Potato Chips Market Positioning Analysis Based on Consumer Perception in Small Medium Enterprises

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ABSTRACT

This paper studied the important attributes that will be considered by consumer and to analyze market positioning of four potato chips Small Medium Enterprises based on consumer perceptions. The methodology used Multi Dimensional Scaling by questionnaire based on variable marketing mix. The result showed that the most important attributes can be grouped as follow: for product variable consist of taste and deliciously, for price are appropriate price on product quality and achievable price, for distribution are product availability and strategic market location, and for promotion are interested advertising and advertising media used. Based on consumer perceptions, the market positioning followed this structure: *market leader*, *market challenger*, and *market follower*.

Keywords: Small Medium Enterprises, consumer perceptions, market positions.

INTRODUCTION

Small and medium enterprises (SMEs) in Indonesia are very important for employment creation and are important sources of economic growth and foreign currencies. It is therefore not a surprise that SMEs receive ample attention in Indonesia. In recent years, particular attention has been paid to development of SME clusters (Tambunan, 2005). Batu city have several Small Medium Enterprises (SMEs) was potentially developed is potato chips industry. According to the data from local authority, there were only two SMEs in the year of 2002 with total annual selling volume were 9000 kg. This number had significantly increased to 21 units in 2008 with total selling volume close to 339.900 kg per year. This growing number of small business, not only indicated that the potato chips business is very potential, but also showed how the market of this product developed.

There are four SMEs that were initially identified as an active and develop enough, that are Cita Mandiri, Gizi Food, Leo, and Rimbaku. Each of them has total annual selling volume at 10.500 kg, 21.500 kg, 5.760 kg and 8.250 kg, respectively. All of them continually improve their products in order to increase their total selling volume. But, they also realize that the more potato chips small business exist, the more competitive market formed. Knowing their market position will help them to get their actual condition in the market and give them valuable information for planning a basic marketing strategy.

Positioning is an important element of marketing strategy because it is immediately relate to marketing diffusion of an organization. The variables of marketing diffusion, which are called as 4Ps (Products, Price, Place and Promotion), are commonly used as a basic strategy to increase the market, including the positioning. Those variables will be used in certain way to develop a consumer perception about the product. According to Winta and Irawan (2005), perception is one of consumer valuation to the resemblance between products. This perception directly affects to the willingness of consumer for buying and consuming the product. Thus, by measuring a consumer perception on certain product, we can predict how well the positioning of that product in the market. MDS (Multi Dimensional Scaling) is one of method which used to know *positioning* of a product. The advantage MDS (Multi Dimensional Scaling) is can to drawing map position of product by virtue of similar or not similar (Wahyudian, Ujang, and Hartoyo, 2003). The purpose of this studied which are to identify the important attributes that will be considered by consumer in buying and consuming potato chips. Next to analyze market positioning of four major potato chips SMEs based on consumer perceptions.

MATERIALS AND METHODS

This research used non-probabilistic sampling technique, by applying *judgment sampling* technique. The population are consumer of potato chips either man or women with the age of 17-56 years old that ever bought and consume potato chips in Batu region. There was no existing data about the number of population, so that the sample size was completely determined by using linier time function amount of 80 samples. The analysis of data use factor analysis and Multi Dimensional Scaling are divided by:

A. Factor Analysis

Factor analysis in the principle is to reduce the data which is process to summarize amount of attribute base of consumer perception. The steps of factor analysis are below:

1. Component selection is chosen attribute, which suitable to bring in analysis factor. This factor analysis tested with *Barlett's test* or KMO (*Keiser Meyer Oliver*) are index which used to test the appropriate factor analysis. Sample has accepted if the value of KMO $\geq 0,5$.
2. Determining factor amount. This step is use with *determination based on Eigen* value method where only

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factor which has Eigen value more than 1 that will be used. Whereas *Eigen value* factor under1 is not included in the model. *Eigen value* indicate relative importance of each factor in calculate the variety of 5 components which has been analyzed.

3. Component categorization in the factor. After determine the amount of factor than going to component categorization to fill in the factor.

B. Multi Dimensional Scaling (MDS) Analysis

From factor analysis result is going to be obtained some attributes which will be used as basic to *Multi Dimensional Scaling* (MDS) *Analysis* .Steps in *Multi Dimensional Scaling* (MDS) Analysis are:

1. Stating number of potato crispy branded duo, the duo number of potato crispy will be compared by using formula n = n [(n-1)/2], n = branded number. In this research, there are four brands which will be compared (Cita Mandiri, Gizi food, Leo, Rimbaku) which can be decided to branded duo number, those are six duos.

2. Stating Input Data
   Data which processed in analysis about consumer's perception to resemble and not resemble of potatoes crispy which are compared. Assignment criteria which is done by using likers scale 1 to 5

3. Stating Dimension Number

To interpretation easily position map, this will be formed to use two dimensions in perception map

4. Giving Dimension Name
   In giving dimension name based on assessment or rating which has been yielded by respondents to attribute which has been offered

5. MDS Analysis Result
   Data processing with MDS method is done to know or describing position to branded product based on resemble of the objects. From the analysis can be obtained result is rivalry position which will show position each branded based on consumer perception

RESULTS AND DISCUSSION

From validity test result, research instrument by using correlation formula *product moment* obtained arithmetic r value with question item is higher than table r (α = 0,05). It means every question items is considered valid (Sugiyono, 1999). For reliability test result by using *Alpha Cronbach* technique known that all variables have *alpha* (α) reliability confession is higher 0,6. It means that every variable is called as reliable (Arikunto, 2006).The result of factor analysis as shows that Sample will be received if KMO value $\geq$ 0,5. Result of every variable test can be seen at Table 1.

Tabel 1. Factor Analysis Result

No	Variable	KMO Value	Explanation Skill
1	Product	0,691	72,188 %
2	Price	0,582	82,637 %
3	Distributed Channel	0,612	89,827 %
4	Promotion	0,558	83,789 %

KMO value of every variables above 0,5. So, the variables can be processed more. To see the existence of attribute which is taken out, it can be seen factor quality value of every attributes at Table 2.

Table 2 Factor Quality Value of Every Attribute

| Variables	Attributes	Explanation	Factor Quality
X1	X1.1	Deliciously	0,905
	X1.2	Taste	0,935
	X1.3	Package appearance	0,641
	X1.4	Package size variation	0,867
	X1.5	Well known branded	0,904
	X1.6	Taste variation	0,600
X2	X2.1	Difference price and branded	0,868
	X2.2	Achievable price	0,875
	X2.3	Sold price	0,817
	X2.4	Price with product quality	0,960
X3	X3.1	Easy to get product	0,947
	X3.2	Shop service	0,705
	X3.3	Location of sold strategy	0,969
	X3.4	Product stock	0.972
X4	X4.1	having *personal selling*	0,865
	X4.2	Interested advertising	0,974
	X4.3	Discount	0,763
	X4.4	Advertisement media used	0,973
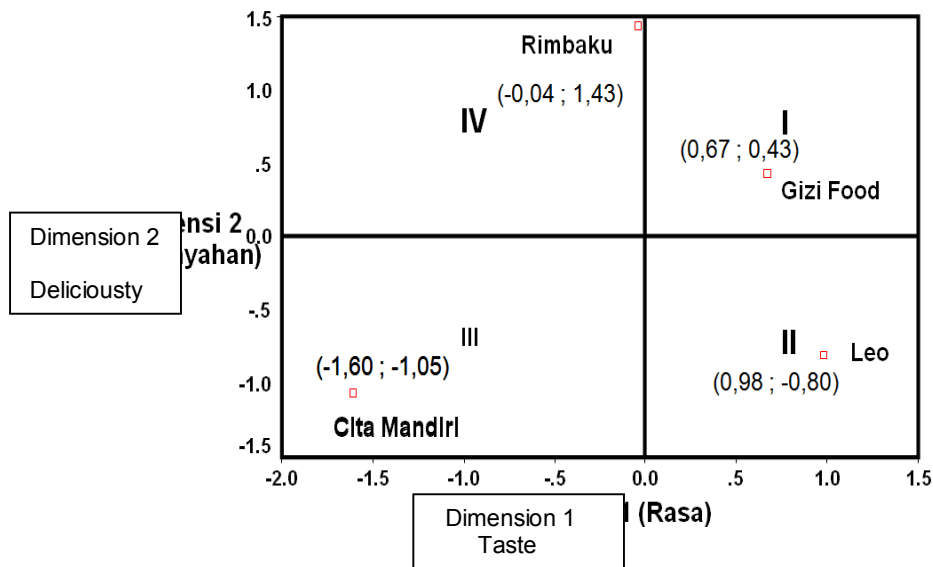
Figure 1 Product Perception Map

Based on figure 1 about product perception map known that quadrant I occupied at Gizi Food. Quadrant II is occupied by Leo. The branded comes near the highest figure of dimension I, which can be compared the third branded (Gizi Food, Leo, Rimbaku). Leo potato crispy is more quality in taste attribute.

Quadrant III is occupied at Citra Mandiri potato crispy. A Rimbaku potato crispy is in a place quadrant IV. Rinbakau potato crispy is called as excellent at deliciously attribute of the third branded (Cita Mandiri, Gizi Food, Leo).
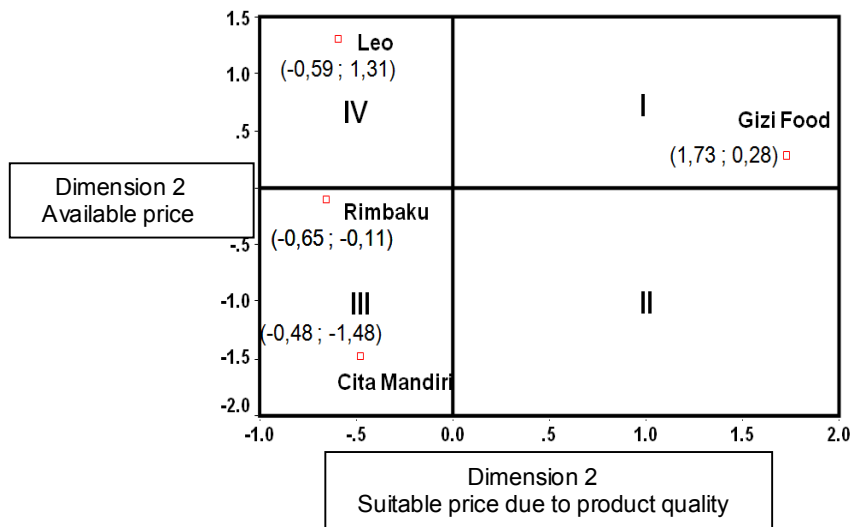

Figure 2 Price Perception Map

Figure 2 shows that potato crispy branded of Gizi Food is in a place at quadrant I, which this branded has big power at price attribute with product quality and achievable price. Quadrant I is not in a place by the other potatoes crispy. However, at Quadrant

III is in a place Rinbakau potato crispy branded and Cita Mandiri. Its mean both of branded of potatoes crispy have weakness in price with product quality and achievable price. For quadrant IV is in a place Leo.
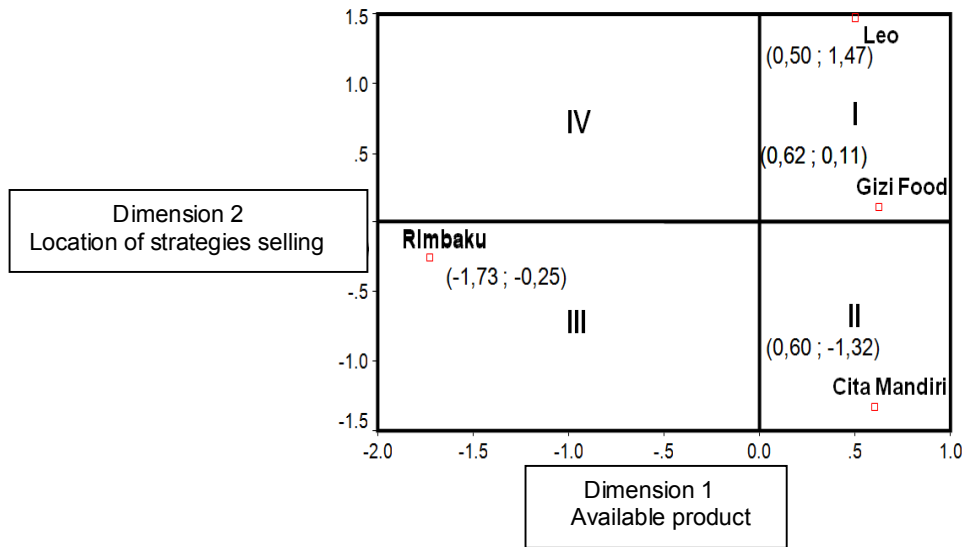
Figure 3 Distributed Perception Map

Figure 3 shows that quadrant I is in a place Leo and Gizi Food, it means that both of this branded have special quality in dimension I attribute and dimension II. Cita Mandiri is excellent in dimension I, nevertheless, in dimension II is weak. This matter, Citra Mandiri is in a place quadrant II and Rinbakau is in a place quadrant III, it means the branded has weakness in product availability attribute and strategy sold location. In dimension IV there is no branded which is mapped.
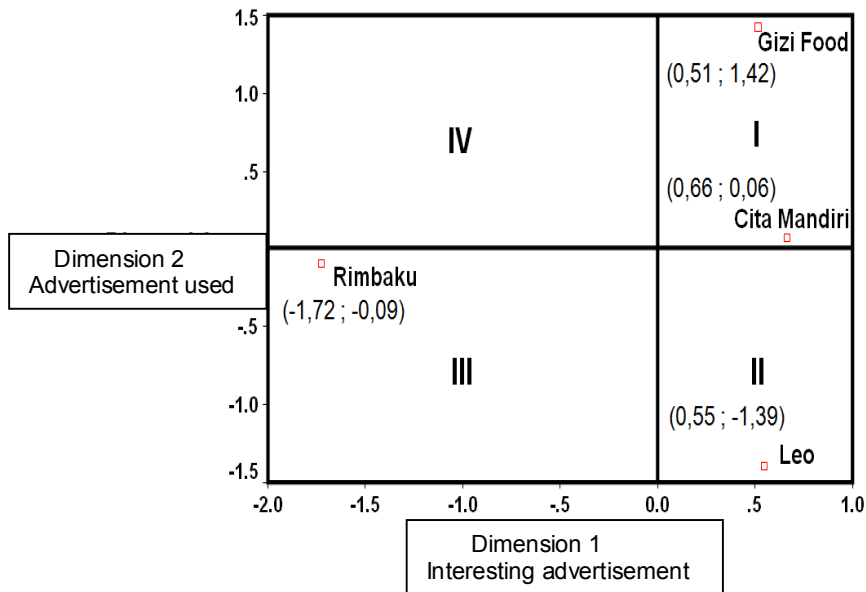

Figure 4 Promotions Perceptive Map

Figure 4 shows that promotion variable perceptive map of Gizi Food and Cita Mandiri is in a place quadrant I. both of the branded has special quality in interested advertisement attribute and advertised branding are used to. In dimension I, Citra Mandiri is higher than Gizi Food. It's mean that advertising which is used to attract consumer buying the product than Gizi Food. Quadrant II is in a place potato crispy branded of Leo, its mean the branded is weak in advertising attribute is used, nevertheless it has special quality in attracting of advertise attribute. For quadrant II is in a place potato crispy branded of Rinbaku, its mean the promotion is done still less, because it in dimension I grade and two negatives. For quadrant IV there is no branded which is mapped.

To know the competitor position of the fourth branded of potato crispy based on 4P variable can be seen at figure 9. Knowing that potato crispy of Cita Mandiri is spread in quadrant I, II, and IV, for potato crispy of Rimbaku is spread in quadrant III and IV. Be sides that, it can be known also potato crispy branded which quality based on arrangement and rating of every marketing variables at Table 3.

Based on Table 3 show that competition position which builds from the fourth potato crispy chips brand can be tell that Gizi

Food as *market leader*, Leo as *market challenger*, Rimbaku and Cita Mandiri as *market follower.* Gizi Food potato crispy chips have special quality in price variable and distribution, in promotion variable and product able to firm compete with another brand. However in picture 9 can be sent that brand taken place on quadrant I, with the result that can be tell based on those 4 variables still able taken placed rivalry position in market and has the sale mean per year 21.500 kg with market share as many

as 46,73%. From the respondents know that Gizi Food is the potato crispy chips brand that most often to bought that is 35% and from the research survey mostly center of gift outlet in Batu area sell those product. Besides that is able to reach out of city market even out of island. According to Lubbis(2004), that to reach position as market leader, the firm usually lead another firm in price exchange, new product introduction, distribution area and big promotion intensity.

Table 3 Rating Merek of Potato Chips based on Marketing Mix Variables.

Variable	Attribute	Brand
Product	Taste	1. Leo 2. Gizi Food 3. Rimbaku 4. Cita Mandiri
	Deliciously	1. Rimbaku 2. Gizi Food 3. Leo 4. Cita Mandiri
Price	Suitable price as quality	1. Gizi Food 2. Cita Mandiri 3. Leo 4. Rimbaku
	Achievable price	1. Leo 2. Gizi Food 3. Rimbaku 4. Cita Mandiri
Place	Product availability	1. Gizi Food 2. Cita Mandiri 3. Leo 4. Rimbaku
	Location of strategies selling	1. Leo 2. Gizi Food 3. Rimbaku 4. Cita Mandiri
Promotion	Interesting advertisement	1. Cita Mandiri 2. Leo 3. Gizi Food 4. Rimbaku
	Advertisement that used (internet, radio, brochure)	1. Gizi Food 2. Cita Mandiri 3. Rimbaku 4. Leo

Leo crispy chips role as *market challenger,* based on table 10 those potato crispy chips only has special quality in product variable, nevertheless on variable price distribution and promotion still enough able to compete wit another third brand. Even has the mean of sale per year less than Cita Mandiri and Rimbaku that is 5.760 kg with market share 12,52%, but based on respondent perception of Leo potato crispy chips able to taken place in this position because be on quadrant I,II, and IV. From the psichgorephy data known as many as 28,75% respondent often bought that potato crispy chips, where the market is centralized in Batu city. Until can be tell that Leo's potato crispy chips has potential to compete with Gizi food's potato crispy chips and able to dominating the market. According from Andriani (2004), that the action that common that usually to do to the market challenger express by decreasing price, merit service that better and add the appearance of product. On the firm that play as market challenger can attack the market leader and competitors in a business to take part of market and using resource which more small and better (Lubis,2004)

In positioning of *market follower* is placed by potato crispy of Cita Mandiri and Rimbaku. Table 3 shows that potato crispy of

Cita Mandiri has special quality in promotion variable, nevertheless the weakness in the third variable (Product, Price, and distribution). From the fourth of the potato crispy branded of Cita Mandiri has *market share* 22,82% with the sold average per year is 10.500 kg. In psychographic data is known that 20% respondents always buy the potatoes crispy. From table 10 potatoes crispy of Rimbaku is able to compete in product variable, in the other variable is not able to compete, because it has low rank. The potato crispy has *market share* is 17, 93% with the sold average per year is 8.250 kg.

In psychographic data is known 16, 25% respondents always buy the potato crispy. According to Jauch (2000), *market follower* is prefer offering the similar things by following the product which is leaded by the company and trying to adjust the company of marker leader as many as possible of market segmentation and also marketing spread area.

The strategy which can be used by Gizi Food to consistent defending position in market is maintaining and increasing the product quality, price, product distribution and also promotion. To replace position which is better in strategic market which is usually done by Leo is doing intensive promotion activities by

using many kind of media. The strategy which can be used by Cita Mandiri is increasing product quality especially in taste sides and deliciously, also in stating price which is adjusted with market price and ability of bought society, for Rimbaku is stating sold price, maintaining product stock, and increasing promotion activities.

Conclusions

The attributes which become consumer's consideration in buying and consuming of potato crispy is product variable (taste and deliciously), price variable (the price adjust product quality and achievable price), distribution variable (product stock and strategic sold location), promotion variable (interested advertising and advertise which used (internet, radio, and brochure).

Competitor position which formed of the fourth potato crispy branded (Cita Mandiri, Gizi Food, Leo, Rimbaku) based on consumer's perception by using MDS method and attribute approach is potato crispy branded of Gizi Food as *market leader*, Leo as *market challenger,* Cita Mandiri and Rimbaku as *market follower*.

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