



The Influence of Competitive Advantage and Product Innovation on Marketing Performance on Tegal Batik Business in Tegal Regency

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Abstract

This study aims to examine the influence of competitive advantage and product innovation on marketing performance on batik business in Tegal regency and which variable is the greater the effect. The hypothesis to be tested is to analyze empirically the influence of competitive advantage and product innovation on marketing performance on batik tegalan business in Tegal regency. The sample in this research was all tegalan batik craftsmen in Bengle village of Tegal regency. Total population to be samples was 85 tegalan batik craftsmen. Data analysis used Spearman rank correlation formula and multiple linear regression. The result of statistical test showed that partially product innovation has a positive effect on marketing performance equal to 67.7% and competitive advantage has positive effect on marketing performance equal to 68.5%. Then the test result simultaneously indicated that product innovation and competitive advantage variables have influence of 77.7% on marketing performance. However, the variable of competitive advantage was the most influencer on marketing performance equal to 68.5%. Result of coefficient determination test showed the amount of marketing performance that can be explained by the variable of product innovation and competitive advantage of 60.4% and the remaining as much as 39.4% was influenced by other unexplainable factors.

Keywords

Product Innovation; Competitive Advantage; Marketing Performance

INTRODUCTION

Background

Batik and Indonesia are already a unity. It is a characteristic that the Indonesian nation is very famous for the production of batik cloth with various shades and colors and motifs that are very rich. Batik is one of the unique archipelago heritages. Its uniqueness is shown by various motifs that have its own meaning (Asti and Arini, 2011).

Currently, dressed batik is not like in ancient times that must follow the rules of use. Batik becomes free in creation in any form. Batik can be used as clothing that is used every day or on the go wherever. When we see batik in the present and then look at batik in the past, looks a lot of difference.

The Indonesian government must go through a long process and got results on October 2nd, 2009, UNESCO confirmed Indonesian batik as global cultural heritage that took place in France. Affirmed in the

eyes of the world legitimize batik as one of Indonesia's cultural heritage.

The development of tegalan batik is very dependent on the order that comes and sales around Tegal. This becomes a classic problem that needs to solve the problem from various parties, especially Tegal regency government.

Problem Formulation

1. How is the effect of product innovation and competitive advantage on batik marketing performance in Tegal regency?
2. Which variable is greater the impact between product innovation and competitive advantage on batik marketing performance in Tegal regency?

Research Objective

1. To test and analyze empirically the influence of product innovation and competitive advantage on batik

marketing performance in Tegal regency.

2. To test and analyze empirically the variable with greater impact between product innovation and competitive advantage on batik performance marketing in Tegal regency.

Research Function

The result of this research is product innovation and competitive advantage which is expected on tegalan batik craftsmen performance in Tegal regency in the future. The result of this study is expected to be useful:

1. For consumer society and Tegal regency government, this research is expected to provide information about product innovation and competitive advantage related to marketing performance of tegalan batik craftsmen.
2. The researcher can provide additional references to further similar studies.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Etymology, History, and Development of Indonesian Batik

According to Hanggopuro (2002, 1-2) in Asa (2006) is in the book of Bathik as the Cloth of Order and the Guide contains about the earlier writers using the term batik which is not actually written with the word "Batik" but it should be "Bathik". This refers to the Javanese letter "tha" not "ta" and the use of batik as the sequence of points is less precise or said wrong. Based on the etymology is actually batik identically is associated with a technique (process) from the start of the motive drawing to *pelorodan*. One of the characteristic of batik is how to draw the motif on the fabric is through the process of *pemalaman* that is scraping the wax fluid placed on a container named canting and stamp.

Both Yamin and Wirjosuparta argued that batik in Indonesia has existed since the time of Srivijaya, China in the time of the Sung or T'ang dynasty (7th-9th centuries). The cities producing batik are: Pekalongan, Solo, Yogyakarta, Lasem, Banyumas, Purbalingga, Surakarta, Cirebon, Tasikmalaya, Tulungagung, Ponorogo, Jakarta, Tegal, Indramayu, Ciamis, Garut, Kebumen, Purworejo, Klaten, Boyolali,

Sidoarjo, Mojokerto, Gresik, Kudus, and Wonogiri (Widodo, 1983: 2-3).

In the process of batik there are generally three stages that include:

1. Drawing motifs on mori cloth by closing unwanted portions of color with *malam* (wax), and by canting tool.
2. Dyeing with cold dye according to the desired motif.
3. *Pelorodan* that is removing the *malam* (wax) with boiling water, so it will look the motive and color as planned.

Based on these stages, often textile or batik design is defined as a physical form of the appearance of the motive and color alone. According to Wulandari (2011: 113), motive is a design pattern of an image so that in it there is the meaning of the picture, the meaning of the sign or symbol can be revealed.

Product Innovation

The definition of product innovation by Crawford & De Benedetto (2000: 9) that product innovation is "Innovation that is used in the overall operations of a company where a new product is created and marketed, including innovation in all functional processes/usability".

Product innovation is defined as a breakthrough related to the creation of new products (Wahyono, 2002: 28-29). There are three indicators used to measure product innovation in this research, namely:

1. Culture of product innovation is a culture of innovation in the company to always create new products.
2. Technical innovation is an innovation in the company's process of producing new products.
3. Product innovation is the company's ability to produce new products according to customer's wishes.

Competitive Advantage

Competitive advantage is the result of strategy implementation utilizing various resources owned by company (Bharadwaj, *et al.* in Dewi, 2005: 133). While, according to Porter (1994) in Suparyadi (2003: 146) "competitive advantage cannot be understood by looking at a company as a whole, but must be from the origin of competitive advantage, that is different

activities done by the company in designing, producing, submitting, and supporting its products.

According to Barney and Wright (1998) cited by Harjanti (2004: 48), there are four conditions that must be met before a resource can be called a source of sustainable competitive advantage:

1. It is a valuable company resource, especially in relation to the ability to take advantage of opportunities or neutralize threats from the corporate environment.
2. Relatively difficult to develop, so it becomes scarce in a competitive environment.
3. Very difficult to imitate.
4. Cannot be easily replaced or substituted by other significant products.

Marketing Performance

Ferdinand (2000: 23) stated that marketing performance is a factor that is often used to measure the impact of a company's strategy. The company's strategy is always directed to produce good marketing performance (such as sales volume and sales growth rate) as well as good financial performance. Furthermore, Ferdinand also stated that good marketing performance is expressed in three major values, namely sales value, sales growth, and market share.

Attention to product quality has increased over the past few years. This happens because consumer complaints are increasingly focused on the poor quality of the product both on materials and workmanship. Although the quality of the product must absolutely exist, in its implementation this factor is a characteristic of product image that is the most difficult to elaborate (Sangadji & Sopiah, 2013: 189).

In research of Voss and Voss (2000: 69) suggested that marketing performance can be expressed by sales volume, sales growth rate, and customer growth rate. While, Zhou, *et al.* (2005) used sales growth, profitability, return of investment, and market share to measure marketing performance. Measures of marketing performance can be obtained through marketing function activity. This measurement is more rational than through accounting approach because it is directly related to the activity of the marketing function.

The results of research conducted by Li (2000: 313) found a positive influence between competitive advantage and performance measured through sales volume, profitability, market share, and return of investment. Competitive advantage can be obtained from the ability of company to process and utilize resources and capital it has. Companies that are able to create competitive advantage will have the power to compete with other companies because their products will remain in demand by customers. Thus, competitive advantage has a positive effect on improving the company's marketing performance.

Some of the indicators used in assessing marketing performance are sales volume, customer growth, and profitability. Sales volume is the sales volume of the company's products. Customer growth is the growth rate of company's customers. Profitability is the amount of profits earned by the company.

RESEARCH METHODS

Data Collection Technique

1) Research Object

The object of research was all batik craftsmen in Tegal regency amounted to 85 craftsmen.

2) Population and Sample

The population studied was all batik craftsmen in Tegal regency which amounted to 85 people. Sampling technique used saturated sampling technique means that all population becomes sample (Arikunto 2013).

3) Data Source

Data used in this research was primary data that was data obtained directly from source and secondary data that was data obtained indirectly from research object. This data was data collected and published by other parties officially.

4) Data Collection

Performed by the method of documentation was by way of questionnaire, interview, and retrieving

necessary data from the records or reports of field survey results.

Research Instrument Testing Technique

Data processing with quantitative analysis through several stages:

1. Instrument Validity Test is used to test the validity of the instruments used. Tested on 30 non sample respondents. The correlation between the items and the total score of items calculated by the product moment correlation formula, while the product moment formula is as follows (Arikunto, 2013: 317):

$$r_{xy} = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{\{n \sum X^2 - (\sum X)^2\} \{n \sum Y^2 - (\sum Y)^2\}}}$$

2. Reliability is the reliability level of the questionnaire. A reliable questionnaire is a questionnaire which, if tried repeatedly to the same group, will produce the same data with the assumption that there is no psychological change in the respondents. In this study, to find the reliability of the instrument used Alpha formula as follows (Arikunto, 2013: 239):

$$r_{11} = \left[\frac{K}{(K-1)} \right] \left[1 - \frac{\sum \sigma b^2}{\sigma^2_t} \right]$$

To achieve the predetermined objectives, the analytical tool used as follows:

- 1) Rank Spearman Correlation Analysis

Rank Spearman correlation is used to find relationships or to test the significance of associative hypotheses. The formula used is as follows (Arikunto, 2010: 321):

$$r_{xy} = 1 - \frac{6 \sum D^2}{n(n^2 - 1)}$$

Description:

r_{xy} = Spearman correlation coefficient

n = amount of subject

D = difference, is the level difference of each subject

The correlation values that have been obtained were then interpreted by the correlation interpretation table as follows:

Table 1. Correlation Value Interpretation

Coefficient Interval	Correlation Level
0.000 – 0.199	Very low
0.200 – 0.399	Low
0.400 – 0.599	Enough
0.600 – 0.799	Strong
0.800 – 1.000	Very strong

- 2) Multiple Linear Regression Analysis

The regression equation used is as follows:

$$ER_i = a + \beta_1 X_1 + \beta_2 X_2 + e_i$$

Description:

ER_i = marketing performance

X_1 = product innovation

X_2 = competitive advantage

b_i = regression coefficient

E_i = residual error

- 3) Regression Coefficient Significance Test

To test the significance of the regression coefficients obtained, two-party t test will be used with a significant level of 95% (or $\alpha = 5\%$). Hypothesis testing criteria:

H_0 is accepted if $-t \alpha/2 \leq t \leq t \alpha/2$

H_0 is rejected if $t > \alpha/2$ or $t < -t \alpha/2$

To test the effect of independent variables together on the dependent variable (first hypothesis) used F test. The formula is as follows (Supranto, 2001):

$$F = \frac{R^2 / (K - 1)}{1 - R^2 / (N - K)}$$

Description:

R^2 = Coefficient of determination

K = Amount of independent variable

N = Amount of sample

Testing criteria:

$H_0 : b_j = 0$, There is no mutual influence between independent variables on the dependent variable.

$H_1 : b_j \neq 0$, There is mutual influence between independent variables on the dependent variable.

H_0 is accepted if $F_{count} \leq F_{table}$

H_0 is rejected if $F_{count} > F_{table}$

Coefficient of Determination

The coefficient of determination aims to determine the level of accuracy of the regression analysis also to determine the percentage of the changes of dependent variable (Y) caused by the independent variable (X). Adjusted-R² is obtained by the following formula (Gujarat, 2003 in Ghozali, 2011: 97):

$$D = r^2 \times 100 \%$$

Description:

D = Coefficient of determination

r = Coefficient of correlation

If the coefficient of determination (R²) is closer to one, then the independent variable affects the dependent variable.

DISCUSSION

Geographical Location

Bengle village is located in Talang sub district and is one part of Tegal regency, Central Java province. The boundaries of Bengle village include:

North : Dukuh Malang village

South : Langgen village

West : Setu village

Bengle village is known as the Village of Batik Craftsmen because of the many people who especially the mothers and teenage girls who livelihood as typical tegalan batik craftsmen. They learn batik from an early age. Usually batik activities are conducted starting at 07.00 am until 04.00 pm, but not infrequently they continue to work until late at night. They work from Monday-Saturday, while on Sunday they use to rest.

Table 2. Frequency Distribution Based on Education Level

Education Level	Frequency	%
Not completed in primary school	3	3,53
Graduated from primary school	12	14,12
Graduated from junior high school	16	18,82
Graduated from senior high school	39	45,88
Graduated from college	15	17,65
Total	85	

Table 3. Frequency Distribution of Respondents by Age

Age Group	Frequency	%
20-30	5	5,88
31-40	15	17,65
41-50	35	41,17
51-60	30	35,30
Total	85	

Can be seen from the data that the highest level of education of respondents is high school graduates and most age range is 41-50 of 41.17%.

Instrument Validity Test

It was tested to 30 people outside the respondents first. The results of this test used the significance level of 0.05 and N = 30 then obtained r table of 0.361.

Table 4. Validity Test of Marketing Performance Variable

Item	r count	r table	Definition
1	0,607	0,361	Valid
2	0,553	0,361	Valid
3	0,405	0,361	Valid
4	0,481	0,361	Valid
5	0,526	0,361	Valid
6	0,447	0,361	Valid
7	0,416	0,361	Valid
8	0,423	0,361	Valid

Table 5. Validity Test of Product Innovation Variable

Item	r count	r table	Definition
1	0,504	0,361	Valid
2	0,553	0,361	Valid
3	0,446	0,361	Valid
4	0,363	0,361	Valid
5	0,581	0,361	Valid
6	0,390	0,361	Valid
7	0,454	0,361	Valid
8	0,376	0,361	Valid

Table 6. Validity Test of Competitive Advantage Variable

Item	r count	r table	Definition
1	0,520	0,361	Valid
2	0,533	0,361	Valid
3	0,440	0,361	Valid
4	0,365	0,361	Valid
5	0,479	0,361	Valid
6	0,514	0,361	Valid
7	0,424	0,361	Valid
8	0,381	0,361	Valid

Reliability Test

Table 7. Reliability Test of Marketing Performance Variable

Reliability Statistics	
Cronbach's Alpha	N of Items
.770	10

From the above SPSS calculation table, Cronbach's alpha value of 0.770. Because the value of $0.770 > 0.60$ then the instrument of performance marketing (Y) is said to be reliable.

Table 8. Reliability Test of Product Innovation Variable

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.670	.662	9

From the above SPSS calculation table, Cronbach's alpha value of 0.670. Because the value of $0.670 > 0.60$ then the instrument of product innovation (X1) is said to be reliable.

Table 9. Reliability Test of Competitive Advantage Variable

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.663	.666	9

From the above SPSS calculation table, Cronbach's alpha value of 0.663. Because the value of 0.663 > 0.60 then the instrument of competitive advantage (X2) is said to be reliable.

Data Analysis

Table 10. Correlation Analysis Result of Product Innovation with Marketing Performance

Correlations

			ProductInnovation	MarketingPerformance
Spearman's rho	ProductInnovation	Correlation Coefficient	1.000	.677**
		Sig. (2-tailed)	.	.000
		N	85	85
	MarketingPerformance	Correlation Coefficient	.677**	1.000
		Sig. (2-tailed)	.000	.
		N	85	85

** . Correlation is significant at the 0.01 level (2-tailed).

Based on Rank Spearman correlation calculation results obtained r_s or $r_{s_{xy}}$ value of 0.677. The value of $r_{s_{xy}}$ of 0.677 then interpreted with r value interpretation table

that is at the interval of 0.600 - 0.799. That means the relationship of product innovation with marketing performance is **strong and positive**.

Table 11. Correlation Analysis Result of Competitive Advantage with Marketing Performance

Correlations

			CompetitiveAdvantage	MarketingPerformance
Spearman's rho	CompetitiveAdvantage	Correlation Coefficient	1.000	.685**
		Sig. (2-tailed)	.	.000
		N	85	85
	MarketingPerformance	Correlation Coefficient	.685**	1.000
		Sig. (2-tailed)	.000	.
		N	85	85

** . Correlation is significant at the 0.01 level (2-tailed).

Based on Rank Spearman correlation calculation results obtained r_s or $r_{s_{xy}}$ value of 0.685. The value of $r_{s_{xy}}$ of 0.685 then interpreted with r value interpretation table

that is at the interval of 0.600 - 0.799. That means the relationship of product innovation with marketing performance is **strong and positive**.

Table 12. Result of Regression Analysis

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.777 ^a	.604	.594	3.159	.604	62.555	2	82	.000

a. Predictors: (Constant), CompetitiveAdvantage, ProductInnovation

From the above calculation, obtained value of R = 0.777 or 77.7%. Because it is in the coefficient interval of 0.600-0.779 thus shows a **strong** and **positive** relationship between variable of product innovation, competitive advantage, and marketing performance.

It is provided coefficient of determination of variable of product innovation, competitive advantage together with marketing performance of 60.4% while 39.6% is influenced by other factors that cannot be explained.

Table 13. Result of t Test Analysis

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	2.970	2.948		1.007	.317	-2.896	8.835
ProductInnovation	.352	.106	.322	3.315	.001	.141	.564
CompetitiveAdvantage	.561	.105	.518	5.337	.000	.352	.771

a. Dependent Variable: MarketingPerformance

From the above table, product innovation variable get t count partial significance value of 3.315 > t table 2.000 with significance value of 0.001 means Ho is rejected that there is influence of product innovation on marketing performance.

Variable of competitive advantage get t count partial significance value of 5,337 > t table 2.000 with significance value of 0.000 means Ho is rejected that there is influence of competitive advantage on marketing performance.

Table 14. Result of F Test Analysis

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1248.683	2	624.342	62.555	.000 ^a
	Residual	818.422	82	9.981		
	Total	2067.106	84			

a. Predictors: (Constant), CompetitiveAdvantage, ProductInnovation

b. Dependent Variable: MarketingPerformance

F test results obtained F count value of 62.555 with probability of 0.000. Because the probability is much less than 0.05 then

variable of product innovation, competitive advantage together are significantly related

to marketing performance of batik products in Bengle village, Tegal regency.

CONCLUSION

1. There is a significant strong and positive relationship of product innovation with marketing performance, it is enough to prove that the innovation of batik products from classical and development motives have begun done by craftsmen in batik center of Bengle village, Tegal regency. Increased product innovation and competitive advantage has a role in improving marketing performance required open access through existing social media where people often make purchases through online media.
2. Competitive advantage currently owned by tegalan batik craftsmen is a motive that is always a large and wide patterned called big reng-rengan. New motive is developed such as mushroom, keongan, galaran, ambringan, godong gedegede. This is the uniqueness and is not owned by batik from other regions. Big style is impressed bold as the character of Tegal people that are open and straightforward.

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