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Analysis of Consumer Satisfaction Levels on Organic Shallots (*Allium Ascalonicum* L) In the Garden of the Faculty of Agriculture, University of Nusa Nipa Indonesia

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Abstract

To determine the characteristics of consumers of organic shallots in practical gardens, Faculty of Agriculture, University of Nusa Nipa Indonesia. The design in this research is quantitative. The author uses quantitative data types to process data obtained from the research location. Analysis of the data used in this study using three data analyzes. Descriptive data analysis was used to explain the characteristics of consumers who consume shallots in the gardens of the Faculty of Agriculture UNIPA, Alok District, Sikka Regency. The next analysis, namely the IPA *(Importance Performance Analysis) analysis, is* used to analyze consumer satisfaction with product attributes, namely by distinguishing the gap between interests and product performance. The results of this study indicate that the characteristics of organic shallot consumers in the practical gardens of the Faculty of Agriculture, Nusa Nipa Maumere University indicate that the performance of agricultural practice gardens is good enough and meets the expectations of Unipa agricultural garden consumers. Based on 9 attributes that have been researched on 30 respondents of shallot consumers.

Key words: satisfaction level, organic shallots, consumers

INTRODUCTION

Indonesia is a large country in Southeast Asia that is in the middle of the world so that Indonesia is known as the "emerald of the equator". This country has enormous resource potential, both living and non-living. With a fertile landscape and known as an agricultural country that relies on the agricultural sector as a source of income. most of the people as well as supporting the growth of the country's economic development in addition to other natural potentials such as mining, fishery, and others. This potential will be very good if we are able to increase our agricultural potential in a better direction, especially agricultural production which concerns people's basic needs, such as rice, corn, wheat and sago. Apart from that, what

is no less important are supporting plants as a complement to food needs that the Indonesian people have never been able to abandon, such as potatoes, onions, chilies, cabbage, carrots, tomatoes, beans, mustard greens, and other horticultural agricultural products.

One of the best known horticultural plants as a complement to food and medicinal needs is shallots. Several thousand years ago, red onions were already known and used by people, especially for medicine (Wibowo, 2008). Shallots originated from Asia or the Mediterranean. Shallots are distinguished from shallots (*Allium Cepa*),shallots *Shallot* (*Allium ascalonicum*) and daffodils (*Allium fistulosum*). These three types of shallots come from tropical regions in Asia. The shallot (brambang) bulb shape is smaller than the other shallots. However, the nutritional value contained in these onion bulbs is almost the same (AAK, 1998). Shallots are a vegetable commodity that has high economic value in terms of meeting national consumption, a source of income for farmers, and its potential as a foreign exchange earner. Shallots are used as a cooking spice and are beneficial for health. However, along with the development of the stage of economic development, agriculture-based business activities and services will also increase, meaning that agribusiness activities will become one of the mainstay sectors of national economic development in all aspects (Saragih, 2001). Treating cancer and other dangerous diseases. Shallots can also be used as a very powerful source of antioxidants to fight free radicals in the body (2014).

The province of East Nusa Tenggara has several regions that carry out shallot farming to fulfill economic development, one example of a district that is engaged in shallot farming is Sikka district. With a land area in 2019 is 26 ha, where the production is 1204 tonnes. The advantage of shallots compared to other agricultural commodities is that they have a longer shelf life. Domestic consumption that has not been fulfilled and the advantages that provide opportunities have made this business much cultivated by farmers (Sitanggang, 2011). So far, the farming pattern applied by farmers in Sikka district is still simple or has not been efficient in the application of onion farming technology so that it has an impact on the farm production obtained. In addition, the commodity prices of shallots that are circulating in the market are always changing and have a very influential impact on data collection so that it will have an impact on sustainable shallot farming from growing farming with the area of the onion plant business area which continues to increase every year.

The commodity of shallots in the previous year soared high, but currently onion production has decreased, it is different from last year. In addition, the prices of shallots in the market always fluctuate so that they are very affected by the profits in the shallot business. The condition of the onions which is easily damaged and also seasonal in nature, which in the end has to make farmers want to or not want to sell their shallot products, which sometimes the price they receive is not proportional to the cost of production.

METHODS

Research Design

The design in this research is quantitative. The author uses the type of quantitative data to process data obtained from the research location, where quantitative data according to Sugiyono (2015) is data that has a tendency towards analysis by means or statistical techniques. This data can be in the form of numbers or scores that are usually obtained using a data collection tool whose answers are in the form of a range of scores or questions.

Place and Time

Research This research was conducted in the garden of the UNIPA agricultural faculty, with the consideration that this location is one of the producers of shallots, in Sikka district. The research was conducted for 2 months, starting from October to December 2020.

Data

analysis Data analysis used in this study used three data analyzes. Descriptive data analysis is used to explain the characteristics of consumers who consume shallots in the gardens of the Faculty of Agriculture UNIPA, Alok District, Sikka Regency. The next analysis, namely the IPA *(Importance Performance Analysis) analysis, is* used to analyze consumer satisfaction with product attributes, namely by distinguishing the gap between interests and product performance. The third analysis is the CSI (*Customer Satisfaction Index)* analysis used to analyze overall customer satisfaction

RESULTS AND DISCUSSION

Index Performance Analysis (IPA) Test Index Performance Analysis (IPA)

test is a measuring tool used to determine the extent of consumer satisfaction with the performance of a company. There are two components of analysis in this IPA test, namely quadrant analysis and gap analysis. This IPA test assesses the level of importance and the results of company performance which will result in the value of the calculation between the level of suitability and the level of importance and the results of the company's performance. The company's performance that has been assessed is what is used to improve performance, where this can have an impact on customer satisfaction. The following is a table of results from IPA calculations from the results of data collection on the

Gap Analysis

Performance Dimension

Table 1. Consumer Interests and Product Performance in Performance Dimensions

Atribut	Interest Consumer							Product Performance							GAP	Conformity (%)
	SP 5	P 4	Cp 3	KP 2	TP 1	□	Rata-rata	Sp 5	P 4	Cp 3	KP 2	Tp 1	□	Rata-rata		
A1	9	8	9	3	1	111	3,7	3	9	9	9	0	96	3,2	-0,5	86,85
A2	11	11	7	1	0	112	3,7	7	9	10	4	0	109	3,6	-0’1	97,32

Source: Primary Data Analysis, 2021 (processed)

Information:

A1 = Price

A2 = Taste

Table 1 above shows the distribution of interests and performance on the dimensions of *performance* product. The table also presents the gap value, where in each attribute the difference is negative. This shows that the smaller the gap value, the smaller the difference between what consumers expect and the performance that the company has given. With the catalyst the conformity or fulfillment of consumer expectations with the performance that has been given by the company.

In the first attribute, namely the price attribute, the average score of the respondent's interest is 3.7 with 9 respondents assessing the price attribute is quite important because according to consumers the price offered by the UNIPA agricultural garden is ordinary, or in other words, it is not expensive and not cheap, considering

that UNIPA's agricultural gardens allow consumers to buy garden products directly to the location. The average value of product performance on the price attribute shows as much as 3.2 with 9 respondents assessing that they are quite satisfied with this attribute. This is because the price of onions offered by UNIPA's agricultural gardens is quite cheap. In both data assessments, the price attribute has a gap value of 0.5 with a suitability level of 86.85%. This figure shows that the performance of agricultural gardens is quite good and can meet 86.85% of the expectations of UNIPA agricultural garden consumers.

The second attribute, namely the taste attribute, was considered important by 11 respondents and had an average importance value of 3.7. It was found that the company's performance had an average value of 3.6 with 9 respondents rated as satisfied. From these two assessments, the taste attribute has a gap value of -0.1 and a conformity value of 98.46%. This figure shows that the company's performance is good enough to meet 97.32% of buyers' expectations.

Feature dimensions

Table 2. Consumer Interests and Product Performance on feature dimensions

	Interests of Visitors							Product performance							GAP	Conformity(%)
	SP5	P4	Cp3	KP2	TP1	□	Rata-rata	SP5	P4	Cp3	KP2	TP1	□	Rata-rata		
A3	8	10	9	3	0	113	3,7	4	8	14	4	0	102	3,4	-0,3	0,90
A4	10	11	5	4	0	117	3,9	7	13	7	3	0	114	3,8	-0’1	0,97
A5	7	9	8	8	0	107	3,5	7	12	8	3	0	113	3,7	0,2	1,05
A6	4	11	11	4	0	105	3,5	5	14	6	5	0	109	3,6	0,1	1,03
A7	8	10	7	4	1	110	3,6	5	10	11	4	0	106	3,5	-0,1	0,96

Source: Primary Data Analysis, 2021 (processed)

A3 = Aroma
A4 = Bulbs Size
A5 = Skin Color
A6 = Skin Texture
A7 = Number of Bulbs

Table 2 shows the value of the difference (gap) in the attributes of skin color and red onion skin texture, which shows positive numbers, namely: 0.2 and 0.1. This indicates that the level of performance of organic shallot products is above the level of expectations or in accordance with consumer expectations. Meanwhile, the values for other attributes show negative numbers. This shows that the level of performance on the feature dimensions of organic shallot products is below the level of consumer expectations.

The third attribute is the aroma of onion which is considered important by 10 respondents and has an average importance value of 3.7. The average performance value for this attribute is 3.4, with 4 respondents assessing that it is less satisfied. From these two assessments, the onion aroma attribute has a gap value of -0.3 and a suitability value of 0.90%. This figure shows that the analysis performance of the level of consumer satisfaction with organic shallots is quite good and can meet the expectations of 0.90 consumers.

The fourth attribute is the size of the shallot tuber which is considered important by 11 respondents and has an average importance value of 3.9. The average performance value for the size attribute of shallot is 3.8 with 7 respondents assessing that it is not satisfied. From these two assessments, the size attribute of onion tubers has a gap value of -0.1 and a suitability value of 0.97. These numbers indicate that the level of consumer satisfaction with organic shallot bulbs is quite good and can meet 0.97% of consumer expectations.

The fifth attribute is the texture attribute of shallot skin which is considered satisfied by 9 respondents and the average value of importance is 3.5. The average value of product performance on this attribute is 3.7 with 8 respondents assessing it as important. From these two assessments, the orange peel texture attribute has a gap value of 0.2 and a suitability value of 1.05%. This figure shows that the analysis of the level of consumer satisfaction with organic shallots is quite good and can meet 1.05% of consumer expectations.

The sixth attribute of red onion bulb skin color was considered important by 14 respondents and the average importance value was 3.5. The average value of performance on this attribute is 3.6 with 30 respondents assessing that they are quite satisfied. From these two assessments, the onion skin color attribute has a gap value of 0.1 and a conformity value of 1.03%. This figure shows that the level of consumer satisfaction with organic shallots is quite good and can meet 1.03% of the expectations of the consumer.

The seventh attribute is the number of shallot bulbs which are considered important by 10 respondents and the average value of importance is 3.5. The average value of performance on this attribute is 3.6 with 10 respondents assessing satisfaction. From these two assessments, the red yam content attribute has a gap value of -0.1 and a suitability value of 0.96%. This figure shows that the company's performance is quite good and can meet 0.96% of consumers' expectations.

Durability Dimensions (Product Durability)

Table 3.Consumer Interests and Product Performance in Durability Dimensions

Atribut	Interests of Visitors							Product performance							GAP	Conformity(%)
	SP5	P4	Cp3	KP2	TP1	□	Rata-rata	SP5	P4	Cp3	KP2	TP1	□	Rata-rata		
A8	5	17	4	4	0	113	3,7	5	12	4	9	0	103	3,4	-0,3	0,91
A9	7	15	7	1	0	118	3,9	2	20	5	3	0	111	3,7	-0,2	0,94

Source: Primary Data Analysis, 2021 (processed)

A8 = Resistance to temperature and light

A9 = Easily Damaged and Rot

Attributes to the dimensions of *durability* or the durability of citrus fruit products when stored outside the refrigerator. resistant to temperature and weather were considered satisfied by 9 respondents and obtained an average value of importance of 3.7. The average performance value for this attribute is 3.4 with 12 respondents assessing it as important. From these two assessments, the attributes of resistance to temperature and weather have a gap value of -0.3 and a suitability value of 0.91%. This figure shows that the company's performance is good enough and can meet 0.91% of consumer expectations.

The nine attributes of easy to damage and rotten shallot bulbs were considered satisfied by 15 respondents and obtained an average value of importance of 3.9. The average value of performance on this attribute is 3.7 with 20 respondents assessing it as important. From these two assessments, the attributes of easy to damage and rotten shallots have a gap value of -0.2 and a suitability value of 0.94%. This figure shows that the company's performance is good enough and can meet 0.94% of consumer expectations.

AnalisisKuadran

Quadrant analysis is another analysis tool used to measure the level of performance of a company with a more specific way. The measurement results are based on the results of the level of importance and performance that can be considered by the company to make improvements to what attributes are considered the most important for the purpose of visitor satisfaction.

The results of this quadrant analysis indicate that the location of the performance of product attributes that can affect consumer satisfaction with the production of shallots in the garden of the Faculty of Agriculture, UNIPA, is divided into four parts or four quadrants. The results of these four quadrants can be seen what attributes are included in the main priority quadrant that must be improved, the maintain achievement quadrant, as well as the low repair priority quadrant.

Table 14. Calculation of Average Performance Score and Interest / Expectation of Visitor

Xi	Xi = Xi / n Attribute Yi	Performance Yi	Interest Yi / nNo		
1	**Price**	**111**	**96**	**3,7**	**3,2**
2	Flavors	122	109	4.07	3,63
3	Aroma	113	102	3,37	3,4
4	Size Tuber	117	114	3,9	3,8
5	Color Skin	107	113	3,57	3 , 77
6	TeksturKulit	105	109	3.5	3.63
7	BanyaknyaUmbi	110	106	3.97	3.53
8	dayatahan	113	103	3.77	3.43
9	damaged and sunk	118	111	3.93	3.7
	Total	**1,016**	963	33.78	32.09
	Average	**112.89**	107	**3.75**	**3.57**

Source: Primary Data Analysis, 2021 (processed)

Based on table 14 above, the calculation of the results of the average performance level and importance level is 3.75 and 3.57. These two values are used to cut straight lines on the horizontal axis and the vertical axis. The horizontal axis is the axis that reflects the attribute performance, while for the vertical axis reflects the importance level of product attributes.

Quadrant I (top priority).

The attributes contained in this quadrant have a high level of importance according to respondents, but their performance is still low, so it can be said that these attributes are able to affect visitor satisfaction but in company performance these attributes are not in accordance

with visitor satisfaction. The attributes contained in this kudran are attributes of skin color and skin texture

The following is a discussion of the attributes of shallots found in quadrant one.
The skin color is assessed by the respondents as this attribute is into the main priority that needs to be improved because the knowledge by many consumers about the skin color of organic shallots is fresh and purplish red. However, in fact, the organic red onions on offer have a pink color.

Quadrant II (Maintain Achievement).

The attributes in this quadrant indicate that these attributes have high performance. These attributes are felt to be important and are in accordance with what the customer feels. The attributes that are in this quadrant are the attributes of taste, tuber size and easily damaged or rotten. The following is a discussion of the attributes of shallots found in quadrant two.

Rasa belongs to quadrant II, where this attribute is an attribute that has high performance. The taste of shallots was judged by respondents according to their expectations or desires. This is because consumers think that the very spicy taste of onions is a natural taste and can be consumed directly because it is safe for the health of the body.

Tuber size is included in quadrant II, where the bulb size attribute is an external appearance that is highly considered by prospective buyers and has high performance. Respondents rated shallot bulbs according to their expectations or desires. This is because consumers are very satisfied with the size of the onion bulbs, which indirectly can help housewives or anyone who manages or uses these shallot bulbs, because easy to clean and does not take a long time.

Broken or rotten. Included in quadrant II, where this attribute is assessed by consumers as having high performance. This organic red onion is judged by consumers according to their wishes and expectations,

Quadrant III (Maintain Achievement).

The attributes in this quadrant are considered less important by respondents, with a less special performance appraisal. The attributes contained in this quadrant are price, number of tubers and storage durability. The following is a discussion of the attributes of shallots found in quadrant three.

Prices are classified into quadrant III, where the price attribute is considered good enough by the respondent. This is because the respondent has an interest in this attribute. This can be caused by factors where the price of shallots is considered relatively the same as non-organic shallots. These shallots are bought for use in household consumption or resold, after consumers have negotiated for the next profit in the follow-up sale.

The number of seeds in citrus fruit varieties found in citrus-picking agro-tourism is one of the priority attributes that must be improved. The seeds on this citrus fruit are not too many, but most visitors, the seeds contained in the fruit are considered to be annoying when consumed.

Storage durability The storage resistance of the fruit is considered quite good by the respondents. This is because the respondent has an interest in this attribute. If while on a tourist visit, the respondent will tend to buy a product, whether it is a food product or not, and when purchasing a food product, what consumers have to pay attention to is how long the product lasts for storage.

Test*CutomerSatisfactionIndex*(CSI)

Table 4.Calculation Results*Customer Satisfaction Index*(CSI)

No	Attribute	Performance	Interests	MSS	MIS	WF (%)	Wsi
		Xi	Yi				
1	Price	111	96	3.7	3,2	9.97	.37
2	Taste	122	109	4.07	3.63	11.31	.46
3	Aroma	113	102	3 , 37	3,4	10,59	,36
4	Size Bulbs	117	114	3,9	3,8	11,84	,46
5	Color of skin	107	113	3,57	3,77	11,74	,42
6	Texture of skin	105	109	3,5	3.63	11.31	.39
7	Number of	110	106	3.97	3.53	11	.44
8	tubersDurability	113	103	3.77	3.43	10.68	.40
9	Broken and rot	118	111	3.93	3.7	11 , 53	.45
	Total	**Total**	**963**	**33.78**	**32.09**	**99.97**	**.75**
Average		**Average**	**107**	**3.75**	**3.56**	**11,10**	**0.41**
CSI = (Wsi / 5) x100%							**75%**

Source: DataPrimer Analysis, 2021 (processed)

Based on the CSI calculation in table 16 above shows that the value of the *Customer Satisfaction Index* is 75%. If this value is based on the consumer satisfaction index table, then the value of 75% is in thethe satisfaction index of consumers of *range* 0.66-0.80%, so that this value shows thatorganic red onions in the Agriculture faculty of UNIPA for the tested attributes can be said to be satisfied.

CONCLUSION

1. The results of this study indicate that the characteristics of organic shallot consumers in the practical gardens of the Faculty of Agriculture, Nusa Nipa Maumere University indicate that the performance of agricultural practice gardens is good enough and meets the expectations of Unipa agricultural garden consumers. Based on 9 attributes that have been researched on 30 respondents of shallot consumers.
2. Based on the CSI *Customer Satisfaction Index calculations* that have been carried out, the 75% consumer satisfaction index table is in the *range* 0.66-0.80%, so this value shows that the consumer satisfaction index of organic shallots in the garden of the Faculty of Agriculture, UNIPA, for the attributes tested can be said to be satisfied. Where this category describes that the level of performance of organic shallot products exceeds the level of interest or consumer expectations

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