

# ANALYSIS OF MILLENNIAL MOMS' SEGMENTATION AND PERCEPTUAL MAPPING OF INFANT FORMULA MILK MARKET IN JAKARTA

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## ABSTRACT

The purpose of this research was to explore factors that influenced the millennial moms in making decision to purchase infant formula product and to use these factors as a basis to determine the segmentation of millennial moms in the formula milk industry as well as the making of perceptual in formula milk industry in Jakarta. The used method was content analysis for the exploratory study whose data were collected through in-depth interviews, cluster analysis and cross tabulation, as well as multidimensional scaling for descriptive research which data was obtained through the questionnaire. The obtained results indicate factors that affect the millennial moms in selecting a formula milk, are price, nutrition, word of mouth, no side effects, taste, commercials, good result, brand loyalty, the recommendation from doctors, pure ingredients, compatibility with the child's body, random trial and error. In addition, there are four market segments of millennial moms in infant formula milk market in Jakarta. There are medical-concern moms, well-educated moms, experience-based moms and random-trial moms. Last, the perceptual mapping of formula milk brand in Jakarta shows five groups of brand according to the dimensions of economy-class of formula milk (economic vs premium) and variants of formula milk (plain vs. flavor).

**Keywords:** millennial moms, buying decision, behavioral segmentation, perceptual mapping

## INTRODUCTION

Along with the times, the growth of the dairy industry in Indonesia has increased by 20 percent each year, while the infant milk production grows 25-30 percent per year (Priyadi, 2008). However, if it is viewed from the business prospect for the powdered milk or formula milk industry in Indonesia and the state of Indonesia as the fourth largest population country the world, it will be a good business opportunity for formula milk industry to enter the Indonesian market with diverse market segmentation. Each segment of mothers from low-grade, medium to upscale need a formula that is best for their child. Moreover, in line with the planning of innovative marketing strategy such as interesting product packaging, it can dominate

Indonesian formula milk market. Table 1 shows the data of market share of eight top brands in formula milk with the largest amount of sales volume from 2013 to 2015 in Indonesia.

The main target of infant formula milk industry at the moment is the mothers in 'Y' generation or millennial moms. Over the past two decades, 'Y' generation or millennial mom has become an important part of market segment (Noble, Haytko, & Phillips, 2009). According to Goggin *et al.* (2014) in Gunawan and Muchardie (2015), millennial moms are defined as the mothers who were born in 1978 to 1994. Currently, 21% of millennial moms have discretionary purchases which are estimated more than 1 trillion dollars in direct purchasing power, and greatly affect the older generation (Butler, 2014). In addition,

within ten year period, 80% of the millennial moms will have a family, and 83% of new moms have been categorized in this age group. By doing so, it can be said that this age group is a large segment with greater spending power (Baby Center, 2014). The women, who belong to millennial mom generation, use social media more than mothers in general, and they utilize the technology to help them to manage their lives. It makes this generation get information more easily related to the formula milk for their children on the Internet.

Table 1 Top Brands of Formula Milk in Toddler Category

Formula Milk Brand	Percentage of Sales Volume
SGM	36,7%
Lactogen	17,5%
Bebelove	13,2%
Morinaga BMT	11,6%
Frisian Baby	5,9%
Nutribaby	5,6%
S-26	3,7%
Enfamil 1	2,0%

(Source: Secondary Data from Nielsen Indonesia, 2015)

Nielsen, Michaelsen, and Holm (2013) proved the existence of the concentration of women in providing good consumption for their children and considering the consumption of what is good for children. Added by Sim, Glanville, and McIntyre (2011), that most of the food management in the family or decisive decisions in managing food is determined by the mother. In connection with it, the ease of accessing information for millennial moms is accompanied by the many offered infant formula milk products in the market, and this makes millennial moms confused in selecting the best formula milk for their children. That is because the development of the consumption of formula milk is increasing. Therefore, the competition in the formula milk industry in issuing the best infant formula milk products is also increasing to reap the market segment of formula milk for mothers who have children.

Because the development of infant formula is increasing, the variety of products from the brand, price, and package are also increasing. For example, there is various flavor of formula milk like plain, chocolate, vanilla, and honey. The offered price is also different ranging from approximately Rp50.000,00 to Rp250.000,00. Different product variations cause the mothers to be selective in choosing formula milk for their children. Since each child has a different body characteristic, the child should consume formula milk based on their needed nutrition as well as their compatibility to the consumed formula milk. However, the information of the formula milk that has been shown through advertising and other social media by marketers to consumers often makes consumers confused to choose which the best milk is

for their children. Hence, the selection should be done carefully and thoroughly.

Schiffman and Kanuk (2009) stated that human being had to be confronted with decisions that they would choose every day. In general, the decision is a choice of various options between two or more alternatives. In other words, when a person takes a decision, the decision comes from alternative options that have been determined. This is what the researchers want to find out the factors that influence the decision of the millennial moms in choosing alternatives to the existing formula milk.

Moreover, Peter and Donnelly (2014) defined segmentation as the process of dividing a market into groups of similar consumers, and selecting the most appropriate group(s) for the company to serve. Its purpose is to enable the company to concentrate its effort on pleasing one group of people with similar needs, rather than trying to please everybody and probably ending up pleasing nobody (Blythe, 2012). Every generation is not alike, nor they should be treated by marketers in the same way (Williams & Page, 2011). For example, the buying process of the baby boomers generation begins with the consumer trust in retailers who provide advice in choosing the right product, where as the millennial generation begins with the product selection (Parment, 2013). Despite millennial moms form a potential market segment, Butler (2014) mentioned that millennial moms were not a homogeneous group. This is in line with the exploratory research that has been conducted by previous researchers that the millennial moms' shopping behavior cannot be uniform due to the diversity of characteristics, both demographic and psychographic. Regarding academic, the previous research by Mafini, Dhurup, and Mandhlazi (2014) that produced a typology of millennial moms in spending on apparel market. However, the researchers have not found the other studies that focus on segmenting millennial moms in Jakarta on formula milk market.

While, positioning is related to the brand relationship with other brands aimed at the same segment. Positioning is the place that the brand occupies in the minds of potential customers compared to other brands (Blythe, 2012). Added by Cravens and Piercy (2012), segmentation is an important tool in strategic marketing, which is linked with choosing market targets and positioning against alternatives to building competitive advantage. Hence, it is necessary to identify the millennial moms' segmentation and draw the competitive mapping of the infant formula milk market based on the factors of purchase decision that have been explored in advance to provide appropriate treatment for each segment.

The purposes of this study are to explore the factors that influence the millennial moms in making purchasing decisions of formula milk (P-1); to use these factors as a basis to determine the segmentation of millennial moms in formula markets (P-2); and to know the perceptual mapping on the formula milk industry in Jakarta (P-3). Thus, the results of this

research are expected to provide benefits for marketers of formula milk products for infants in identifying how the market segmentation is based on millennial moms' consumer behavior; and how the positioning of the major players in the market for infant formula milk in Jakarta is so it can formulate appropriate marketing strategies to reach the intended target market.

## METHODS

There are two types of used research method, which are explorative research (P-1) and descriptive research (P-2 and P-3). The used data collection techniques are in-depth interviews (P-1) and questionnaires (P-2 and P-3). The unit of analysis investigated is the millennial moms (mothers who born in 1978 and 1994) in Jakarta and have children who consume milk formula. The sampling technique used for exploratory research is the convenience sampling with 20 respondents based on the statement of Malhotra (2010) that sample numbers in qualitative research is the small size of unrepresentative cases. While the sampling technique used for descriptive research is simple random sampling with 100 respondents that are derived from the sampling formula of the unknown population.

The analytical method is content analysis to answer P-1. The implication of content analysis in research and marketing strategy is to identify variables and indicators in the research (Mayring, 2000). While, cluster analysis and cross-tabulation are used to answer the P-2, as said by Malhotra (2010) that cluster analysis was a class of techniques used to classify objects or cases into relatively homogeneous groups called the cluster. Finally, Multidimensional Scaling (MDS) is used to answer the P-3. According to Schmidt and Hollensen (2006), multidimensional scaling is the appropriate method to assess product positioning in the market segment.

## RESULTS AND DISCUSSIONS

From the results of the exploratory study by using the word-in-context analysis, 13 factors that influence the purchasing decisions of infant formula milk by millennial moms are obtained. Table 2 summarizes these factors along with the indicators, which will then be used as the determinant variables of segmentation in descriptive studies.

Furthermore, after performing quantitative data processing with cluster analysis and cross-tabulation methods, the segmentation results of millennial moms in infant formula milk market in Jakarta is obtained and can be seen in Table 3 and 4.

Table 2 Purchase Decision Factors of Infant Formula by Millennial Moms

Factors	Cluster			
	1	2	3	4
Price	2,3	2,9	4,0	2,2
Nutrition	1,9	4,3	4,1	3,4
Word of mouth	1,8	2,7	4,0	2,1
No side effect	2,4	2,9	4,1	3,1
Taste	2,3	3,3	4,0	3,4
Brands switching	2,4	3,6	3,0	4,0
Advertising	1,5	3,7	2,5	2,0
Good result	1,9	3,8	4,4	3,6
Brand loyalty	1,9	2,9	4,0	3,2
Recommendation from doctors	4,0	3,0	2,3	2,0
Pure ingredients	1,4	4,7	3,5	3,4
Compatibility	4,1	3,6	4,0	1,5
Random trial error	1,8	2,7	2,8	3,6

Table 3 Final Cluster Centers

Variable	Indicators
Price	a. Affordable price b. Lower price than brand competitors
Nutrition	a. Good nutrition for children b. High protein for children
Word of Mouth	a. Recommendation from family b. Recommendation from other mothers who also buy the formula
No Side Effect	a. No side effect b. Side effects from the use of the previous brand
Taste	a. Preferred taste by children b. Varioustaste
Brand Switching	a. Incompatibility of previous brand usage b. Better usage of current brand than the previous one
Advertising	a. Attractive display of ads b. Ads of promising benefits
Good Result	a. The increasing of development of child's body b. desired child development
Brand Loyalty	a. Previously using the brand b. Uninterest to try other brands
Recommendation from Doctors	a. Recommendation from doctors b. Examination to doctor to avoid allergies
Pure Ingredients	a. Undangerous content of milk b. Natural milk ingredients
Compatibility with Child's Body	a. Compatibility with Child's Body b. Not causing digestive problems for children
Random Trial Error	a. Not staying on a specific brand b. Always wanting to try new brand

(Source: SPSS Output)

Table 4 Segmentation of Millennial Moms on Formula Milk Market in Jakarta

Segment	Medical-concern Mom	Well-educated Mom	Experience-based Mom	Random-trial Mom
Variables	- Recommendation from doctors  - Compatibility with child's body	- Nutrition  - Advertising  - Pure Ingredients	- Price - Word of mouth - No side effect - Taste - Good result - Brand loyalty	- Trial error   - Brand switching
Age of moms	25 - 28	35 - 38	35 - 38	21- 24
Age of kids	0 - 1	3 - 5	3 - 5	1 - 3
Occupation of moms	Housewife	Housewife	Housewife	Professional
Kids consu-mption / month	Rp500.000,00– Rp1.000.000,00	Rp1.000.000,00 – Rp3.000.000,00	Rp1.000.000,00– Rp3.000.000,00	Rp500.000,00 – Rp1.000.000,00

(Source: SPSS Output)

First, the segment of medical-concern mom is a segment of mothers who concentrate on medical matters such as the physical health of children and just listen to doctor's recommendation. This segment belongs to mothers whose age is 25-28 years as housewives with 0-1 year children, and the average children consumption expenditure per month is around Rp500.000,00 - Rp1.000.000,00 which means this segment is for relatively new mothers who just have a child and do not have experience in taking care of children. Therefore, in this segment, the mothers are considering the doctor's recommendation as the best for her first child. The implication for marketers who target this segment as the key target market that they should apply strategy by partnering with doctors in marketing the formula milk products to support the promotion. In addition, the product packaging and advertisements displayed should convey the message that infant formula products have been recognized by pediatricians or based on doctor's recommendation.

Second, well-educated mom segment is mothers who have much knowledge about how to raise children and what are the best contents for the child to be consumed. This segment belongs to mothers whose age is around 35-38 years and occupation as housewives with children aged 3-5 years, and the average children consumption expenditure per month is around Rp1.000.000,00 - Rp3.000.000,00 implying that the mothers prefer to focus on natural ingredients and nutrients for the children aged 3-5 years due to the rapid growth. Thus, the mother provides the best content and nutrition for the child. Such behavior is also influenced by the factors of milk ads that they watch. It encourages and teaches the mothers to provide the best nutrition for their children. For marketers who target this segment as a key target market, they can use a strategy to invite potential target market for educational seminars to share the benefits and the importance of content and nutrition on formula milk for children, to increase the new content and nutrition which is good for the health and development of children, and to show the exhibition for innovation of dairy product in new content or nutrition.

Third, experienced-based mom segment is a segment for mothers who have repeatedly parented for years and based on experiences that have happened before. The third segment is classified as mothers aged 35-38-year housewives who have a child whose age is 3-5 years with the average consumption expenditure per month is around Rp1.000.000,00 - Rp3.000.000,00. It is because the mothers have experience in taking care of the child, and tend to use particular formula milk brand which is similar to the previous children. The mothers use the same brand of milk because of the mothers' experiences with their previous children like the use of brand A in first child, having no side effects, the satisfied development of the child's body, the preferred taste of milk from brand A by the children. The Selection of the brand of milk in this segment is also influenced by two factors. First, it is the word of mouth where the mother chooses formula milk based on recommendations from other mothers or family. The second factor is the price because the average expenditure for consumption of children is quite much, the mother is likely to provide the best formula which is relatively expensive. Then, it is also because the mothers think that when the price is relatively expensive, then the product will have good quality. The implication for marketers who target this segment is they can make a strategy to sharpen the product positioning by maintaining the quality of infant formula milk so that consumers are satisfied with the results of the desired product, increasing brand loyalty on infant formula products that consumers will be more loyal to particular brand, making new innovations in regular basis through marketing campaign that mother and child will have the interaction with the formula milk brand to create brand loyalty, and creating an effective Customer Relationship Management in the form of brand community so that consumers can be gathered while interacting in there.

Four, the random-trial mom segment is for mothers who have a habit to try the latest product randomly and switch from one brand to another brand with a reason of wanting to try as long as the children like it. In this segment, the mothers are around 21-



24 years with professional work and have children aged 1-3 years. The average children consumption expenditure per month is around Rp500.000,00-Rp1000.000,00. It means this segment of young mothers with the professional work are more likely to try the latest products randomly and switch from one brand to another brand. The implication for marketers that can be done is to make milk products with certain advantages that the other product does not have that the mothers in this segment will start to be aware and interested in trying out the advantages of a particular product to prevent the brand switching to another brand. In addition, marketers can create innovations like attractive advertising, new packaging and interesting promotions to attract the attention of consumers in this segment. Setting a competitive price which is cheaper than other brands, and giving attractive promotions such as buy one get one, give bundle price, and give a discount per season are also ways to reach out the customers in this segment.

Table 5 Number of Cases in Each Cluster

Cluster 1	4,000
2	15,000
3	54,000
4	27,000
Valid	100,000
Missing	,000

(Source: SPSS Output)

Table 5, shows that segment 1 (medical-concern mom) consists of 4 people, segment 2 (well-educated mom) is 15 people, segment 3 (experience-based mom) has 54 people, and segment 4 (random-trial mom) consists of 27 people. Among the four segments, experience-based mom segment has the largest size, while medical-concern mom segment has the least number of members. Therefore, it can be said that the most potential segment in formula milk market is experience-based mom.

Regarding the distances between segments, Table 6 shows that the most significant difference is between medical-concern mom segment and well-educated moms. On the contrary, the least different segments are between experience-based mom and random-trial mom. Then, from the four existing segments, well-educated mom is the most stand out segment compared to others.

Table 6 Distances between Final Cluster Centers

Cluster	1	2	3	4
1		8,151	5,062	5,128
2	8,151		3,760	3,996
3	5,062	3,760		2,175
4	5,128	9,996	2,175	

(Source: SPSS Output)

Finally, after processing the data using

multidimensional scaling method, the result shows S-Stress value of 0,001 or 0,1%. It means that the positioning model has the good fit. Hence, the perceptual mapping of infant formula milk market in Jakarta is obtained and can be seen in Figure 1.

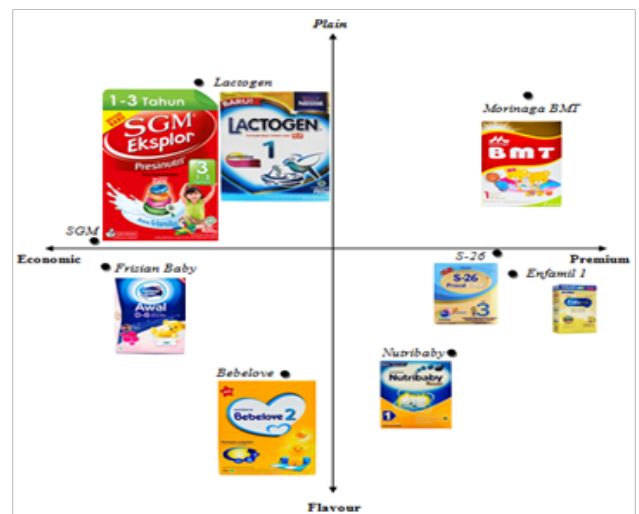


Figure 1 Perceptual Mapping of Formula Milk Brands in Jakarta (Source: Authors)

Based on the dimensions of formula milk in economy class (economic-premium) and variants of formula milk (plain-flavor) in the landscape of the formula milk brand competition, there are five groups of formula milk brand that resemble each other. Group 1 is SGM and Frisian which get the position as economic class milk where the price is relatively cheap for the middle-class market segment. This group is suitable for the segment of random-trial moms, who are classified as the segment with average to low spending for the needs of the child or in other words, tend to look for formula milk with economic prices.

Group 2 is Bebelac which is considered as economic class milk, which is still regarded cheap and also has a considerable variety of flavors like vanilla, honey, chocolate, and plain. This group is suitable for the segment of experienced-based moms. It is because various flavors become one of the considerations in choosing formula milk products in this segment.

Group 3 is S-26, Enfagrow, Nutrilab that are considered as premium class milk which is relatively expensive compared to other milk brands and are suitable for the upper-middle class to the upper-class market segment. This is suitable for well-educated moms who are classified as a segment having high average expenditure and tend to choose products without considering the price for the children needs and emphasize the content of good nutrition for children.

Group 4 is Morinaga Chill Kid that is classified as premium class milk since its price is relatively expensive and suitable for upper-middle and upper class market segment, but the nutrient content is not

complete as group 3. This group is also suitable for well-educated moms who has a high average expenditure and tend to choose products without considering the price and emphasize the good nutrition for children.

Group 5 is Lactogen. This is positioned as economic class milk that is still relatively cheap and suitable for the middle-class market segment, but it does not have various flavors. It only has plain flavor. The group is suitable for the segment of medical-concern moms who has low to average consumption expenditure for the child that the price becomes the determinant to choose the formula milk. Group 5 only has the plain flavor which is appropriate for medical-concern moms segment because one of the main factors of this segment is the compatibility with the child's body, which plain flavor is a suitable taste for all children.

## CONCLUSIONS

From the explorative study, it obtains factors that affect the millennial moms in selecting a formula. There are the price, nutrition, word of mouth, no side effects, taste, commercials, good result, brand loyalty, the recommendation from doctors, pure ingredients, compatibility with the child's body, and random trial error. Based on those factors, the cluster analysis generates four segments of millennial moms in Jakarta in the market for infant formula milk. There are medical-concern moms, well-educated moms, experience-based moms and random-trial moms. Finally, in the perceptual mapping of the formula milk industry, there are five groups of brands perceived by consumers based on the dimensions of formula milk economy-class (economic vs premium) and formula milk dimensional variant (plain vs flavor). The result of this research is restricted to millennial moms' behavior in Jakarta regarding formula milk consumption and the variables used as segmentation basis are obtained from qualitative research. The suggestion for next research is the researchers can do quantitative research to test the segmentation variables in a wider scope.

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