



THE INFLUENCE OF PRODUCT QUALITY AND PRICES ON CONSUMER SATISFACTION IN JDM PROJECT PRINTING BUSINESSES

Fera Kusumawati¹, Hartono², Rini Armin³

^{1,2}Fakultas Ekonomi Universitas Islam Majapahit, Indonesia

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ABSTRACT

This research aims to determine the effect of product quality and price on consumer satisfaction in the JDM PROJECT printing business. This research uses a quantitative method with the number of samples in this research being 96 respondents with an incidental sampling technique. The data collection method uses an online questionnaire. This research uses multiple linear regression analysis with data processing tools in the form of the IBM SPSS 21 program. The results of the research show that product quality partially influences consumer satisfaction (Sig 0.000 < 0.05, and t count 3.056 > t table 1.989) and price partially influences consumer satisfaction (sig 0.000 < 0.05 and t count 6.192 > t table 1.989). Product quality and price simultaneously influence consumer satisfaction in the JDM PROJECT printing business (sig 0.000 < 0.05 and f count 22.075 > f table 3.09).

1. INTRODUCTION

People by offering goods door to door. Operational costs that are too large mean that marketers cannot offer their merchandise widely because it is difficult to sell goods conventionally. The development of technology and communication, especially in the development of internet technology, currently makes it easier for traders to market the goods or services they produce. In the current era of globalization, the business world is increasingly developing day by day. This means that companies cannot be separated from existing competition so that companies are required to provide a good marketing system to companies operating in the industrial and service sectors (Hartono, Toto Heru Dwihandoko, 2023). One of the visible impacts of the internet is the emergence of various e-commerce sites that provide various products online so that buyers do not need to come directly to the shop.

The increasingly sophisticated communication technology in the field of modern printing means that every company, office, educational facility and others will definitely need printing services for their activities and to promote business products to the people of the area. Current computer and printer technology allows us to print not only text and images, but we can also print photos with quality results. Even if we print photos using photo paper, the results will resemble photo prints. Computer and printer technology is increasingly sophisticated, making the results obtained increasingly better, and the production process becomes faster and easier. This digital printing business has very good prospects in the future. Because as long as government or the world of education and Small and Medium Enterprises (SMEs) continue to run and grow, the existence of this printing business will always be needed by them. It is hoped that this business will be able to open up job opportunities for people who are creative in this field, so that the knowledge gained can be used optimally in this business venture and facilitate communication with the public.

*Corresponding author.

E-mail: ferawati5641@gmail.com

The product quality and price factors are factors that can influence consumer satisfaction. According to Gaspersz, product quality and price are the company's main focus in creating products. High quality products are the main criteria for consumers in choosing products provided by the company. Companies can always maintain and improve the quality of their products to meet consumer desires. With high quality products, companies can also compete to dominate the market. So product quality means that the results are good or very good production for the company (Hartono, 2018). Based on this background, researchers are interested in conducting research entitled "The Influence of Product Quality and Price on JDM PROJECT Consumer Satisfaction" in Pening Village, District. Jetis, Regency. Mojokerto.

2. METHODS

The type of research used in this research is quantitative research according to (Sugiyono, 2017) Quantitative research is a research method based on positivist philosophy, used to research certain populations or samples, data collection using research instruments, quantitative or statistical data analysis using The aim is to test the hypothesis that has been established (V.A.R.Barao et al., 2022). The sources of information in this research are divided into two, namely primary data and secondary data. Primary data was obtained from the results of respondents' responses from filling out questionnaires by consumers at the JDM PROJECT printing business. Meanwhile secondary data comes from references, journals, literature. (Rosita, 2017). The research location is at the JDM PROJECT printing business in Dsn. Sidogede Ds. Pening, District. Jetis, Kab. Mojokerto. The population in this study is consumers who made purchases at the JDM PROJECT printing business in Mojokerto City with an unknown number (Abdul Gofur, 2019). Because the population size is not known with certainty, to determine the sample size, the Cochran formula was used and the results were 96 samples.

3. RESULTS AND DISCUSSIONS

Results

General Description

DM Project is a business that operates in the printing sector. This business is an individual business but was started jointly by Mas Yunus, Mas Firman and Mas Zainul. Founded in 2018, JDM is an abbreviation of Mojokerto Design Services. JDM Project's address is Dsn. Sidogede Ds. Pening District. Jetis District. Mojokerto, East Java. Product types include invitations, stickers, ID cards, Yasin books, X Banners, brochures, etc.

Classic Assumption Test Results

Normality Test

The normality test aims to determine whether in the regression model the confounding or residual variables have a normal distribution or not. This research uses SPSS 21 to detect normality of each variable. Normality is tested by looking at the dotted line following the diagonal. If yes, the image is declared normally distributed. Test test results. The normality of this research data is as follows:

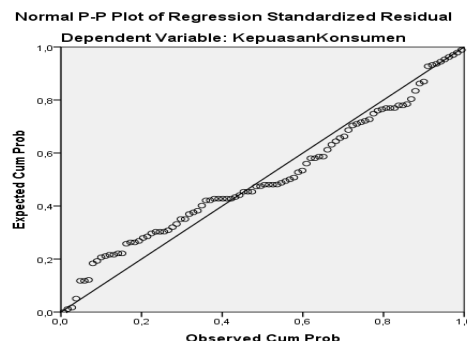


Figure 1 Normality Test Results

Based on the results of the normality test, the data is declared normally distributed because the dotted line follows the diagonal.

Multicollinearity Test

The multicollinearity test is used to test whether in the regression model a correlation is found between the independent variables (Prasetyo et al., 2013) (Efendi & Widyastuti, 2019). The multicollinearity test in the research uses VIF and Tolerance values, with the decision making process if $VIF < 10$ then multicollinearity does not occur. And if the tolerance is > 0.1 then it is stated that there is no multicollinearity.

Table 1 Multicollinearity Test Results

Variabel	Colinearity Statistic Tolerance	VIF
Product quality	0,996	1,004
Price	0,996	1,004

Based on the table above, it can be seen that the product quality (X1) and price (X2) variables show $VIF < 10$ or a VIF value of less than 10 and tolerance > 0.1 or a tolerance of more than 0.1. From the results of the multicollinearity test, it can be concluded that there is no indication of multicollinearity.

Heteroscedasticity Test

The Heteroscedasticity Test aims to find out whether in the regression model there is inequality in the residual variables between one observation and another (Efendi & Widyastuti, 2019). The measure for determining the heteroscedasticity test in research is that if the significance value of the independent variable is > 0.05 then there is no indication of heteroscedasticity. Below are the results of the heteroscedasticity test in this study:

Table 2 Heteroscedasticity Test Results

Variabel	Signifikansi	Information
Product quality	0,951	Heteroscedasticity does not occur
Price	0,555	Heteroscedasticity does not occur

Based on table 2, it can be seen that the significance value for product quality is 0.951 and for price is 0.555. So both have a significance value > 0.05 or above 0.05. So it can be concluded that in this study there was no heteroscedasticity. The heteroscedasticity test can also be seen from the scatterplot graph produced by the SPSS output based on the processed data. In a scatterplot, if the dots are formed randomly and spread from the 0 axis or the Y axis or the dots do not produce a particular pattern, it can be concluded that there are no symptoms of heteroscedasticity.

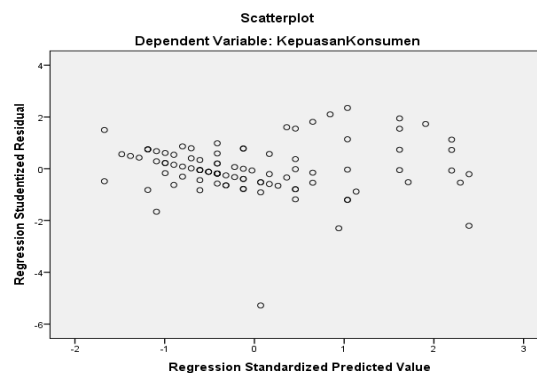


Figure 2 Heteroscedasticity Test Results

Hypothesis Testing

T Test

According to Kuncoro (2013) (Efendi & Widyastuti, 2019), the t statistical test basically shows how far the influence of an individual explanatory variable is in explaining the dependent variable.[19] This t statistical test is carried out using a significance level of 5%. If the significance value of $t < 0.05$ means there is a significant influence between an independent variable on the dependent variable. If the significance value of $t > 0.05$ means that there is an influence between one independent variable. The results of the t test in this study are presented in the table below:

Table 3 T Test Results

Model	Coefficients ^a				T	Sig.
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
(Constant)	13,322	4,324			3,081	,003
1 Product quality (X1)	,174	,057	,260		3,056	,003
Price (X2)	,521	,084	,527		6,192	,000

a. Dependent Variable: Consumer Satisfaction

Product Quality On Consumer Satisfaction

According to the t test results in the table above, it is known that the resulting significance value is 0.003, which means the significance value is below 0.05 (< 0.05). The t calculated value is ($3.056 > 1.986$) so the value is (t calculated $>$ t table). Which means that the product quality variable (X1) partially influences consumer satisfaction at JDM PROJECT printing.

Price On Consumer Satisfaction

The resulting significance value is 0.000, which means the significance value is below 0.05 (< 0.05). The t calculated value is ($6.192 > 1.986$) so the value is (t calculated $>$ t table). So from the resulting value the conclusion drawn is that H_0 is rejected and H_a is accepted or the first hypothesis is accepted. Which means that the price variable (X2) partially influences consumer satisfaction at JDM PROJECT printing.

F Test (Simultaneous)

According to Kuncoro (2013), the F statistical test basically shows whether all the independent variables included in this model have a joint influence on the dependent variable. (Efendi & Widyastuti, 2019)

Table 4 F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	306,561	2	153,281	22,705	,000 ^b
	Residual	627,845	93	6,751		
	Total	934,406	95			

a. Dependent Variable: Consumer Satisfaction
b. Predictors: (Constant), Price(X2), Product Quality(X1)

Based on the table above, it can be seen that the influence of the independent variables simultaneously or together influences the dependent variable by obtaining a significant value of 0.000, which means the resulting significance value is smaller than 0.05. And the calculated F obtained is 22.705, where the calculated F is greater than the F table ($22.705 > 3.09$). And it can be concluded that product quality (X1) and price (X2) simultaneously or jointly influence consumer satisfaction.

Coefficient of Determination Test

According to (Ghozali, 2016), the coefficient of determination test aims to measure how far the model's ability is to explain variations in the dependent variable (Oktavian & Soliha, 2022).

Table 5 Coefficient of Determination Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,573 ^a	,328	,314	2,59827

a. Predictors: (Constant), Price(X2), Product Quality(X1)
b. Dependent Variable: Consumer Satisfaction

From the table above, it can be explained that the correlation coefficient (R) is 0.573 and is close to 1. This means that there is a relationship between the independent variable and the dependent variable of 57.3%. From these figures the conclusion that can be drawn is that there is a strong relationship between the independent variable and the dependent variable. The Adjusted R Square (R²) value is 0.314, which means the influence of product quality and price variables on purchasing decisions is 30.4%. This shows that the consumer satisfaction variable can be explained by the product quality and price variables. Meanwhile, the remaining 19.1% is explained by other variables outside this research.

Discussion

The Influence of Product Quality on Consumer Satisfaction

The test results of the hangout lifestyle variable (X1) show that there is an influence between the hangout lifestyle variable on purchasing decisions (Y). The significance value shown from the test results on the hangout lifestyle variable (X1) is 0.003 and the calculated t is 3.056 and the t table is 1.989, so $3.056 > 1.989$. This means that product quality influences consumer satisfaction at JDM PROJECT printing. So it can be concluded that product quality (X1) partially influences consumer satisfaction at JDM PROJECT printing. Thus the first hypothesis can be proven true. Product quality is the ability of a product to perform its function, this includes overall durability, reliability, accuracy, ease of operation, and product repair as well as other product attributes (Hartono, 2021). It is a characteristic of a product or service that depends on its ability to satisfy stated or implied consumer needs. There are several components of measuring product quality based on performance, that is, a product comes from raw materials that have superior seeds and ingredients contained in a product. According to research, product quality is the factors contained in an item or result that cause the item or result to according to the purpose for which the goods or results are intended or needed. Good product quality supported by a maximum price will not disappoint consumers. It is better if the product quality is low at a maximum price, it will cause consumer dissatisfaction. The results of this research are in line with research by Nelli Rizayanti (2021) entitled the influence of product quality and price on consumer satisfaction of Socolatte in Pidie Jaya. Which states that the influence of product quality and price on Socolatte consumer satisfaction in Pidie Jaya.

The Effect of Price on Consumer Satisfaction

Based on the results of the t test on the word of mouth variable (X2), the significance value shown is 0.000 and the calculated t value is 6.192 so that the calculated t is greater than the t table ($6.192 > 1.989$). This means that price influences consumer satisfaction at JDM PROJECT printing. So it can be concluded that the price variable (X2) partially influences consumer satisfaction at JDM PROJECT printing. Thus the first hypothesis can be proven true. The partial influence of price (X2) on consumer satisfaction (Y) is due to several indicators including the consumer's willingness to express and tell stories as well as invite or convince others about a product or their consumption experience of a product. Because price is the amount of value that consumers exchange for the benefits of owning or using a product whose value is determined by buyers and sellers through bargaining for one price with all buyers. Setting and assessing prices and price competition have been assessed as one of the main problems faced by companies. Differences in price levels can also influence market conditions.

The results of this research are in accordance with Abdullah and Tantri's theory in their research which states that price setting is a problem when a company has to determine prices for the first time. That the price of a good or service is the amount of money paid by consumers in the hope of getting a reward in the form of benefits from the good or service. The price of a product will provide its own value for consumers. The results of this research are in line with previous research conducted by M. Amri Nasution (2019) entitled the influence of price and quality of medical device products on purchasing decisions of Medan city consumers. The results of this research state that the price and quality of medical device products influence the purchasing decisions of Medan city consumers.

The Influence of Product Quality and Price on Consumer Satisfaction

Based on the F test which shows a significance value of 0.000, which means the resulting significance value is smaller than 0.05 ($0.000 < 0.05$). And the Fcount obtained is 22.075, where Fcount is greater than Ftable ($22.075 > 3.09$). So H_0 is rejected and H_a is accepted. And it can be concluded that product quality and price simultaneously have a significant effect on consumer satisfaction. This can happen because the two independent variables have an interrelated relationship. So if the two dependent variables are combined they can influence consumer satisfaction simultaneously. So according to the researchers, consumer satisfaction in visiting JDM PROJECT printing proves that JDM PROJECT printing is an online shop

that provides various types of products that suit the desires of high consumer tastes. After consumers make a purchase at JDM PROJECT printing, consumers usually tell about the positive things they got after visiting JDM PROJECT printing. So many consumers know about JDM PROJECT printing because they get information from their social environment. With communication, they can exchange information such as consumer reviews and be heard by the wider community. If consumers are satisfied with JDM PROJECT printing, they will recommend many other people or potential new customers to visit JDM PROJECT printing.

4. CONCLUSION

Based on the explanation of the research results and the discussion in the previous chapter, the conclusion that can be drawn from this research is that product quality variables have a partial effect on consumer satisfaction at JDM PROJECT printing. This is proven by the results of the t test, where the resulting significance value is 0.003, which means < 0.05 . And the calculated t value is ($t_{\text{calculated}} 3.056 > t_{\text{table}} 1.989$). then the price variable partially influences consumer satisfaction at JDM PROJECT printing. This is proven from the results of the t test where the resulting significance value is 0.000 (< 0.05). And the calculated t value is ($t_{\text{calculated}} 6.192 > t_{\text{table}} 1.989$). The variables product quality and price have a simultaneous effect on consumer satisfaction at JDM PROJECT printing. This is proven by the significant value of 0.000 (< 0.05). And F count $22.075 > F_{\text{table}} 3.09$.

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