



How to increase customer satisfaction of Mujair Fish Crackers with the IPA-KANO method

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Abstract: This study aims to analyze consumer satisfaction with the IPA-KANO method. This research uses quantitative research where data collection techniques using questionnaire. The respondents used in this study were 100 consumers of processed mujair fish cracker products CV. SARIRAM. The data analysis technique used in this research is the Importance Performance Analysis (IPA) method and Kano is then converted using SPSS. The results of the integration of Importance Performance Analysis (IPA) and the Kano model show that there are 12 attributes that fall into the category to be maintained and the remaining 8 attributes that need attention to improve their performance to increase customer satisfaction.

Abstrak: Penelitian bertujuan untuk menganalisis kepuasan konsumen dengan metode IPA-KANO. Menggunakan pendekatan penelitian kuantitatif dimana teknik pengumpulan data menggunakan kuesioner. Responden sebanyak 100 konsumen produk kerupuk olahan ikan mujair CV. SARIRAM. Teknik analisis data menggunakan *Importance Performance Analysis* (IPA) dan Kano kemudian dikonversikan dengan menggunakan software statistik SPSS versi 22.0. Hasil dari integrasi *Importance performance Analysis* (IPA) dan model kano memberikan hasil bahwa terdapat 3 atribut yang ditingkatkan, 11 atribut masuk dalam kategori untuk dipertahankan dan sisanya sebanyak 6 atribut merupakan atribut yang perlu mendapatkan perhatian untuk ditingkatkan kinerjanya untuk meningkatkan kepuasan konsumen.

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Introduction

Currently, processed tilapia fish crackers are in great demand among local and out-of-town residents. The tilapia fish cracker product here has become a productive culture for Prasung residents. Producers and marketing departments must think hard about how to survive and continue to be able to produce tilapia fish crackers according to consumers' hopes and desires. Companies must strive to learn and understand the needs and desires of their customers. By understanding customer needs, desires and requests, it will provide important input for companies to design marketing strategies to create satisfaction for their customers (Swastha & Irawan, 2014). The more the demand for tilapia crackers grows, the higher the company's level of prioritizing quality. One important aspect in processing mujair crackers is customer satisfaction. Because customer satisfaction is what guarantees the company to continue producing tilapia fish crackers. According to Mamonto et al. (2021) there are several factors that influence consumer satisfaction or customer satisfaction, one of which is taste, texture, color, packaging, etc. Lack of concern by companies or producers regarding customer satisfaction can result in economic losses.

Customer satisfaction is the main key to achieving long-term success. Good customer satisfaction means that customers are satisfied with the products or services provided. Therefore, companies must have important ways to increase consumer satisfaction, including maintaining product quality, where high quality products can provide higher satisfaction to customers, because customers will feel happy with the results provided by the product. Apart from that, you can increase customer satisfaction by giving appreciation, because by giving appreciation, customers feel appreciated by the business and this can increase customer loyalty. What is no less important is the quality of the product itself by maintaining the taste that has been used as a recipe for processing tilapia fish crackers. Therefore, efforts to increase consumer satisfaction are very important for a company in order to maintain the company in good condition.

Customer satisfaction contributes to a number of crucial aspects (Putra et al., 2017). In general, satisfaction can be interpreted as the similarity between the product and service performance received and the product and service performance that consumers expect (Setyo, 2016). This satisfaction can be felt after the customer concerned consumes the product (Setiawan & Bahrin, 2023). Companies must place orientation on customer satisfaction as the main goal in consumer or customer purchasing decisions. This is reflected in the increasing number of companies that include their commitment to customer satisfaction in their mission statements, promotions in the form of advertising, and public relations releases. The main key for companies to win the competition is to provide value and satisfaction to customers by delivering quality products and services at competitive prices. Therefore, in this research, consumer satisfaction with processed tilapia fish crackers is very important

for a producer because it is a very determining factor for producers to get products that suit consumer desires. In this research, the IPA - KANO method was used where the parameters of Taste, Color, Texture, Flavor and Packaging are important dimensions in consumer assessment to regulate consumer satisfaction.

Quoting previous research by Sembodo and Surabagiarta (2016), satisfaction occurs when customers feel that what they receive is in accordance with what they want. Consumer or customer satisfaction has an influence or influence on the survival of a company. This research also focuses on customer satisfaction but not on service or service quality but focuses on customer satisfaction with products where consumer satisfaction with products is no less important than customer satisfaction with service, and where the parameters of taste, texture, color, bloomability and packaging are important dimensions in consumer assessment to regulate consumer satisfaction. Similar research was also conducted by Permana (2013) show that product quality and service quality have a positive and significant influence on customer satisfaction. This means that increasing customer satisfaction can be done through improving product quality and service quality. What differentiates it from other research is that the method used is different from other research positions, and the direction the research aims at is also different. The IPA-KANO method is generally used to analyze service satisfaction, but in this research it is used to analyze customer satisfaction with tilapia fish cracker products, therefore the results obtained from this research are to obtain results to determine the size of the level of customer satisfaction, consumer satisfaction. towards tilapia fish cracker products. So this research uses gap research with an empirical gap type. The empirical gap is a gap that emphasizes empirical phenomena. This is a benchmark for inconsistencies in the research. In other words, researchers will find gaps between common phenomena and existing field evidence. That way researchers can determine strategies based on the results of previous research.

Based on the background and description above, the research aims to analyze consumer satisfaction with processed cracker products mujair fish in prasung village with the hope that researchers will get results that need to be considered in consumer research to be conveyed to producers so that producers can develop the quality of mujair processed fish products according to what consumers want. Marketing is a social process in which individuals or groups obtain what they want and need by creating, offering and exchanging valuable products with other parties (Fatimah & Soedarmadi, 2020). The definition of marketing management according to Nainggolan (2022) is "the art and science of choosing target markets and getting, retaining and growing customers through creating, delivering and communicating superior customer value". Marketing Management is an effort to plan, implement (which consists of organizing, directing, coordinating activities) and supervise or control marketing activities in an organization to achieve organizational goals efficiently and effectively (Agustina, 2020). According to Fitriyanti (2022), "marketing

management is an effort made to achieve the desired results. Crackers are a type of dry food made from ingredients that contain quite a high starch.

Literature review

Crackers are a thin dry material made from dough whose main ingredient is starch (Wahyuningtyas et al., 2014). Crackers are a snack made from tapioca flour mixture mixed with spices such as shrimp or fish. Crackers are made by steaming the dough before cutting it into thin pieces, drying it in the sun and frying it in lots of cooking oil. Taste is a food attribute that includes appearance, smell, taste, texture and temperature. Taste is a form of cooperation between the five human senses, namely taste, smell, touch, sight and hearing. Taste itself is the result of taste which is located on the tongue, cheeks, throat, roof of the mouth which are part of the taste buds (Pramono, 2021).

Food texture is smooth or not, liquid or solid, hard or soft, dry or moist (Pradapa & Kusumawati, 2021). Food texture can be defined as the pressure of a stimulus observed by touching with the fingers or mouth (biting, chewing and swallowing). Texture is influenced by several factors, namely chemical compounds, temperature, concentration, and interactions with other components (Lobo et al., 2023). In this case, what is meant by the texture of tilapia crackers is their shape or appearance. Food color is one of the important things in the appearance of a food. When looking at food, color is the first characteristic you will see. Food with nice and attractive colors can arouse the appetite of everyone who sees it. On the other hand, less attractive colors are less appetizing. Color can be used as an indicator of freshness or maturity, whether or not the mixing or processing method is used is indicated by the presence of a uniform and even color (Hamka, 2017).

One of the determining factors for good cracker quality is the development of cracker power because it determines consumer acceptance. The swelling power of crackers is one of the indicators used to determine whether the materials used and the cracker processing process are said to be successful. Crackers are said to be good if they have maximum swelling power (Warintek, 2021). The ability to expand crackers is closely related to the starch content in the product. The greater the tapioca starch content in fish crackers causes greater swelling power (Mawaddah et al., 2021). Packaging according to Agusria et al. (2021) is a general activity and planning of an item which includes determining the design for making the wrapping or packaging of an item. Santi (2015) defines "packaging involves the design and production of the container or wrapper for a product" meaning that the packaging process involves design and production activities, the main function of the packaging itself is to protect the product so that the quality of the product is maintained by the intended market (target).

Methods

In this research, the *Importance Performance Analysis* (IPA) - KANO method was used. This type of research is quantitative research, it is said to be quantitative research because the data to be analyzed is in the form of numbers, starting from data collection, interpretation of the data, and displaying the results using the SPSS data processing tool. In this research, the technique used was Accidental Sampling because the researcher distributed questionnaires to every CV consumer or customer. tilapia fish cracker products. SARIRAM in Prasung village who came and bought the product. Accidental Sampling is a technique for determining samples based on chance (Ismunandar et al., 2021), namely every consumer met when researchers collected data from August to October. In this research, the number of samples taken was 100 respondents who were asked to fill out a questionnaire containing statements from the IPA - KANO method. *swasta* *Importance Performance Analysis* (IPA), one of the measurements of customer satisfaction, can be done by analyzing the interests and performance of a company. Sengkey et al. (2022) explains that by using the Importance Performance Analysis method (level of importance and performance), companies can find out the level of customer satisfaction, as well as what things need to be improved and maintained for the services provided, so that they can become foundation for increasing consumer satisfaction.

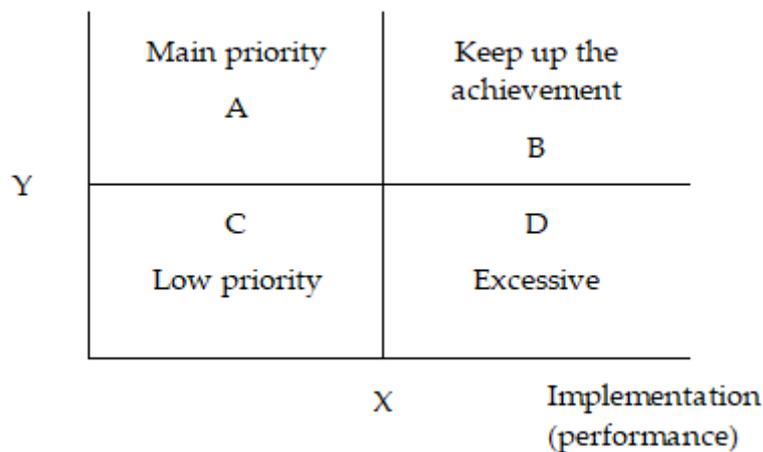


Figure 1. Cartesian diagram image
Source: (Lupiyoadi & Bramulya, 2015)

Importance Performance Analysis is described in the form of a Cartesian diagram, which is a structure that is divided into four quadrants bounded by two lines that intersect perpendicularly at the points (X, Y) where X is the average score of perceived performance or service ratings and Y is the average score of the assessment of the expected interests/services that affect student satisfaction. This is used to determine the position of each attribute or measure of service quality with the level of

importance of the quality of services provided. The Cartesian diagram of the *importance performance analysis* method can be seen in the figure 1.

Table 1. Evaluation of Kano

Consumer Needs	<i>Dysfunctional</i>				
	1	2	3	4	5
	Like	Hope	Neutral	Tolerance	Do not Like
<i>functional</i>					
1. like	Q	A	A	A	O
2. hope	R	I	I	I	M
3. neutral	R	I	I	I	M
4. tolerance	R	I	I	I	M
5. do not like	R	R	R	R	Q

Source : Walden (1993).

Information :

Q = Questionable (doubted)

I = Indifferent (neutral)

R = Reserve (decline)

O = One dimensional (one size)

A = Attractive (interesting)

M = Must be (must)

The Kano model starts by conducting a survey of customers who are asked two different questions for each indicator. The first statement is the customer's opinion if the indicator works well (functional), while the second question is the customer's opinion if the indicator does not work well (dysfunctional). These two questions have the answers (1) Like, (2) Hope, (3) neutral, (4) Tolerance and (5) Do Not Like. Then evaluated using the Kano model evaluation table (Table 1). Kano Model made by Dr. Noriaki Kano from Tokyo Riko University Japan in 1984. At first the Kano Model was used to create a model that could categorize elements of a product or service based on the impact these elements could have on customer needs (Candra et al., 2020). The data used in this study uses primary and secondary data. Primary data were obtained from questionnaires distributed to all consumers of processed mujair fish crackers produced by CV. SARIRAM in Prasung Village. While secondary data is obtained from documentation data or data that is already available and collected by other parties. Secondary data in this study were obtained through journals and research documentation.

Result

Questionnaire design begins with determining consumer satisfaction. These attributes are divided into 5 dimensions regarding product quality, namely taste, texture, color, cracker developing power, and packaging. These product quality attributes were obtained from the results of interviews with respondents and

consultations with the company. The results of the interview resulted in 20 questions regarding the quality of mujair fish cracker products. The questionnaire design was then tested for validity and reliability. The results of the validity test are declared valid because the value of r count of all attributes is greater than r table. The results of the calculation of the reliability test from the distributed questionnaires obtained an average value of the reality level of 4.02 and for the level of expectation with an average value of 4.32 for the sake of the IPA questionnaire, and for the canoe questionnaire it has a Cronbach alpha of 0.429. Cronbach's alpha value is known to be > 0.70 so that the questionnaire is said to be reliable.

Table 2. The results of the IPA Method Assessment

Calculation results Level of reality and Expectation level				
Attribute	Reality Score	Expectation Score	Reality Level	Expectation Score
P1	401	455	4,01	4,55
P2	408	453	4,08	4,53
P3	398	453	3,98	4,53
P4	385	453	3,85	4,53
P5	439	460	4,39	4,6
P6	452	466	4,52	4,66
P7	426	453	4,26	4,53
P8	372	431	3,72	4,31
P9	353	371	3,53	3,71
P10	353	353	3,53	3,53
P11	342	374	3,42	3,74
P12	400	430	4	4,3
P13	439	458	4,39	4,58
P14	449	457	4,49	4,57
P15	443	462	4,43	4,62
P16	403	451	4,03	4,51
P17	428	449	4,28	4,49
P18	311	319	3,11	3,19
P19	427	447	4,27	4,47
P20	412	447	4,12	4,47
Average			4,02	4,32

Source : Data analysis 2023

Based on table 2, it can be explained that the respondent's assessment for each attribute is reality and expectation. calculation of the average value of the level of reality and the level of expectation of consumer satisfaction attributes based on equations 1 and 2. This calculation is carried out to facilitate data processing in the IPA method. The following is the recapitulation of the Cartesian diagram which was analyzed using the Importance Performance Analysis (IPA) method:

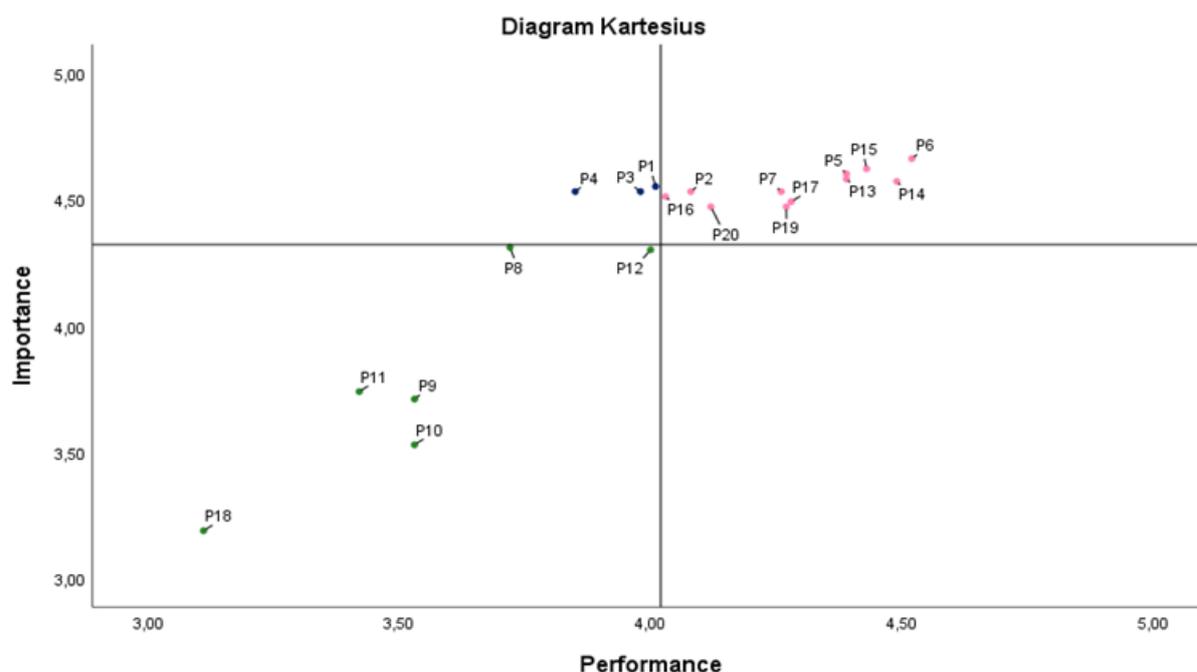


Figure 2. Attribute Categories of Consumer Satisfaction Based on the IPA Model
 Source : SPSS versi 22.0, 2022

The description of the customer satisfaction attributes above can be divided into 4 groups, namely quadrant A (top priority), quadrant B (maintain achievement), quadrant C (low priority), quadrant D (excessive). Below I will describe it based on each category.

Table 3. Attributes included in the top priority category

Attribute Code	Statement
P1	The taste produced by processed mujair fish crackers is savory
P3	The taste produced by crackers resembles the taste of mujair fish
P4	The taste of mujair crackers is superior to the taste of crackers in general

So the attributes in the table 3 are included in the main priority category, which contains indicators with a relatively high level of importance but in reality they are not in line with customer expectations (performance is still low).

The attributes in the table 4 are included in the maintain performance category, where indicators have a relatively high level of importance and level of performance.

Table 4. Attributes included in the category maintain achievement

Attribute Code	Statement
P2	Sensitivity to the taste of mujair fish crackers
P5	Mujair fish crackers have a crunchy texture
P6	The texture or shape produced by Mujair fish crackers is in line with consumer expectations
P7	Mujair fish cracker maturity level after frying is not too tight
P13	Processed Mujair fish crackers have perfect swelling power after being fried
P14	Processed Mujair fish crackers have good swelling properties even without drying them first
P15	The swelling power of ad mujair fish crackers is very suitable and good, all of this cannot be separated from the composition of the raw materials that are made
P16	The ability to develop mujair fish crackers is much liked by consumers
P17	The packaging on mujair fish crackers is very interesting
P19	Processed mujair fish crackers have practical packaging and are easy to open
P20	The design of mujair processed fish cracker packaging is easy to recognize

Table 5. Attributes included in the low priority category

Attribute Code	Statement
P8	Processed mujair fish crackers have a smooth texture
P9	Crackers made from mujair fish have a distinctive color characteristic
P10	Mujair fish crackers have an interesting color
P11	Processed mujair fish crackers are brownish cream before being fried
P12	The color of the processed mujair fish crackers is very attractive after being fried
P18	The packaging for processed mujair fish crackers has a very neat packaging

So the attributes in the table 5 are included in the low priority category, where indicators with a relatively low level of importance and the reality of their performance are also relatively low, so satisfaction is also felt to be relatively low.

There are no attributes that are included in the excessive category, where indicators with a relatively low level of importance and perceived by service users are too excessive (relatively high performance) with a relatively high level of satisfaction as well.

Table 6. Attribute Categories of Consumer Satisfaction Based on the Kano Model

No	Attributes of consumer satisfaction	Grade
1	The taste produced by processed mujair fish crackers is savory	A
2	Sensitivity to the taste of mujair fish crackers	M
3	The taste produced by the crackers resembles the taste of mujair fish	A
4	The taste of crackers made from mujair fish is superior to the taste of crackers in general	I
5	Processed mujair fish crackers have a crunchy texture	A
6	The texture or shape produced by mujair fish crackers is in accordance with consumer expectations	M
7	The level of maturity of the mujair fish crackers after being fried is not dense	O
8	Processed mujair fish crackers have a smooth texture	I
9	Crackers made from mujair fish have a distinctive color characteristic	M
10	Mujair fish crackers have attractive colors	I
11	Processed mujair fish crackers are brownish cream before being fried	M
12	The color of the processed mujair fish crackers is very attractive after being fried	I
13	Crackers for mujair fish have perfect swelling power after being fried	I
14	Processed mujair fish crackers have good swelling properties even without being dried in the sun first	M
15	The swelling power of mujair fish crackers is very suitable and good, all of that cannot be separated from the composition of the raw materials that are made	M
16	The ability to develop mujair fish crackers is much liked by consumers	M
17	The packaging on mujair fish crackers is very interesting	O
18	The packaging for processed mujair fish crackers has a very neat packaging	A
19	Processed mujair fish crackers have packaging that is practical and easy to open	O
20	The design of mujair fish cracker packaging is easy to recognize	I

Source : Data analysis 2023

The description of service attributes is carried out to identify the attributes of customer satisfaction that fall into four categories, including: attributes that must be improved service (concentrate here), maintained (keep the good work), low priority (low priority), and excessive service (possible overskill). The results of the division of each quadrant can be seen in Figure 2. Quadrant A (main priority/concentrate here), Quadrant B (keep the good work), Quadrant C (low priority), Quadrant D (excessive service /possible overskill). Recapitulation to determine the canoe category for each service attribute according to Blauth's formula so that the results are in picture 2.

Table 6 explains the results of the Kano questionnaire data collection which has been tabulated based on table 1, namely that there are several criteria for tilapia crackers which fall into categories including Attractive, Must be, Indifferent, One dimensional, Reserve, and Questionable.

After obtaining the classification results from the 2 methods, namely importance performance analysis and the Kano model, it is then classified based on IPA – Kano. After getting a category with the integration of importance performance analysis and the Kano model, it will then be grouped based on which attributes only need to be maintained, which means that customer satisfaction is considered sufficient, and which attributes need to be improved, which means that these attributes need attention in order to improve performance. Categorization of attributes - Attributes based on integration of importance performance analysis and the Kano model can be seen in table 7.

So in the table 7 it can be explained which is the top priority, namely, the taste produced by the mujair fish crackers tastes savory, the taste produced by the crackers resembles the taste of mujair fish, and the taste of mujair crackers is superior to the flavors of crackers in general, the attributes in this category are the attributes that must be improved. Meanwhile, the achievement that was maintained was the sensitivity of the taste of processed mujair fish crackers, mujair fish crackers had a crunchy texture, the texture or shape produced by processed mujair fish crackers was very in line with consumer expectations, the maturity level of mujair fish crackers after frying did not become dense, processed mujair fish crackers had perfect swellability after frying, processed mujair fish crackers have good swell properties even without drying it first, swellability of mujair commercial crackers is very suitable and good, all of that cannot be separated from the composition of the raw materials made, swellability of the crackers mujair commercials are very suitable and good, all of that cannot be separated from the composition of the raw materials that are made, The packaging for mujair processed fish crackers is very attractive, Mujair processed fish crackers have packaging that is practical and easy to open, and the design of mujair processed fish crackers packaging is easy to recognize, attributes in this category are attributes to be maintained, and those that are a low priority are processed mujair fish crackers having a smooth texture, processed mujair fish crackers having a distinctive color characteristic, mujair processed fish crackers

Table 7. Importance Performance Analysis and the Kano model

Attribute Code	Statement	IPA category	Kano category	Repair
P1	The taste produced by the mujair fish crackers is savory	Main priority	O	Upgraded
P3	The taste produced by the crackers resembles the taste of mujair fish	Main priority	O	Upgraded
P4	The taste of mujair fish crackers is superior to the taste of crackers in general	Main priority	O	Upgraded
P2	Sensitivity to the taste of mujair fish crackers	Keep up the achievements	O	keep it up
P5	Mujair fish crackers have a crunchy texture	Keep up the achievements	A	keep it up
P6	The texture or shape produced by mujair fish crackers is in accordance with consumer expectations	Keep up the achievements	I	keep it up
P7	The level of maturity of the mujair fish crackers after being fried is not dense	Keep up the achievements	A	keep it up
P13	Processed mujair fish crackers have perfect swelling power after being fried	Keep up the achievements	I	keep it up
P14	Processed mujair fish crackers have good swelling properties even without drying them first	Keep up the achievements	I	keep it up
P15	The swelling power of ad mujair fish crackers is very suitable and good, all of this cannot be separated from the composition of the raw materials that are made	Keep up the achievements	I	keep it up
P16	The swelling power of ad mujair fish crackers is very suitable and good, all of this cannot be separated from the composition of the raw materials that are made	Keep up the achievements	I	keep it up
P17	The packaging on mujair fish crackers is very interesting	Keep up the achievements	M	keep it up
P19	Processed mujair fish crackers have packaging that is practical and easy to open	Keep up the achievements	M	keep it up
P20	The design of mujair processed fish cracker packaging is easily recognized	Keep up the achievements	M	keep it up
P8	Processed mujair fish crackers have a smooth texture	Low priority	M	Minus
P9	Processed mujair fish crackers have a distinctive color characteristic	Low priority	I	Minus
P10	Mujair fish crackers have attractive colors	Low priority	O	Minus
P11	Processed mujair fish crackers are cream brown in color before being fried	Low priority	I	Minus
P12	The color of the processed mujair fish crackers is very attractive after being fried	Low priority	M	Minus
P18	The packaging for processed mujair fish crackers has a very neat packaging	Low priority	O	Minus

having attractive colors, processed mujair fish crackers having a cream color the color of the processed mujair fish crackers is very attractive after being fried, and the packaging for processed mujair fish crackers has a very neat packaging, attributes in this category are attributes that must be reduced.

Discussion

Sample data collection was carried out twice which was used in this study taken randomly every day to get a total of 100 respondents. The first data collection is by distributing Importance Performance Analysis (IPA) questionnaires which contain questions of reality and expectations accompanied by parameters of taste, color, texture, swelling and packaging which aim to measure consumer expectations and to measure consumer perceptions of perceived satisfaction. by consumers. Furthermore, the second data collection is by distributing the Kano questionnaire which contains questions relating to the functional and dysfunctional aspects of the attribute in question. Then after the first questionnaire data is distributed, it will be processed into the Importance Performance Analysis (IPA) method to be able to find out which of the several attributes must be increased, maintained, and reduced. Furthermore, the second questionnaire data will be processed using the Kano method to be able to find out the results of several attributes which are categorized based on several attributes including: must-be, one-dimensional, attractive and indifferent. So that the results of the two methods can be integrated and get the results of which attribute categories of processed mujair fish cracker products are able to satisfy customer needs.

Based on the results of the Importance Performance Analysis (IPA) mapping, it shows that there are 3 attributes that must be improved, namely, the taste produced by mujair fish crackers tastes savory, the taste produced by the crackers resembles the taste of mujair fish, and the taste of mujair fish crackers is superior to the flavors of crackers in general. There are 11 attributes that must be maintained, namely, the sensitivity of the taste of processed mujair fish crackers, Mujair fish crackers have a crunchy texture, The texture or shape produced by Mujair processed fish crackers is very in line with consumer expectations, Mujair fish crackers maturity level after frying is not dense, Processed crackers mujair fish has perfect swelling power after frying, processed mujair fish crackers have good swelling properties even without drying it first, the swelling power of mujair commercial crackers is very suitable and good, all of that cannot be separated from the composition of the raw materials made, the flowers on the mujair ad crackers are very suitable and good, all of that cannot be separated from the composition of the raw materials that are made, The packaging for mujair processed fish crackers is very attractive, mujair processed fish crackers have packaging that is practical and easy to open, and Design of processed mujair fish

crackers packaging easy to recognize. and 7 attributes that must be reduced to meet consumer satisfaction, namely, Processed mujair fish crackers have a smooth texture, Processed mujair fish crackers have a distinctive color characteristic, Processed mujair fish crackers have attractive colors, Processed mujair fish crackers are brownish cream before frying, The color of the processed mujair fish crackers is very attractive after being fried, and the packaging for the processed mujair fish crackers has a very neat packaging.

Based on the results of the mapping of the "*Must-be*" kano category, the packaging for processed mujair fish crackers is very attractive, mujair processed fish crackers have packaging that is practical and easy to open, The design of mujair processed fish cracker packaging is easy to recognize, mujair processed fish crackers have a smooth texture , The color of mujair fish crackers is very attractive after being fried. Attributes in this category must exist so that it can give consumer satisfaction. If these attributes are still considered lacking by consumers, the producer must improve them. The four categories of "*indifferet*" kano are the texture or shape produced by processed mujair fish crackers which are in line with consumer expectations, processed mujair fish crackers have perfect swelling after being fried, processed mujair fish crackers have good swelling properties even without drying them first, The swelling power of the mujair fish crackers is very suitable and good, all of this cannot be separated from the composition of the raw materials that are made, the swelling power of the mujair fish crackers is very suitable and good, all of this cannot be separated from the composition of the raw materials made, processed mujair fish crackers have color characteristics which is typical, processed mujair fish crackers are brownish cream before being fried. Attributes in these categories will not affect the increase or decrease in the level of customer satisfaction. In order to increase consumer satisfaction, these attributes can be ignored.

The phenomenon of the parameters used at the time of distributing the questionnaire actually consumers did not have specific parameters, but after answering the questionnaire consumers became more aware in terms of taste, color, texture, swelling and packaging that they actually needed, they finally found the parameters that were most likely The three attributes that must be improved are the taste produced by the mujair crackers tastes delicious, the taste produced by the crackers resembles the taste of mujair fish, and the taste of mujair crackers is superior to the flavors of ordinary crackers.

In this study, the method used is different from other research positions, and the directions used as research objectives are also different. The IPA-KANO method is generally used for analysis of service satisfaction, but in this study it is used to analyze customer satisfaction on mujair fish cracker products, therefore the results obtained from this study are to obtain results to determine the size of the level of consumer satisfaction on cracker products mujair fish

Conclusion

After getting a category according to the integration of Importance Performance Analysis (IPA) and the Kano model, from the 20 attributes it will be known which attributes need to be maintained, which means that they are good in terms of customer satisfaction, and which attributes need to be improved so that customers or consumers are satisfied with processed mujair fish cracker products. The results of the integration of Importance Performance Analysis (IPA) and the Kano model show that there are 3 attributes to be improved, 11 attributes are included in the category to be maintained and the remaining 6 attributes are attributes that need attention to increase customer satisfaction. So that in the research above, the results obtained 3 attributes that need to be improved, namely regarding the taste produced in mujair fish crackers. The taste of the 3 attributes regarding the taste produced by processed mujair fish crackers is a factor that really needs to be improved from the results of the consumer questionnaire, and the results of the 3 attributes that need to be improved are that it is important for producers to always prioritize the quality of processed mujair fish crackers products, so that from The results of this research will greatly help producers with the results of consumer evaluations, so that producers can evaluate the processed mujair fish cracker products to be ready to be delivered to consumers.

The results of this study indicate that the analysis of consumer satisfaction with processed mujair fish crackers has an effect. This has implications so that in the future the producers pay more attention to and improve even more regarding 3 attributes, namely the taste produced by savory mujair crackers, the taste produced by mujair crackers is in accordance with expectations, and the taste of mujair processed fish crackers is superior to the flavors of mujair crackers in general, in order to improve the quality of mujair fish cracker processed products so that the producer's goals can be achieved to obtain satisfaction from consumers. Regarding the limitations of the research, this research has been attempted and carried out in accordance with scientific procedures, but it still has limitations, namely, the factors that affect the quality of processed mujair fish cracker products from this study only consist of 5 variables, namely Taste, Color, Texture, Swellability and Packaging, while there may still be many other factors that can also affect consumer satisfaction. For the next researcher, the variables used for this study are Taste, Color, Texture, Flourishing and Packaging, therefore in future research they can add other variables or dimensions or attributes related to consumer satisfaction with processed mujair fish cracker products, questionnaire The questions used by the researcher are rather limited, therefore in future research it can add to and improve the questions in this study, the number of population used or the number of respondents can be even more so that it can increase the number of samples to be used.

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