

THE EFFECT OF PACKAGING PROCESS AND PRICE ON THE PURCHASE DECISION OF LIVE LOBSTER ON CONSUMERS PT. PERMATA NINGRAT

Natasya Rossa Afriany¹, Dimas Sujatono², Yuwono Dwisilo Sucipto³, Abdul Ghafar⁴

^{1,2,3,4} Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia.

corresponding author: ntsya.rosa@gmail.com & dimassjn5@gmail.com

Abstract: This research focuses on the packaging process and price on the purchase decision of live lobster from PT. Permata Ningrat. The purpose of this research is to determine the effect of the packaging process and price on the purchase decision of live lobster from consumers of PT. Permata Ningrat. This study uses quantitative research by distributing questionnaires for consumers in PT. Permata Ningrat. The data analysis uses validity test, reliability test, multiple regression linear and statistical hypothesis. The result of this research shows that the packaging process and price had a positive and significant effect on the purchase decision of consumers of PT. Permata Ningrat.

Keywords: *Price, Purchase Decisions, Consumer, Lobster, Packaging Process*

Introduction

This research discusses live lobster. Lobster can be traded when it is life and can be packed without using water and lobster arrived at the destination in stable condition. Lobster is a very valuable commodity so that there are so much time and efforts to develop storage, packaging, and transportation system, for making sure the lobster arrived at the hotel, restaurant, and catering or consumers in stable condition.

PT Permata Ningrat is a goods distribution company and also as supplier live seafood to the hotel, restaurant, and catering. Before finding the proper handling, PT Permata Ningrat had the death of lobster during the distribution process. The solution to this packaging problem of live lobster is by using a soft brush for making the lobster dry. The setting location of lobster by its size from heaviest one is placed at the bottom until the smallest size placed on the top. The price of lobster depends on its type. The thing that contributes to the price of lobster are on the packaging process that affects the death rate of lobster. Furthermore, the purchase decision by the hotel, restaurant and catering are seen by the affordability of the price and the suitability of the price and the product quality and by its necessary.

Literature Review

Packaging Process

According to (Yildirim et al., 2018) the purpose of packaging is as containers for the product in the supply chain. Moreover, the packaging can avoid physical, chemical and microbiological damage and contamination, and criminal acts. (Borishade, Ogunnaike, & Favour, 2015) revealed that to increase the product selling value can use the packaging by the design including color, shape, label and packaging materials. The primary purpose of the packaging is to keep the product quality from the distribution process, the storage, marketing reference until it is received by consumers.

The lobster packaging process which carried out by PT. Permata Ningrat starts by catching the lobster from the fish pond and separates the lobster by size from the smallest until the biggest size. Then the lobsters are anesthetized without using chemical material. The lobsters are anesthetized by freezing. After that, lobster can be anesthetized for about five hours. The next process is drying lobster by using sawdust and using a soft brush. The important thing from this process is to dry the lobster body to make sure that lobster cannot move in the styrofoam box. After the lobster is chilled, lobsters must be packaged by primary packaging so that the position of feet close to the body and the part near the head remains open and done separately for each lobster. Put the ice cubes into the styrofoam box and give the barrier to prevent the lobsters from being attached to the ice cubes. The last step is to arrange the lobsters into the styrofoam box by size from the biggest at the bottom until the smallest on the top.

From the explanation above, it can be concluded that the packaging process is development action sequence by making the container which designed for the product include the product appearance like packaging design, color, the shape of the packaging, labels, the anesthetized method, drying method, materials and temperature that used to save the product in the container to keep the quality product when delivered to consumers.

Price

According to (Lk, Arimbawa, & Damayanti, 2019) Price is the sum of numbers that are given by the consumer for getting the profit by having or using a product or service. (Marcal, Saldanha, & Amaral, 2020) revealed that price is one of the important

factors that trigger product competition. Things that affect the price is quality, product value, the product quantity at the market and amount of customer.

according to the definition, it can be concluded that price is the sum of numbers of products that must be paid for getting or having some product or service that is influenced by the quality, product value, and product quantity at the market to generate revenue for the company.

Consumers Purchase Decisions

According to (Borishade et al., 2015) purchase decision is where the consumer's choice or decision before the transaction that starts after decides to buy something. After that, the consumer must decide where to buy, the brand, the product design, the size, when to buy, how much money needed to buy the product, and the payment method. This decision can be affected by product packaging, the differences between one product and the other brand. (Riadi, 2020) revealed that purchase decision is the process of the decision taken by the consumer to buy something that combines between knowledge required to choose alternative products available. Influencing factors are quality, price, location, promotion, convenience, and service.

From the definition above, it can be concluded that the purchase decision of consumers is alternative choices or decisions to choose the decision to buy or not after the consumer decides. It is influenced by product quality, price, location, promotion, convenience, and service.

Method

This research used a quantitative research method and the primary data source is the questionnaire that distributing to some respondents from the consumers of PT Permata Ningrat and marketing staff of PT Permata Ningrat. The secondary data are book literature, the journal, the article, examples of previous research, and other sources related to this research.

The data analysis method that used in this study were validity test, reliability test, multiple regression linear and statistical hypothesis. They were tested by SPSS version 26.

- 1) Validity test is a measure that shows the extent of the measuring instruments or tools to be able to measure what it claims to measure. The level of validity can be

measured by comparing R-value calculated by R-Table with the provision that the degree of freedom ($df = n - k$), where n is the number of samples and k is the number of independent variables.

- 2) Reliability test. Data reliability is a verification to gain credibility of some questionnaires to be trustworthy as data collection tools. Reliability coefficient between 0.00 and 1.00. The questions are acceptable if the alpha value is > 0.60 .
- 3) Multiple regression linear. According to (Mongisidi, Sepang, & Soepeno, 2019), multiple regression linear is used to analyze the correlation of some independent variable (X) to dependent variable (Y) together.
- 4) Statistical hypothesis test. The statistical hypothesis test is the T-Test value and F Test value. The T-Test value is used to determine the partial influence independent variable (X) individually to explain the variation of the dependent variable (Y). The F-Test value is used to determine the correlation between all of the independent variables (the packaging process and price) to dependent variables (the purchase decision of consumers). It is most often used when comparing statistical models that have been fitted to a data set, to identify the model that best fits the population from which the data were sampled.

Discussion and Result

Validity Test

Validity test is calculated by comparing the R-Value and R-table with error degree is 5% for the degree of freedom ($df = n - k$), with requirement statement test results is valid if $R \text{ count} > R\text{-table}$. Validity test gave to 43 consumers respondents of PT Permata Ningrat. The SPSS calculation result will get a value on the table for each statement then will be compared to the table value for degree freedom ($df = 43 - 2 = 41$), R-table value is 0.308. R-value $> R\text{-table}$, so consumers statement on the questionnaire is valid.

Table 1 Validity Test Result of Packaging Process Variable (X_1)

Statement	R-value	R-table	Description
Statement 1	0.610	0.308	VALID
Statement 2	0.500	0.308	VALID

Statement 3	0.805	0.308	VALID
Statement 4	0.798	0.308	VALID
Statement 5	0.696	0.308	VALID
Statement 6	0.863	0.308	VALID
Statement 7	0.775	0.308	VALID
Statement 8	0.730	0.308	VALID
Statement 9	0.653	0.308	VALID
Statement 10	0.770	0.308	VALID
Statement 11	0.760	0.308	VALID
Statement 12	0.640	0.308	VALID
Statement 13	0.581	0.308	VALID
Statement 14	0.713	0.308	VALID
Statement 15	0.708	0.308	VALID

Source: Processing Data Output SPSS 26

Based on the validity table on the packaging process variable (X_1) above, every statement of the fifteen statements is valid, because every person correlation or R-Value $>$ R-Table, with significant degree < 0.05 . For R-Table 0.308 obtained from R-table statistic where the value of $df = n$ (the number of respondents) $- k$ (the number of independent variables) which is $43 - 2 = 41$. Based on the table above, shows that every questionnaire (1 – 15) is valid, it is supported by R-value from lowest to highest value (0.500 – 0.863) $>$ R-table (0.308).

Table 2 Validity Test Result of Price Variable (X_2)

Statement	R-value	R-table	Description
Statement 1	0.884	0.308	VALID
Statement 2	0.825	0.308	VALID
Statement 3	0.714	0.308	VALID
Statement 4	0.759	0.308	VALID
Statement 5	0.806	0.308	VALID
Statement 6	0.819	0.308	VALID

Source: Processing Data Output SPSS 26

Based on the table of validity test on price variable (X_2), every statement is valid, it supported by every Pearson correlation or R-Value $>$ R-table, and significant degree < 0.05 . For R-table is 0.308 obtained from R-statistic Table which is the value of $df = n$ (the number of respondents) $- k$ (the number of independent variables) which is $43 - 2 = 41$. Based on the table above by price variable, shows that the questionnaires (1 – 6) are valid, it supported by R-value from lower until highest value (0.71 – 0.884) $>$ R-table (0.308).

Table 3 Validity Test Result of Consumers Purchase Decision Variable (Y)

Statement	R-value	R-table	Description
Statement 1	0.901	0.308	VALID
Statement 2	0.942	0.308	VALID
Statement 3	0.868	0.308	VALID
Statement 4	0.823	0.308	VALID
Statement 5	0.938	0.308	VALID
Statement 6	0.933	0.308	VALID
Statement 7	0.868	0.308	VALID
Statement 8	0.916	0.308	VALID
Statement 9	0.834	0.308	VALID

Source: Processing Data Output SPSS 26

Based on the validity test table on consumers purchase decision (Y), each statement is valid, because every correlation or R-value > R-table, and significant degree < 0.05. For R-table is 0.308 was obtained from R statistic Table which is the value of $df = n$ (the number of respondents) – k (the number of independent variables) which is $43 - 2 = 41$. Based on the table above by consumers purchase consumers variable, shows that the questionnaires (1 – 9) are valid, it supported by R-Value from lower until higher value (0.834 – 0.942) > R-table (0.308). From the test results above, it shows that the statement items in the questionnaire on the packaging process, price, and consumers purchase decisions show R-Value > R-Table, it can be concluded that all statement items are valid.

Reliability Test

Reliability Test is measuring by Alpha Cronbach Method. A variable can be reliable if the result of Alpha Cronbach > 0.6. Based on calculation statistic data SPSS 26, the result of reliability is as below:

Table 3 Reliability Result

Variables	Reliability Statistics	
	Cronbach's Alpha	N of Items
Packaging Process (X_1)	0.924	15
Process (X_2)	0.878	6
Consumers Finance Decision (Y)	0.966	9

Source: Processing Data Output SPSS 26

The analysis result of reliability test on the packaging process variable, the coefficient of reliability Alpha Cronbach is 0.924. Based on the result, it can be

concluded that the data above is very reliable, in which it almost reaches point 1.00 with the minimum range 0.81

The analysis result of reliability test on price variable, the reliability Alpha Cronbach coefficient is 0.878. By the result, it shows that the above is very reliable, in which it almost reaches point 1.00 with the minimum range 0.81

Multiple Regressions Linear

Multiple Regression Linear Analysis is used to determine how much the correlation between the packaging process (X_1) and price (X_2) on the purchase decision of consumers (Y). The statistic calculation on multiple linear regression is served by the data table below:

Table 4 The Result of Multiple Linear Regression

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-5.255	4.087		-1.286	0.206
1 Packaging Process Variable (X_1)	0.416	0.084	0.552	4.982	0.000
1 Price Variable (X_2)	0.669	0.191	0.387	3.494	0.001

a. Dependent Variable, Consumers Purchase Decision(Y)

Source: Processing Data Output SPSS 26

$$Y = a + b_1X_1 + b_2X_2 + e$$

$$Y = - 5.255 + 0.416 X_1 + 0.699 X_2$$

By the regression linear result, the interpretation can be obtained:

- 1) The Constant of – 5.255 is meant that if the packaging process and price (independent variable) are considered 0 (zero) or ignored, the purchase decision will decrease by 5.255.
- 2) The regression coefficient of the packaging process is 0.416 states that for every increase in the packaging process of 1 value, so the packaging process will also

increase consumers purchase decisions by 0.416 with the assumption that other variables are considered constant. In other words, the packaging process affects consumers purchase decisions.

- 3) The price regression coefficient is 0.669 states that every price increase of 1 value, will increase consumers purchase decisions by 0.669 with the assumption that other variables are considered constant. In other words, the price affects consumers purchase decisions.

Hypothesis Testing

T Test Result

T-Test is used to determine the partial effect of the independent variable (X) individually in explaining the variation of the dependent variable (Y). The following tables are the results of hypothesis testing (T-test) for the packaging process and price variables on consumers purchase decisions partially obtained:

Table 5 T Test Result

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-5.255	4.087		-1.286	0.206
Variable of Packaging Process (X ₁)	0.416	0.084	0.552	4.982	0.000
Price (X ₂)	0.669	0.191	0.387	3.494	0.001

a. Dependent Variable, Consumers Purchase Decision (Y)

Source: Processing Data Output SPSS 26

The Effect of The Packaging Process Variables on Consumers Purchase Decisions

The packaging process variable (X₁) has a positive and significant effect on consumers purchase decisions (Y). It can be seen that the significant level of the packaging process (X₁) is $0.000 < 0.05$ and the T Value is bigger than T Table ($4.982 > 2.021$), then H₀ is rejected and H₁ is accepted so that the hypothesis that there is an effect of the packaging process on consumers purchase decisions is partially accepted. This means the packaging process will improve consumers purchase decisions of PT Permata Ningrat

because the packaging can keep the temperature cool according to product quality requirements. This process is very useful for maintaining a cool temperature that keeps the lobster in anesthetized condition. It is an indicator in describing the packaging process variables and the need for companies to make consumers decision to buy live lobster at PT Permata Ningrat because the quality of the product is very good which has an indicator in describing consumers purchase decisions variables.

The Effect of Price Variables on Consumers Purchase Decisions

The price variable (X_2) has a positive and significant effect on consumers purchase decisions (Y). It can be seen that the significant level of price (X_2) is $0.001 < 0.05$; and the value of T Value is bigger than T Table ($3.494 > 2.021$), then H_0 is rejected and H_2 is accepted so that, the hypothesis shows that there is an effect of the decision purchase price consumers were received in partial. This means the price will increase the purchase decisions of consumers of PT Permata Ningrat live lobster. Prices vary according to quality, benefits and size obtained and the price of live lobster has better benefits than dead lobster. That has an indicator that describes the price variable and the need for companies to make consumers decision to buy live lobster because of the ease of placing an order is an important indicator in describing the variables of consumer purchase decisions.

F Test Result

The F Test is used to determine whether there is a simultaneous effect between all independent variables (the packaging process and price) on the dependent variable (consumers purchase decisions) as follows:

Table 6 F Test Result

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1330.053	2	665.026	63.016	<0.001 ^b
	Residual	422.133	40	10.553		

	Total	1752.186	42			
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a. Dependent Variable: Consumers Purchase Decisions(Y)

b. Predictors: (Constant), Price (X_2), The Variable of The Packaging Process (X_1)

Source: Processing Data Output SPSS 26

Based on the calculation of F Test using SPSS, the obtained F Value is 63.016 with F Table value of 3.23 and the calculated F value $>$ F table or $63.016 > 3.23$. A significant level $< 0.001 < 0.05$, then H_0 is rejected and H_3 is accepted. It can be concluded that variables of the packaging process (X_1) and price (X_2) simultaneously have a significant effect on consumers purchase decisions (Y). This means that the packaging process and price will improve the purchase decisions of consumers of PT Permata Ningrat live lobster. In this way, the company must keep the temperature cool according to product quality requirements, which is useful in maintaining a cool temperature that keeps the lobster in anesthetized condition. That is an indicator that reflects the variables of the packaging process and the price that varies according to quality, benefits and size obtained and the price of live lobster has better benefits than dead lobsters. These make consumers decisions to purchase live lobster due to ease of order is an important indicator for describing consumer's purchase decision variables.

Conclusion

Based on the research result, can be concluded that the right price and packaging process take positive effect and significant on the purchase decision. It stated quantitatively has a positive result which means that the higher value of the packaging process and the price, so the purchase decision to buy live lobster will have a higher value too, by the consumers at PT. Permata Ningrat.

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