

The Effect of Product Quality, Price, and Distribution on Customer Satisfaction at UD Randu Laut, East Lampung

Destri Vonica Maharani^{1*} Suwarto² Dharmawan³

1,2,3 Department of Management, Faculty of Economics and Business, Universitas Muhammadiyah Metro, Indonesia

* Corresponding Author: destrivonicamaharani@gmail.com

Received : 16 September 2025

Revised : 20 December 2025

Accepted : 05 January 2026

Published: 28 January 2026

Abstract

This study examines whether product quality, price, and distribution affect customer satisfaction at UD Randu Laut, a local trading enterprise in Banjarrejo Village, East Lampung, that produces kapok-based household products such as pillows and mattresses. A quantitative approach was applied, with a sample of 100 customers selected through accidental sampling. Data were collected using a Likert-scale questionnaire and analysed using multiple linear regression in SPSS, preceded by classical assumption tests. The results show that product quality has a non-significant effect on customer satisfaction, price has a positive and significant effect, and distribution has a significant but negative effect, while the three variables jointly have a significant effect, explaining 14.0 percent of the variance in customer satisfaction. The non-significant effect of quality suggests that the enterprise's product quality is already consistent and is no longer a differentiating factor, the positive effect of price indicates that pricing is perceived as commensurate with value, and the negative effect of distribution points to inefficiencies in the current distribution strategy. The low coefficient of determination indicates that other factors also shape satisfaction. The study contributes to marketing-mix research in rural micro-enterprises and recommends that the enterprise maintain quality, apply measured pricing, and evaluate its distribution strategy comprehensively.

Keywords: *Product quality; Price; Distribution; Customer satisfaction; Marketing mix*

1. Introduction

Trade is an important sector supporting economic growth at both local and national levels, and trading enterprises are a pillar of community economic activity within the small and medium enterprise segment. UD Randu Laut, a trading enterprise in Banjarrejo Village, East Lampung, contributes to meeting community needs and creating local employment, operating in the production and sale of kapok-based products such as pillows, mattresses, and doll fillings that use the natural fibre of kapok randu.

Kapok randu fibre is valued for being light, elastic, durable, and breathable, which makes the resulting products more comfortable than synthetic alternatives. Competing in the market for household and bedding products, UD Randu Laut must maintain customer trust and satisfaction. For a local enterprise, a planned distribution strategy suited to the geographic characteristics and behaviour of local consumers is crucial to ensuring even product availability, and the optimisation of distribution affects not only operational efficiency but also the strengthening of market position and sustained customer satisfaction.

Customer satisfaction is the feeling of pleasure or disappointment that arises from comparing perceived product performance with expectations, and it is a key driver of loyalty and positive word

of mouth (Oliver, 1980; Szymanski & Henard, 2001). In the marketing mix, product quality, price, and distribution are interrelated determinants of satisfaction: quality reflects the product's capacity to meet needs (Garvin, 1987), price signals value (Zeithaml, 1988), and distribution ensures availability and convenience (Frazier, 1999). However, evidence on how these three elements jointly shape satisfaction in rural micro-enterprises remains limited, which constitutes the research gap addressed here.

Accordingly, this study examines the effect of product quality, price, and distribution on customer satisfaction at UD Randu Laut. The study contributes to marketing-mix research in the context of rural micro-enterprises and provides practical guidance for managing quality, pricing, and distribution. The objectives are to analyse the partial and simultaneous effects of the three variables on customer satisfaction.

2. Literature Review and Theoretical Framework

2.1 Theoretical Foundation

Product quality refers to how well a product meets the specific needs of customers, encompassing performance, conformance, durability, and reliability, and it is a determinant of post-purchase satisfaction (Garvin, 1987; Tsiotsou, 2006). Price is the monetary value exchanged to obtain a product, the only marketing-mix element that generates revenue, and consumers assess products by weighing benefits against price (Dodds et al., 1991; Zeithaml, 1988). Distribution comprises the set of organisations and activities that move a product from producer to consumer, and effective channels ensure that products are available easily, affordably, and conveniently (Coughlan et al., 2006; Frazier, 1999).

Customer satisfaction is the evaluation that results from comparing perceived performance with expectations: performance below expectations yields dissatisfaction, performance meeting expectations yields satisfaction, and performance exceeding expectations yields delight (Oliver, 1980). Satisfaction is associated with loyalty, repeat purchase, and recommendation, making it a central outcome of marketing-mix management (Anderson et al., 1994; Fornell et al., 1996).

2.2 Hypothesis Development

Drawing on satisfaction theory and prior evidence, higher product quality is expected to raise satisfaction (Garvin, 1987), value-congruent pricing is expected to raise satisfaction (Dodds et al., 1991; Homburg et al., 2005), and effective distribution is expected to raise satisfaction through availability and convenience (Frazier, 1999). The hypotheses are therefore:

H1: Product quality has a positive and significant effect on customer satisfaction.

H2: Price has a positive and significant effect on customer satisfaction.

H3: Distribution has a positive and significant effect on customer satisfaction.

H4: Product quality, price, and distribution jointly have a significant effect on customer satisfaction.

3. Research Methodology

3.1 Research Design

This study employed a quantitative associative design to test the effects of product quality, price, and distribution on customer satisfaction at UD Randu Laut in Banjarrejo Village, East Lampung.

3.2 Data Collection

The population comprised all customers who purchased from UD Randu Laut. Using a non-probability accidental sampling technique, chosen in view of constraints of time, energy, and resources, the study reached 100 customers. Data were collected through a Likert-scale questionnaire as primary data, supported by secondary data from literature and prior studies.

3.3 Data Analysis

Data were analysed using multiple linear regression in SPSS, preceded by normality, homogeneity, and linearity tests. Hypothesis testing was conducted through the partial t-test, the simultaneous F-test, and the coefficient of determination.

4. Results and Discussion

4.1 Results

The classical assumption tests, summarised in Table 1, confirmed that the data met the required conditions: the residuals were normally distributed, the variances were homogeneous, and each predictor had a linear relationship with customer satisfaction.

Table 1. Classical assumption test results

Test	Significance	Conclusion
Normality (K-S)	0.064	Normal
Homogeneity (X1, based on mean)	0.061	Homogeneous
Homogeneity (X2, based on mean)	0.181	Homogeneous
Homogeneity (X3, based on mean)	0.177	Homogeneous
Linearity (deviation, X1)	0.929	Linear
Linearity (deviation, X2)	0.537	Linear
Linearity (deviation, X3)	0.088	Linear

Source: Primary data processed with SPSS, 2026

The multiple linear regression results are presented in Table 2. The estimated equation is $Y = 107.815 - 0.067X_1 + 0.493X_2 - 0.680X_3$. Product quality recorded a non-significant coefficient (significance of 0.573), so H1 is not supported; price recorded a positive and significant coefficient (significance of 0.000), supporting H2; and distribution recorded a significant but negative coefficient (significance of 0.032), so H3 is statistically supported but in the opposite direction to that hypothesised.

Table 2. Multiple linear regression coefficients

Model	B	Std. Error	Beta	t / Sig.
(Constant)	107.815	28.593	-	3.771 / 0.000
Product quality (X1)	-0.067	0.118	-0.053	-0.565 / 0.573
Price (X2)	0.493	0.118	0.398	4.186 / 0.000
Distribution (X3)	-0.680	0.312	-0.205	-2.175 / 0.032

Source: Primary data processed with SPSS, 2026. Dependent variable: customer satisfaction.

The simultaneous F-test, summarised in Table 3, produced a value of 5.217 with a significance of 0.002, confirming that the three variables jointly affect customer satisfaction, so H4 is supported. The coefficient of determination is 0.140, indicating that the three variables explain 14.0 percent of the variance in customer satisfaction, while the remaining 86.0 percent is attributable to other factors not examined in this study.

Table 3. Simultaneous test and coefficient of determination

Statistic	Value	Conclusion
-----------	-------	------------

F-value (Sig.)	5.217 (0.002)	Significant
R	0.374	-
R-squared	0.140	14.0% explained
Adjusted R-squared	0.113	-

Source: Primary data processed with SPSS, 2026

4.2 Discussion

The non-significant effect of product quality on customer satisfaction means H1 is not supported, indicating that quality is no longer the primary determinant of satisfaction in this market. This pattern can be explained by the consistent quality of UD Randu Laut's products, which already meets market standards, so that quality functions as a maintainer of loyalty rather than a driver of growth (Anderson et al., 1994; Tsiotsou, 2006). Customers therefore weigh other factors, such as price and availability, more heavily in their evaluation.

The positive and significant effect of price supports H2 and indicates that an appropriate pricing strategy influences satisfaction directly, with customers perceiving the price as commensurate with product quality. This finding is consistent with the price-value perspective, in which measured pricing can reinforce perceived quality and image (Dodds et al., 1991; Homburg et al., 2005; Zeithaml, 1988). The significant but negative effect of distribution is noteworthy: although distribution matters, increases in the current form of distribution are associated with lower satisfaction, suggesting inefficiencies such as poorly targeted channels, high distribution costs, or unsuitable distribution partners (Coughlan et al., 2006; Frazier, 1999). This result calls for a comprehensive evaluation of the distribution strategy.

Jointly, the three variables significantly affect satisfaction, although the low coefficient of determination (14.0 percent) indicates that other factors, such as service quality, brand image, and stock availability, also play substantial roles. Theoretically, the study illustrates that marketing-mix elements can have heterogeneous and even counterintuitive effects in rural micro-enterprises, while practically it implies that the enterprise should maintain quality, apply measured pricing, and redesign its distribution strategy to convert its current negative effect into a positive one.

5. Conclusion

This study examined the effect of product quality, price, and distribution on customer satisfaction at UD Randu Laut in Banjarrejo Village, East Lampung. Product quality has a non-significant effect on satisfaction, because the enterprise's quality is already consistent and meets expectations; price has a positive and significant effect, indicating that measured pricing influences satisfaction; and distribution has a significant but negative effect, signalling inefficiency in the current strategy. Jointly, the three variables have a significant effect, explaining 14.0 percent of the variance in satisfaction.

The study recommends that the enterprise maintain consistent product quality and innovate product variants to attract new markets, apply flexible but measured pricing that balances affordability with perceived quality, and conduct a comprehensive evaluation of its distribution channels by expanding to more strategic locations, minimising delivery costs, and selecting partners closer to target consumers. Because the model explains a modest share of the variance, future research should incorporate additional variables such as service quality, brand image, and stock availability, and adopt larger and more diverse samples to improve generalisability.

Acknowledgements

The authors gratefully acknowledge UD Randu Laut and the participating customers. The authors declare no conflict of interest.

References

- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53-66. <https://doi.org/10.1177/002224299405800304>
- Coughlan, A. T., Anderson, E., Stern, L. W., & El-Ansary, A. I. (2006). *Marketing channels* (7th ed.). Pearson Education.
- Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193-218. [https://doi.org/10.1016/S0022-4359\(00\)00028-2](https://doi.org/10.1016/S0022-4359(00)00028-2)
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307-319. <https://doi.org/10.1177/002224379102800305>
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American Customer Satisfaction Index: Nature, purpose, and findings. *Journal of Marketing*, 60(4), 7-18. <https://doi.org/10.1177/002224299606000403>
- Frazier, G. L. (1999). Organizing and managing channels of distribution. *Journal of the Academy of Marketing Science*, 27(2), 226-240. <https://doi.org/10.1177/0092070399272007>
- Garvin, D. A. (1987). Competing on the eight dimensions of quality. *Harvard Business Review*, 65(6), 101-109.
- Grewal, D., Roggeveen, A. L., & Nordfalt, J. (2017). The future of retailing. *Journal of Retailing*, 93(1), 1-6. <https://doi.org/10.1016/j.jretai.2016.12.008>
- Homburg, C., Koschate, N., & Hoyer, W. D. (2005). Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to pay. *Journal of Marketing*, 69(2), 84-96. <https://doi.org/10.1509/jmkg.69.2.84.60760>
- Kotler, P., & Armstrong, G. (2018). *Principles of marketing* (17th ed.). Pearson Education.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469. <https://doi.org/10.1177/002224378001700405>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Spreng, R. A., MacKenzie, S. B., & Olshavsky, R. W. (1996). A reexamination of the determinants of consumer satisfaction. *Journal of Marketing*, 60(3), 15-32. <https://doi.org/10.1177/002224299606000302>
- Sugiyono. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203-220. [https://doi.org/10.1016/S0022-4359\(01\)00041-0](https://doi.org/10.1016/S0022-4359(01)00041-0)
- Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29(1), 16-35. <https://doi.org/10.1177/0092070301291002>
- Tsiotsou, R. (2006). The role of perceived product quality and overall satisfaction on purchase intentions. *International Journal of Consumer Studies*, 30(2), 207-217. <https://doi.org/10.1111/j.1470-6431.2005.00477.x>

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.
<https://doi.org/10.1177/002224298805200302>