

The Preference and Prospects of Sugar Needs in Micro, Small and Medium Enterprise Industries of Food and Beverage in Surabaya City

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This purpose of this research is to learn about the preference and prospect of need for granulated sugar to the MSME (Micro, Small, and Medium Enterprises) industries of food and beverage in Surabaya City. A qualitative research type was used in this research. The subjects in this research are three informants, which are the MSME Industries of Food and Beverage; and one informant which is an active sugar producer. The analytic techniques used is this qualitative analysis are reduction, display, conclusion drawing/verification. The result of this research shows that the attribute of taste preference became the most important factor for consumers in buying sugar products with points in the amount of 20. Then the second most important preference attribute is health, with 19 points. Then followed price as third most important attribute with 17 points. The physical looks attribute is placed in fourth most important with 15 points. Texture also earned eight points as the fifth most important. And aroma as sixth most important with seven points. The conclusion of this research is that the most important attributes in influencing consumer preferences of MSME Industries of Food and Beverage in choosing sugar products are: sweet tastes, healthiness (natural sugar material), the prices appropriate to its product quality, physical performance such as colour and the brand of sugar, the texture of the sugar which shapes as soft granules, and neutral sugar aromas.

Key words: Sugar preference, foods and beverages industry.



Introduction

The existence of sugar industries in Indonesia holds a vital role for the people of Indonesia and the other industry sectors, as sugar has an important role in human bodies. Besides, sugar is also needed as materials for the MSME Industries of Foods and Beverages and others alike. In the end, sugar needs in the land keeps rising from year to year, sugar imports keep increasing from year to year. So it's ironic that Indonesia, which is an agricultural country became the largest sugar importer country after Russia. The effect of the high sugar imports, has caused more difficulties for sugar factory or firms in competing and surviving, and even for expanding (Masyhuri and Rahayu, 2004).

According to the data of the Centre Statistics Agency (2017), the average number for granulated sugar consumption per capita per week in 2016 was 1,432 ons; this number rises from 2015 which was 1,305 ons per capita per week. This case shows that sugar needs for expanding countries follows on from the increase in the number of people, which causes increases of sugar production.

Together with the rapid growth of the food and beverage industries, the usage of granulated sugar by the MSME industrial group in Surabaya is building several sweetening material or types of preferences and prospects of sugar needs. Sugar is one of the vital commodities in Indonesia. According to descriptions of background above, this research has the purpose of learning the preferences and prospects for granulated sugar needs to the MSME Industry of Food and Beverage in Surabaya City.

Literature Review Theory of Consumer Behaviour

According to Setiadi (2010:2-3), the behaviour of consumers is a direct consumer act to earn, consume, and exhaust the product or service's value, including the decision process which overtakes and finishes the action. To understand the consumers and build a precise marketing strategy, it is a must to understand what they wanted (cognition) and what they feel (influence), what they do (behaviour), and also where (surrounding events).

The consumer's preference in purchasing a product is decided by the consumer's behaviour. Consumer behaviour is a study about the decision process which motivates the consumer to purchase and consume the product (Griffin & Ebert, 2007:289). The factors which affect consumer behaviour (Griffin and Ebert, 2007:289) are:

A. Psychologically, which includes: motivation, perception, capabilities of learning and individual attitude.



- B. Privately, which includes: lifestyle, personalities and economic status.
- C. Socially, which includes: family, leader opinion (people which his/her opinions are accepted by others) and other referenced groups such as friends, working partners, and same-profession partners.
- D. Culturally, such as: culture, subculture and social class.

Consumer Preference

The preference word is a term which means "a greater liking for one alternative over another or others." Assael (2007) suggests that a preference is a liking, choices, or something the consumer likes more. Preference is one of the parameters of the success rate of company marketing to reach its goal, which is a decision of purchase performed by consumers based on consumer preference.

In a viewpoint by Foster (2008:49) about preference a consumer is everyone who acts like their preference. Because of that, there are lots of consumer acts which can be foreseen. Consumer preference over products can be known by deciding the attributes or factors which stick to the product. Those attributes are the factors which in the end can influence people in their consideration to choose a product.

There are 3 basic traits of consumer preference which are:

a. Completeness

Completeness contains understanding, if A and B are two conditions or situations, then everyone must be able to specify which:

- 1) A is preferred over B,
- 2) B is preferred over A, or
- 3) Both A and B are equally preferred.

With this base everyone is assumed to never doubt in deciding choices, because they know which is better and which is worse, and therefore can always determine the choice between two alternatives.

b. Transitivity

Transitivity if A and B are conditions or situations, then everyone must be able to specify which:

- 1) A is preferred over B,
- 2) B is preferred over A,
- 3) Both A and B are equally preferred.



With this base everyone is assumed to never doubt in deciding choices, because they know which is better and which is worse, and therefore can always determine the choice between two alternatives.

c. Continuity

Continuity is when someone states to prefer A over B, this means every condition below the A choice is preferred over conditions below B.

Consumer preference analysis is an analysis which aims to learn what the consumer likes and dislikes, also to determine the order of priority of some attributes of the product and even the product itself. Preference analysis will reveal the order of the priorities of product characteristics, like which is most important or most liked.

Sugar

Sugar used for the food and beverage and pharmaceutical industries is refined sugar. Refined sugar in Indonesia comes from domestic refined sugar producers and imports directly carried out by importers who obtain import permits. According to Darwin (2013), sugar is a simple carbohydrate because it can dissolve in water and is directly absorbed by the body to be converted into energy. In general, sugar is divided into two, namely:

a. Monosaccharide

As the name implies, mono which means one, is formed from one sugar molecule. Monosaccharides include glucose, fructose, galactose.

b. Disaccharide

Unlike monosaccharide, disaccharide means that it is formed from two sugar molecules. Disaccharides include sucrose (a combination of glucose and fructose), lactose (a combination of glucose and galactose) and maltose (a combination of two glucose).

Sugar is the main commodity of trade in Indonesia. Sugar is one of the common sweeteners consumed by the community. Sugar is commonly used as a sweetener in food and beverages. In the field of food, in addition to being a sweetener, sugar is also used as a stabiliser and preservative.

Sugar is a simple carbohydrate that is generally produced from sugar cane. But there are also other basic ingredients for making sugar, such as coconut, palm, or palm leaves. The sugar itself contains sucrose, which is a type of disaccharide. Sugar sweeteners are very often found on the market, the most common we use is sugar.



MSME Industry of Foods and Beverages

The Laws in Republic of Indonesia No. 3 Year 2014 about industry, mean industry as a whole form of economic activities which process the materials and/or exploit industrial resources so as to produce products which have more value or use, which is also the industrial services (Millati et al, 2017). The FAO (Food and Agriculture Organisation) in the book by Soekartawi (2000), reveals that some industries uses resources from farming.

The MSME Industry of Food and Beverage is included in the food services industry by the decision of the health minister of Republic Indonesia No 715/Menkes/SK/V/2003. According to industrial and trading department companies of food service industries, this includes firms selling ready to eat foods distributed through orders for celebrations, parties, seminars, meetings, journey packages for haji, public transportation or anything alike (Muhtarom et al, 2019).

Research Methodology Research Type

The research type used in this research is qualitative. This qualitative research can be used to understand social interaction, such as: by using deep interview, clear patterns would be found, so that qualitative research in this research can be useful to provide deep results about preferences and prospects of granulated sugar needs to the MSME Industries of Food and Beverage in Surabaya City.

Research Subject

The informants in this research are:

- (1) Sugar consumers which are the owner of MSME Industries of Food and Beverage in Surabaya City, and
- (2) Sugar Producers.

The subject criteria of this research are:

- (1) MSME Industries of Foods and Beverage:
- (a) Domiciled in Surabaya and nearby.
- (b) MSME operated for 5 years in Surabaya.
- (2) Sugar producers which are experienced and active in producing sugar.

Informants or interviewees of four persons which fulfilled the criteria above are given initials:



- (1) Informant A,
- (2) Informant B,
- (3) Informant C, and
- (4) Informant D.

Data Type and Resources

The type and resources of data in this research is primary data. This primary data is obtained through interview, observation, and documentation carried out with informants in the research about preferences of MSME Industries of Food and Beverage to the sugar products which are measured through its attributes, such as:

- (1) Physical appearance,
- (2) Texture,
- (3) Taste,
- (4) Aroma,
- (5) Awareness on health danger, and
- (6) Price.

Data Analysing Technique

The qualitative data analysis steps in this research are data reduction, data display, and conclusion drawing/verification (Sugiyono, 2014):

- (1) Data reduction: Reducing data is the act of summarising, choosing the main cases, focusing on important cases and searching for the theme and also its pattern. In this reduction, the researcher uses the coding method. Coding is organising text from interview results and looking for the line pattern of the said text, so that will assist the researcher to make text categorization based on theory framework used (Auerbach & Silverstein, 2003).
- (2) Data display: Data display are recorded in the form of short explanation, chart, relation between categories, flowchart, and others alike.
- (3) Verification: In this research, data obtained are in the shape of description which are gained through interview. Earned data would later be processed and interpreted so that the researcher can find and understand the implied meaning from the subject's condition.



Results and Discussion Research Results

The observations and interview results on the four informants in this research about consumer (MSME Industry of Food and Beverage) preferences against sugar product measured through the sugar's attributes, such as:

- (1) Physical appearance,
- (2) Texture,
- (3) Taste,
- (4) Aroma,
- (5) Awareness on health danger, and
- (6) Price.

Can be seen in Table 1.

Table 1: Attribute Preference which Became Consumer's Consideration

Attribute	Description	Value					
		Infor	Infor	Infor	Informant 4	Score	Ranking
		mant	mant	mant			
		1	2	3			
Physical	Colour and the	4	4	4	3	15	4
Appearance	Brand of Sugar						
Texture	Sugar Shape	4	2	1	1	8	5
Taste	Sugar Taste	5	5	5	5	20	1
Aroma	Sugar Aroma	4	1	1	1	7	6
Price	Sugar Price	5	4	4	4	17	3
Health	Awareness of	5	5	5	4	19	2
	the dangers to						
	health						

Source: Data from Interview Result (2019)

Table 1. shows the observation and interview results about factors which influenced consumer's consideration in purchasing sugar products. To learn the most important factor, the researcher arranges the statements that oblige the consumers to sort the factors that are most important according to consumers from number one, which not necessary, up to five points. This rating for most the important factors or written as number one will get five points of rating, number two will get four points, number three will get three points, number four will get two points and number five will get one point.



Table 1. also shows that the preference attribute of taste became the most important attribute in purchasing sugar products with 20 points. The next second most important preference attribute is health with 19 points. Then followed by price with 17 points as third most important. Physical appearance earned 15 points ranked fourth most important. Texture earned eight points as the fifth most important. And aroma earned seven points placing sixth most important.

Discussion

Taste

Taste became the most important factor considered by the consumers in purchasing sugar products. As can be seen in Table 1, taste factor earned the most points in the amount of 20 based on informant rating. Taste became the most important factor, because taste is the number one consumer consideration in purchasing products, as stated by the informant on the interview transcript below:

"If you're talking about a sugar product, basically sweet taste becomes the number one consideration, doesn't it?"

Taste is the form of evaluation of sugar quality which is appropriate to the consumer's taste preference. Consumer evaluation of taste determines the purchase decision later, as explained by the informant below:

"If the taste is not sweet like the general dose, people won't buy, if the taste is sweet like it's the general dose, consumers will keep buying."

The interview transcript above shows that consumers not satisfied with product taste will be disappointed and won't purchase the product again, meanwhile the satisfied consumers will purchase again and again. The survey and interview results show that taste became the main factor for consumers, because taste is the matter that consumers evaluate against the food products and this affects the next purchase decision, so the informant in the research tends to choose sweet sugars. This study matches the research carried out by Pompriang in Lovell (2011), which found that food taste is a factor that affects the product choice.

Health

Health became the consumer's second consideration factor in purchasing sugar products. From Table 1., it can be seen that health became the second consideration for consumers in purchashing sugar products. Consumers will buy products appropriate to the consumer's



preference, where they will look for products by considering which is more economic as explained by what the informant said in the transcript below:

"Because in this era there is lots of disease caused chronically from sugar, for us, the MSME of Food and Beverage don't use artificial sweetening."

As owners of the MSME of Food and Beverage, informants surely consider health from materials of sugar as the main consideration, which can be seen from the transcript above. Consumers made health as a consideration factor because consumers made health as a parameter of product quality. The results of the interview show that consumers, in purchasing sugar products went far by spending more money to get the product with good taste and quality; this case is parallel to the theory revealed by Mullins and Walker (2010:298) that consumer make health an indicator of the product or the service's quality. So in the health preference attribute, consumer tend to choose original sugar material.

Price

Price is the third consideration attribute for consumers in buying sugar products. From Table 1., it can be seen that price became a secondary consideration for consumers in buying sugar products. Consumers will buy the product which is appropriate to their preference, where they will look for the products by considering which is most economic, as explained by the informant on this transcript below:

"This era is a bit difficult for considering which is more economic. But for me, price doesn't mean that much, especially for food sweetening products which includes sugar. Because we clearly know, where there are higher prices the quality will be far better."

As the owner of MSME of foods and drinks, the informant surely considers the product quality as the main consideration, as can be seen from the interview transcript above. Consumers made the price a consideration factor because consumers made the price the parameter of the product's quality. The result of this interview shows that consumers in buying sugar products went far by spending more money to earn the product with good taste and quality; this case is parallel to the theory revealed by Mullins and Walker (2010:298), suggesting that consumers assessed price as a main indicator of product or service's quality. So in the price preference attribute, consumer tends to choose prices which match the product's quality.



Colour and Brand

Colour and brand is a fourth consumer's consideration in buying sugar products. The colour and brand are turned into one of the important factors, because the colour and brand is the consumer's number four consideration in buying sugar products, as described by the informant in the interview transcript below:

"For me the physical appearance of a sugar product can be seen from the colour, and sweet brands become a main consideration."

"If the clean white colour has a sweet taste with a general dose, even if it's not branded, the consumers will keep buying."

The results of surveys and interviews shows that colour and brand became a main factor for consumers, which affects the decision in sugar purchase, so that the informant in this research tended to choose clean coloured sugar and not branded.

Texture

The sugar texture became a fifth consideration for consumers in buying sugar products. The information learned from the informant is in the interview transcript below:

"I prefer the sugar with a soft texture."

"If it was me, the sugar with the texture that looks more hygienic."

The survey and interview results show that sugar texture became one of the considerations in buying sugar, so the informant in the research tended to choose sugar with a soft texture.

Aroma

Aroma became one of the important factors for consumer consideration in buying sugar products, because aroma is the sixth consumer's consideration, as explained by the informant in the interview transcript below:

"I like the sugar with a neutral aroma."

"Neutral sugar aroma shows natural sugar materials."

The results of the surveys and interviews show that sugar aroma became one of the considerations in buying sugar, so that informants in the research tended to choose sugar with a neutral aroma.



Conclusion and Suggestions Conclusion

Based on the results of the research and research discussions in the previous chapter, it can be concluded that some of the assumptions are:

The results of this research show that the most important attribute in affecting consumer preference of MSME Industries of Food and Beverage in choosing sugar products are: sweet taste, health (natural sugar material), price that matches the product quality, physical appearance, which is colour and sugar brand, the texture of sugar which is soft granulated, and sugar with a neutral aroma. The six preference attributes ease the consumers in deciding their next purchase.

Suggestions

The suggestions stated by the findings in this research are:

It is recommended that the next researchers could seek more information deeply related to consumer preference by involving other attributes which haven't been investigated in this research.

Hopefully the next researchers may be able to involve more informants outside the MSME Industries of Food and Beverage of West Surabaya, so that the result can be generalised.

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