Analysis of the influence of marketing mix on the sales online of processed products salak (*Sallaca zalazza* (Gaert.) Voss.)

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Abstract. The increasing of internet usage now is a new business opportunity by providing online stores, including SMEs UD. Cristal Yogyakarta. UD. Cristal has some obstacles, there are the salak processed products that are not widely known, the level of online sales has not been maximized and it is still fluctuating. This study aims to identify the marketing mix that influence the level of sales online of the salak processed products and prioritize the improvement of the best marketing mix strategy for UD. Cristal is based on a marketing mix that influences and readiness from UD. Cristal. Data analysis used in this research is the classical assumption test, multiple linear regression, simultaneous test (F-test) and partial test (t-test). Based on this research, it was found that the marketing mix simultaneously had a positive significant effect on the level of sales online of the salak processed products with a value (adjusted R²) is 59.4%. And then partially, four out seven marketing mix variables have a positive significant effect on the level sales online are the product, promotion, process/services, and physical evidence. Priority improvement of online marketing mix UD. Cristal consists of repairing service facilities, improving physical evidence on online stores, developing promotional methods through the internet, adding promotions in the form of discounts, and product development.

1. Introduction
In the current era of globalization, technology and information in the world, especially the internet, is experiencing very rapid development. The reason why the internet is so popular in the world community is that the internet has very wide connectivity and coverage, reduces communication costs, lower transaction costs, reduces agency costs, is interactive, flexible, and easy has the ability to distribute knowledge quickly. Therefore the internet is now a basic necessity by most people besides the needs of food, clothing and shelter. The phenomenon of internet usage, which is expected to increase over time is certainly a new business opportunity by providing online stores as part of e-commerce.

The internet is a global computer network that provides various variety of information and facilities in communication [1]. While, Electronic commerce or also called e-commerce is the use of communication networks and computers to carry out business processes. E-commerce can also be defined as a way to shop or trade online or direct selling that utilizes internet facilities where there are websites that can provide "get and deliver" services [2].

Based on the survey shows that internet users in Indonesia continue to increase every year. In 2017, it is known that the penetration of internet users in Indonesia is 143.26 million. There are 32.19% or 41.6 million people who access the internet to buy online and 16.83% or 24.1 million people who access the internet to sell online [3].
Through this internet, there is a means of buying and selling bridging between sellers and buyers online. Everyone can sell online via an online marketplace, including SMEs to expand market share and increase sales volume [4]. At present, the number of 3.79 million SMEs units has implemented online sales through e-commerce [5]. One of the SMEs that has developed online sales is UD. Cristal in Yogyakarta. Establishment of UD. Cristal aims to make salak have a high selling value due to a large number of salak production in Sleman Regency compared to other districts [6].

Based on data obtained from this company in the past two years, it is known that the data on online sales of salak processed products are as follows:

Table 1. Data of the number of sales online of salak processed products

| No. | Month  | 2017 | 2018 |
|-----|--------|------|------|
| 1   | January| 56   | 92   |
| 2   | February| 73  | 88   |
| 3   | March  | 60   | 90   |
| 4   | April  | 63   | 91   |
| 5   | May    | 69   | 90   |
| 6   | June   | 69   | 92   |
| 7   | July   | 67   | 102  |
| 8   | August | 68   | 105  |
| 9   | September| 77 | 112  |
| 10  | October| 86   | 112  |
| 11  | November| 93  | 114  |
| 12  | December| 95  | 120  |

Average: 73, 101

Source: data processing (2019)

Based on the above data it can be concluded that the data shows the sales online of salak processed products of UD. Cristal has a positive trend from 2017 with an average sales of 73 products/month to 101 products/month in 2018. This figure is already quite high and continues to increase for the SME scale that sells region processed products in the online market. But with the current marketing mix, the salak processed products of UD. Cristal has not been widely known and the level of online sales has not been maximized and is still volatile. This means that there is a marketing mix variable that influences the level of sales online of salak processed products of UD. Cristal but has not been maximized by UD. Cristal. In terms of capacity, UD. Cristal is also quite high and able to meet more market demand.

The success of selling business needs to be supported by many factors, one of which is the marketing mix strategy. Therefore, it is necessary to know how the marketing mix affects the sales level of processed salak products online and prioritizes the improvement of marketing strategies that can be applied at UD. Cristal to increase sales following UD. Cristal's readiness.

2. Materials and Methods

This research was conducted during January – April 2019. We uses the quantities descriptive method, data collection with closed questionnaires and purposive sampling technique. The number of respondents taken is 150 people, where the respondents are a person who has purchased processed salak UD. Cristal by online at least once [28].

Sources of data in this study are primary data obtained through questionnaires and collected directly from the respondents. While the secondary data is the data supporting this research, obtained through
interviews and literature data obtained from the study of literature as well as from internet research. Sources of data we use in this paper come from the research object, namely UD. Cristal.

Once all the data and the results of the analysis have been completed, then the next from the questionnaire distributed to respondents via WhatsApp [29]. Respondents will assess each statement in each marketing mix using a Likert scale (1 - 5) starting from disagreeing to strongly agree. The results of the questionnaire will then be processed using the classical assumption test, which consists of a linearity test, normality test, heteroscedasticity test, and multicollinearity test. Furthermore, the data is processed using multiple linear regression analysis to obtain the equation model in the form of equation (1). Data is also processed using a simultaneous test (F-test) and a partial test (t-test) to test predetermined hypothesis. Furthermore, the results of multiple linear regression analyses are used to formulate the priorities of online marketing strategies for UD. Cristal also considers the readiness of UD. Cristal itself.

3. Data analysis and results

Processing data in this study using the help of SPSS 21 software.

3.1 The Classical Assumption Test

A good regression model and analysis can be carried out must meet the criteria of LINE (linearity, independence, normality, Equal variance) [22]. At this stage four tests were conducted, namely Linearity Test for Linearity criteria, Multicollinearity Test for Independence criteria, Normality Test for Normality criteria, and Heteroscedasticity Test for Equal variance criteria.

3.1.1 Linearity Test, used to see whether the relationship between variables X and Y forms a linear relationship [22]. A model is said to be linear when Sig. Deviation from Linearity > 0.05 and if Sig. Deviation from linearity < 0.05, it can be concluded that there is no linear relationship between the independent variable (X) and the dependent variable (Y).

Table 2. Linearity test results

| No. | Variabels     | Sig.Deviation from Linearity | Information |
|-----|---------------|------------------------------|-------------|
| 1   | Product (X1)  | 0.166                        | Linier      |
| 2   | Price (X2)    | 0.066                        | Linier      |
| 3   | Place (X3)    | 0.639                        | Linier      |
| 4   | Promotion (X4)| 0.409                        | Linier      |
| 5   | People (X5)   | 0.234                        | Linier      |
| 6   | Process (X6)  | 0.054                        | Linier      |
| 7   | Physical evidence (X7)| 0.079                  | Linier      |

Source: data processing (2019)

Based on Table 2, it can be seen that the value of Sig. Deviation from Linearity of all independent variables is more than 0.05. Therefore, we can conclude that there is a linear relationship between the independent variable (X) and the dependent variable (Y) so that it qualifies for the next statistical test.

3.1.2 Normality test, the aim is to test whether, in the regression model, the dependent variable with an independent variable has a normal distribution or not. The normal distribution is very important because, as it is known that the t-test and F assume that the residual value follows a normal distribution. The normality test can be done by the Kolmogorov Smirnov test and is said to be normally distributed when the significance is > 0.05 [30].

Based on Table 3, it can be seen that the significance value obtained is 0.932, which means more than 0.05. Therefore, we can conclude that the residual confounding variable has a normal distribution and qualifies for the next statistical test.
**Table 3. Normality test results**

| No. | Information | Unstandardized Residual |
|-----|-------------|-------------------------|
| 1   | N           | 150                     |
| 2   | Asyp. Sig. (2-tailed) | 0.932                  |

Source: data processing (2019)

3.1.3 **Multicollinearity Test**, to find out whether in the regression model there is an inequality of variance and from another observation. A good regression model does not occur in heteroscedasticity. In this study, heteroscedasticity tests were carried out using the Glejser test. The Glejser test is done by regressing between the independent variables and their residual absolute values. If the significance value between the independent variables and absolute residuals is more than 0.05, there is no problem with heteroscedasticity [31].

**Table 4. Multicollinearity test results**

| No. | Independent variables | Collinearity Statistics |
|-----|-----------------------|-------------------------|
|     |                       | Tolerance | VIF  |
| 1   | Product               | 0.617     | 1.621 |
| 2   | Price                 | 0.732     | 1.366 |
| 3   | Place                 | 0.799     | 1.252 |
| 4   | Promotion             | 0.378     | 2.646 |
| 5   | People                | 0.857     | 1.166 |
| 6   | Process               | 0.382     | 2.615 |
| 7   | Physical evidence     | 0.530     | 1.888 |

Source: data processing (2019)

Based on Table 4, it can be seen that the tolerance value for all independent variables in this study is greater than 0.1. Also known, the VIF value for all independent variables in this study is worth less than 10. Therefore, we can conclude that the variables in this regression model are said not to occur multicollinearity.

3.1.4 **Heteroscedasticity Test**, the aim is to test whether the regression model found a correlation between independent variables used to detect the presence or absence of multicollinearity in the study. A good regression model should not correlate with variables, because if the independent variables correlate with each other than this variable is not orthogonal or the correlation value between the variables is not 0 (zero). The multicollinearity test in this study used a VIF statistical instrument (variance inflation factor). VIF is nothing but measuring the closeness of the relationship between independent or independent variables or X. Then variables are said to have not a multicollinearity problem if the tolerance value > 0.1 and the VIF value < 10 [31].

Based on Table 5, it can be seen that the significance value of the independent variables with absolute residuals for all independent variables is more than 0.05. Therefore, we can conclude that there is no problem of heteroscedasticity so that it qualifies for further statistical tests.
Table 5. Heteroscedasticity test results

| No. | Variables                | Sig. |
|-----|--------------------------|------|
| 1   | Product (X1)             | 0.242|
| 2   | Price (X2)               | 0.936|
| 3   | Place (X3)               | 0.106|
| 4   | Promotion (X4)           | 0.384|
| 5   | People (X5)              | 0.621|
| 6   | Process (X6)             | 0.151|
| 7   | Physical evidence (X7)   | 0.354|

Source: data processing (2019)

3.2 Multiple Linear Regression Analysis

Based on the analysis of classic assumptions that have been previously carried out, the results obtained that the data obtained meet all the requirements of the classical assumptions. Therefore, it can be said that the data used in this study is good and feasible to be used to form the model as in equation (1). The results of the calculation of multiple linear regression analysis can be seen in Table 6. Below.

Table 6. Multiple linear regression results

| No. | Variables     | B    |
|-----|---------------|------|
|     | Constant      | 6.660|
| 1   | Product (X1)  | 0.155|
| 2   | Price (X2)    | 0.032|
| 3   | Place (X3)    | 0.005|
| 4   | Promotion (X4)| 0.226|
| 5   | People (X5)   | 0.053|
| 6   | Process (X6)  | 0.278|
| 7   | Physical evidence (X7) | 0.173|

Source: data processing (2019)

Based on Table 6, the multiple linear regression equation is obtained as follows:

\[ Y = 6.660 + 1.55X_1 + 0.032X_2 + 0.005X_3 + 0.226X_4 + 0.053X_5 + 0.278X_6 + 0.173X_7 + \varepsilon \ldots \ldots \ldots \ldots (1) \]

3.3 Simultaneous Test (F – test)

The F test is a test to find out whether the independent variables X1, X2, X3 and X4, X5, X6, and X7 together (simultaneously) can influence the dependent variable Y. The use of this analysis technique is done by comparing the value of F with Ftable at the significance level (\(\alpha\)) 0.05 or 5%. If the value of Fcount > Ftable and F significant (\(\alpha\)) < 0.05 then it is proven that the independent variables simultaneously have a significant effect on the dependent variable and vice versa [31, 32].

Table 7. Simultaneous test (F – test) results

| F tabel | F count | F sig. | Adjusted R² | Decision |
|---------|---------|--------|-------------|----------|
| 2.07    | 32.091  | 0.000  | 0.594       | H8 accepted |

Source: data processing (2019)

Based on Table 7, it can be seen that the calculated F value is 32.091 and F is significant at 0.000. While for the F table obtained is 2.07 from the value of df 1 (k) is 7 and df 2 (NK) is 148. Thus it can be seen that Fcount > Ftable which means the marketing mix (7P) together have a positive effect on the level of online sales. Besides, it is also seen that the value of F significant <0.05, which means the marketing mix (7P) together has a significant effect on the level of online sales. Then it can be
concluded that the marketing mix (7P) together has a significant positive effect on the level of sales of salak processed products. Also, know that the coefficient of determination (R²) is 59.4%.

### 3.4 Partial Test (t-test)

In this study using a real level of 95% or α = 0.05 so that the influence of independent variables individually with criteria if t count> t table and t significance <0.05 can be said that the independent variable has a significant positive effect on the dependent variable and so vice versa [31]. In this study using a real level of 95% or α = 0.05 and N (sample) of 150, so that it is known that t table is 1.97591. The results of the calculation of the coefficient of determination can be seen in Table 8.

| No. | Variables        | t tabel   | t count  | Decision   |
|-----|------------------|-----------|----------|------------|
| 1   | Product (X1)     | 1.97951   | 2.502    | H1 accepted|
| 2   | Price (X2)       | 1.97951   | 0.621    | H2 rejected|
| 3   | Place (X3)       | 1.97951   | 0.066    | H3 rejected|
| 4   | Promotion (X4)   | 1.97951   | 2.105    | H4 accepted|
| 5   | People (X5)      | 1.97951   | 0.808    | H5 rejected|
| 6   | Process (X6)     | 1.97951   | 4.560    | H6 accepted|
| 7   | Physical evidence (X7) | 1.97951 | 2.207    | H7 accepted|

Source: data processing (2019)

Partially, not all variables from the marketing mix (7P) affect the sale of processed salak products online. Four marketing mix variables have a statistically significant positive effect on the sales online of salak processed products, namely product, promotions, process, and physical evidence. While the other three variables, namely price, place, and people statistically did not have a significant positive effect on the sale of processed salak products online.

### 3.5 Proposed Priority for Improving the Marketing Mix Strategy

In this study, the priority of improving the marketing mix strategy also considers the readiness of UD. Cristal itself. Therefore, UD. Cristal also provides a ranking of the influential marketing mix variables that are prioritized to prioritize strategy improvements. Each variable is given a priority rating starting from 1 (top priority) to 4 (last priority) with the same weight so that the weight for each assessment is 50% (0.5) [33]. The priority of the marketing mix variables can be seen in Table 9.

| No. | Variables       | t count | Priority form consumers (a) | Priority from UD. Cristal (b) | Final priority (½(a+b)) |
|-----|-----------------|---------|----------------------------|-------------------------------|--------------------------|
| 1   | Process         | 4.560   | 1                          | 3                             | 2                        |
| 2   | Product         | 2.502   | 2                          | 4                             | 3                        |
| 3   | Physical evidence | 2.207  | 3                          | 2                             | 2.5                      |
| 4   | Promotion       | 2.105   | 4                          | 1                             | 2.5                      |

Source: data processing (2019)

Based on the total ranking of each variable, the order of priorities from the top priority to the last is Process, Physical Evidence, Promotion and Products. Then a priority proposal can be prepared to improve the best marketing mix strategy that can be applied by UD. Cristal to increase sales online of salak processed products according to their readiness (Figure 1) as follows:
3.5.1 Process
Given that the process is the first influential variable, efforts from UD. Cristal to maintain the quality of services provided. Proposed improvement of process variables on online sales of salak processed products of UD. Cristal has been adjusted to the readiness of UD. Cristal is as follows:

- The choice of shipping service and payment method for each online buying and selling media is made the same and complete so that consumers have no difficulty in determining the shipping and payment options and their choices according to the wishes of consumers.
- Responding or confirming the "Voice of the Consumer" who entered so as not to awaken a negative image through responses given by consumers.
- Information on the stages of purchasing the product is uploaded as soon as possible after the manufacturer carries out this stage.

3.5.2 Physical evidence
Given that the physical evidence is the second influential variable, efforts from UD. Cristal to improve their physical evidence provided. Proposed improvement of physical evidence variables on online sales of salak processed products of UD. Cristal has been adjusted to the readiness of UD. Cristal is as follows:

- Repairing photos, increasing the number of photos for each product so that consumers can see products from various perspectives. In addition, you can also add videos so that consumers are sure that the product's form is real and will be in accordance with the product being sent.

3.5.3 Promotion
Considering that promotion is the second influential variable, it requires effort from UD. Cristal to increase promotional activities for their products. Proposed improvement of promotion variables on online sales of salak processed products of UD. Cristal has been adjusted to the readiness of UD. Cristal is as follows:

- Developing promotional methods through social media such as Facebook and Instagram. According to UD. Cristal, they are now able to provide additional human resources to manage social media that have been inactive for the past few years.
- Give a promo in the form of a discount at a certain time. This is based on the online store owned by UD. Cristal has become a flagship store among similar stores in the online buying and selling media so that it can already get some discount promos from the online buying and selling media for its customers.

3.5.4 Product
Considering the product to be the last variable that has an effect, it needs effort from UD. Cristal to improve their products. Proposed improvement of product variables on online sales of salak processed products of UD. Cristal has been adjusted to the readiness of UD. Cristal is as follows:

- The choice of salak processed products in each online buying and selling media is made the same and complete so that consumers in each online buying and selling media have the same choices and opportunities in making product purchases.
- Development of information and product descriptions. The product description currently is size, weight, and expiration. This can be further clarified by adding ways to store products, how to consume products, etc.
- Product development through product innovation with various sizes and variations in taste. This will cause consumers not to feel bored with the product and will continue to repeat orders.

4. Conclusion
Based on the research that has been done, the writer tries to pull conclusion as follows. 1) Overall, the contribution of the 7P marketing mix to the level of online sales of salak processed UD. Cristal is 59.4%. And then partially, four out seven marketing mix variables have a positive significant effect on
the level sales online are the product, promotion, process/services, and physical evidence. 2) Priority improvement of online marketing mix UD. Cristal consists of repairing service facilities, improving physical evidence on online stores, developing promotional methods through the internet, adding promotions in the form of discounts, and product development. These results still contain limitations, therefore it still needs improvement on UD. Cristal and further research. Seeing that the overall marketing mix affects the level of online sales, the UD. Cristal must pay more attention to the marketing mix aspects of the marketing process carried out. The determination of the next online marketing strategy can be focused on the communication mix.

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Figure 1. Proposed Priority for Improving the Marketing Mix Strategy