

The Effects of Product and Promotion Development on the Control of CV. Hamira Paving Block Market Share in Bangka Belitung

Rini Afrianti¹, Elmiwati²
{rinidanish264@gmail.com¹, elmiwati@borobudur.ac.id²}

Universitas Borobudur, Indonesia

Abstract. Marketing Strategy is an integrated comprehensive plan in the field of marketing in achieving company goals through the marketing mix which includes Product, Price, and Place, and Promotion strategies. To win business competition for a particular product or service, every business actor is required to be able to determine the most appropriate strategy for the dynamic and rapidly changing strategic environment. This study aims to analyze the strategy of a company engaged in the production of paving blocks in Bangka Belitung in its efforts to increase the market share of its products. The company applies a strategy with a marketing concept with an emphasis on product and promotion development strategies. From the results of the analysis using multiple linear regression analysis, it is known that the product and promotion development strategy carried out by CV. Hamira Paving Block has a significant and positive influence on the market share of these products in Bangka Belitung Province. This means that the more the production and promotion costs, both partially and simultaneously allocated, will increase, the market share will also increase.

Keywords: product; promotion; market share;

1 Introduction

Marketing activities in a business are the spearhead that determines the continuity of the business. With the right strategy, it will make the products or services offered known to the public, increase sales volume, and ultimately generate high profits as well. It is not surprising that business people are very concentrated on this marketing problem. Various efforts were made to upgrade his marketing skills and knowledge, take part in various trainings, expand networking, and participate directly in promotional activities.[1]

In the execution of marketing activities, what is called a marketing plan is needed. That plan is a detail that describes the marketing strategy to be implemented. The purpose of the marketing plan is for marketing activities to be directed so that marketing output can be optimal.[2] Without the support of a marketing plan, a business is like walking along a blind map, so that when marketing execution finds a problem, the management is unable to find a quick and appropriate anticipation that which in the end does not produce the expected level of sales.[3]

Two factors that determine customer satisfaction are quality products and the company's ability to communicate and interact with consumers. Serving quality products even at slightly higher prices will be more attractive if the products produced have high quality. Meanwhile,

even though the products produced may not be different from competitors' products, consumers will remain loyal if the company has an emotional closeness with potential consumers and is able to communicate it through promotional activities.

Promotion aims to increase product sales and enlarge the market share of similar products. While, by doing promotions, the product will be recognized by potential consumers. So that more people know about the product, the brand awareness of the products offered will also increase. In the long term, the stronger the brand, the easier marketing activities will be. That is the important role of promotion in the short and long term.[4]

One of the marketing goals often targeted by companies is market share control, as it was done at CV. Hamira in controlling the paving block market share in Bangka Belitung. As a company located in Pangkal Pinang and only 2 (two) years old, of course, it wants to acquire a growing market share in the market share of similar products in its area. The company uses market share control indicators as a measure of its marketing performance. As a company that has just entered the paving block market in Bangka Belitung, the company's management focuses its marketing strategy on implementing the marketing mix concept in product and promotion development to gain market share for similar products while gradually increasing it.

The writer identifies that there are some obstacles related to company's efforts to obtain and control the paving block market share through product and promotion development strategies, such as the economic condition of the people who are still in an economic recession due to the Covid 19 pandemic which greatly affects the purchasing power and buying interest of the public for non-food products. Beside that, the business and production activities are still not optimal due to frequent restrictions on employee work activities and community social activities. [5]

With the identification of the problems above, to make the problems do not spread, the writer will limit the problems in this study to be more focused. To make the research become accurate, the writer limits the problem only to the effect of product and promotion development on the company's products on the control of the paving block market share in Bangka Belitung and formulates the problem as: "Are there any significant effect of product and promotion development partially and simultaneously on the control of the company's market share in Bangka Belitung?"

2 Literature Review

2.1 Theory Description

Griffith and Reenen mention the notion of market share is the proportion of total sales of goods or services of a company from various sources compared to the total sales of goods or services in a particular industry during a certain period of time.[6] Having a large percentage of market share is a strong indicator of the success of a business, especially if that share increases over time. If a company can grow efficiently and continue to increase its market share, it will be difficult for competitors to compete with it. Increasing market share will increase the company's reputation in developing its business..

In preparing its marketing plan, the company is required to base its design on an analysis of the portfolio of products. It is a systematic analysis and evaluation of a series of company offerings. The goal is to examine the company's product portfolio to understand what, if any, the company should do to strengthen its portfolio. Companies can assess the strength of the

product portfolio as a whole as well as the relative strengths and weaknesses of each product individually. It involves the use of market attractiveness and product positioning.

One of the tools for evaluation is the BCG matrix, which describes the relative position of each product in relation to market growth and market share. Each product is then grouped into four quadrants as 'Star' indicates the product has a relatively high market share and a high market growth rate, 'Cashcows' is the product has a relatively high market share and a low market growth rate, 'Question' figuresthe product has a relatively low market share and a high market growth rate, and 'Dogs' illustrates the product has a relatively low market share and a low market growth rate. There are 4 (four) strategies that can be applied to anticipate these conditions, namely:

- a. Develop: the goal is to increase the market share of the strategic business unit even at the expense of short-term profits. This strategy is suitable for 'questions' whose market share must be increased in order to become 'stars'.
- b. Maintain: the goal is to maintain the market share of the strategic business unit. This goal is suitable for strong cash cows to continue to provide positive cash flow.
- c. Harvest: the goal is to increase the short-term cash income of the strategic business unit regardless of the long-term consequences. This strategy is suitable for weak cash cows who have a bleak future and are a source of cash flow.
- d. Freelancing: the goal is to sell or liquidate a business because it would be better to use it for other business units that can still be developed. This strategy is suitable for business units that are in the 'dogs' category.

Kotler says that in implementing a product development strategy, there are several things that need to be considered by companies, including effectiveness in allocating and using development costs [7]. The product development costs include the allocation of costs for product design, market research, creation/extension of product lines and markets, product quality testing in addition to the production costs themselves. Value, price, and cost are important elements in product development (goods and services) in the midst of intense business competition. The development of a product with a new model or type requires costs.

Research costs for market surveys, designs, prototypes, testing, although not all companies follow these stages as a whole. It is depending on the type and complexity of the resulting product output. The costs incurred from the development stage to the manufacturing process must be designed and calculated properly. Stanton assumes that the amount of costs allocated for product development can be used as an indicator of the company's success in product development although it all needs to be supported by the effectiveness and efficiency principles [8]. However, with the amount of costs allocated by a company, it can be seen the seriousness and efforts of the company in product development to increase sales or market expansion.

In marketing, promotion is an activity carried out in order to increase the development of something, be it a brand, product, or the company itself. It is such a communication activity carried out by a person or company to the wider community. The goal is to introduce the product to the public and influence them to buy and use the product. That is, promotion is an activity that is very commonly carried out by marketers to be able to provide information related to a product and also encourage potential consumers to want to buy goods or services offered by the company.

Likewise with product development, according to Stanton the efforts made by promotion development companies can be measured based on the quality and quantity of the determination of the budget allocation of costs and the effectiveness and accuracy of its utilization.[9] To get the effectiveness and accuracy of the use of the budget in accordance with the strategy and

achievement targets, the first thing to do is to do research on market conditions and preferences and determine what types of promotions will be set.

2.2 Constellation Framework

From the theoretical exploration described regarding to the market share control related to the effect of product and promotion development, a framework of thought is formed that there is a significant effect product and promotion development partially and simultaneously on the market share control. Thus, there are two independent variables and one dependent variable measured, they are product development as X_1 and promotion development as X_2 . While, the dependent variable or Y is the market share control. Figure 1 shows a diagram of the constellation model of the three variables studied.

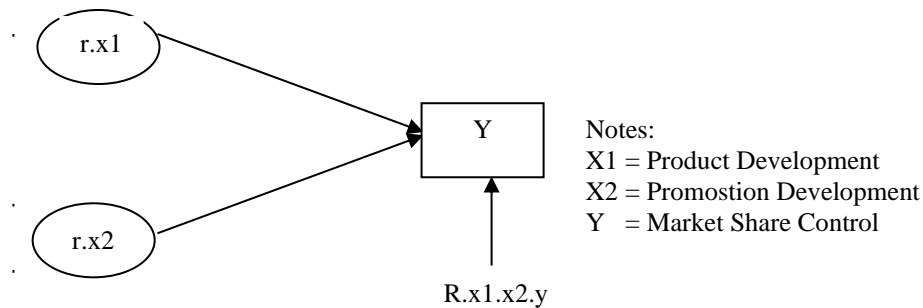


Figure 1. Variables constellation Model

2.3 Research Hypothesis

Based on the determination of the framework of thinking by the author and the theoretical reference that has been submitted by the experts, the research hypothesis can be formulated as: "There is a significant effect of product and promotion development partially and simultaneously on CV. Hamira Paving Block market share control in Bangka Belitung.

3 Methodology

Data analysis is carried out based on "*time series analysis*" in the form of costs incurred by the company in carrying out product and promotion development activities, as well as the market size of paving block products that have been successfully achieved. The time dimension used is 30 (thirty) months, from November 2019 to April 2022. The data obtained regarding the three variables studied were processed with operational statistical data to then find out how the condition of the fluctuations in the achievement of these three variables from month to month and whether there was a significant effect of product and promotion development on the control of the company's paving block market share in Bangka Belitung.

The writer processes the secondary data in the form of costs incurred by the company in carrying out product and promotion development activities as well as the quantity of the company's paving block market share in meeting market needs for paving block products in Bangka Belitung in a time series of 30 (thirty) months. Then the data is processed using

statistical and econometric data processing to determine whether there is a significant, strong, and positive effect of product and promotion development on the company's market share control of product. For data processing, the writer uses the following devices:

- a. Test the coefficient of determination to find out how much the percentage of the the company's paving block market share control variable (Y) variation can be explained by the product development variable (X₁) and promotion development variabel (X₂) simultaneously. The formula used is **JK (Reg) = b₁ΣX₁Y + b₂ΣX₂Y**
- b. Significance Test of Multiple Linear Regression Coefficient, to find out whether there is a significant influence of each independent variable partially towards the dependent variable. Based on the *t* distribution with a significance degree (α) of 0.05 and a degree of freedom equal to 29, hypothesis testing is carried out using the following formula **tXi = bi/Sbi** . If the value of the *t* test obtained is greater than the *t* table, it means that H₀ is rejected and H₁ is accepted and proves that the partially tested independent variables have a significant influence towards the dependent variable.
- c. Determination Coefficient Significance Test, to find out whether there is a significant influence of independent variables simultaneously towards the dependent variable. Based on the *F* distribution with a significance level (α) of 0.05 and a degree of freedom equal to 28, hypothesis testing is carried out using the following formula:

$$R0 = \frac{R^2/K}{(1-R^2) / (n-k-1)}$$

If the *F* test value obtained is greater than *F* table, it means that H₀ is rejected and H₁ is accepted and proves that the independent variables tested simultaneously have a significant influence towards the dependent variable.

4 Research Result and Discussion

Infrastructure development in the form of roads, bridges, office and housing areas, as well as trade centers continues to be carried out by the Government, the private sector and the community. With the rapid development of the infrastructure has an impact on the increasing need for construction materials that cover the ground surface specially paving block. Table 1 describes the amount of need and use of paving blocks per year in Bangka Belitung Province in the last 5 years.

The data shows that the need and use of paving blocks in Bangka Belitung increased in the era before the Covid 19 pandemic and decreased in 2020 due to a decline in development and economic activities due to the pandemic. However, in 2021, where the pandemic conditions have not subsided even at its peak, the need and use of paving blocks for the construction of infrastructure has increased even though it is still below the usage in the last year before the pandemic. With the increase in own production capacity coupled with a partnership system and guidance for these local producers, the production capacity and market share of paving blocks with the brand "Hamira Paving Block" is growing from time to time. The market share of these products continues to increase and begins to gradually shift the market dominance of competitors from outside the Bangka Belitung region.

Table 1. Number of Paving-block Uses in Bangka Belitung Province

Year	Government M ²	Business Sector M ²	Community M ²	Total M ²
2017	28.050	19.250	7.700	55.000
2018	34.485	25.707	2.508	62.700
2019	33.435	29.720	11.145	74.300
2020	30.745	12.555	4.000	47.300
2021	28.749	27.380	12.330	68.450

Source: Data of BPS Provinsi Bangka Belitung February 2022

Then, based on the data listed in Table 2 below, it is known that the control of the paving block market share in Bangka Belitung Province controlled by the company started from just 7% at the start of its production in November 2019, but within 30 months it has grown to 20.9%. Thus, there has been a 13.9% increase in market share ownership within a period of 30 months amid very high fluctuations in market size due to unfavorable economic conditions due to the Covid 19 Pandemic which began to feel its influence in Bangka Belitung Province in May 2020.

When viewed from its product portfolio on market growth and relative market share control through portfolio analysis of the Boston Consulting Group (BCG), it can be said that paving block products in Bangka Belitung Province have a high growth rate in the last two years. Even though there are quite significant fluctuations in a matter of months, there will still be an increase in relative market growth of almost 35%. The control of the relative market share of Hamira Paving Block products reaches 20.9%, if it is compared with the market leader for these products in Bangka Belitung which reaches 25%, it can be said that the position of Hamira Paving Block products is in the "Stars" position.

Product development costs are one of the most important components of investment. Product development costs for research and testing, needed to get a product that really fits the target market share. Costs incurred by the company in improving product quality which include the improvement of the quality of human resources, purchase of main production equipment, and cooperating with vendors to ensure the availability of the required raw materials such as cement and sand.

The marketing development strategy carried out by the company is the promotion development strategy. The strategy carried out is to implement a portion of the promotional mix that is relevant to the condition of the product, product market, and available resources. The Company's promotional activities focus on advertising, sales promotion, personal selling, direct marketing, and interactive media.

Similar to product development activities, promotional development activities also require the availability of an investment budget. This investment is not a direct cost that can directly generate profits from the difference in selling prices compared to production costs. However, with a cost-effective and efficient design, it will be able to encourage sales volume that generates profits with maximum sales quantity emphasis.

Table 2: The Market Share Control of Company's Product

No.	Year	Month	Market Size (m ²)	Market Share (m ²)	Percentage (%)
1	2019	November	5.800	406	7,0
2		December	6.100	445	7,3

No.	Year	Month	Market Size (m ²)	Market Share (m ²)	Percentage (%)
3	2020	January	6.350	450	7,1
4		February	6.500	552	8,5
5		March	6.300	510	8,1
6		April	5.500	484	8,8
7		May	2.850	285	10,0
8		June	2.430	320	13,2
9		July	2.000	294	14,7
10		Agustus	2.259	361	16,0
11		September	3.100	561	18,1
12		October	2.800	428	15,3
13		November	3.550	593	16,7
14		December	3.670	620	16,9
15	2021	January	4.690	811	17,3
16		February	4.730	809	17,1
17		March	4.920	876	17,8
18		April	4.980	911	18,3
19		May	5.020	908	18,1
20		June	5.200	910	17,5
21		July	5.600	997	17,8
22		Agustus	5.850	1.065	18,2
23		September	6.100	1.165	19,1
24		October	6.800	1.319	19,4
25		November	7.300	1.387	19,0
26		December	7.260	1.414	19,5
27	2022	January	7.300	1.453	19,9
28		February	7.350	1.477	20,1
29		March	7.830	1.597	20,4
30		April	7.820	1.634	20,9

Source: Marketing Department Data of CV. Hamira Paving Block

The data regarding the numerical magnitude of the three tested variables are then inputted into statistical data processing in the form of multiple linear analysis in the form of a 30 (thirty) month time series with the help of SPSS (Statistical Product for Social Science) software. From the output, it can be known then regarding the complete description of the data to analyze the condition of each variable being studied as well as to find answers to the research hypotheses determined.

Based on the data on the SPSS output (Frequencies) at Table 3, it can be seen and analyzed that overall the data on the 3 (three) variables studied are 'valid', where there is no single monthly data series in the form of product development costs and promotion developments as well as the amount of market share that is incomplete data (missing). Validity is the extent to which the concept and/or measurement has reliability and has an accurate conformity with the actual conditions.

The data shows that the average (*mean*) value of the three variables is Rp. 4,337,000,- (product), Rp. 4.406.000,- (promotion), and 15.3% (market share control). It can be assumed that within a period of 30 months, the company spent almost equal in amount on product and promotion development in its efforts to increase its product market share. Based on the data above regarding the frequency distribution of the data of the three variables tested, it can be seen that the overall data studied further is valid, normally distributed and feasible to continue

to be tested to indicate whether there is a any effect of independent variables on dependent variable.

Table 3. SPSS Output ‘Frequencies’

			Product	Promotion	Market_share
N	Valid	Statistic	30	30	30
	Missing	Statistic	0	0	0
Mean		Statistic	4.337	4.405	15.3
		Std. Error	1.479	1.038	3.8
Median		Statistic	4.500	4.000	17.1
Range		Statistic	5.320	4.155	13.9
Minimum		Statistic	1.500	1.445	7.0
Maximum		Statistic	6.820	5.600	20.9
Percentile	25,00	Statistic	85,25	86,00	75,75
	50,00	Statistic	96,50	97,00	85,00
	75,00	Statistic	104,25	106,25	95,00

Multiple Modes Exist. The smallest value is shown

To find out how much variation in the size of market share can be explained by the cost of product and promotion development simultaneously, an analysis of the Summary Model data processing output is carried out as shown in Table 4. With the two independent variables tested in this study, to find out how much variation in the value of the dependent variable is R Square. The R Square number in Table 4 is 0.954, which means 95.4% variation of the market share variable for Hamira Paving Block products in Bangka Belitung can be explained by product development costs and promotion development costs. There is only 4.6% variation in market share domination.can be explaided by other variables which are not tested in this research.

Table 4. SPSS Data Processing Output: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of theEstimate
1	,977 ^a	,954	,915	1,618

a. Predictors: (constant), Product, Promotion

b. Dependend Variabel: Market_Share

To answer the formulation of the problem regarding whether there is a significant effect of product and promotion development on the market share of company products, the writer analyzes the output of data processing in Table 5. At the same time with this analysis it can be seen how much the contribution of these two variables is to the increase or decrease in the market share of products. Comparing the probability number (sig.) of the effect of each independent variables and the dependent variable with a standard value of 0.05, it is known that the probability value (sig.) of product development (0.038) and promotion development (0.002) are smaller than 0.05, so that, it can be determined that these two variables have a significant effect on the dependent variable.

Table 5. SPSS Data Processing Output: Coefficients

Model		Unstandardized Coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(constant)	-7,100	2,981		-1,673	,188
	Product	,554	,106	,817	6,147	,038
	Promotion	,707	,097	,976	8,364	,002

a. Dependent Variable Market_Share

Then, to find out how much the contribution of the increase of each independent variable in affecting the dependent variable, it is used an equation test with the formula $Y = b_0 + b_1X_1 + b_2X_2 + e$. The result shows the value (-7.100), (0.554) and (0.707), which can be applied in the formula as follows:

$$Y = -7,100 + 0,554 (X1) + 0,707 (X2) + e$$

From the equation test value above, it can be seen that if there is no increase or decrease (fixed) in product development costs and promotion development costs, the market share of products is -7.1%. The increase per Rp. 1 million product development costs will increase 0.554% of the market share of products and the increase per Rp. 1 million promotion development costs will increase 0.554% of the market share of Hamira Paving Block products in Bangka Belitung Province

Lastly, to answer the formulation of the problem and the third hypothesis which states that there is a significant effect of product and promotion development costs simultaneously on the market share control of company's products, the writer analyzes the output of ANOVA data processing in Table 6 following:

Table 6. SPSS Data Processing Output: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2431,225	2	1215,612	5,015	,022 ^a
	Residual	83,442	27	3,090		
	Total	2514,667	29			

a. Predictors: (constant), Product, Promotion

b. Dependent Variabel; Market_Share

The output data above shows that the significance value used as a probability for the effect of product and promotion development costs simultaneously on the market share of company's products is 0.022. This value is smaller than 0.05 and bigger than 0.01 which means that the two independent variables simultaneously have a significant effect on the market share of company's products at the 95% significance level or Alpha 0.05. Then, the F test value there is no negative sign (-) which means that there is a positive effect of the cost of product and promotion development simultaneously on the market share control of products in Bangka Belitung Province.

5 Conclusion

The results of research that have been conducted regarding the effect of product and promotion development costs on the market share control of Hamira Paving Block products in Bangka Belitung Province can be concluded that there is a significant and positive effect of product and promotion development cost partially and simultaneously on the control of market share. This shows that the higher the cost of product development partially and simultaneously, the higher the market share control of that company's products in Bangka Belitung Province.

From the conclusions of the research results obtained, the writer can provide strategic and operational suggestions to increase the market share of Hamira Paving Block in Bangka Belitung Province as follows:

- a. With the significant and positive effect of increasing product and promotion development costs on the market share control, the first and foremost advice to the management is continuously increasing the cost of product development and promotion accompanied by a high level of effectiveness and efficiency.
- b. With the changes in rapidly changing market conditions, short-term evaluations need to be carried out in an effort to quickly anticipate if there is a discrepancy between the strategies implemented and the changes in the market environment that make the strategy ineffective and inefficient.

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