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DEVELOPMENT OF "CASSIM COFFEE" PRODUCTS THROUGH CONSUMER EVALUATION

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Abstract. Casim Coffe is one of the new local coffee products in Jember Regency. Therefore, this study was conducted to explain the consumers assessment of the quality of Casim Coffe products, so that they can be used as a basis for product development. This study used the descriptive method, Fishbein, Importance Performance Analysis (IPA), and the Customer Satisfaction Index (CSI). The satisfaction index level in Casim Coffee products are 86%, so this result concludes that the customer has felt very satisfied with Casim Coffee products. The Casim Coffes smell, taste, price, expired date, packaging, availability, color, and viscosity were in line with customer expectations. The quality of packaging attributes of Casim Coffee, although not in the spotlight of the customers, can exceed the expectations of customers, but Casim Coffee in the packaging attribute does need to be improved because it gets the lowest rating compared to the other seven attributes.

1. INTRODUCTION

Jember Regency is the district that experienced the most significant development of coffee production in East Java in 2017 with more than 4 times growth, from 4,000 tons per year to 18,000 tons per year. Figure 2 below presents the level of development that occurred from the amount of coffee production in Jember Regency
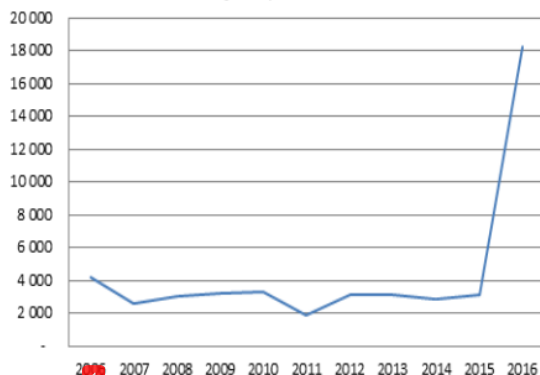

Figure 1. Total Coffee Production in Jember Regency (www.bps.go.id)

The development of coffee growth in Jember is getting higher because more and more coffee farming businesses grow in Jember Regency in producing coffee powder products. One of the coffee farming groups that experiences a large amount of coffee production is the Sumber Kembang coffee farming business group. This farmer group was established in 2017 consisting of several coffee farmers who live around Durjo Village, Sukorambi Subdistrict, which is located around the slopes of Mount Argopuro.

The amount of coffee production in one harvest period for Sumber Kembang farmer groups is as much as 6 tons of logs shape which is then processed into 1.5 net tons per hectare consisting of arabica and robusta coffee in a ratio of 1: 2. Arabica coffee products sold locally consist of Robusta coffee and Arabica coffee of various types, but the type that already has a simple packaging at present is the type of full wash, honey and lanang arabica coffee. These products are sold locally through 10 partners located in Jember, Banyuwangi, Malang, Belitung, Tangerang and Bogor. Meanwhile, Robusta coffee products sold for export are coffee that is still in the form of coffee logs by establishing a partnership with PT. Indocom. The number of sales made each year can generate a turnover of more than 200 million.

The explanation of the coffee business that has been carried out by Sumber Kembang farmer groups shows that Sumber Kembang farmer groups have the potential to develop well, seen from the products produced. Product development is a strategy for growth by offering new or modified products to current market segments [2]. Product development can be done in a number of ways, one of which is through research to improve original quality and modification. The product development process through consumer evaluation has to take a look at several important attributes. The seven important attributes are [3]:

    a. Product quality is one of the main positioning facilities that have a direct impact on product performance.
    b. Product features are competitive advice for differentiating products.
    c. Product style and design not only consider performance factors but also aim to improve product performance, reduce production costs, and increase competitive superiority.
    d. Determination of the brand is the identity of the product maker
    e. Packaging is a product wrapper that can provide advantages if given innovation
    f. Labels are simple markers attached to the product
       Product support services include services to customers.

Therefore, this research wants to help to develop coffee products produced through consumer assessment of coffee products from Sumber Kembang farmer groups. The aim is to get an information base to make improvements to the quality of existing products. The improvement in the quality of this product is later expected to make the level of sales of coffee products from the Sumber Kembang farmer group even more increased. Products that are increasingly developing from Sumber Kembang farmer groups are very important because the product is an important element in the marketing mix of a business. The marketing mix of a business consists of four important elements, namely product, price, place and promotion [1].

Research related to the assessment of coffee products based on consumer perspectives has been done by several studies. The previous studies that were used as a reference in this study are as follows;

Table 1. Previous research

Peneliti	Metode	Hasil
Akbar (2009)	*Informance Performance Analysis (IPA) and Customer Satisfaction Index (CSI)* Analysis	The results showed that Fruit Tea products had the highest level of conformity between consumer interests and product performance, which was 98.93% and the highest level of customer satisfaction was Sosro Tea product with a consumer satisfaction index of 0.742.
Qomariyah *et al* (2014)	Fishbein Method and Importance Performance Analysis	Consumer attitudes toward positive attributes. There are performance attributes that are in quadrants I, II, III, and IV
Utama (2017)	Fishbein Method and Customer Satisfaction Index	Nescafe instant coffee is preferred from Torabika. Both of these coffees provide satisfaction to consumers
Tambunan (2018)	Descriptive, Fishbein Method, Spearman Rank Correlation	Instant coffee is preferred over local coffee powder. Consumer characteristics do not have a real effect on ground coffee

2. METHOD

2.1 Research sites

This research will be carried out in Sumber Kembang farmer group, Sukorambi District, Jember Regency. Sumber Kembang coffee farmer groups are located in Durjo Village, Sukorambi District, Jember Regency. The location of this research is about 21 kilometers from the Jember State Polytechnic Campus.

2.2. Types and Data Sources

Data used in this study are primary and secondary data. Primary data is data obtained directly from research respondents. They are the consumers of coffee "Casim Coffee". Meanwhile, secondary data was obtained from the Farmer Group, the Central Statistics Agency associated with this study. The sampling method used in this study uses the purposive sampling method with the following criteria:

1. Consumers are users of Cassim Coffee products in Jember Regency
2. Consumers are the consumers who consume for a long period of time
3. Consumers have enjoyed Casim Coffee products for at least 3 months

2.3. Data Collection Techniques

The collection of data needed for this research was carried out with several techniques. The data collection techniques used in this study are:

1. Field Survey Method. This method is done as an initial form to find out the conditions and important information at the study site.
2. Questionnaire Method. The purpose of distributing this questionnaire is to get the primary data that will be used as a basis for decision making
3. Interview Method. The purpose of this method is to obtain information and facts and increase trust and clarification of the findings obtained when conducting field surveys.
4. Documentation Method. The purpose of this method is to obtain data that can support primary data that has been obtained from the implementation of the previous method.

2.4. Data Analysis Techniques

This research will conduct an analysis of the consumer satisfaction level assessment of Cassim Coffee products. This study uses 8 types of attributes as a basis for evaluating consumers to measure the level of satisfaction on Cassim Coffee products. The attributes are as follows.

Table 2. Attribute Types

Number	Atribut
1.	Scent
2.	Taste
3.	Price
4.	Exp Date
5.	Packaging
6.	Availability
7.	Color
8.	Viscosity

Data analysis techniques in this study used descriptive methods, validity and reliability, Fishbein, IPA, and CSI. The first method used in this study is a descriptive method that will describe the process of making purchasing decisions by consumers.

The second method used is the test method of validity and reliability. The validity test of this research was conducted in order to find out the validity level of the questionnaire distributed and filled out by the respondents. Meanwhile, a reliability test is performed to determine the level of determination of an instrument in measuring what must be measured.

The third method used is the Fishbein method, the method is used to determine consumer attitudes toward an object that is determined by its attitude to the attributes owned by the object. The multi attribute Fishbein formula is as follows [8]:

$$A_{0=} \sum_{i=1}^{n} bi . ei$$

Notes:

Ao   = consumer attitude towards an object
ei   = evaluation component of interest
bi   = component of trust
n   = the number of attributes that an object has

The fourth method used in this study is Importance Informance Analysis (IPA). IPA is used to describe the fulfillment of buyer expectation on the performance of product attributes.

The last method used in this study is Customer Satisfaction Index (CSI). This method is used to determine the relationship of consumers to a product. The overall Customer Satisfaction Index (CSI) will then be interpreted based on the results of calculations that have been done. The basis of this interpretation is presented in the following table.

Table 3. Interpretation analysis *Customer Satisfaction Index* (CSI)

Rentang Skala	Interpretasi
0,00-0,20	Very dissatisfied
0,21-0,40	Dissatisfied
0,41-0,60	Quite satisfied
0,61-0,80	Satisfued
0,81-1,00	Very satisfied

3. RESULT & DISCUSSION

3.1 Respondent's Characteristics

This study distributed 32 questionnaires during the research process. The respondents chosen in this study were consumers who have consumed Cassim Coffee for a long time. The characteristics of respondents in this study are presented in the following table.

Table 3. Respondent Characteristics

Information	Quantity	Precentage
Age:		
s.d. 30 year	16	50%
More than 30 year	16	50%
Gender:		
Female	9	28,125%
Male	23	71,875%
Education Background:		
Elementary	1	3,125%
Junior High	4	12,5%
Senior High	21	65,625%
Bachelor	6	18,75%
Occupation:		
Employee	14	43,75%
Non Employee	18	56,25%

3.2. Description of the Process of Making Product Purchasing Decisions

The first test conducted was to explain the process of making coffee purchasing decisions from the respondents. This result is based on answers to nine questions that have been asked to respondents. Based on the results of the study, it is shown that most of the respondents made coffee purchases due to habitual reasons. The respondents know about coffee product information that they will buy from the direct seller. Respondents buy coffee products that are usually drunk based on the coffee taste criteria. Thus, the more delicious the taste of the coffee will be more attractive to respondents. Coffee purchases made by respondents eventually become something planned because respondents already know which coffee products have a taste that is in accordance with the tastes of the coffee shops that are around where they live. Coffee products purchased by most respondents are always taken daily and are satisfied with theoe products. The respondents also claimed that they would make purchases on every coffee product they liked even though the price of the coffee product had increased.

3.3. Validity and Reliability Test Results

The second test conducted was to test the validity and reliability of the questionnaire items that had been distributed to respondents. Reliability testing in quantitative research is related to consistency, stability and repeatability of results. This means that research results can be relied upon if they have consistent results in the same situation despite being in different circumstances (Haradhan, 2017). Furthermore, the validity test is a test that assesses the instrument in order to measure what is designed to be measured (Robson, 2011).

Test of the validity and reliability in this study used the help of the application SPS Version 22.0. Validity test is determined from the calculated r value which must be greater than 0.3. Furthermore, the reliability of the results is determined from the Cronbach Alpha value which must be greater than 0.6. The following tables 4 and 5 present the results of the validity and reliability tests that have been carried out.

Table 4.Validity Test Result

Number	Attribute	Test Value of the Expectation Validity	Test Value of Performance Validity	Information
1.	Scent	0,415	0,416	Valid
2.	Taste	0,334	0,746	Valid
3.	Price	0,454	0,380	Valid
4.	Exp Date	0,307	0,539	Valid
5.	Packaging	0,48	0,764	Valid
6.	Availability	0,661	0,687	Valid
7.	Color	0,477	0,625	Valid
8.	Viscosity	0,447	0,524	Valid

Table 5. Reliability Test Result

Variable	Cronbach Alpha
Expectation	0,633
Performance	0,743

Table 4 above shows that the research questionnaire has valid items. This is because the calculated r value of each attribute (item) has a value above 0.3. Table 5 above also shows that the research questionnaire already has reliable items. This is based on a Cronbach Alpha value of more than 0.6.

3.4. Analysis of Fishbein's Attitude Model

Determination of the first level of satisfaction is done by using the Fishbein attitude model. This fishbein method is calculated using the formula as described in the research methods section. Fishbein explained that attitudes are human learning tendencies, so this tendency causes individuals to be able to respond to an object or thing (Tsang et al., 2004).

The results of the study related to the evaluation of the attributes used showed that respondents considered all the attributes proposed in the questionnaire were important. Respondents assume that the attributes, scent, taste, and availability are very important attributes of a coffee product. Evaluation scores for each attribute are presented in table 6 below.

Table 6. Coffee Attribute Evaluation Value

Number	Attribute	Importance Evaluation Score (ei)	Information
1.	Scent	4,22	Very Important
2.	Taste	4,88	Very Important
3.	Price	3,91	Important
4.	Exp Date	3,94	Important
5.	Packaging	3,63	Important
6.	Availability	4,31	Very Important
7.	Color	3,84	Important
8.	Viscosity	3,94	Important

Respondents' assessment of Cassim Coffee using the attributes used in this study showed good results. This is because the results of the assessment indicate that 6 of the 8 attributes evaluated by respondents get very good ratings. The results of the respondents' assessment are presented in table 7 below.

Table 7. Trust Value of Cassim Coffee Attribute

Number	Attribute	Trust Score	Information
1.	Scent	4,5	Very Good
2.	Taste	4,66	Very Good
3.	Price	4,38	Very Good
4.	Exp Date	3,97	Good
5.	Packaging	4,16	Very Good
6.	Availability	4,41	Very Good
7.	Color	4,16	Very Good
8.	Viscosity	3,91	Good

Fishbein attitude analysis is done after the value of the evaluation (ei) and trust (bi) is known, so that the value of Ao can be calculated. This Ao value indicates the assessment of respondents' attitudes towards the attributes of Cassim Coffee. The results of calculations using the Fishbein method in this study are as follows.

Table 8. Results of Fishbein Attitude Analysis

Attribute	Interest Evaluation Score (ei)	Trust Score (bi)	Consumer Attitude	Attitude Category
Scent	4,22	4,50	18,99	Positive
Taste	4,88	4,66	22,72	Positive
Price	3,91	4,38	17,11	Positive
Exp Date	3,94	3,97	15,64	Neutral
Packaging	3,63	4,16	15,09	Positive
Availability	4,31	4,41	18,99	Positive
Color	3,84	4,16	15,96	Positive
Viscosity	3,94	3,91	15,39	Neutral
Total			139,88	**Positive**

3.5. Importance Performance Analysis (IPA)

The next test is to conduct an Importance Performance Analysis (IPA) analysis. This analysis maps the eight attributes used in this study into four quadrants, which are (I) Main Priority Quadrant, (II) Maintain Performance Quadrant, (III) Low Priority Quadrant, and (IV) Excessive Quadrant. The result of this IPA analysis is a Cartesian diagram consisting of 4 quadrants using the help of SPSS ver 22.0. The diagram of the Cartesian diagram is as follows.
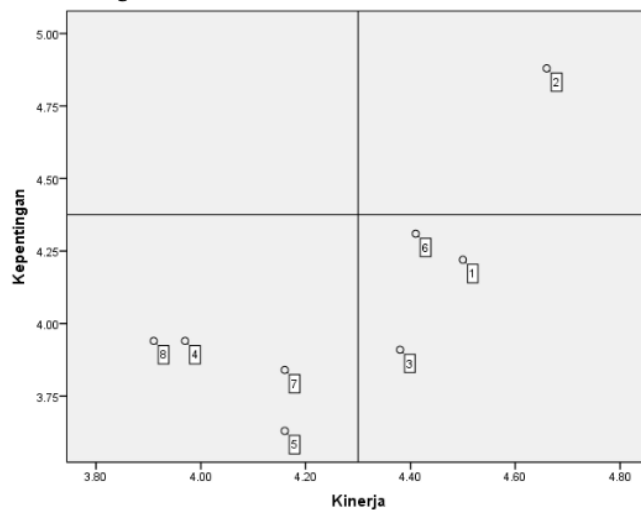
Figure 2. IPA Analysis

The IPA analysis that has been carried out produces 4 quadrants which have been presented in Figure 3 above. In quadrant I shows that there is not one attribute that is in quadrant I. This shows that there are no attributes of Cassim Coffee products that are lower than expected by consumers. In quadrant II there is a taste attribute from Cassim Coffee that has been considered good by the respondent and needs to be maintained because these attributes are important. In quadrant III there are attributes expired date (4), packaging (5), color (7), and viscosity (8) of Cassim Coffee which is less important for respondents and has mediocre performance. The last quadrant is quadrant IV which has the aroma, price, and packaging attributes of Cassiim Coffee which are less important but have good performance. In other words, Cassim Coffee's performance from this attribute exceeds respondents' expectations. Based on the results of the IPA analysis shows that Cassim Coffee products have an

advantage in taste which is one of the important attributes for respondents. In addition, Cassim Coffe needs to improve the quality of the attributes expired date (4), packaging (5), color (7), and thickness (8) in order to have better performance even though it is not an important attribute for respondents.

3.6. Measurement of Customer Satisfaction Index

The size of the customer satisfaction index is an important measure for determining future goals. In addition, this measure can also be used to determine customer satisfaction on a particular product. This customer satisfaction index enables managers in making goals in increasing consumer satisfaction [10]. The results of the calculation of the customer satisfaction index in this study are presented in the following table:

Table 9. Customer Satisfaction Index Measurement Results

Attribute	Performance	Expectation	WF	WS
Scent	4,50	4,22	12,92%	0,58
Taste	4,66	4,88	14,94%	0,70
Price	4,38	3,91	11,97%	0,52
Exp Date	3,97	3,94	12,06%	0,48
Packaging	4,16	3,63	11,11%	0,46
Availability	4,41	4,31	13,19%	0,58
Color	4,16	3,84	11,75%	0,49
Viscosity	3,91	3,94	12,06%	0,47
Total		32,67	100,00%	4,28
Customer Satisfaction Index				86%

Table 8 above is a table of the results of the calculation of the customer satisfaction index of Cassim Coffee products that have been conducted in this study. The results showed that the level of respondent satisfaction with Cassim Coffee products was 86%. Thus, these results indicate that respondents were very satisfied with the existing Cassim Coffee products

4. CONCLUSSION

This study aims to test consumer ratings of the quality of Cassim Coffee products. The results of research that have been done show that consumers consider the scent, taste, and availability of coffee products to be very important. Cassim Coffee products are currently only able to provide good quality related to taste and have not been able to provide good quality in terms of scent and availability. However, Cassim Coffee products in general have been able to make consumer feel very satisfied with the products sold based on the eight attributes that have been assessed in this study.

The results of this study can be accepted by considering a number of limitations. The first limitation is related to the number of research respondents. Respondents of this study have a very limited number because respondents who are permanent and long-term consumers of Cassim Coffee products in Jember are difficult to find. The second limitation is related to limited research time, thus making data collection less than optimal. Based on these two limitations, further research is expected to be able to gather more sources of information related to product consumers and adequate research time by using internet media to cover a wider scope.

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6. ACKNOWLEDGMENT

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GENERAL COMMENTS

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