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Analysis of Development Strategy of Bio-fertilizer Market

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Abstract

This study was aimed to analyze the marketing strategy of bio-fertilizers based on product excellence, identifying attributes that affect consumers choosing bio-fertilizer, and recommends alternative strategies of bio-fertilizers. On business development, management will expand the sales area in each district. Samples consist of 100 respondents, drawn from population of farmers in Simalungun district who know about bio-fertilizer. Respondents were determined using purposive and simple random sampling. The survey was conducted through direct interview. Management of BPAM has conducted the marketing mix of product strategy, pricing, distribution, and promotion, but does not know the effectiveness. A scientifically conducted study is necessary in problems for the expansion of sales areas to measure the marketing mix and its influence on the decision, satisfaction and customer loyalty as BPAM ideas for follow-up. This study shows that the overall hypothesis is acceptable, in this case, there is a significant influence on the product, distribution, and promotion of the decision; there is a significant influence on satisfaction of products and promotion; there is a significant influence on decision satisfaction, and there is a significant influence on decisions and satisfaction to loyalty. Main attributes that influence the selection of bio-fertilizers are quality of the product, promotion, and distribution in order to win market competition. Companies must provide clear information about the advantages and how to use the product on the product packaging. Companies need to approach consumers through farmers' groups, to do direct promotion such as demonstration plots and free samples.

Keywords: marketing mix, decision, satisfaction, loyalty

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1. Introduction

Fertilizer is one of the emerging industries in Indonesia. It can be seen from the amount of fertilizer use in Indonesia which tends to increase every year [2]. The use of inorganic fertilizer should be reduced because it can endanger the health of the body and can interfere with the survival of organisms in the soil (Ruswandi, 2010). Therefore, it is necessary to apply integrated fertilizer management that combines the use of inorganic fertilizer with organic fertilizer and or biological fertilizer. This causes many

companies to start producing organic and biological fertilizers. One of the companies that produce organic fertilizer and bio-fertilizer is PT Petrokimia Kayaku Gresik, one of the biggest multinational company in Indonesia. That bio-fertilizer is named 'Sinarbio'. PT Bintang Petani Agro Mandiri (BPAM) has been appointed to distribute this fertilizer throughout North Sumatera and Aceh region. Thus, BPAM becomes the only distributors in that region.

Company data shows that sales of fertilizers, both organic and biological, have increased when compared to the initial sales. However, a company will always face challenges due to high market competition. A Company must be able to always maintain and increase market share, one of them is by having a special place in consumers' mind. A Company must have the ability to change the mindset of the consumers. Thus, it becomes important for the company to always develop the right marketing strategy in order to influence purchasing decisions.

Based on the existing data, it is proven that the use of Sinarbio fertilizers effectively provides higher results than before. But based on fact, to this day, the company has not been able to realize the sales volume of targeted manufacturers. That is why the company must have a marketing strategy that is able to influence the decision to purchase Sinarbio biological fertilizer.

It is necessary to investigate whether the failure to achieve the related targets is due to improper marketing strategy implemented by PT BPAM, whether it is related to competition of other companies that have cheaper prices, or whether the company is less concerned with the problems and difficulties faced by customers, or is there anything else that causes failure on the target sales and how to find solution.

One form of marketing strategy that is able to influence Sinarbio fertilizer purchase decision is the use of marketing mix strategy which includes product, price, distribution channel and promotion.

A proper marketing mix strategy will certainly have an impact on customer satisfaction, which will ultimately affect a customer's decision to be loyal to the product. Consumers who are satisfied, have the possibility to be loyal. This means consumers want to buy back the product.

Thus, appropriate marketing mix strategy is needed, so that the company will be able to develop competitive advantage in serving the target market [8]. Especially amid the high level of market competition. Therefore, this research is important to implement, because the opportunity to increase sales is still very open and also creating loyal customers, as information to develop Sinarbio biofertilizer market.

2. Literature Review

2.1. Marketing strategy

Kotler stated that marketing strategy is a concept that explains decision-making, analysis and marketing issues, emphasis on organizational rather than functional views. The role of marketing changes along with awareness of the importance of customers for a company. From the aforementioned definition of marketing, it can be concluded that the marketing process aims to satisfy consumers. The key to achieve organizational goals is to recognize the needs and wants of the target market and provide satisfaction to consumers in a more effective and efficient way than its competitors.

2.2. Marketing mix

Marketing mix is a tool for marketers that consist of various elements of marketing programs that need to be considered for the implementation of a successful marketing strategy to run successfully. The function of marketing is to achieve the company goals by generating sales of profitable products/services in the target market. The functional strategy of marketing should be the guide of decision-makers (marketing managers) in determining who, what, where, to whom, how much, and how will the product sell. This strategy usually includes four components: product, price, place (distribution) and promotion. The product marketing mix includes 4P: product, price, place and promotion. Some recent books add 6 marketing mix: product, price, promotion, place, market entry and customer management. Market entry is more targeted to the target market or segment, whether for everyone, anyone, anytime and anywhere can become a target market (undifferentiated market) or include a segment chosen (differentiated market).

2.3. Product

By the concept, product is a subjective understanding of the producer of something that can be offered as an effort to achieve organizational goals through the fulfillment and desires of consumers, in accordance with the competence and capacity of the organization and the purchasing power of the market. Previous research said that products not only include physical but also packaging, warranty, after sales service, brand, company name, and satisfaction value.

2.4. Price

Lamb et al. (2001) said that 'Price is what should be given by the consumer (buyer) to get a product'. Price is often the most flexible element among the four elements of the marketing mix. Meanwhile, according to Walker et al. (2000) 'Implementing a low price policy compared to competitors can be created, if the company has competitive advantage at low cost'.

Thus, price fixing and price competition are the number one problem faced by marketing executives. However, many companies are unable to handle pricing well. Pricing plays an important role in the marketing mix process, because the pricing is directly related to the revenue received by the company.

2.5. Place

Cravens (2000) states 'Distribution channels are organizational networks that perform functions connecting producers to the end consumers'. Thus, the distribution channel consists of various interdependent or interdependent agencies or bodies that function as a system or network, which together attempt to produce and distribute a product to the final consumer.

Distribution channels connect manufacturers with end users of products or services. Effective and efficient distribution channels provide an important strategy advantage for members of the organization over its competitors' channels.

2.6. Promotion

Promotion strategy is planning, implementation, and control of communication from an organization to consumer and other targets. The promotion function in a marketing mix is to achieve various communication goals with each consumer. Cravens (2000) states 'Promotional strategies include the determination of: (1) communication objectives, (2) the role of promotional mix-forming components, (3) promotion budgets, and (4) strategy of each mixed component'. The components of the promotion mix include advertising, individual sales, sales promotion, and public relations. An important marketing responsibility is to plan and coordinate integrated promotional strategies and select the most effective strategies.

It can be concluded that promotion is a company activity to provide information, persuade and remind others of the company and the products produced in the hope

that other party take action purchases against the company's products. In order for promotional activities done to be successful, then the promotion should be planned first.

2.7. Customer satisfaction

Customer satisfaction can be defined as an evaluation of customer's awareness and love of goods or services that have been handed to him by a particular producer. Satisfaction is influenced by the expectation level of service quality (Cronin and Taylor at Birgelen et al., 2000). Customer satisfaction as a result of the comparison between the expectation of the product or service and the fact that one receives the two possibilities, the first is that if the seller gives excessive information to the customer, then the customer will have too high expectations, resulting in dissatisfaction if the seller cannot meet the information. The second possibility is that if the seller cannot meet the information to the customer, the customer will be less interested (in low expectations) on the product or service, so the transaction will not happen.

Overall satisfaction is defined as an effective statement of emotional reactions to the experience of a product or service influenced by the consumer's satisfaction with the product (attribute satisfaction) and information used to select the product (information satisfaction).

2.8. Customer loyalty

Research on consumer loyalty generally centers on consumer loyalty to tangible products, and is often referred to as brand loyalty. In the 1960s and 1970s, various researches were conducted on brand loyalty and tended to focus on the issue of constructing definitions and measurements based on quotation from Kim (2003). The concept of consumer loyalty is also extended to service companies that usually provide intangible products. Experts believe that service loyalty constructs are different from brand loyalty.

Based on the literature, it defines loyalty to services consists of three different dimensions, but interconnected. Loyalty to services is defined as the degree to which a consumer exhibits repetitive purchasing behavior of a service provider, has a positive attitude toward the company, and considers only to use the company when the need for such services arises.

2.9. Bio-fertilizer

Based on the literature, fertilizer is defined as a material to improve soil fertility that provides nutrient elements for plants. Fertilization is a very effective way to increase the production and quality of crops. Fertilizer is necessary for agricultural crops so that the crop can provide high results so that crop farming is economically beneficial. The purpose of fertilizer is to supplement the natural supply of nutrients in the soil to meet the needs of the crop, replacing the nutrients lost due to harvesting, washing and so on, and improving poor soil conditions or maintaining good soil conditions for plant growth.

Based on the previous research conducted by Afrianti (2015) in Bogor Regency, he said that the biological fertilizer is a product that always wanted to be used by the respondents. The three most important attributes of respondents in choosing biological fertilizers are quality, price and product content. Other attributes that are also important include brand, ease of use, product availability, attractive ad attributes, and discounts. Bio-fertilizer must have good quality in order to compete with other brands. Likewise with the distribution. Companies need to always pay attention to the distribution of biological fertilizers, in order to avoid scarcity. Consumer approach can be done through farmer groups, to conduct direct promotion, either in the form of demonstration plots or free sampling.

3. Research Methodology

3.1. Research type

This research was conducted in Simalungun Regency, North Sumatera. The selection of research sites was done purposively based on the consideration that Simalungun Regency is the biggest marketing area of Sinarbio biological fertilizer.

This research used quantitative approach by using cross sectional study, which is a research done by studying object in certain time period. The selection of quantitative approaches is based on the consideration to identify, define, and explain the charac-teristics that exist in a target population.

3.2. Population and sample

The population of this research is farmer's consumers in Simalungun district. The total population of agricultural households in Simalungun district is 126,388 households distributed in thirty-one (31) sub-districts in Simalungun district (BPS Kabupaten Simalungun in Figures, 2013).

To determine the sample size, we used area sampling technique. This technique was used to determine the sample when the object being studied or the data source is very wide, for example, residents of a country, province or district (Sugiono, 2013). To determine who will be sampled was done randomly or randomly from each area. Seen from the conceptual framework, there were six variables, hence the sample in this study is at 100 respondents. The respondents will be given a questionnaire.

3.3. Data collecting method

Data collection techniques in this study were conducted as follows:

1. Interviews were conducted directly to household consumers in Simalungun district who became respondents in this study.

2. Questionnaires were given to household consumers in Simalungun district who became respondents in this study.

3.4. Data analysis method

In order to analyze the influence of product, price, distribution channel and promotion, to customer loyalty of Sinarbio biofuel by consumer of farmer household in Simalungun district by using intervening variable of customer satisfaction, then a path analysis must be used when using regression analysis (Situmorang and Lutfi, 2012) because the regression model with intervening variable is a multilevel relationship.

Path analysis is used to test the magnitude of the effect indicated by the path coefficients on each path diagram of the causal relationship between X_1, X_2, X_3, and X_4 against Y. The correlation and regression analysis on which the path is based.

3.5. Hypothesis Test

Regression models that have fulfilled the classic assumption requirements that will be used to analyze through hypothesis test, namely:

1. Determination Coefficient

2. Partial Test (T-Test)

3. Simultaneous Test (F-Test)

4. Result

4.1. Marketing mix on customer satisfaction

TABLE 1: Result of simultaneous test of marketing mix on customer satisfaction.

Hypothesis	Exogenous Variable	Endogenous Variable	B	t	Sig.	F	Sig.	Determination Coefficient (R^2)
H1	Customer Satisfactory	Constant	0.378	0.245	0.807	13.890	0.000[b]	0.369
		Product	0.090	1.021	0.310			
		Price	0.231	1.543	0.126			
		Place	0.251	2.410	0.018			
		Promotion	0.294	2.787	0.006			

Source: Processed data (2018).

And the regression equation is:

$$Y_1 = 0.378 + 0.090X_1 + 0,231X_2 + 0,251X_3 + 0,294X_4 + e.$$

The determination coefficient obtained from Table 1 is 0.369, it means that only 36.9% of customer satisfactory variable can be explained by marketing mix variable, the remaining is explained by other factors and error. From the result of F-test, it is obtained the significance level = 0.000 < 0.05, then Ho is rejected and H1 is accepted. This means that marketing mix, which consists of product, price, promotion, and place, is simultaneously and significantly affecting customer satisfaction. While, the partial test or t-test shows that only place and promotion are significantly affecting customer satisfaction and the most dominant variable to affect customer satisfactory is promotion, due to the regression equation.

4.2. Marketing mix on loyalty through customer satisfaction

TABLE 2

Hypothesis	Exogenous Variable	Endogenous Variable	B	t	Sig.	F	Sig.	Determination Coefficient (R^2)
		Constant						
H2	Loyalty	Product	5.239	3.953	0.000	4.513	0.000[b]	0.194
		Price	0.223	2.914	0.004			
		Promotion	−0.133	−1.025	0.308			
		Place	−0.104	−1.125	0.263			
		Product	0.183	1.939	0.056			

Source: Processed data (2018).

And the regression equation is:

$$Y_2 = 5.239 + 0.223X_1 - 0,133X_2 - 0,104X_3 + 0,183X_4 + 0,188Y_1 + e.$$

The determination coefficient obtained from Table 3 is 0.194, it means that only 19.4% of loyalty variable can be explained by marketing mix variable through customer satisfaction, the remaining is explained by other factors and error. From the result of F-test, it is obtained the significance level = 0.000 < 0.05, then Ho is rejected and H1 is accepted. This means that the marketing mix, consists of product, price, promotion, and place, is simultaneously affecting loyalty. It indicates the rise and fall of the loyalty level is determined by the level of marketing mix, which consists of product, price, promotion, and place, with loyalty. The result of t-test exhibits that partially the most dominant variable affecting loyalty is customer satisfaction and product. The most affecting one is product, due to its regression equation.

5. Discussion

Based on the results of research, the quality will affect loyalty. Customers are willing to pay more for the quality of this product. Loyalty affects company's profit. In this case, price is not a dominant factor of consumers in buying products. Consumers are more interested in product quality than price. However, the management must also consider prices that are appropriate with the quality of the product. So does with the factor of place or distribution channel problem. This variable is not the main focus of consumers in buying the product.

While for promotion, it is also not an important factor to support the creation of consumer loyalty. Promotion is important, but the main quality remains. Additionally,

the thing that affects customer loyalty is customer satisfaction. If the consumer is satisfied with the product offered, he will be loyal to the product. Consumer loyalty is a continuation of consumer satisfaction in using a product and evidence that consumers have a positive attitude toward the product.

By having a high level of customer loyalty, PT Bintang Petani Agro Mandiri (BPAM) will be able to increase the profitability of the company because sales from Sinarbio's own products will increase if customer loyalty improves.

6. Conclusions

1. Test results indicate that product, price, distribution and promotion variables simultaneously have a significant effect on customer satisfaction.

2. Test results indicate that product variables, prices, distribution channels, promotion and customer satisfaction simultaneously have a significant effect on customer loyalty.

3. Test results indicate that the indirect effect of marketing mix variables are product, price distribution and promotion of customer loyalty through variable satisfaction. So the first hypothesis is accepted.

4. Test results indicate that there is a direct influence of marketing mix variables of the product to the loyalty of consumers. Where the better the quality of the product, the more loyal this product is used by the customer.

7. Suggestions

1. PT. Bintang Petani Agro Mandiri can provide inputs for producer of Sinarbio bio fertilizer that is PT Kayaku to always improve and maintain product quality so that it can produce good quality product, because based on the research, the main focus influencing the decision to buy Sinarbio product is product quality and customer satisfaction.

2. It is expected that the company focus on improving customer satisfaction, so that users increasingly educated by the existing products, feel satisfied to use the product properly and in accordance to the rules so as to obtain satisfactory results in accordance with expectations, so that customer loyalty will also be achieved and product sales also more increasing.

3. It is better to identify the influence of other variables besides price, product, distribution channel and promotion that can influence customer satisfaction and loyalty to Sinarbio biological fertilizer.

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