an assessment of the overall superiority of service. Meanwhile, Supranto (2006) noted that service quality signifies service providers who must perform well.

In summary, service quality perception is an ideal quality where service quality assesses how well the level of service delivered can match customer expectations. A good service can maintain existing customers or repeat orders and even able to attract new customers. In other words, service quality is among the factors that influence customer satisfaction, which ultimately affects the company's profit. Tjiptono (2005) mentioned that some service quality dimensions consist of physical evidence, empathy, responsiveness, reliability, and assurance.

2.4 Consumer / Customer Satisfaction

Customer satisfaction refers to an individual's expectations compared to their perceived performance (results). The level of satisfaction can be felt when the results of consumers exceed their expectations. The same thing was conveyed by Lin et al. (2017), the level of customer satisfaction from someone derived from the comparison of product performance received with one's expectations. Aside from that, Vega-Vazquez et al. (2013) define customer satisfaction as the level of product performance felt on the expectations. This quote can conclude that customer satisfaction can occur when the results obtained from work

exceed what is thought. Customer satisfaction is essential for the ongoing company because customer satisfaction will benefit the company's survival in the future. Kotler & Keller (2009) indicators measuring customer satisfaction fulfill customer expectation, attitude, desire, and recommendation to other parties.

2.5 Effect of product quality on customer satisfaction

Agus (2018) mentioned that product quality is very dominant in influencing consumer satisfaction. Meanwhile, according to Pribanus et al. (2019), product quality significantly and positively affects customer service. This research is also supported by Sun (2011). Product quality is the product's or service's feature that affects its capacity to fulfil customers' demands. Djuwarno et al. (2018) stated that better product quality could support customer satisfaction, encouraging customers to make repeat purchases. Based on some researches, this survey will examine the hypotheses about product quality toward customer satisfaction where:

H1 There is a significant association between product quality and customer satisfaction

2.6 Effect of Prices on Consumer Satisfaction

Djuwarno et al. (2018) discovered that price improves customer satisfaction after getting the intended results, encouraging consumers to continue trusting and repeat purchases. Prices impact customer satisfaction, and from the consumer's perspective, price is frequently used to determine value. Hermann et al. (2007) revealed that the price on satisfaction is also expressed that the reasonableness of price affects customer satisfaction positively. Meanwhile, Tjiptono (2001) indicates that the value will increase with the benefits felt by consumers at a fixed price level. This study will observe whether prices positively affect consensus satisfaction, as described in the H2 hypothesis.

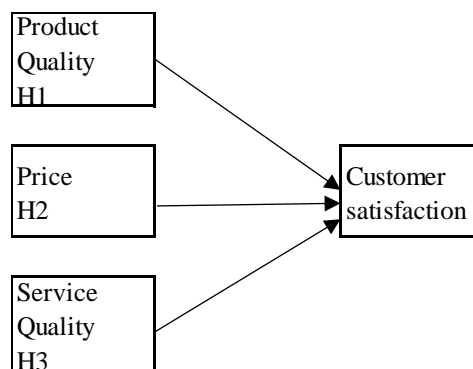
H2 There is a significant association between price and customer satisfaction.

2.7 Effect of Service Quality on Consumer Satisfaction

One of the hypotheses to be examined is the quality of service and whether it substantially affects customer satisfaction. Some research has proved that service quality also affects customer satisfaction. Research from Coeho and Hanselle (2012) confirms that service quality is essential in creating customer satisfaction. This research also supported Montung (2015), who found that customer satisfaction is positively and significantly affected by service quality.

H3. There is a significant association between service quality and customer satisfaction.

Figure 1 Hypotheses flow chart



3. Method

This study aims to examine product quality, price, and service quality towards customer satisfaction. This study used a survey method where the respondent will be distributed to 120 respondents, and asked to fill in the questionnaire, such a questionnaire

will feature a range of 1 to 5, generally referred to as a Likert scale of five points, with point one representing a low degree of agreement and point five for a strong agreement. The set of the questionnaire consists of two groups, the one group to analyze demographics and the other one is questioner to identify the product, price, service, and customer satisfaction. The total number of variabel are 4variabels, which consist of 9 indicators and questioners are 24 items, distributed through e-mail or filled directly to a workshop, model sampling based on judgmental sampling and using SPSS , the research has been conducted by September 2019.

4. Results and Discussion

Based on the result of demographic data, which questionnaire distributed to 120 customers who have been in the past six months visiting auto-detailing indicates are as follows.

Table 1 – Demographic data

No	Category	Value	%
1	Gender		
	-Female	26	22%
	-Male	94	78%
2	Occupation		
	-Self employee	57	48%
	-Entrepreneur	42	35%
	-Students / teenager	10	9%
	-Civil employee	11	9%
3	Product introduction		
	-Relationship	94	78%
	-Social Media	26	22%
4	Walk-in customers		
	-first walk-in	68	57%
	-second walk-in	31	26%
	-third walk-in	16	13%
	> fourth walk-in	5	4%

N: 120 respondents

The above table indicated that the number of customer walk-in auto detailing is mostly coming from male whereas at a 78% is dominated by male and the rest was female. Meanwhile, 48% of customers have been working as self-employees and entrepreneurs at a 35%, respectively. Based on 120 respondents, 78% of customers have known the products come from relationship or power of mouth in terms of product introduction. It means that optimization of social media is still more minor, therefore using social media to introduce the product is one of the business strategies which can be applied. Based on the customer satisfaction of 120 respondents, 43% of customers will be coming again to detailing their cars. It has demonstrated that customers are happy and satisfied.

4.1 The 24 questionnaire items were tested for their validity and reliability, and the results indicated that the 24 items were valid and reliable. It signifies that all respondents understood the questionnaire and agreed with the specified statement. Please refer to the below table:

Table 2 – Summary Validity and Reliability

Variables	code	Questionaries	Mean	Value Validity	Value Reliability
Product quality Variable	P1	The product has a good reputation	4,42	0,984	0,962
	P2	The result is expected	4,49	0,936	0,969
	P3	The product has added value	4,42	0,902	0,973
	P4	Product guarantees has given us convenience	4,42	0,984	0,962
	P5	The product provides paint protection and wetlook	4,58	0,850	0,981
	P6	Quite good protection resistance	4,42	0,984	0,962
Price Variable	H1	Prices are in accordance with the quality	4,34	0,921	0,954
	H2	Affordable product prices	4,26	0,965	0,947
	H3	Clear price information to customer	4,33	0,942	0,951
	H4	Competitiveness in terms of price	4,68	0,820	0,970
	H5	Prices are in accordance with product standards	4,25	0,960	0,948
	H6	Prices are in line with expectations	4,48	0,905	0,957
Services quality variable	Pn1	Area is strategic enough to provide a sense of comfort	4,55	0,977	0,962
	Pn2	Explains in detail the benefits of protection	4,54	0,976	0,962
	Pn3	Responsive service in serving	4,54	0,924	0,971
	Pn4	Service is quite reliable	4,49	0,953	0,966
	Pn5	Overall service meets expectations	4,56	0,972	0,963
	Pn6	Pick up & Delivery helps service	4,42	0,839	0,980
customer satisfaction variable	Kp1	The work result is quite satisfying	4,46	0,763	0,949
	Kp2	Return to workshop when ever having additonal vehicles	4,50	0,821	0,941
	Kp3	Guarantee is good enough	4,40	0,935	0,923
	Kp4	Satisfaction on timeliness and product quality	4,52	0,905	0,928
	Kp5	Overall results given to us is quite happy and satisfied	4,45	0,957	0,918
	Kp6	I wil give recommendation to the others about	4,54	0,897	0,929

4.2 Validity test

Tests to obtain the level of validity of the questionnaire used as a measurement tool in research, based on 24 questioners indicated that value of R-count is higher than R Table. In contrast, R Table is at 0,1779, so that we can summarize that based on such results indicated 24 questioners are valid to be tested.

4.3. Reliability: The reliability test results using the Cronbach's Alpha, when value Cronbach's alpha is higher than 0,6, therefore such questioners are reliable.

Based on the calculation of Statistical Package for the Social Sciences, all 24 items questioner are reliable. R-count is higher than 0,6, please refer to below test for detailed results.

Table 3 - Reliability Test Results

Variable	Coefficient Cronbach's Alpha		Information
	Count	Standard	
Product quality	0,974	0,6	Reliable
Price	0,962	0,6	Reliable

Service quality	0,973	0,6	Reliable
Consumer Satisfaction	0,943	0,6	Reliable

Multiple linear regressions is an approach to developing an equation that tries to assess the influence of independent variables on the dependent variable. In this research, the multiple linear regression seeks to define the impact of product quality (H1), price (H2), service (H3) on consumer satisfaction (Y) both individually and together (simultaneously).

4.4 Statistical Test T (Individual / Partial Test)

The t-test is to determine the product variables (H1), price (H2), and service (H3) affect the customer satisfaction (Y), partially or individually, with a significance value of 0,05. If the value is less than 0,05, the result indicates a partially significant relationship between the independent and dependent variables.

Table 4 T-Test Regression Analysis

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Table t
	B	Std. Error	Beta			
Constant	0,526	0,286		1,840	0,068	
Product	0,636	0,034	0,666	18,616	0,000	1,981
Price	-0,028	0,018	-0,035	-1,556	0,122	1,981
Services	0,372	0,032	0,372	11,704	0,000	1,981

a. Dependent Variable: customer satisfaction

Based on the t-test of Table 4:

Regression equation $Y = 0,526 + 0,636 + 0,372 - 0,028$, and testing the hypothesis based on sample $N = 120$, table $(n-k) = 1,981$ and a 5% confidence level. can be concluded:

4.4.1 Product quality (H1)

The significance value of the product quality variable (H1) is 0,000, meaning that the value of significant is less than 0,05 so that it can conclude that H_0 is rejected and H_1 is accepted. Meanwhile, the t value is 18,616 compared to the t-table value of 1,981, since t-count is higher than t-table, so H_0 is rejected, and H_1 is accepted. Both indicators show that product quality significantly and directly affects to customer satisfaction.

4.4.2 Price (H2)

The significance value of the price variable (H2) is 0,122 is higher than 0,05. However, the t-value (-1,556) is less than the t-table (1,981), H_0 is accepted, and (H2) is rejected. Therefore, the price variable towards customer satisfaction has no significant and no direct impact.

4.4.3 Service Quality. (H3)

The significance value of the service quality variable (H3) is 0,000, meaning that the significance value is less than 0,05, while the t-count is 11,704. The t-table is 1,981 since the t-value is higher than the t-table, H_0 is rejected, and H_3 is accepted. As a result, the service quality variable towards customer satisfaction, either partially or separately, has significant and positive impact to customer satisfaction.

4.5 Statistical Test F (Simultaneous Test)

The F test seeks to determine if the product quality (H1), service (H2), and price (H3) all have the same influence on the dependent variable, namely customer satisfaction (Y). Here is the hypothesis table F test (simultaneous test).

Table 5 Test F

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.	Tabel F
Regression	1012,975	3	337,658	3038,274	.000 ^b	2,68
Residual	12,892	116	0,111			
Total	1025,867	119				

a. Dependent Variable: customer satisfacton

b. Predictors: (Constant), Price , services , Product

Table 5 demonstrates the significance value of 0,000 is less than 0,05 (probability value) while the F value is 3.038,274 is higher than the value of table 2,68 or $F\text{-count} > F\text{ table}$. It is concluded that the variable of product, price, and service has a significant impact, and simultaneously, all variables have impacted customer satisfaction variable (Y).

4.6 Coefficient Determination (R²)

Table 6 Test Coefficient

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.994 ^a	0,987	0,987	0,333
a. Predictors: (Constant), Harga , Layanan , Product				

Coefficient determination (R²)

Based on Table 6 indicated that the adjusted R square value is at 0,987 or 98,7%. The meaning of this value is that variables of product quality, service, and price can explain customer satisfaction at 98,7%. The remaining 1,3% is explained by other factors that cannot be explained in this model.

5. Results and Discussion

This chapter aims to summarize any measurement related to product, price, service towards customer satisfaction. Based on the regression results for the product, the t-test sig value of 0,000 is less than 0,005. Meanwhile, the t-value is higher than the t-table (18,616 > 1,981); also, test F indicated F-Count is higher than F-Table (please refer to Table 5). Therefore product quality is both individual and simultaneously impacts customer satisfaction. This is also consistent with Heizer and Render (2001), who define it as a product's or service's capacity fulfilling the customers' demands.

The price variable is also tested. Based on data indicating the result of testing t-test sig is 0,122 higher than 0,05 and t-value is less than t-table (-1,588 < 1,981), it concludes that price has no significant effect on consumer happiness. The same research has been conducted by Rondonuwu (2013), where price does not impact customer satisfaction. However, when the price is combined with other variables, product and service, it simultaneously affects customer satisfaction.

On the service variable indicated that t-value is 11,704, which is higher than the t-table (11,704 > 1,981), and value of significantly is at 0,000, which is less than 0,05, resulted to service variable is accepted. According to both table values, service quality significantly has affected significant and positive to customer satisfaction. Based on the F test (Anova) indicated, when all variables are combined simultaneously, all variable (Product, Price and Service) will have impact customer satisfaction. The research is similar to Abdullah (2012),

6. Conclusion

As explained before, the research objective is to examine whether product quality, price, and service quality, has influenced to customer satisfaction individually and simultaneously.

- 6.1. Based on Test regression Analysis, product quality has the highest beta value other than all variables (0,666). It means that product quality is very influential and significant to customer satisfaction, this also support based on 120 respondents, where as mostly respondents are given the highest appreciation to the product quality.
- 6.2. Price does not significantly impact customer satisfaction, based on t-test, t-value is less than t-table as well as no significantly due to . However when combined with other variables, the price variable is simultaneously impacting customer satisfaction. Probably, this is because the setting price strategy is higher than the market industry. Based on 120 respondents interview indicated that the price given is quite expensive compare to competitor
- 6.3. Service quality is one variable that has directly impacted significant to customer satisfaction.
- 6.4. Variable prices, product quality, and service quality simultaneously have significantly and positively to customer satisfaction.
- 6.5. R Square value is 0,987, indicating that all variables can be explained; however, 1,3% cannot be explained.
- 6.6. Since the survey has limited to specific area, therefore, for the following review should be expanded to some area in order to get the good picture of analysis, as well as to explore some variabel such as branding merk of product and customer loyalty.

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