

# Analysis of Customer's Attitudes of Tempeh Product in Mataram City

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## ABSTRACT

The research is aimed at determining the customer's attitude towards product tempeh of Mataram city, which is produced at Pejeruk Abian. The research is descriptive which using sample survey method. In order to answer the problem proposed, the analytical tool is Ideal-Point Model. The model measures a difference between what is desired and what is perceived by consumers. The result of this study shows that consumers provide a very good assessment to the existing attributes. It means that customer's attitude to the product is very good which is in accordance with consumer's desire.

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## 1. INTRODUCTION

Today, small industries are expected to act as a buffer for the national economy. This is because small industries will open up job opportunities and try bigger. Small food processing industries have contributed to the national economy with the ability of these industries to absorb labor and the value of production produced. The three sub-sectors that contribute the largest production value are the food, beverage, and tobacco industry sectors.

SMEs in the food sector, one of which is the tofu and tempeh industry in general is small and medium scale. Based on the Central Statistics Agency, around 38% of soybeans in Indonesia are consumed in the form of tofu and tempeh products. Along with the increasing population of Indonesia, the domestic demand for tofu and tempeh products in the last decade experienced growth. However, around 2017, tofu and tempeh consumption decreased nationally. Especially tempeh, the decline in consumption began in 2017 to 2019. However, in 2020 – 2021 it showed an increase in consumption even though it has not returned to the national consumption level in 2016. (National Socioeconomic Survey, 2022).

Indonesian people make tempeh as daily consumption food. These foods are well known and can be reached by all levels of society. Soybeans which are raw materials for tofu products, in addition to containing protein, also contain iron, calcium, vitamins A, B, B1, and B2 (Cahyadi, 2007: 13).

Tempeh consumption will affect the survival of the soybean processing industry, as is the case in Mataram City which has several soybean-based food processing industries. There are several places in the city of Mataram that are centers of soybean-based industries (tofu-tempeh), namely the Abian Body area and the Kekalik Jaya area, Tempit, Pejeruk Abian, and several other areas. Each

region has a different number of business units and contributions. Of the several soybean-based industrial MSME centers, one area that has been developing tempeh production for quite a long time is Pejeruk Abian, which has a large enough share in tempeh production in the city of Mataram.

Research on consumer attitudes is instrumental in helping companies to know the things that consumers want. Consumer attitude is an important factor that will influence consumers in making purchasing decisions on a product. Consumer attitudes arise, influenced by consumer confidence and evaluation of the benefits of a product. Not only the product is a consideration for consumers to purchase, but also the attributes or characteristics that complement the product.

Based on this background, researchers are interested to see how the consumer attitude of Pejeruk Abian tempeh products, which is one of the leading products in the city of Mataram. The author takes the title "Customer's Attitudes of Tempeh Products in Mataram City, a study at the production center of Pejeruk Abian.

## **2. RESEARCH METHOD**

### **Types of Research**

The type of research used in this study is descriptive. This method is called descriptive because this method focuses on a step of solving problems that exist in the present or actual, then the data collected is first compiled, explained and then analyzed (Surakhmad, 1998: 140). The purpose of descriptive research is to make a systematic, factual and accurate description, picture or painting of the facts, properties and relationships between the phenomena investigated.

In this case, descriptive research is used to get an idea of consumer attitudes towards the superior product of the city of Mataram, namely tempeh Pejeruk Abian.

### **Research Location**

In a study of Pejeruk Abian tempeh consumers, researchers chose 3 traditional markets. Researchers chose three markets as the location / place of research, the first is the Ampenan market, this market was chosen because the location of this market is in the center of tofu production whose products are studied. The second is the Kebon Roek market because it is a group A (large) market where sellers and buyers gather in / outside the city of Mataram, and the third is the Dasan Agung market, because it is located in the middle of a settlement within the city of Mataram.

### **Respondent Determination**

The population in this study is all consumers of tempeh products who come to make purchases of Pejeruk Abian tempeh in one of the three markets. The respondent determination technique used in this study is purposive sampling, namely sampling according to the purpose of the study. When viewed as a person who happens to be met is suitable as a data source based on the criteria in choosing respondents are as follows:

1. Consumers who come to the Pejeruk Abian tempeh sales location and make a purchase.
2. Adults, here adults are categorized as 17 years old and over or married, researchers assume respondents aged 17 years understand the questions asked. Respondents are decision makers in purchasing tempeh.
3. The assumption in relation to respondents is that in making decisions, consumers know and can evaluate the attributes contained in tempeh products.

Because the number of members of the study population is not known exactly, the number of eating samples taken for the study was as many as 100 people. This number has met the minimum number of samples between 30 and 500 as stated by Roscoe in Wibisono (2003: 55). The determination of the sample size is also in accordance with Guilford's opinion (1987: 125) which states that the research sample includes a number of elements (respondents) that are greater than the minimum requirement of 30 elements or respondents.

### **Data Collection Methods**

In this study, the method used was a survey sample. According to Nazir (2005: 325), the survey sample method is a method that only takes a portion of the population as a sample. The

reason for using the sample survey method in data collection is because the population size is unknown.

### Data Collection Techniques and Tools

#### Data Collection Techniques

The data collection techniques used are:

1. Interview techniques, namely data collection techniques by way of questions and answers with respondents. In this study, data were collected regarding respondents' or consumers' responses to Pejeruk Abian tempeh products.
2. Observation techniques, namely data collection techniques by making observations and recording directly on the object of research. In this study about how consumer attitudes towards packaging, taste, nutritional content, and promotion of Pejeruk Abian tempeh products.
3. Questionnaire technique, which is a data collection technique by asking a list of questions or statements in writing to respondents and is the primary data source.

#### Data Collection Tools

The data collection tool used in this study is a questionnaire, which is a collection of questions compiled by researchers to collect information according to the problem studied. The questionnaire used in this assessment uses the Likert Scale 5 alternative answers (scale 5) (Djarwanto and Subagyo, 2006) among others:

Totally agree	= score 5
Agree	= score 4
Neutral	= score 3
Disagree less	= score 2
Disagree	= score 1

#### Variable Identification

Based on the problems posed, the variables can be identified, which are as follows:

1. Evaluation, regarding attributes (ei). The variable attributes are: packaging, price, taste, nutritional content, and promotion of tempeh products.
2. Belief, that the object has an attribute (bi), while the variable attributes are: packaging, price, taste, nutritional content, and promotion of tempeh products.
3. Consumer attitude towards objects (Ao).

#### Data Analysis Procedure

According to Sumarwan (2003: 164), to determine consumer attitudes towards tempeh products, the *Ideal-Point Model* is used. The analysis procedure used in the study is as follows:

1. To find out consumer confidence in tempeh products, consumers are asked to provide an assessment of the nature of attributes as consumers actually feel about tempeh products which are assessed on a scale of 1 to 5.

Consumer confidence in attributes can be calculated by the formula:

$$X_i = \frac{\sum(nXSkala)_i}{\sum n}$$

Where

$X_i$  = Consumer trust in attribute i

Scale = The reality of attribute I on the actual product is perceived according to consumers who are rated on a scale of 1-5

n = Number of respondents

2. To find out the ideal properties desired by consumers for tempeh products, then using the Consumer Ideal Quality Analysis of tempeh product attributes, which can be calculated by the formula:

$$K_i = |I_i X_i|$$

Where:

$K_i$  = Ideal Quality of Consumer Against Attribute I

$l_i$  = Ideal performance of consumers against attribute I

$X_i$  = Consumer confidence in attribute I

3. To find out consumer attitudes towards tempeh products, it uses *The Ideal-Point Model*, which can be formulated as follows:

$$Ab = \sum_{i=1}^n W_i |l_i - X_i|$$

Where:

Ab = overall attitude towards the importance that respondents give to attribute i

Wi = The degree of importance given by respondents to attribute I

li = Ideal Consumer Performance of Attribute I

Xi = Consumer Trust in Attribute I

n = Number of attributes evaluated by consumers

Consumer attitude criteria are assessed using a numerical linear scale with the formula:

$$x = \frac{\sum W_i (l_i - 1)}{\text{Skala}}$$

Numerical Linear Scale:

0 ≤ Off < x Excellent

x ≤ Off < 2x Good

2x ≤ Off < 3x Neutral

3x ≤ Off < 4x Bad

4x ≤ Off < 5x Very bad

### 3. RESULTS AND DISCUSSIONS

#### Consumer Importance Analysis

Decision making made by consumers in purchasing a product will consider the attributes that exist in a product. Consumers who buy tempeh will consider attributes according to their importance. The attributes attached to tempeh products will be an attraction for consumers to make purchases. To find out consumer attitudes towards Pejeruk Abian tempeh products, it must be known about the level of consumer importance to the attributes attached to the tofu product.

**Table 1. The Level of Consumer Interest in the Product Attributes of Tempeh Pejeruk Abian**

No.	Attribute	ST (1)	HCMC (2)	C (3)	PT (4)	SPT (5)	Total	N	Wi	Rang- king
1	Price			5	10	85	480	100	4,80	2
2	Taste			2	8	90	488	100	4,88	1
3	Color			15	11	74	459	100	4,59	6
4	Aroma			7	13	80	473	100	4,73	3
5	Shape			17	10	73	456	100	4,56	7
6	Texture			10	13	77	467	100	4,67	4
7	Nutritional Content			15	10	75	460	100	4,60	5

Source: primary data processed

Information:

ST : Very Unimportant

HCMC : Tidak Penting

C : Quite Important

PT : Important

SPT : Very Important

N : Number of Respondents

#### Analysis of the ideal quality of consumers of abian orange tempeh products.

Analysis of the ideal quality of a product is used to measure the extent of the gap between the ideal performance / ideal properties desired by consumers with the reality that exists in a product.

Analysis of the ideal quality of Abian Body tempeh products is intended to describe whether the attributes attached to the product are appropriate or not in accordance with consumer wishes. Analysis of the quality of Pejeruk Abian tempeh products can be seen in the following table.

**Table 2. The Ideal Quality of Pejeruk Abian Tempeh Product**

No	Attribute	Ideal (Ii)	Consumer Confidence (Xi)	Ii – Xi
1	Price	4,41	4,09	0,32
2	Taste	4,31	3,93	0,38
3	Color	4,55	3,70	0,85
4	Aroma	4,52	3,80	0,72
5	Shape	4,55	4,10	0,45
6	Texture	4,50	3,90	0,60
7	Nutritional Content	4,25	4,12	0,13

Source: primary data processed

From the table above, it can be known the ideal quality of consumers against the attributes of tempeh Pejeruk Abian. The attribute that best suits consumer desires is nutritional content, followed by price, taste, and shape. While the attributes of texture, aroma, and color have not been ideal or have not met consumer desires.

The nutritional content attribute is the attribute that best meets the ideal nature of consumers with the smallest difference in value of 0.13. This means that the nutritional content is in accordance with their wishes, but the nutritional content is not a top priority for consumers to buy products, but only the fifth order.

The second attribute that meets the ideal nature or meets the consumer's desire is price, with a difference in value of 0.32. Consumers argue that the price of tempeh is still affordable and in accordance with consumer purchasing power.

The next attribute is taste, it has also fulfilled the ideal nature of consumers. The difference in value between ideal properties and reality on the product is 0.38. This shows that the taste attribute has fulfilled the ideal nature or is in accordance with consumer desires. Consumers argue that Pejeruk Abian tempeh products have a distinctive and savory taste. Taste is the main consideration factor for consumers buying these tofu products.

The next product attribute that already meets the ideal properties for consumers is form. The shape of tempeh has fulfilled the ideal properties according to consumers. The difference in value between ideal properties and reality on the product is 0.45. However, the shape of tempeh products is not an important consideration factor for consumers in buying these products, but is a final consideration factor.

Attributes that have not met the ideal properties for consumers are the texture, aroma, and color of the product. The difference between ideal and reality properties in each attribute is 0.60, 0.72, and 0.85. Consumers argue that they prefer tempeh products that have a chewy and soft texture, as well as a delicious aroma that affects the taste of tempeh. Consumers also want tempeh products that do not use artificial colors and preservatives (chemicals), and if necessary use natural preservatives (such as waru leaves).

#### **Analysis of customer's attitudes towards Pejeruk Abian tempeh products.**

Marketers must be able to find out consumer tastes that are reflected in attitudes by giving an assessment of the products they use. This attitude puts him in a mindset to like or dislike a particular product.

Consumer attitudes have ideal product criteria, the closer a product is to the ideal, the better its position. In Pejeruk Abian tempeh products, various attributes are taken into consideration by consumers when making purchases such as price, taste, color, aroma, shape, texture, and nutritional content. Consumer attitudes towards these attributes can be seen in the following table:

**Table 3. Consumer Attitudes Towards Pejeruk Abian Tempeh Product**

No.	Attribute	Importance (Wi)	li – Xi	Wi/li – Xi
1	Price	4,80	0,32	1,728
2	Taste	4,88	0,38	1,5844
3	Color	4,59	0,85	3,9015
4	Aroma	4,73	0,72	1,842
5	Shape	4,56	0,45	2,052
6	Texture	4,67	0,60	2,0081
7	Nutritional Content	4,60	0,13	0,548
	Sum			13,764

Source: primary data processed.

The criteria for consumer attitudes towards Pejeruk Abian tempeh products are assessed using a numerical linear scale, namely:

$$\begin{aligned}
 X &= 4,80 (4,38 - 1) + 4,88 (4,31 - 1) + 4,59 (4,55 - 1) + 4,73 (4,52 - 1) + 4,56 (4,55 - 1) \\
 &\quad + 4,67 (4,50 - 1) + 4,60 (4,25 - 1) / 5 \\
 &= 16,22 + 16,15 + 16,29 + 16,65 + 16,19 + 16,35 + 14,95 / 5 \\
 &= 112,8 / 5 \\
 &= 22,56
 \end{aligned}$$

The numerical linear scale is:

0 < Ab < 22.56	:Excellent
22.56 < Ab < 45.12	:Good
45.12 < Ab < 67.68	:Neutral
67.68 < Ab < 90.24	:Bad
90.24 < Ab < 112.8	: Very bad

From the table above, it is known that consumer attitudes towards tempeh Pejeruk Abian amounted to 13,764. This means that the attitude of consumers to such products is relatively very good. In other words, consumers give a very good assessment of the attributes that exist in Pejeruk Abian tempeh so that the product is said to be in accordance with consumer wishes. This is shown in the attitude points that are on the highest scale in the numerical linear scale 0 < Ab < 22.56 (very good), meaning that consumer attitudes towards Pejeruk Abian tempeh products are very good or in accordance with consumer wishes.

#### 4. CONCLUSION

The conclusions that can be drawn from this study are: The attributes of products that are in accordance with consumer desires (ideal consumer properties) are nutritional content attributes, followed by price, taste, and shape, while the texture, aroma, and color attributes are not ideal or have not met consumer desires. The attributes that consumers consider buying the highest Pejeruk Abian tempeh are taste, followed by price, aroma, texture, nutritional content, color, and finally shape attributes. Consumer attitudes towards these products are relatively very good, which is indicated by attitude points being on the highest scale in the numerical linear scale. In other words, the Pejeruk Abian tempeh product is in accordance with the wishes of consumers.

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