

ANALYSIS OF DEVELOPMENT STRATEGY OF OIL PALM SEEDS MARKET

Eben Haeser Sembiring (Department of Management, North Sumatra University)

Amrin Fauzi (Department of Management, North Sumatra University)

Isfenti Sadalia (Department of Management, North Sumatra University)

Email: eben.haeser.sembiring@gmail.com

Abstract—The objective of this study was to analyze the marketing strategy of oil palm seeds based on the seeds' quality, assessing the factors that affect consumers' decision in choosing oil palm seeds and recommend alternatives of superior oil palm seeds. Samples consist of 50 respondents who represents 50 oil palm companies in North Sumatra. Respondents were determining by using purposive and simple random sampling. The survey was conducted by direct interview with each respondent. Management of PT Timbang Deli Indonesia (PT TDI) has conducted the marketing mix of product, pricing, distribution and promotion without any data of the effectiveness. Therefore, a scientifically conducted study is required to understand the issues which affected the expansion of sales areas. It will help PT TDI to measure the marketing mix and its influence on the decision, satisfaction and customer loyalty. This study shows that there is a significant influence on the product, price, distribution, and promotion of the decision. Product quality and promotion has a very significant effect on the decision of purchasing. Based on this study, the company must promote the seeds by emphasizing the quality (especially yield and early return of investment). In addition, promotion by presenting the seeds' information and encouraging the candidate customers to visit the demonstration plot of the seeds is a very effective way to win the customers' heart. Furthermore, aftersales service is one of the strategies which will distinguish PT TDI from other seeds producers to win the market, especially in North Sumatra.

Keywords— *marketing mix, decision, satisfaction, loyalty*

I. INTRODUCTION

Oil palm is one of the biggest plantation crop planted in Indonesia. In fact, the oil palm industry has grown rapidly in the past 20 years in Indonesia. It is planted either by company or smallholders. One of the most important factors in oil palm plantation is the seed quality. The seeds with high yielding potential and

resistant/tolerant to main pest and disease should be possessed by the superior seeds. Higher yield will generate higher revenue per ha per year.

Verdant Bioscience (or known as PT Timbang Deli Indonesia) is one of the oil palm seeds producers in Indonesia. The company collaborates with Dami Oil Palm Research Station (DOPRS) of New Britain Palm Oil Limited (NBPOL), Papua New Guinea, in selling the oil palm seeds. The superior oil palm seeds produced by NBPOL were released by the Indonesian Ministry of Agriculture in May 2010. Therefore, the seeds are available through Verdant Bioscience in Indonesia. The trademark of the seeds is SuperFamily oil palm seeds.

The SuperFamily seeds are the latest variety released by NBPOL in Indonesia. It has several superior characteristics which distinguish the SuperFamily from other oil palm varieties in Indonesia. It has been proven that this variety can reach yield 15 ton/ha/year on the second year after planting. In addition, the percentage of oil extraction rate is 29% (on average) and the palm kernel yield approximately 6%. The main oil palm disease, Ganoderma, never occurs in plantations planted with SuperFamily seeds.

The current sales trend of SuperFamily seeds in Indonesia is still very limited and under the targeted sales number. In fact, these superior seeds are less sold compared to other oil palm varieties which were released by NBPOL in the last 20 years. Therefore, Verdant must investigate the cause of the declining sales, especially the marketing strategy to increase the sales and loyalty of the customers.

One of the marketing strategies which will able to influence the SuperFamily oil palm seeds purchase is the use of marketing mix. This includes product, price, distribution channel and promotion. A proper marketing mix strategy will have a positive impact on customers' satisfaction, which will ultimately affect the customers' loyalty in purchasing the seeds. Therefore, an appropriate marketing mix strategy is needed to help Verdant in serving the target market, especially in the mid to high level of market competition.

The purpose of this study was to analyze the marketing strategy of oil palm seeds based on seed

quality (product), price, distribution channel and promotion. Furthermore, this study also assesses the factors that affect consumers' decision in choosing oil palm seeds and recommends alternatives of superior oil palm seeds.

II. LITERATURE REVIEW

A. Marketing strategy

According to Kotler (2005), marketing strategy is a concept that explains decision-making, analysis and marketing issues, emphasizing on organizational rather than functional views. The role of marketing changes along with awareness of the importance of customers for a company. Based on the definition of marketing, it can be concluded that the marketing process aims to satisfy consumers. The key to achieving 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 competitors.

B. Marketing mix

Marketing mix is a tool for marketers that consists of various elements of marketing programs that need to be considered for the implementation of a 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 in the 4P product marketing mix: product, price, place (distribution) and promotion. Some recent studies have a six-factor 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 chosen segment (differentiated market).

C. Product

According to 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, aftersales service, brand, company name, and satisfaction value.

D. 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 and Casterella (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.

E. 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.

F. 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's activity to provides information, persuades and reminds others of the company and the products produced in the hope that the other party takes action and purchases the company's products. In order for promotional activities to be successful, promotion should be planned first.

G. Customer Satisfaction

Customer satisfaction can be defined as an evaluation of customers' awareness and love of goods or services that have been provided them by a particular producer. Satisfaction is influenced by the expectation level of service quality (Cronin & Taylor as cited in Birgelen et al., 2006). Customer satisfaction is a result of the comparison between the expectation of the product or service and the fact that one receives 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) in 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).

H. 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 a 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 as consisting of three different but interconnected dimensions. Loyalty to services is defined as the degree to which a consumer exhibits repetitive purchasing behavior of a service provider, has a positive attitude towards the company, and considers only to use the company when the need for such services arises.

I. SuperFamily Oil Palm Seeds

Oil palm seed is the most important factor which affects the success of an oil palm company. The genetics inside the seeds will respond to all factors such as agronomy practices, fertilizer, pest, disease, rainfall and the climate which will stimulate the seeds' potential.

The SuperFamily oil palm seeds have a highest yield potential amongst other oil palm seeds in the market. This seeds' quality is the most important factor for customers in deciding to purchase the seeds. Distribution and availability are the other two factors which affect the customer's decision. In addition, the availability of aftersales service and demonstration plots are an important part of marketing strategy of the oil palm seeds.

J. Hypothesis Development

In a previous observation conducted by Husaini (2017) in Indonesia, he found that the customers always complain about the high price of the oil palm seeds. On the other hand, the distribution channel and the seeds quality are the most important factors affecting the customers' decision in buying the seeds. In contrast, Nelson (2018) stated that price has no significant effect on the customer's decision to buy the seed. According to him, the most important factor for the oil palm seeds market is the seed quality (product) and the promotion. Therefore, this research analyzed the most important factor and evaluated factors which have the most

significant effect on customers' decisions to buy the oil palm seeds, especially in North Sumatra region.

K. Hypothesis Statement

H₁: Product quality, Price, Place and Promotion have a significant effect on customers' satisfaction on purchasing oil palm SuperFamily seeds from PT Timbang Deli Indonesia.

H₂: Product quality, Price, Place and Promotion have a significant effect on customers' loyalty on purchasing oil palm SuperFamily seeds from PT Timbang Deli Indonesia.

III. RESEARCH FRAMEWORK



Fig 1. Research Framework

IV. METHODS

A. Research Type

This research was conducted in North Sumatra Province, Indonesia. The main reason of the selection of the research site is because Verdant is located in North Sumatra. In addition, many oil palm plantations companies are located in North Sumatra. Therefore, this province is the biggest target market for SuperFamily seeds.

This research used quantitative approach by descriptive study, which means that it is done by studying the object in a certain period of time. This approach will identify, define, and explain the characteristics that exist in a targeted population.

B. Population and sample

The population of this research is *Gabungan Pengusaha Kelapa Sawit (GAPKI)*, North Sumatra. This organization consists of oil palm plantation companies and farmers in North Sumatra, with total number of 83 companies covering 600,000 ha area of oil palm plantation.

Probability sampling technique will be used to determine the sample size. This technique helps 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. The number of companies for the sample is 50. The name of the company will be taken randomly from the list of GAPKI Sumut members. The respondents in each company will be given a questionnaire.

C. Data collecting method

Data collection techniques will be conducted as follows:

1. Interviews will be conducted directly to each company sample from GAPKI Sumut members who became respondents in this study.
2. Questionnaires will be given to each company sample from GAPKI Sumut members who became respondents in this study.
3. Documentation study.

D. Data analysis method

In order to analyze the influence of product, price, distribution channel and promotion on customer loyalty of SuperFamily oil palm seeds by oil palm company as GAPKI Sumut members, the data will be analyzed by using intervening variable of customer satisfaction. Path analysis will be used by using regression analysis to identify the multilevel relationship.

In addition, path analysis will be 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_1 and Y_2 . The correlation and regression analysis will be used on which the path is based.

The indicator and measurement scale are used to facilitate this study. The analysis and discussion of variables used in this study are as follows:

1. Product (X_1)
2. Price (X_2)
3. Place (X_3)
4. Promotion (X_4)
5. Satisfactory (Y_1)
6. Loyalty (Y_2)

E. Hypothesis test

Regression models that have fulfilled the classic assumption requirements that will be used to analyze the hypothesis test, namely: Determination Coefficient, Partial Test (T-Test) and Simultaneous Test (F-Test).

V.RESULTS AND DISCUSSION

A. Marketing mix effect on customer satisfaction

Table 1. Result of simultaneous test of marketing mix effect on customer satisfaction.

Hypothesis	Exogenous Variable	Endogenous Variable	B	t	Sig.	F	Sig.	Determination Coefficient (R ²)
H ₁	Customer Satisfaction	Constant	0.316	0.236	0.817	12.980	0.000 ^b	0.346
		Product	0.087	1.012	0.304			
		Price	0.314	1.452	0.116			
		Place	0.263	2.318	0.026			
		Promotion	0.398	2.689	0.036			

(Source: processed data (2019))

The regression equation is: $Y_1 = 0.316 + 0.087X_1 + 0.314X_2 + 0.263X_3 + 0.398X_4 + e$.

The determination coefficient is 0.346, which means that only 34.6% of the customer satisfaction variable can be explained by the marketing mix variable, the remaining is explained by other factors and error. From the result of F-test, significance level = $0.000 < 0.05$ is obtained, thus, H_0 is rejected and H_1 is accepted. This means that marketing mix, which consists of product, price, promotion, and place, simultaneously and significantly affects customer satisfaction. However, the partial test or t-test shows that only place and promotion significantly affect customer satisfaction and the most dominant variable to affect customer satisfaction is promotion, due to the regression equation.

B. Marketing mix effect on loyalty through customer satisfaction

TABLE 2. RESULT OF SIMULTANEOUS TEST OF MARKETING MIX EFFECT ON CUSTOMER LOYALTY.

Hypothesis	Exogenous Variable	Endogenous Variable	B	t	Sig.	F	Sig.	Determination Coefficient (R ²)
H ₂	Customer Loyalty	Constant						
		Product	5.132	3.651	0.000	4.442	0.000 ^b	0.146
		Price	1.431	2.830	0.005			
		Promotion	0.112	1.021	0.318			
		Place	0.102	1.216	0.259			
		Product	0.238	1.862	0.063			

(Source: processed data (2019))

The regression equation is: $Y_2 = 5132 + 1.431X_1 - 0.112X_2 - 0.102X_3 + 0.238X_4 + 0.143Y_1 + e$.

The determination coefficient obtained is 0.146, which means that only 14.6% of the loyalty variable can be explained by the marketing mix variable through customer satisfaction, the remaining is explained by other factors and error. From the result of the F-test, significance level = $0.000 < 0.05$ is obtained, thus, H_0 is rejected and H_1 is accepted. This means that the marketing mix, which consists of product, price, promotion, and place, is simultaneously affecting loyalty. It indicates that 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 one most affecting is product, due to its regression equation.

Based on the results of research, quality will affect loyalty. Customers are willing to pay more for the quality of this product. Loyalty affects a 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 as well as the factor of place or distribution channel problem. This variable is not the main focus of consumers in buying the product. For promotion, it is also not an important factor to support the creation of consumer loyalty. Promotion is important, but quality remains the main factor. 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 towards the product. By having a high level of customer loyalty, PT TDI will be able to increase the profitability of the company because sales from the SuperFamily oil palm seed will increase if customer loyalty improves.

VI. CONCLUSION

Based on this study, the test results indicate that product, price, distribution and promotion variables simultaneously have a significant effect on customer satisfaction. In addition, it also indicates that product variables, prices, distribution channels, promotion and customer satisfaction simultaneously have a significant effect on customer loyalty. Furthermore, the test results also 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. It also indicates that there is a direct influence of marketing mix variables of the product to the loyalty of consumers, whereby the better the quality of the product, the more loyally this product is used by the customer.

ACKNOWLEDGMENT

Thank you to the Director of PT Timbang Deli Indonesia who provided the marketing data of SuperFamily oil palm seeds. Furthermore, thank you to the chief of GAPKI Sumut who provided all the company names list and contact persons in North Sumatra. And, as the most important part of this research is the oil palm companies' representatives as respondents, thank you for your cooperation and attention during this research. Last but not least, thank you for Prof. Amrin Fauzi and Dr. Isfenti Sadalia for their supervision during this research. The opportunity given by ICOI 2019 to present and publish this research is much appreciated.

REFERENCES

- [1] Basiron, Y. 2007. Palm Oil Production Through Sustainable Plantations. *European Journal of Lipid Science and Technology*, 109(4).
- [2] Birgelena, Marcel van., Jong, Ad de., & Ruyter, Ko de. 2006. Multi-channel service retailing: The effects of channel performance satisfaction on behavioral intentions. *Journal of Retailing*, 82 (4), 367-377.
- [3] Cravens, D. W. 2000. *Strategic Marketing*, 6th edn. Sydney: Irwin McGraw-Hill.
- [4] Cronin, J., & Taylor, S. A. 1992. *Measuring Service Quality: A Reexamination and Extension*. *Journal of Marketing*, 56, 55-67.
- [5] Fitzherbert, E.B., Struebig, M.J., Morel, A., Danielsen, F., Brühl, C.A., Donald, P.F., & Ben Phalan, B. 2008. *How Will Oil Palm Expansion Affect Biodiversity? Trends in Ecology & Evolution*, 23(10), 538-545.
- [6] Hartley, C.W.S. 1967. *The Oil Palm*. London: Longmans, Green and Co. Ltd..
- [7] Kotler, P. 2005. *Manajemen Pemasaran*, Terjemahan: Hendra Teguh, Ronny A. Rusli dan Benjamin Molan. Edisi Milenium. Penerbit PT. Indeks, Jakarta.
- [8] Keller. 2012. *Marketing Management*, 14th edn. New Jersey (US): Pearson Prentice Hall.
- [9] Lamb, C. W., Hair, Joseph F., and Mcdaniel, Carl. 2001. *Pemasaran. Edisi Pertama*. Jakarta: Salemba Empat.
- [10] Maizura, I., Rajanaidu, N. Zakri, A.H., & Cheah, S. C. 2006. *Assessment of Genetic Diversity in Oil Palm (Elaeis guineensis Jacq.) using Restriction Fragment Length Polymorphism (RFLP). Genetic Resources and Crop Evolution*, 53(1), 187-195.
- [11] Pearce, J A., & Robinson, R.B. 1997. *Strategic Management. Formulation, Implementation and Control*. 7th edn. New York: McGraw Hill.
- [12] Santoso, S. 2000. *SPSS Versi Mengolah Data Statistik Secara Profesional*. Penerbit PT. Elex Media Komputindo, Jakarta.
- [13] Saputra, H. 2008. *Analisis Pengaruh Strategi Bauran Pemasaran Terhadap Keputusan Pembelian Teh Celup Sariwangi Oleh Konsumen Rumah Tangga di Kota Medan*. Tesis. Program Magister Ilmu Manajemen. Fakultas Ekonomi. Universitas Sumatera Utara, Medan.
- [14] Sekaran, U. 2003. *Metodologi Penelitian Untuk Bisnis*. Jakarta: Salemba 4.
- [15] Setiowati, B. 2007. *Analisis Strategi Bauran Pemasaran Pada Perusahaan Jasa Freight Forwarding: Rencana, Implementasi, dan Evaluasi Kebijakan yang Mempengaruhi Kinerja Pemasaran*. Tesis. Program Magister Manajemen. Universitas Diponegoro, Semarang.
- [16] Walker, Paul L., and Casterella, Jeffrey R. 2000. *The Role of Auditee Profitability in Pricing New Audit Engagements*. *AUDITING: A Journal of Practice & Theory*: March 2000, Vol. 19, No. 1, pp. 157-167.