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## Analysis and marketing strategy for processed sea cucumber crackers in the UMKM Kenjeran coastal area, Surabaya

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### Abstract

Micro, Small and Medium Enterprises (UMKM) are a good place for job creation which is planned by the government, private sector and individual business actors. In an effort to increase tourism and UMKM, the Surabaya City Government provides a platform for all residents, including Sea Cucumber Cracker UMKM. This research aims to analyze the profile of Sea Cucumber Crackers UMKM in the Kenjeran Coastal Area of Surabaya, analyze the marketing strategy of Sea Cucumber Crackers UMKM in the Kenjeran Coastal Area of Surabaya, and analyze the factors that influence the sustainability of the Sea Cucumber Crackers UMKM in the Kenjeran Surabaya Coastal Area. The research was carried out using a survey method of 28 Sea Cucumber Cracker UMKM business actors in the Kenjeran coastal area of Surabaya from April 2023 to December 2023. Data collection techniques used observation, interviews, literature study and documentation methods. The analysis carried out is quantitative descriptive analysis, SWOT analysis and QSPM. The results of this research show that in general, sea cucumber cracker UMKM in the Kenjeran Coastal Area of Surabaya City are micro businesses, with the majority running the business for more than 10 years, and having a high school education. Based on the SWOT analysis, it can be concluded that the marketing strategy position of UMKM Sea Cucumber Crackers is in Quadrant III, namely Change Strategy. The results of the Quantitative Strategic Planning Matrix (QSPM) analysis show that the Total Attractive Score (TAS) is 65.78.

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### Introduction

Kenjeran Beach is a place or tourist attraction that belongs to the Surabaya government which is managed by the Service Technical Implementation Unit (UPTD) at the Culture and Tourism Service (DIKPARTA). Various facilities at Old Kenjeran Beach include a food depot stand, parking area, prayer room, toilet, children's games, a stage on the water at THP Kenjeran, a wooden bridge over the water at THP Kenjeran, boat rental services, a kiosk for processed beach knick-knacks, a fish stall which is processed into food ingredients such as shrimp paste, salted fish, sea cucumber crackers, and the sales proceeds are the largest income for local residents.

Sea cucumbers (Holothuroidea) is the term given to sea cucumber invertebrates that can be consumed by humans. There are many benefits of sea cucumbers, especially gold cucumbers (*Stichopus herrmanni*) in curing various degenerative diseases (health conditions that cause tissue or organs to deteriorate over time), namely stroke, coronary heart disease, diabetes, gangrene (a condition where skin tissue dies. and wounds arise due to not getting enough blood supply or due to severe bacterial infections), cancer (tumors), kidney failure, chirosis hepatis, gout, rheumatism, hemorrhoids, osteoporosis, respiratory tract allergies, skin allergies, high blood pressure, low blood pressure, cholesterol, narrowing of blood vessels, decreased liver

function, hair loss, enlarged prostate. The many benefits of sea cucumbers in healing disease are obtained from sea cucumber extracts which have been processed by the medicinal industry. Apart from that, sea cucumbers can be used as processed crackers which have high nutritional value. Sea cucumber crackers are one of the typical souvenirs from the city of Surabaya, which are processed sea cucumber products, namely sea cucumbers. One of the products processed by sea cucumbers is fried, known as sea cucumber crackers. The color is blackish brown, the texture is crunchy like rambak crackers, the taste is savory and the aroma is slightly fishy.

One of the sales of processed sea cucumber crackers comes from UMKM spread across the coastal area of Kenjeran, Surabaya city. Things that need to be considered are product policies, prices, promotions and distribution. Thus, marketing is a function of success and achieving the expected goals so that the survival of UMKM in the Kenjeran coastal area of Surabaya can be achieved.

## Materials and Methods

### Research methods

This research uses qualitative research methods, namely scientific research which aims to understand a phenomenon in natural social contact by prioritizing a process of in-depth communication interaction between the researcher and the phenomenon that is occurring. For the business actors of Sea Cucumber Crackers in the Kenjeran Coastal Area, Surabaya, there is a phenomenon of an abundance of sea cucumbers which makes local residents use them to make a living. This method serves to provide input regarding marketing strategies to develop the business to make it bigger.

### Data source

Primary data is data obtained directly from informants. Primary data was obtained through interviews with informants. Determining informants using purposive sampling or purposive sampling. In this research, the informants taken were informants who were selling Sea Cucumber Crackers in the UMKM in the Kenjeran Coastal Area, Surabaya, collected by researchers as many as 28 respondents. Secondary data is data obtained by the author to support primary data. This secondary data includes statistical data from the Central Statistics Agency, the Surabaya City Fisheries Service, and the East Java Province Maritime and Fisheries Service.

### Data collection technique

Observation, collecting data through observation, in simple terms is the process by which the researcher or observer looks at the research situation. Observations will be made directly on the production and marketing activities of sea cucumber crackers in UMKM in the coastal area of Kenjeran, Surabaya. Interviews, interview data collection is used to obtain primary data from respondents. Respondents who will be interviewed are UMKM owners, sea cucumber cracker makers, traders in UMKM in the coastal area of Kenjeran, Surabaya.

Literature Study, the first step in the data collection method. Literature study is a data collection method that is directed at searching for data and information through documents, both written documents, photographs, drawings and electronic documents that can support the writing process.

Documentation, in the form of photos or drawings and data regarding UMKM. This research uses a questionnaire

containing a number of written questions regarding the aspects studied to obtain responses and information from respondents.

### Population and sampling techniques

28 Sea Cucumber Cracker UMKM in the Kenjeran Coastal Area of Surabaya will have their data taken according to real conditions in the field and will then be grouped based on levels or strata. Sampling technique to determine the profile of Sea Cucumber Crackers UMKM in the Kenjeran Coastal Area, Surabaya. The marketing strategy for UMKM Sea Cucumber Crackers and the factors that influence sales volume were carried out on the same 28 respondents randomly.

### Analysis of the UMKM profile of sea cucumber crackers

Analysis of the UMKM profile of Sea Cucumber Crackers using quantitative descriptive analysis. The quantitative analysis commonly used is descriptive statistical analysis.

### Analysis of marketing strategy for UMKM sea cucumber crackers

Analysis of the marketing strategy used in this research uses descriptive analysis. Descriptive analysis is used to determine the internal and external factors that influence the development of marketing of processed sea cucumber cracker production in the UMKM in the Kenjeran coastal area of Surabaya and the analysis used is SWOT analysis. The SWOT Matrix is a tool used to develop company strategic factors in implementing marketing development strategies for production products. The determination of internal factors and external factors was based on the results of a Focus Group Discussion (FGD) between researchers, the head of the Surabaya City Fisheries Service, and Sea Cucumber Cracker UMKM in the Kenjeran Coastal Area, Surabaya. Stages of preparing a SWOT analysis:

### IFAS table creation

After the internal strategic factors of an UMKM have been identified, an IFAS (Internal Strategic Factors Analysis Summary) table is prepared to formulate these internal strategic factors within the company's Strength and Weakness framework. The stages are: Determine the factors that are the strengths and weaknesses of UMKM players in column 1.

Give each factor a weight on a scale ranging from 1.0 (most important) to 0.0 (not important), based on the influence of the factor these factors on the strategic position of UMKM (all these weights must not exceed a total score of 1.00).

Calculate the rating (in column 3) for each factor based on a scale ranging from 4 (outstanding) to 1 (poor), based on the influence of the factor on the condition of the UMKM concerned. Positive variables (all variables that fall into the strength category) are given a value ranging from +1 to +4 (very good) by comparing them with the average of the main competitors. Meanwhile, variables that are negative are the opposite.

Multiply the weight in column 2 with the rating in column 3, to obtain the weighting factor in column 4. The result is a weighting score for each factor whose value varies from 4.0 (outstanding) to 1.0 (poor).

Use column 5 to provide comments or notes on why certain factors were selected, and how the weighting scores were calculated.

Add up the weighting scores (in column 4), to obtain the total weighting score for the UMKM concerned. This total value shows how a particular company reacts to its internal strategic factors. This total score can be used to compare UMKM actors with other UMKM in the same group.

#### EFAS table creation

Arrange them in column 1 (5 to 10 opportunities and threats). Give each factor a weight in column 2, starting from 1.0 (very important) to 0.0 (not important). These factors are likely to have an impact on strategic factors.

Calculate the rating (in column 3) for each factor by providing a scale ranging from 4 (outstanding) to 1 (poor) based on the influence of the factor on the condition of the company or UMKM in question. The rating value for the opportunity factor is positive (a greater opportunity is given a rating of +4, but if the opportunity is small, it is given a rating of +1). Threat rating scoring is the opposite. For example, if the threat value is very large, the rating is 1. Conversely, if the threat value is small the rating is 4.

Multiply the weight in column 2 with the rating in column 3 to obtain the weighting factor in column 4. The result is a weighting score for each factor whose value varies from 4.0 (outstanding) to 1.0 (poor).

Use column 5 to provide comments or notes on why certain factors were selected and how the weighting scores were calculated.

Add up the weighting scores (in column 4), to obtain a total weighting score for the company or UMKM in question. This total value shows how a particular company or UMKM reacts to its external strategic factors. This total score can be used to compare UMKM with other UMKM in the same group.

#### SWOT Matriks Creation

The tool used to compile company strategy factors is the SWOT matrix. This matrix can clearly illustrate how the external opportunities and threats faced by the company can

be adjusted to its strengths and weaknesses. This matrix can produce 4 (four) sets of possible strategic alternatives.

SO Strategy, this strategy was created based on the company's way of thinking, namely by utilizing all strengths to seize and exploit opportunities as much as possible.

ST Strategy, this strategy uses the company's strengths to overcome threats.

WO Strategy, this strategy is determined based on utilizing existing opportunities by minimizing existing weaknesses.

WT Strategy, this strategy is based on defensive activities and seeks to minimize existing weaknesses and avoid threats.

#### Analysis of Factors Affecting Sustainability

The data obtained was analyzed using SWOT analysis to determine the Marketing Strategy for Sea Cucumber Crackers in UMKM in the Kenjeran Coastal Area, Surabaya. External factors play a role in monitoring the micro and macro economic environment through opportunities and threats related to the organization. Meanwhile, internal factors include strengths and weaknesses to evaluate the company. The determination of internal factors and external factors was based on the results of a Focus Group Discussion (FGD) between researchers, the Surabaya City Fisheries Service, and Sea Cucumber Cracker UMKM in the Kenjeran Coastal Area, Surabaya.

#### Results and Discussion

##### Marketing Strategy for UMKM Products Sea Cucumber Crackers

In this research, the data obtained used SWOT analysis. SWOT analysis includes efforts to identify strengths, weaknesses, opportunities and threats that determine company performance. External information about opportunities and threats can be obtained from various sources, including customers, government documents, suppliers, banking circles, and partners in other companies.

**Table 1:** Strategy Analysis of Internal Factors for UMKM Sea Cucumber Crackers in the Kenjeran Coastal Area, Surabaya

Description	Internal Factors	Value	Rating	Value x Rating
Strength	Customer Network from Business Actors	0,12	3	0,37
	Quality/Skills of Human Resources Processing Sea Cucumber Crackers	0,05	1	0,05
	Brand	0,05	1	0,05
	Packaging Design	0,05	1	0,05
	All Production Equipment	0,05	1	0,05
	Strength Score Total			0,59
Weakness	Price	0,16	3	0,49
	Product Distribution	0,14	3	0,43
	Promotion	0,12	3	0,37
	Financial Condition Support (financiers)	0,10	2	0,21
	Product Diversification	0,10	2	0,21
	Weakness Score Total			1,74
	Total			2,33

Based on table 1 above, it shows that the analysis in the strengths section obtained a total score of 0.59, while the total score in the weaknesses section was 1.74. This means that the total weakness score is greater than the strengths.

Meanwhile, external factors that influence the UMKM of Sea Cucumber Crackers in the Kenjeran Coastal Area of Surabaya can be seen in the following table:

Based on table 2 above, it shows that the analysis in the opportunities section obtained a total score of 1.29, while the total score in the threats section was 1.03. This means that the

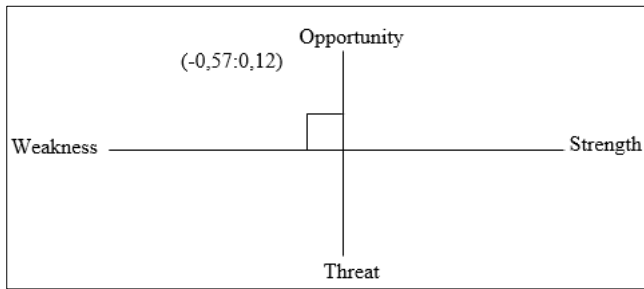
total score for opportunities is greater than the threats.

#### SWOT analysis diagram

Based on internal factors and external factors, a total strength score of 0.59 was obtained; the total value of the weakness score was 1.74; the total value of the opportunity score was 1.29; and the total threat score is 1.04. In the next stage, internal factors will be compared with external factors as outlined in the following SWOT analysis diagram:

**Table 2:** Strategy analysis of external factors for UMKM sea cucumber crackers in the Kenjeran Coastal Area, Surabaya

Description	External Factors	Value	Rating	Value x Rating
Opportunity	Easy and availability of transportation	0,16	3	0,49
	Communication facilities	0,17	3	0,52
	Government assistance/policies	0,07	2	0,15
	Collaboration with other universities or institutions	0,05	1	0,05
	General conditions and culture	0,05	1	0,05
	Opportunity Score Total			
Threat	Customers	0,11	2	0,23
	The existence of other UMKM in almost the same field	0,05	1	0,05
	Availability of raw materials	0,11	2	0,23
	Post Covid-19 pandemic	0,17	3	0,52
	Threat Score Total			
Total				2,33



**Fig 1:** SWOT Analysis Diagram

On the four lines of strength, weakness, opportunity and threat factors, the following coordinates can be obtained:

Strength Score – Weakness Score:	Opportunity Score – Threat Score
2	2

$$\frac{0,59-1,74}{2} : \frac{1,29-1,04}{2} = -1,14 : 0,24$$

2            2

The results of the SWOT analysis obtained a value of (-1.14:

0.24). These results indicate that the UMKM of Sea Cucumber Crackers in the Kenjeran Coastal Area, Surabaya City are in Quadrant III (Change Strategy) where the source on the X-axis arrow is positive and the Y-axis is negative. Based on the SWOT test results, it was found that the weakness value was greater than the strengths and the opportunity value was greater than the threat value, while the comparison of the IFAS and EFAS values showed that internal factors (weaknesses) = external factors (opportunities). The existence of this position shows that the UMKM Sea Cucumber Crackers in the Kenjeran Coastal Area of Surabaya City has opportunities but there are many weaknesses that must be corrected.

**SWOT Matrix**

Based on the SWOT analysis, internal factors and external factors are obtained which are often called IFAS and EFAS. Next, the SWOT Matrix is arranged in table 3. Based on the previous SWOT calculation, the O>W score, namely opportunities greater than weaknesses in Quadrant III is a Change Strategy. Sea Cucumber Crackers UMKM in the Kenjeran Coastal Area, Surabaya City have a great opportunity to develop their business, but have weaknesses so they have to change their strategy so that sales continuity is better.

**Table 3:** SWOT Matrix of IFAS and EFAS Results for UMKM Sea Cucumber Crackers in the Kenjeran Coastal Area, Surabaya

IFAS / EFAS	Strength (S)	WEAKNESS (W)
<b>OPPORTUNITIES (O)</b> Easy and availability of transportation Communication facilities Government assistance/policies Collaboration with other universities or institutions - General conditions and culture	Customer Network from Business Actors Quality/Skills of Human Resources Processing Sea Cucumber Crackers Brand Packaging Design - All Production Equipment	Price Product Distribution Promotion Financial Condition Support (financiers) - Product Diversification
	<b>STRATEGY (SO)</b> Follow up with customers regarding products Collaborating with universities such as those in the Engineering department to complete production equipment - Collaboration or participation in assistance from the government to carry out training to increase human resources skills	<b>STRATEGY (WO)</b> Offer discounts during cultural events or festivals in Surabaya Introducing products in universities or institutions for promotion - Cooperation in aid or government policies regarding capital for business development
<b>THREATS (T)</b> Customers The existence of other UMKM in almost the same field Availability of raw materials - Post Covid-19 pandemic	<b>STRATEGY (ST)</b> Add and expand the customer network by recontacting reduced customers Increasing the quality of human resources to produce good products to attract customers after the Covid-19 pandemic - Providing a brand on each product packaging so that it can differentiate it from other UMKM production	<b>STRATEGY (WT)</b> Adding types of product promotions to bring back lost customers Create product diversification with the availability of raw materials to attract buyers - Request capital support from banks or other institutions after the Covid-19 pandemic



The designs that can be made are as follows; offer discounts during cultural events or festivals in Surabaya, introducing products within universities or institutions for promotion, cooperation in aid or government policies regarding capital for business development.

### Quantitative Strategic Planning Matrix (QSPM)

Quantitative Strategic Planning Matrix (QSPM), is a tool for

evaluating various alternative strategies objectively based on key factors, both internal and external, that have been considered in the previous stage. QSPM is an intuitive judgment tool (a deep feeling when you instinctively know that something you are doing is right or wrong). Several alternative strategies for sea cucumber crackers UMKM in the Kenjeran Coastal Area, Surabaya City are in table 4.

**Table 4:** Quantitative Strategic Planning Matrix Analysis

Description	Strategi Alternatives	TAS Score
1	Request capital support from banks or other institutions after the Covid-19 pandemic (WT-3)	7,52
2	Follow up with customers regarding products (SO-1)	6,6
3	Providing a brand on each product packaging so that it can differentiate it from other UMKM production (ST-3)	5,7
4	Adding types of product promotions to bring back lost customers (WT-1)	5,64
5	Cooperation in aid or government policies regarding capital for business development (WO-3)	5,53
6	Increasing the quality of human resources to produce good products to attract customers after the Covid-19 pandemic (ST-2)	5,47
7	Collaboration or participation in assistance from the government to carry out training to increase human resource skills (SO-3)	5,26
8	Collaborating with universities such as those in the Engineering department to complete production equipment (SO-2)	5,19
9	Introducing products within universities or institutions for promotion (WO-2)	5,14
10	Add and expand the customer network by recontacting reduced customers (ST-1)	5,01
11	Create product diversification with the availability of raw materials to attract buyers (WT-2)	4,67
12	Offer discounts during cultural events or festivals in Surabaya (WO-1)	4,05

Based on calculations carried out with the Attractiveness Score (AS) or total attractiveness score and the Total Attractive Score (TAS) or total attractiveness score. The AS value shows the attractiveness of each strategy for its key factors. The AS value was obtained through a questionnaire addressed to twenty-eight respondents who were directly related to the marketing and production process of Sea Cucumber Cracker UMKM in the Kenjeran Coastal Area, Surabaya City. So, they are considered to have knowledge about the development of UMKM. The alternative strategy that has been prepared above is the most interesting strategy to be implemented by UMKM Sea Cucumber Crackers in the Kenjeran Coastal Area, Surabaya City in accordance with the owner's authority.

The results of the Quantitative Strategic Planning Matrix (QSPM) analysis show that requesting capital support from banks or other institutions after the Covid-19 pandemic (WT-3) is a strategy with the highest Total Attractive Score (TAS) value compared to others. namely 7.52. The results of the data obtained show that the strategies that have been formulated require changes in strategy in order to cover weaknesses with existing opportunities as shown in the SWOT analysis diagram, namely Quadrant III. Sea Cucumber Cracker UMKM in the Kenjeran Coastal Area, Surabaya City face great opportunities, but face several internal weaknesses. The strategy implemented in this position is to minimize the company's internal problems so that it can capture a better market (turn around).

### Conclusions

Based on the results of the IFE and EFE analysis, a total IFE score of 2.33 was obtained and a total EFE score of 2.33. From these results it can be concluded that the company is in Quadrant III, namely Change Strategy. The results of the SWOT analysis of Sea Cucumber Crackers UMKM in the Kenjeran Coastal Area, Surabaya City

produced 12 alternative strategies. The most interesting strategies are asking for capital support from banks or other institutions after the Covid-19 pandemic (WT-3).

The results of the analysis using the QSPM method show that the most suitable strategy for UMKM to implement at this time is to ask for capital support from banks or other institutions after the Covid-19 pandemic (WT-3). This is closely related to the weakness of UMKM, namely product diversification and the threat to UMKM, namely post Covid-19 pandemic.

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### References

1. Ghozali I. Application of Multivariate Analysis with the SPSS Program. Semarang: UNDIP; c2009.
2. Handayani R. Social Research Methodology. Yogyakarta: Trussmedia Graphics; c2020.
3. Kotler, Keller. Marketing Management. Volume I 12th Edition. Jakarta: Erlangga; c2012.
4. Nazir M. Research Methods. Jakarta: Ghalia Indonesia;

- c2003.
5. Moleong LJ. *Qualitative Research Methods*. Bandung: PT. Rosdakarya teenager; c2017.
  6. Nisak Z. SWOT analysis to determine competitive strategy. *Ekbis Journal*. 2013;9(2):468-76.
  7. Freddy. *SWOT Analysis Techniques for Dissecting Business Cases*. Jakarta: PT. Gramedia Pustaka Utama; c2008.
  8. Sugiyono. *Understanding Qualitative Research*. Bandung: CV. Alfabeta; c2005.
  9. Sugiyono. *Quantitative, Qualitative and R&D Research Methods*. Bandung: CV. Alfabeta; c2017.
  10. Suhandi A. Utilization of the potential of sea cucumber innards waste as an ingredient for animal feed. Bogor Agricultural Institute. Bogor; c2001.
  11. Teguh MS. Sea cucumbers (Sea Cucumber) and seahorses (Hippocampus SP). Retrieved; c2011.
  12. Tjiptono F. *Service Management*. Third Edition. Andi Offset. Yogyakarta; c2000.
  13. Tjiptono F. *Marketing Strategy* First Edition. Yogyakarta C.V Andi Offset; c2001.
  14. Tjiptono F. *Marketing Strategy* First Edition. Yogyakarta C.V Andi Offset; c2007.