



## The influence of product quality and price on consumer satisfaction at the 3R Tofu Factory, Majalengka

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### ABSTRACT

The purpose of this research was to determine the effect of product quality and price on customer satisfaction at Pabrik Tahu 3R, Majalengka. The data collection method used in this study was a questionnaire. The population in this study are consumers who purchase products at Pabrik Tahu Tahu 3R, Majalengka. Sampling was calculated using the Lameshow formula and obtained as many as 96 respondents using the Accidental sampling technique. The analysis used in this study includes validity test, reliability test, multiple linear regression analysis, correlation coefficient analysis, determination coefficient analysis, and hypothesis testing T-test and F-test with SPSS V26.0 data processing. The results showed that product quality and price proved to have a positive and significant effect on customer satisfaction. This is evidenced by the analysis of the regression equation,  $Y=4.590+0.166X_1+0.438X_2$ . From this equation, it can be concluded that with a constant value of 4.590 and a positive value, it means that if the value of the product quality and price variable is zero, then the customer satisfaction will experience an increase of 4.590. The value of the correlation coefficient ( $r$ )=0.710, which means that the relationship between product quality and price with customer satisfaction is at a fairly strong level of relationship. The results of the test for the coefficient of determination show that the effect of price and product quality on customer satisfaction is 50,4%, while the remaining 49,6% is influenced other variables not used in this study. Meanwhile, the value of  $F_{count} > F_{table}$ , namely ( $47,204 > 3.094$ ) product quality and price together influence customer satisfaction.

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## 1. INTRODUCTION

The business world continues to develop rapidly in line with the development of the globalization era, this is marked by the increasingly high level of competition in the business world in marketing products and services to consumers (Ceniga & Sukalova, 2020). Business people compete with each other in marketing the products they offer in order to meet consumer needs and desires (Sierra Rodríguez, 2022). Currently, consumers prefer products that are cheap but have good quality (Imad M. Assali, 2016). Intense competition in the business world occurs in various fields, including the food business (Amornkitvikai et al., 2021). The need for food and drink is a basic human need that must be fulfilled so that the food business has become a trend among society. Companies are required to better understand all the needs and desires of consumers or companies must be able to create

products that suit consumer needs (Yanenko et al., 2020). Apart from that, good marketing is also needed (Herhausen et al., 2020).

According to (Singh et al., 2020), product quality is the overall characteristics and characteristics of a product or service in terms of its ability to satisfy implied needs. Consumers expect the products they buy to have good quality and meet their expectations in order to satisfy them. The price factor is also an important factor that consumers consider when making purchasing decisions for a business (Van Loo et al., 2020). Consumers want product prices that match the quality of the product in question. Pricing by business actors must be adjusted to the environment and changes that occur (Wen & Siqin, 2019). This will influence consumers before deciding to purchase because consumers will find out the price and will choose a product that suits their purchasing ability (Khan et al., 2019). Price is the amount of money charged for a product or service, or the amount of value that consumers exchange for the benefits of having or use the product or service (Oh et al., 2020).

Consumer satisfaction is a requirement for the success of all types of business. With satisfaction, it is hoped that consumers will trust the product (Huq & Sarker, 2020). It is very important for the 3R tofu factory to know exactly how consumers respond to the quality of the product and its price, whether the quality of the product and the price can meet consumer tastes (Ropiudin & Syska, 2023). It is very important for the 3R tofu factory to know for sure how consumers respond to the quality of their product, whether the quality of the product can meet consumer tastes, and whether consumer responses to the price are in line with consumer expectations (Mamun & Al, 2017). So it is hoped that this can foster a good consumer response and can play a role in attracting new consumers and influencing satisfaction and continued consumption of 3R tofu factory products. Many efforts have been made by the management of the 3R tofu factory to provide optimal satisfaction to consumers. However, in reality there are still consumers who are not satisfied with consuming tofu. This may be due to a fairly important problem, for example dissatisfaction with the suitability of taste and aroma or a discrepancy with the net weight measurement which is a quality dimension, or a discrepancy in price with the product offered by the company not meeting consumer desires in terms of quality, especially in terms of size and appearance product (Bayu Luhur Wicaksono, Adhi Susanto, 2002; Mugge et al., 2018).

There are several contributions in this research: For the author, the expected benefit is to increase insight and knowledge regarding marketing management, especially in the theory of product quality, price and consumer satisfaction. For the company, it is hoped that the results of this research can be very useful information for the company to be used as a reference or food for thought in providing information about the magnitude of the influence of product quality and price on consumer satisfaction, so that companies can attract attention to move consumers' hearts to make purchases. For other parties, it is hoped that this research can be used as a source of knowledge and reference material regarding information the influence of product quality and price on consumer satisfaction so that it can be used as feedback for their respective performance.

## 2. RESEARCH METHOD

The method used in this research is descriptive and verification. The population that will be taken is the population of consumers of the 3R Tofu Factory, Majalengka Regency, the exact number of which cannot be known. The sample size in this research is 96 respondents. Because the population is unknown, sampling is carried out using the Lameshow formula. If the researcher does not know the population size, then choosing a P of 0.5 will always provide observations without looking at the actual proportion. The chosen confidence level is 95%, with a distance of d (10%) below and above the actual proportion (Azizah et al., 2021). So a sample of 96 will be needed to achieve a 95% confidence level in estimating the proportion of the consumer population who have made purchases at the 3R Tofu Factory, Majalengka Regency. Questionnaires were used as research instruments. Validity and reliability tests were carried out to determine the quality of the questionnaire. Before testing the hypothesis, a data normality test is first carried out to find out whether the data collected is normally

distributed (Suliyanto, 2018). Multiple linear regression tests, multiple correlation tests, and coefficient of determination tests were used to analyze research data, while partial t tests and simultaneous F tests were used to test hypotheses. This data analysis was carried out using SPSS version 26 software.

### 3. RESULTS AND DISCUSSIONS

#### Research result

To obtain reliable research results, validity and reliability tests were first carried out on instruments (questionnaires) for product quality, price and consumer satisfaction. The instrument test results can be seen in table 1

Table 1. Instrument Test Results (Questionnaire)

Variabel	Statement Items	Validitas		Reliabilitas	
		Koefisien Korelasi	Information	Cronbach's alpha	Information
Product Quality	No. 1 – 15	>0,30	Valid	0,633	Reliabel
Price	No. 16 – 24			0,853	
Customer Satisfaction	No. 25 – 33			0,670	

Source: data processed (2023)

Based on the results of validity test calculations using the product moment correlation formula, the correlation coefficient value for each questionnaire statement item was more than 0.30, so that 33 questionnaire statement items were declared valid. The next step is to carry out a reliability test using the Cronbach alpha formula with the condition  $r_{count} \geq r_{table}$  with a significance level of 5%, and the results are that all questionnaire statement items for each variable are said to be reliable, so they can be used for research.

The following are the results of data processing using SPSS version 26 software.

Tabel 2. Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4,590	2,813		1,632	,106
1 Product Quality	,166	,049	,263	3,388	,001
Price	,438	,059	,575	7,393	,000

a. Dependent Variable: Customer Satisfaction

Based on the results of data analysis displayed in table 2, the regression equation  $Y = 4.590 + 0.166X_1 + 0.438X_2$  can be interpreted as follows:

- 1) The constant value is (4.590) and is positive, meaning that if the value of the product quality variable and the price variable is zero, then consumer satisfaction will increase by (4.590).
- 2) ( $X_1$ ) The price regression coefficient value of (0.166) is a positive linear regression direction coefficient, which means that every 1% increase in product quality will cause an increase in consumer satisfaction of 0.166 (16.6%) or vice versa for every 1% decrease in price. % will cause a decrease in consumer satisfaction of 0.166 (16.6%).
- 3) this will cause a decrease in consumer satisfaction of 0.438 (43.8%).

Tabel 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,710 <sup>a</sup>	,504	,493	1,690

a. Predictors: (Constant), Product Quality, Price

Based on table 3, a correlation value (r) of 0.710 is obtained, meaning that product quality and price at the 3R Tofu Factory in Majalengka Regency have a strong relationship with consumer

satisfaction. Meanwhile, the coefficient of determination is 0.540, meaning that consumer satisfaction which is influenced by product quality and price is 50.4%. Meanwhile, the remaining 49.6% was influenced by other variables or factors that were not researched.

The test results can be depicted in a path diagram as follows

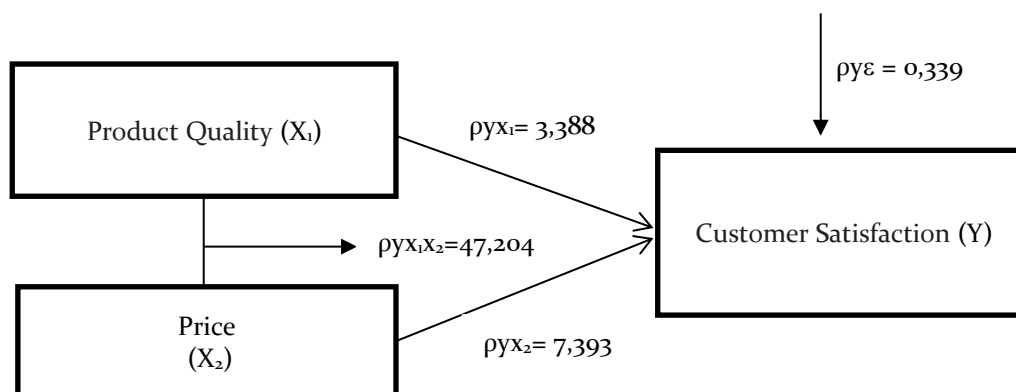


Figure 1. Structure of the causal relationship between  $X_1$ ,  $X_2$  and  $Y$

Based on the data in Figure 1, the following information can be obtained:

- 1) The contribution of product quality ( $X_1$ ) which directly influences consumer satisfaction ( $Y$ ) is 3.388
- 2) Price contribution ( $X_2$ ) which directly influences consumer satisfaction ( $Y$ ) is 7.393
- 3) The simultaneous contribution of product quality ( $X_1$ ) and price ( $X_2$ ) which directly influences consumer satisfaction ( $Y$ ) is 47.204, influenced by other factors not explained in the research.

## Discussion

### 1) The Influence of Product Quality on Consumer Satisfaction

Based on the research results, product quality variables have a significant effect on consumer satisfaction. This is proven by the research results which show the calculated t value (3.388) > t table (1.986) Probability value (sig) of 0.006 >  $\alpha$  (0.05) so that the fourth hypothesis states that there is a significant influence between product quality and consumer satisfaction. proven true. It can be concluded that product quality has a positive and significant effect on consumer satisfaction at the 3R tofu factory in Majalengka Regency. The results of this research are consistent with the research results of (Rimawan et al., 2017), and (KYALO, 2019) which stated that product quality has a significant positive effect on customer satisfaction. Where product quality is one of the most important factors in determining consumer satisfaction, if the quality of a product meets or exceeds customer expectations, it directly leads to customer satisfaction.

### 2) The Effect of Price on Consumer Satisfaction

Based on the research results, the price variable has a significant effect on consumer satisfaction. This is proven by the research results which show the calculated t value (7.393) > t table (1.986) Probability value (sig) of 0.041 <  $\alpha$  (0.05) so that the fifth hypothesis states that there is a significant influence between families on consumer satisfaction can be proven the truth. It can be concluded that product quality has a positive and significant effect on consumer satisfaction at the 3R tofu factory in Majalengka Regency. The results of this research are consistent with the results of (Rimawan et al., 2017; Shamsher, 2016) which states that the price variable has a positive and significant effect on consumer satisfaction for M2 Fashion online products. Where price is one of the most important factors in determining consumer satisfaction, if the quality of a product price meets or exceeds expectations customers, it directly leads to customer satisfaction.

### 3) The Influence of Product Quality and Price on Consumer Satisfaction

Based on the F test, the calculated F value (47.204) > F table (3.094) Probability value (sig) of  $0.000 < \alpha (0.05)$  shows that  $H_0$  is rejected and  $H_1$  is accepted, which means product quality and price have a direct relationship with consumer satisfaction, meaning As product quality and price increase, consumer satisfaction will increase, and vice versa. So the sixth hypothesis can be proven true. It can be concluded that product quality and price jointly influence positively and significantly on consumer satisfaction at the 3R tofu factory in Majalengka Regency.

The results of this research are in line with the results of research (Sulaiman et al., 2021), which states that product quality and price influence consumer satisfaction. Research by (Fatmaningrum et al., 2020) explains that satisfaction arises because product quality and price can have the appropriate and expected impact on the product received by consumers. This research is in line with the opinion of (Maulidasari et al., 2023) who stated that product quality and price play an important role in creating customer satisfaction. Superior product quality and price can be achieved by optimizing all indicators or measures of product quality and price itself..

#### 4. CONCLUSION

Based on the research that has been carried out, several conclusions can be drawn as follows: There is a positive and significant influence between product quality and consumer satisfaction at the 3R tofu factory in Majalengka Regency. This is proven by research results which show the influence of product quality on consumer satisfaction with a calculated t value > t table (3.388 > 1.986) with a probability (sig) value of  $0.000 < \alpha(0.05)$ .

There is a positive and significant influence between price and consumer satisfaction at the 3R tofu factory in Majalengka Regency. This is proven by research results which show the influence of price on consumer satisfaction with a calculated t value > t table (7.393 > 1.986) with a probability (sig) value of  $0.000 < \alpha(0.05)$ .

There is a positive and significant influence between product quality and price on consumer satisfaction at the 3R tofu factory in Majalengka Regency. This is proven by the results of the Fcount > Ftable value, namely (47.204 > 3.094) with a Probability (sig) value of  $0.000 < \alpha(0.05)$ . Managerial Implications

The R3 Majalengka Regency tofu factory needs to maintain and improve product quality so that the company continues to have the trust of the community. Apart from that, the R3 Tofu Factory in Majalengka Regency also needs to expand its marketing network directly and indirectly so that sales increase. For future researchers who will conduct research on similar companies, it is hoped that they can examine other variables outside of the variables already in this research so that the results can be better.

There are several limitations in this research: First, the scope of the research only focuses on one company, namely the R3 tofu factory, Majalengka Regency. This means that the research results cannot necessarily be generalized to other companies that have different characteristics. Second, the variables studied only focus on product quality and price, so other important variables such as service quality and promotion have not been included in the analysis. Third, the research sample was limited to 96 consumers, so the results do not represent the entire consumer population of the R3 Tofu Factory, Mjaalengka Regency. Fourth, data collection uses questionnaires and interviews so that respondent subjectivity is difficult to avoid. Several suggestions for expanding the scope of research include: first, expanding the research area to similar companies so that the results can be generalized. Second, adding service quality and promotion variables to the research model. Third, take a larger number of samples, for example all consumers of the R3 Tofu Factory, Majalengka Regency. Fourth, data collection does not only use questionnaires and interviews but also direct observation.

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## REFERENCES

- Amornkitvikai, Y., Tham, S. Y., & Tangpoolcharoen, J. (2021). Barriers and factors affecting e-commerce utilization of Thai small and medium-sized enterprises in food and beverage and retail services. *Global Business Review*, 09721509211036294.
- Azizah, S. S. N., Nadjib, A., Nugraha, Y. K., Dhamayanti, M., Adawiyah, S. El, Harnika, N. N., Juliana, Hartati, A., Sulaiman, E., Halim, H., & Husain, S. (2021). *Metodologi Penelitian Sosial*. Nuta Media.
- Bayu Luhur Wicaksono, Adhi Susanto, dan W. W. W. A. (2002). EVALUASI KUALITAS LAYANAN WEBSITE PUSDIKLAT BPK RI MENGGUNAKAN METODE WEBQUAL MODIFIKASIAN DAN IMPORTANCE PERFORMANCE ANALYSIS Bayu Luhur Wicaksono, Adhi Susanto, dan Wing Wahyu Winarno. *Media Ekonomi & Teknologi Informasi*, 2(2), 21-34.
- Ceniga, P., & Sukalova, V. (2020). Sustainable business development in the context of logistics in the globalization process. *SHS Web of Conferences*, 74, 4003.
- Fatmaningrum, S. R., Susanto, S., & Fadhilah, M. (2020). Pengaruh kualitas produk dan citra merek terhadap keputusan pembelian minuman Frestea. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 4(1), 176-188.
- Herhausen, D., Miočević, D., Morgan, R. E., & Kleijnen, M. H. P. (2020). The digital marketing capabilities gap. *Industrial Marketing Management*, 90(July), 276-290. <https://doi.org/10.1016/j.indmarman.2020.07.022>
- Huq, T., & Sarker, I. M. (2020). *Factors influencing brand preferences for instant foods: A comparative study between Sweden and Bangladesh*. diva-portal.org.
- Imad M. Assali. (2016). The Impact of Brand Name on Consumer Procurement. *International Journal of Engineering Research and Technology (IJERT)*, 5(1), 225-229.
- Khan, Z., Yang, Y., Shafi, M., & Yang, R. (2019). Role of social media marketing activities (SMMAs) in apparel brands customer response: A moderated mediation analysis. *Sustainability*.
- KYALO, C. M. (2019). *FACTORS AFFECTING BRAND LOYALTY TO MOBILE PHONE SERVICE PROVIDERS: A CASE STUDY OF AIRTEL KENYA LIMITED*. repository.mua.ac.ke.
- Mamun, M., & Al, A. (2017). *Consumer perception and brand Preference for purchasing paints: a study on RAK Paints*. dspace.bracu.ac.bd.
- Maulidasari, C. D., Damrus, D., & Chairiyaton, C. (2023). Pengaruh Kualitas, Harga, kepuasan dan Citra Merek terhadap Keputusan Pembelian Produk Kecantikan. *Jurnal Bisnis Dan Kajian Strategi Manajemen*, 7(1).
- Mugge, R., Dahl, D. W., & Schoormans, J. P. L. (2018). "What you see, is what you get?" Guidelines for influencing consumers' perceptions of consumer durables through product appearance. *Journal of Product Innovation Management*, 35(3), 309-329.
- Oh, T. T., Keller, K. L., Neslin, S. A., Reibstein, D. J., & ... (2020). The past, present, and future of brand research. *Marketing Letters*. <https://doi.org/10.1007/s11002-020-09524-w>
- Rimawan, E., Mustofa, A., & ... (2017). The influence of product quality, service quality and trust on customer satisfaction and its impact on customer loyalty (Case Study PT ABC Tbk). In *International Journal of ...* researchgate.net.
- Ropiudin, R., & Syska, K. (2023). Green manufacturing for rural tofu SMEs to increase global competitiveness: Case study in tofu industry center, Banyumas Regency, Central Java. *Jurnal Agricultural Biosystem Engineering*, 2(1), 168-179.
- Shamsher, R. (2016). Store image and its impact on consumer behaviour. In *Elk Asia Pacific Journal of Marketing and Retail ...* researchgate.net.
- Sierra Rodriguez, J. (2022). Digital strategies for meeting The Singleton's post-Pandemic consumer needs and expectations. *Trabajo de Grado*.
- Singh, N., Mishra, V., & Pathak, J. P. (2020). A REVIEW PAPER ON EVALUATION OF BRAND PERFORMANCE OF FINANCIAL PRODUCTS WITH SPECIAL REFERENCE TO NEWLY LAUNCHED .... In *Journal of Critical Reviews*. jcreview.com.
- Sulaiman, E., Hermawati, W., & Kurniasih, U. U. (2021). Pengaruh Harga Dan Promosi Terhadap Keputusan Pembelian Kosmetik Di Kota Cirebon. *Jurnal Ekonomi Manajemen*, 16(2), 49-55.
- Suliyanto. (2018). *Metode Penelitian Bisnis untuk Skripsi, Tesis & Disertasi*. Andi Publisher.

- Van Loo, E. J., Caputo, V., & Lusk, J. L. (2020). Consumer preferences for farm-raised meat, lab-grown meat, and plant-based meat alternatives: Does information or brand matter? *Food Policy*, 95(July), 101931. <https://doi.org/10.1016/j.foodpol.2020.101931>
- Wen, X., & Siqin, T. (2019). How do product quality uncertainties affect the sharing economy platforms with risk considerations? A mean-variance analysis. *International Journal of Production Economics*, 107544. <https://doi.org/10.1016/j.ijpe.2019.107544>
- Yanenko, M., Nazarova, E., Kuzmenko, V., & ... (2020). Development of Digital Technologies in Brand Strategies of Retailing. *Proceedings of the ....* <https://doi.org/10.1145/3446434.3446435>