

# Analysis of the Factors That Influence the Decision to Buy Chicken Eggs During the COVID-19 Pandemic

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**Abstract**—The Covid-19 pandemic has caused consumer purchasing power to decline. Uncertainty and various restrictions have resulted in a weakening of the economy which has affected household consumption of various products or commodities, including chicken eggs. This paper aims to analyze the costumer decision to buy chicken eggs during the COVID-19 pandemic. The effect of marketing mix (4P) product, price, promotion and place on purchasing decisions might be different under abnormal conditions The research method used is an online and direct survey method to 100 housewives. The results of the analysis show the influence of the product, price, promotion and place toward the decision to buy chicken eggs during the pandemic. Partially the price variable has the highest influence on consumer decisions in purchasing eggs The results of this paper can be used as additional insight for producers and other researchers on which marketing mix should get more attention during this pandemic.

**Keywords**—purchase decision, product, price, promotion, place

## I. INTRODUCTION

2020 is a very different year from the years before. Where the Indonesian people even almost the whole world feels the COVID-19 pandemic. Due to the pandemic, the government imposed social restriction (in large scale), with the aim that the spread of the virus can be inhibited. However, social restriction is also an obstacle to the distribution of food products. The results of a survey by the Indonesian Central Bureau of Statistics which were delivered at a working meeting with Commission XI of the DPR RI stated that there was a decrease in the income of the people in all levels. The consumption pattern is reduced due to reduced income, and because of the restrictions producers also experience abnormal limitations. Borsellino [1] stated that in connection with the pandemic, a new trend has emerged in various countries to consume healthy food and home cooking. There has been a decrease in direct purchases to grocery stores, causing many sellers to lose customers during the pandemic.

Malang City also experienced a social restriction in which offices, schools, places of worship, and public facilities were temporarily closed only a few very important public facilities

are allowed to operate. This has an impact on various sectors including transportation, trade, offices and others. Traditional markets are temporarily closed or opened with various restrictions. Many consumers have switched to buying goods online. This is similar to what was conveyed by Butu et al [2] During the Covid-19 pandemic, many consumers switched to online purchases for fresh ingredients such as vegetables, especially for consumers who were in quarantine areas.

According to Kotler and Armstrong [3] Purchasing decisions are the stage in the decision-making process taken by buyers where consumers actually buy from what they want. Seeing the limited and restricted situation, it seems that it is now experiencing a change. The effect of product, price, promotion and place on purchasing decisions will be different under abnormal conditions. The results of this paper can be used as additional insight for chicken egg producers and other researchers on which marketing mix should be paid attention to or get more attention during this pandemic.

## II. METHODS

This research was conducted in the city of Malang in August 2020. The research method used is a survey method of 100 housewives, online and direct survey (with covid health protocol). The instrument used was a questionnaire with questions adopted from the marketing mix indicators [4]. The sample was taken by using purposive sampling method. The criteria used are housewife that actively purchasing their household food needs. Validity and reliability tests were carried out before data was collected. By the result as shown at table 1 and 2, concluded that the instrument was valid ( $p > .368$ ) and reliable ( $p > .60$ ).

TABLE I. VALIDITY TEST

| Item | Corrected Item-Total Correlation |      |      |      |      |
|------|----------------------------------|------|------|------|------|
|      | X1                               | X2   | X3   | X4   | Y    |
| 1    | .778                             | .732 | .502 | .542 | .779 |
| 2    | .619                             | .376 | .546 | .615 | .661 |
| 3    | .680                             | .846 | .545 | .517 | .733 |
| 4    | .712                             | .805 | .449 | .442 | .421 |
| 5    | .818                             | .410 | .392 | .487 | .647 |

**TABLE II. RELIABILITY TEST**

| Variable | Cronbach's Alpha |
|----------|------------------|
| X1       | .883             |
| X2       | .824             |
| X3       | .725             |
| X4       | .752             |
| Y        | .839             |

The classical assumption test is performed before the data is analyzed. Quantitative data analysis processed using the SPSS program. Statistical analysis using multiple linear regression analysis. The demonstration of interpreting of multiple regression output obtained through SPSS is descriptive and intuitive. Henceforth, it can be used by the researchers, students, and the related faculties as a template while each one of the related would be using real data for problem solving researches and the studies [5].

### III. RESULTS AND DISCUSSION

The results of the analysis as shown in table 3 and 4 show that the decision to buy chicken eggs is significantly influenced by product, price, promotion and place.

**TABLE III. MODEL SUMMARY**

| R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------------------|----------|-------------------|----------------------------|
| .669 <sup>a</sup> | .448     | .425              | .260                       |

Table 3 show the R<sup>2</sup> value (coefficient of determination), which is the proportion of variance in the purchase decision variable that can be explained by the product, price, promotion and place variables. We can see from the value of .448 that product, price, promotion and place explain 44.8 % of the purchase decision. And 65.2% (100% - 44.8%) of the variation is caused by factors other than the predictors included in this model.

**TABLE IV. COEFFICIENTS REGRESSION OF VARIABLE**

| Variable  | Coefficient | Significance |
|-----------|-------------|--------------|
| Constant  | .913        | .008         |
| Product   | .159        | .027         |
| Price     | .240        | .003         |
| Promotion | .189        | .012         |
| Placement | .206        | .004         |

Statistical significance of each of the independent variables tests, as we can see from the coefficient table show that each of the independent variables significance are less than .005 or 5%. The general form of the equation to predict purchase decision from product, price, promotion and location, is:

$$\text{Predicted Y} = .913 + .159X1 + .240X2 + .189X3 + .206X4$$

Partially the price variable has the highest influence on consumer decisions in purchasing eggs. Consumers consider

prices because of their economic conditions. This does not agree with the results of Hutauruk [6] where in his research results during a pandemic like today, consumers do not see the price of a basic necessity because the social restriction conditions are very difficult to find a cheaper price. In a pandemic era with various limitations and shortcomings, Chicken eggs are still a protein source commodity that is relatively cheap and affordable to all levels of society. As the public's knowledge increases, they are increasingly aware of the nutritional needs needed by the human body and the nutritional needs of families [7]. Eggs are a nutrient dense and delicious food, easy to process and the price is relatively cheap when compared to other sources of animal protein. For children, adolescents and adults, eggs are the ideal food and very easy to get. Eggs have a complete nutritional composition [8]. Consumers represented by housewives consider price as part of their purchasing decision for chicken eggs. Ndenga et al. [9] in their research stated that size, price, shell color and freshness of the I.C eggs were the most important attributes influencing consumer choice and consumption. Melovic et al. [10], stated that Price and promotion have the greatest influence on consumer decisions in purchasing organic food products when compared to products and places. However, the nutritional needs of the community are needed to strengthen immunity. Chicken egg is common in most parts of the world and plays a very important role as far as the consumption of proteins from animal sources is concerned [11].

### IV. CONCLUSION

Partially, the price has the most influence on purchasing decision for chicken eggs during the COVID-19 pandemic. Besides product, Promotion, Placement. Manufacturers should pay more attention to price as a basis for consideration used by consumers in purchasing decisions for chicken eggs, especially during the covid pandemic. The role of the government is also very necessary to keep egg prices affordable for all levels of society in Malang city.

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