International Journal of Education and Life Sciences (IJELS)
Vol. 3, No. 12 December 2025: 3323-3330

Perception of Product Strategy, Pricing, and Branding in Maintaining the Life Cycle of Central Batik Products (Rest Area Heritage KM 260B Banjaratma)

Sari Wiyanti[1*], Lili Febriani[2], Novita Rahmawati[3]
Pancasakti University of Tegal
Corresponding Author: Sari Wiyanti: saridyasa0604@gmail.com

A R T I C L E I N F O

Keywords: Product Strategy, Pricing, Branding, Product Life Cycle.

Received : 12 Oktober
Revised : 23 November
Accepted: 26 December

A B S T R A C T

This research investigates whether product strategy, price, and branding contribute to shaping the product life cycle of Central Batik products at the Heritage Rest Area KM 260B Banjaratma. The research approach used is a quantitative method with a purposive random sampling technique, where the sample consists of 70 respondents who are consumers who have visited the Central Batik Rest Area Heritage KM 260B Banjaratma. Data were obtained using Likert-scale questionnaires and analyzed through multiple linear regression to evaluate both separate and joint variable effects. The results demonstrate that Product Strategy, Price, and Branding collectively and positively influence the Product Life Cycle, supported by a significance value of 0.000 (< 0.05). This evidence highlights that aligning product strategy and pricing while fostering customer satisfaction can reinforce the positioning and competitive advantage of Central Batik at the Heritage Rest Area KM 260B Banjaratm.

INTRODUCTION

One of the MSMEs that is growing rapidly is in the Rest Area Heritage KM 260B, which is located on the strategic Pejagan-Pemalang toll road, Brebes, Central Java. This rest area operates 188 MSME tenants and 27 non-MSMEs, with a total of 596 workers. The heritage concept that utilizes the former Dutch sugar factory building makes it unique, not only as a resting place but also as a historical and cultural tourist destination. This rest area is now equipped with the Brebesan Batik Center, which houses local potentials such as Salem Batik, Mangrove Batik, Ecoprint Batik, and Bangsin Batik. This provides a space for local batik artisans to sell, combining Brebes' typical crafts with other archipelago batik.

Batik, as a work of art that uses wax to create special patterns on fabrics. This industry is labor-intensive, absorbing millions of workers, especially women, and contributing to the creative industry. However, batik faces challenges such as fierce competition, difficulties in building strong brands, expensive raw materials, and changing consumer tastes.

In marketing, the product life cycle is an important concept to understand the evolution of the product from launch to end Fandy Tjiptono (2015). Product strategy includes product level, classification, and nine main strategies Fandy Tjiptono (2015). Price, as an element of marketing that generates revenue, affects sales volume and value perception Fandy Tjiptono (2015). Branding, through identities such as brand names and symbols, creates differentiation and attractiveness Fandy Tjiptono (2015). At Sentral Batik, strong branding can become the identity of MSMEs and influence consumer choices.

LITERATURE REVIEW

Product Strategy

Fandy Tjiptono (2015), product strategy is a company's step in designing, managing, and marketing products to have a competitive advantage. The strategy includes positioning, repositioning, product line development, diversification, and innovation. Positioning aims to instil a unique image in the minds of consumers so that the product is different from competitors, while repositioning is carried out when there is a change in the market environment or consumer preferences.

H1 : "Product Strategy Perception has a significant and positive effect on the Life cycle of central batik product at the Heritage Rest Area KM 260B Banjaratma."

Price

Fandy Tjiptono (2015) emphasized that pricing is a decisive factor with a direct link to corporate profit performance. Beyond being a numeric figure, price acts as a market signal that conveys product value and can influence consumers' judgments about product quality. Price also reflects the aggregate value surrendered by consumers in return for the benefits of possession or usage of a product or service. Therefore, price encompasses both monetary costs and non-monetary considerations that carry utility and are required to acquire a product.

H2 : "Price has a significant and positive effect on the Life cycle of central batik product at the Heritage Rest Area KM 260B Banjaratma".

Branding

Fandy Tjiptono (2015) At its core, branding draws on the idea of a brand as defined by the American Marketing Association (AMA): a set of identifiers (name, term, mark, symbol, design, or a combination) that separates one seller's offerings from rival products. From a marketing standpoint, branding involves deliberately building a product's identity and meaning through visible brand cues (name, symbols, slogans, design) and through the symbolic values and self-image the brand intends to communicate. The ultimate objective is to position the product distinctly in consumers' minds, thereby creating a unique value proposition and stronger appeal relative to competitors.

H3 : "Branding has a significant and positive effect on the Life cycle of central batik product at the Heritage Rest Area KM 260B Banjaratma".

Product Lifecycle

Fandy Tjiptono (2015), In essence, the Product Life Cycle (PLC) is a graphical depiction of how sales evolve over time, starting from a product's launch and continuing until the product is phased out of the market.

H4 : "Product Strategy Perception, Price, and Branding have a simultaneous effect on the Life cycle of central batik product at the Heritage Rest Area KM 260B Banjaratma".

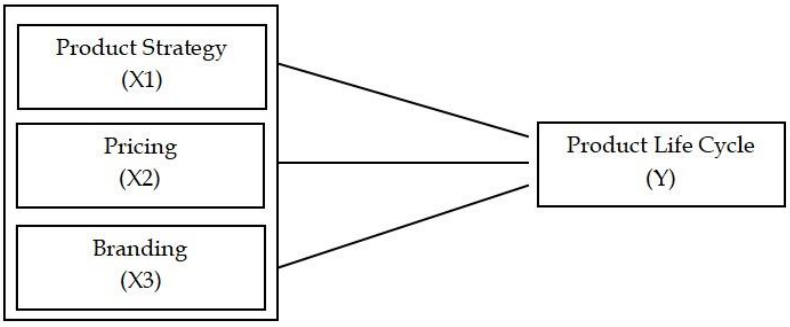


Figure 1. Conceptual Framework

METHODOLOGY

This study is designed as a quantitative survey aimed at empirically assessing whether Product Strategy Perception, Price, and Branding influence the Product Life Cycle of Central Batik products. The survey-based quantitative approach is appropriate given the clearly defined research problem and the need to test hypotheses using primary respondent data. The population consists of all consumers/visitors who have visited the Central Batik Rest Area Heritage KM 260B Banjaratma. The sample used was 70 respondents with purposive random sampling with the criteria of having visited the Central Batik Rest Area Heritage KM 260B Banjaratma. Data was collected through questionnaires, which assessed respondents, perceptions of research variables through a Likert scale. After the research instrument is tested, each question item is valid and reliable. The analysis was performed through a multiple linear regression model, with the F-test used to test the collective influence of the independent variables and the t-test used to determine the partial influence of each variable.

RESULTS AND DISCUSSION

NORMALITY TEST

In regression analysis, the normality test evaluates the distribution of the model's residuals (disturbance terms) to confirm whether they conform to a normal distribution (Ghozali, 2021).

The following table shows the results of the normality test:

One-Sample Kolmogorov-Smirnov Test		
		Standardized Residual
N		70
Normal Parameters[a,b]	Mean	,0000000
	Hours of deviation	,97801929
Most Extreme Differences	Absolute	,132
	Positive	,097
	Negative	-,132
Test Statistic		,132
Asymp. Sig. (2-tailed)		,004c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

The normality test using One-Sample Kolmogorov–Smirnov yielded an Asymp. Sig (2-tailed) of 0.004. This value (<0.05) indicates a deviation from the normal distribution of the residuals, thus the normality assumption in the regression model is not met.

MULTICOLLINEARITY TEST

In regression analysis, multicollinearity testing evaluates the presence of intercorrelation among predictor variables. As emphasized by (Ghozali, 2021) an acceptable regression model should be free from multicollinearity; this condition is commonly satisfied when the Tolerance value exceeds 0.10 and the VIF is below 10**.** As shown in the table below, the multicollinearity diagnostics (Tolerance and VIF) are reported:

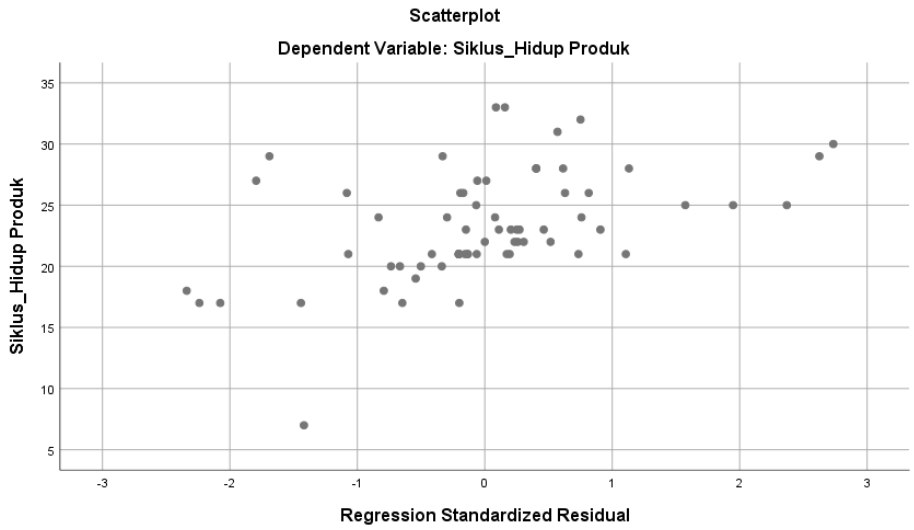
Coefficientsa								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Itself.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	BRIGHT
1	(Constant)	4,387	1,315		3,335	,001		
	Product Perception	,153	,101	,198	2,506	,037	,201	4,965
	Price Perception	,355	,109	,462	3,247	,002	,172	5,810

	Branding Perception	,203	,097	,257	2,086	,041	,231	4,332
a. Dependent Variable: Product Life Cycle								

The diagnostics show that each independent variable meets the multicollinearity criteria: Tolerance values are > 0.10 (0.201; 0.172; 0.231) and VIF values are < 10 (4.965; 5.810; 4.332). Accordingly, there is no evidence of problematic multicollinearity among the predictors. This confirms that the non-multicollinearity assumption is satisfied, meaning the multiple linear regression model is feasible for further analysis.

HETEROSCEDASTICITY TEST

In regression analysis, the heteroscedasticity test evaluates whether the residuals exhibit non-constant (unequal) variance across observations, indicating a violation of the homoscedasticity assumption (Ghozali, 2021). A regression model is considered reliable when it satisfies homoscedasticity, indicating that residual variance remains constant across observations. However, heteroscedasticity is commonly found in cross-sectional datasets because the data often represent units with different magnitudes (small, medium, and large). One diagnostic approach is to plot Regression Standardized Predicted Values against Studentized Residuals. Random, patternless dispersion of points suggests the absence of heteroscedasticity, whereas a clear pattern indicates potential heteroscedasticity. The figure below displays the heteroscedasticity test results:



The scatterplot displays a random spread of points above and below the Y = 0 line without forming a specific pattern. This pattern supports the conclusion that heteroscedasticity does not occur, so the regression model is considered suitable for subsequent analysis.

Multiple Linear Regression Analysis Test

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Itself.
		B	Std. Error	Beta		
1	(Constant)	4,387	1,315		3,335	,001
	Product Perception	,153	,101	,198	2,506	,037
	Price Perception	,355	,109	,462	3,247	,002
	Branding Perception	,203	,097	,257	2,086	,041
a. Dependent Variable: Product Life Cycle						

The analysis results yield the following regression equation/model specification.

$$Y = a + b1X1 + b2X2 + b3X3 + e$$

Product Lifecycle = 4.387 + 0.153 Product Strategy + 0.355 Price + 0.203 Branding + e

Following the estimation of the multiple regression equation relating X1, X2, and X3 to Y, the interpretation of the model is described as follows:

a. The model intercept of 4.387 implies that, in the hypothetical condition where Product Strategy (X1), Price (X2), and Branding (X3) take a value of zero, the estimated Product Life Cycle (Y) equals 4.387.
b. The estimated coefficient for Product Strategy (X1) is 0.153 (positive), which indicates a direct relationship: a one-unit increase in product strategy perception increases the Product Life Cycle (Y) by 0.153 units, assuming other predictors remain constant. This result suggests that stronger product strategy perception is associated with a more favorable product life cycle for Central Batik at Heritage Rest Area KM 260B Banjaratma.
c. The Price coefficient (X2) equals 0.355 and is positive, implying that a one-unit increase in price is linked to a 0.355-unit increase in the Product Life Cycle (Y), holding other variables constant. Therefore, price is positively associated with the product life cycle in this context.
d. Branding (X3) has a positive coefficient of 0.203, meaning that strengthening branding by one unit increases the Product Life Cycle (Y) by 0.203 units, ceteris paribus. This indicates that improved branding—often reflected through stronger promotional activities—supports the product's life cycle performance at the Central Batik outlet in Heritage Rest Area KM 260B Banjaratma.

PARTIAL TEST (T TEST)

To determine the effect of each independent variable on the dependent variable, this study used a t-statistical test. This partial test was conducted to assess whether each independent variable individually had a significant effect on

customer satisfaction (Y). The test decision was based on the level of significance, with a sig. value <0.05 indicating rejection of the null hypothesis (H0) and acceptance of the alternative hypothesis (Ha). The results of the t-test data processing are presented in the following table:

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Itself.
		B	Std. Error	Beta		
1	(Constant)	4,387	1,315		3,335	,001
	Product Perception	,153	,101	,198	2,506	,037
	Price Perception	,355	,109	,462	3,247	,002
	Branding Perception	,203	,097	,257	2,086	,041
a. Dependent Variable: Product life cycle						

Based on table 3, the results of data analysis using the t-test are found that the influence of independent variables on dependent variables is as follows:

1. Influence of Product Strategy on the Product Life Cycle
   The statistical analysis demonstrates that Product Strategy exerts a significant influence on the Product Life Cycle. This is evidenced by a t-value of 2.506 and a significance level of 0.037, which meets the acceptance criteria for H1. The unidirectional relationship confirms a positive contribution of Product Strategy to the Product Life Cycle of the Batik Center at Rest Area Heritage KM 260B Banjaratma.
2. Influence of Price on the Product Life Cycle
   The results of the partial hypothesis testing indicate that the Price variable significantly affects the Product Life Cycle, as reflected by a t-value of 3.247 and a significance level of 0.002 < 0.05. Accordingly, hypothesis H2 is accepted. This outcome suggests that Price plays a positive and direct role in shaping the Product Life Cycle of the Batik Center at Rest Area Heritage KM 260B Banjaratma.
3. Influence of Branding on the Product Life Cycle
   The findings show that Branding has a statistically significant effect on the Product Life Cycle, supported by a t-value of 2.086 and a significance level of 0.041. As a result, hypothesis H3 is accepted. This indicates that Branding contributes positively and in a one-way manner to the Product Life Cycle of the Batik Center at Rest Area Heritage KM 260B Banjaratma.

SIMULTANEOUS TEST (F TEST)

The results of the simultaneous significant tests are shown in table 4 as follows

Table 4 F Test Results (Simultaneous Test)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Itself.
1	Regression	1033,589	3	344,530	73,522	,000b
	Residual	309,283	66	4,686		
	Total	1342,871	69			
a. Dependent Variable: Product life cycle						
b. Predictors: (Constant), Product perception, Price perception, Branding perception.						

Based on the table above, it shows that the significance test is simultaneous, the value of F is calculated as 73.522 with a significant value of 0.000. So together there is a significant influence of Product Strategy (X1), Price (X2), and Branding (X3) on the Batik Central Life Cycle (rest area heritage km 260b banjaratma).

DETERMINATION COEFFICIENT TEST

In regression analysis, the coefficient of determination is utilized to assess the suitability of the model. This measure reflects the degree to which the independent variables collectively explain the variability of the dependent variable (Ghozali, 2021). The coefficient of determination provides an overview of the contribution of independent variables in explaining the dependent variable. This coefficient is represented by the R square value presented in the Model Summary table. The correlation coefficient listed in the R square column of the output is incorporated into the calculation of the determination coefficient using the formula KP = R^2 × 100%, where KP signifies the determination coefficient and R denotes the correlation coefficient. The results of the R square analysis are summarized in the table below.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,877a	,770	,759	2,165
a. Predictors: (Constant), Persepsi_Branding, Persepsi_Produk, Persepsi_Harga				

The results shown in the table indicate that the Adjusted R Square value reaches 0.759, representing 75.9% of the explained variance. This implies that Product Strategy, Price, and Branding jointly have a substantial influence on the Product Life Cycle, accounting for 75.9% of its variation. Conversely, the remaining 24.1% is attributable to other variables not examined in the present study.

CONCLUSION

Drawing on the research results and the analysis discussed in the preceding sections, several conclusions can be formulated as follows:

1. The Influence of Product Strategy Perception has a positive and significant effect on the Product Life Cycle at the Batik Rest Area Heritage KM 260B Banjaratma Central.
2. The Effect of Price has a positive and significant effect on the Product Life Cycle at the Central Batik Rest Area Heritage KM 260B Banjaratma.
3. The influence of Branding has a positive and significant effect on the Product Life Cycle at the Batik Heritage KM 260B Banjaratma Rest Area Central.
4. The influence of Product Strategy Perception, Pricing and Customer Satisfaction has a positive and significant effect on the Central Batik Rest Area Heritage KM 260B Banjaratma.

SUGGESTION

1. Increasing product innovation by adding new batik variants that combine traditional motifs with modern fashion trends, such as contemporary or exclusive batik, so that consumers have more choices that suit local tastes and current lifestyles.
2. Setting competitive prices by considering the quality of fabrics, design complexity, and purchasing power of the community around the KM 260B Banjaratma Rest Area, so that the product remains affordable but provides added value and optimal profits for the Batik Central.
3. Strengthen branding through the development of a strong brand identity, such as authentic batik culture stories and personalized shopping experiences, to build customer loyalty and differentiate products from competitors in strategic locations such as rest areas.
4. Utilizing social media and digital platforms for effective branding promotion, such as visual campaigns that display the uniqueness of batik, so that marketing strategies have a wider reach and attract the younger generation who often visit the rest area.

REFERENCES

Ghozali, I. (2021). *aplikasi analisis multivariate dengan SPSS.Semarang*. UNDIP. https://id.scribd.com/document/644946086/Ghozali-Edisi-9-pdf

Tjiptono, F. (2015). *Strategi Pemasaran Edisi 4.* Yogyakarta: Andi Offset.