



The Influence of Marketing Mix on Purchase Decision Through Purchase Intention in Free-Range Chicken Eggs in East Java (Case Study of Free-Range Chicken Egg in Surabaya & Malang)

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Abstract. Market dynamics are constantly changing, in terms of needs, preferences, expectations, social and economic trends. The current healthy lifestyle trend is changing consumer tastes to meet their needs. Currently, consumer interest and demand for functional food has increased, one of which is free-range chicken egg products. This study aims to analyze the influence of the marketing mix (product, price, place, promotion) on purchase decision through purchase intention in free-range chicken eggs in East Java. The research data consists of two types, namely primary data and secondary data. Primary data was obtained through direct interviews with consumers of free-range chicken eggs, while secondary data was obtained from journals, text books and other data relevant to the research topic. The research data was collected using a Likert scale questionnaire distributed to 600 respondents at traditional and semi-modern markets in Malang (Pasar Besar & Pasar Oro-oro Dowo) and Surabaya (Pasar Wonokromo & Pasar Keputran), utilizing convenience sampling techniques. The collected data was then analyzed using path analysis with SmartPLS 4. The results showed that, partially, product, price, place, and promotion significantly influence purchase intention ($p < 0.05$). Additionally, product, price, and buying interests significantly influence purchase decision ($p < 0.05$), whereas place and promotions do not significantly influence purchase decision ($p > 0.05$). Furthermore, product, price, place, and promotion significantly influence purchase decision through purchase intention ($p < 0.05$). It can be concluded that buying interest effectively mediates the influence of the marketing mix on purchase decision. Recommendations from the research results, namely the need for free-range chicken egg producers to increase promotions and sales service facilities both offline and online. This can influence buying interest and increase consumer decisions in buying free-range chicken eggs.

Keywords: Purchase Intention, Purchase Decision, Free Range Eggs

1 Introduction

Market dynamics consisting of needs, preferences, expectations, social and economic trends for products continue to change rapidly. The demand for organic food products worldwide has increased significantly. The main motivation for consumers to demand organic products is health concerns. There are three different understandings of consumer purchasing preferences for organic eggs. The first preference is that organic food will improve health, the second preference is that health can increase happiness, and the third preference is that the principle of organic agricultural production processes is poorly understood by consumers. Environmental changes can affect consumers' food choices and diets [1,2]. Consumer awareness of health is the main motivation for purchasing organic products. In addition, socio-relational factors also have an influence on purchasing decisions, including trust in market information. People today are aware of fulfilling their nutrition through a healthy lifestyle by consuming quality foods such as free-range chicken eggs.

Previous research explains that only price, product, and promotional strategies significantly influence consumer purchasing decisions for organic products in developing countries such as China and Malaysia. This study seeks to offer a new perspective with the existence of place variables and the commodity of free-range chicken eggs, where free-range chicken eggs are local chicken products. In addition, this study moderates the position of products and prices in urban areas in East Java. Marketing is an important main activity carried out by business actors with the aim of developing business and making profits for the survival of their business. The obstacles faced by producers arise from various factors, both internal and external factors that must be considered so that the product position is able to compete. Competition in the marketing field is so complex that producers must determine the best marketing strategy. The marketing mix is one of the factors that is very influential in the success of a product. The combination of various marketing elements used to influence consumer buying interest and purchasing decisions is a marketing mix consisting of product, price, place, and promotion [3] in his research explains that product, place, and price have a contribution of 68.9% to customer satisfaction, besides that customer satisfaction has a positive influence on customer loyalty. Product, promotion, place, price, and customer satisfaction have an influence of 61.7% on customer loyalty.

The food product that is the focus of this research is free-range chicken eggs, which are classified as functional food commodities. Functional food is food that naturally or has undergone processing contains compounds that have certain functions that are beneficial to health. Functional food is not new to Malaysian society. Traditional medicine uses many ingredients derived from functional foods which have contributed greatly over the last few centuries. The main motive for purchasing functional products is due to strong economic growth, adoption of healthy lifestyle by the people [4].

Data from the Ministry of Agriculture in 2023 explained that the production of free-range chicken eggs in Indonesia experienced an increase of 41.14% from 2019 to 2023, but it did not go hand in hand with the consumption rate which decreased by 0.52%. The decline in the consumption rate of free-range chicken eggs is influenced

by consumer buying interest and purchases. The consumption rate has decreased due to various factors, one of which is the lack of attention to the marketing mix carried out by farmers as producers in East Java. Consumer perception and adoption behavior have been recognized for their development in functional food innovation, but have not been widely explored. Consumer perception and awareness of the benefits of functional products have a positive influence on product demand [1,5].

The research was conducted in Surabaya City and Malang City, East Java with 600 respondents. The study aims to analyze the effect of marketing mix (product, price, place, promotion) on purchasing decisions through purchase intention on free-range chicken eggs. The results of the study are expected to contribute and understand the importance of the marketing mix for producers in increasing buying interest and purchasing decisions for free-range chicken eggs. In addition, the results of the study can be a reference for producers to innovate products according to current consumer tastes in East Java.

2 Materials and Methods

2.1 Theoretical Framework

The research was conducted in a number of market locations in Surabaya City and Malang City. Wonokromo Market and Keputran Market represent Surabaya City, while Oro-Oro Dowo Market and Pasar Besar represent Malang City. The four locations were purposively selected based on the size of the market area and the number of visitors. This research is a series of interrelated processes in a systematic manner, so a good sequence of several research steps is needed. Each step of the research, various kinds of results and theories relevant to the research being conducted are used as a source of reference and reference. Referring to the research objectives, this research design is included in the type of explanatory research, where research is conducted to explain what causes problems to occur. [6] explains that the explanatory research method is a method that can be applied to seek scientific truth for the social sciences and humanities.

Research variables in the analysis can be identified based on the subject matter and hypotheses that have been determined. This study uses two types of constructs, namely Latent constructs and Manifest constructs. Latent constructs are constructs that cannot be measured directly, while Manifest constructs are constructs that can be observed directly to measure Latent constructs. Based on their role in the model, constructs can also be divided into Exogenous constructs and Endogenous constructs. Exogenous constructs are constructs that are not influenced by other constructs in the model or commonly considered as independent variables. Endogenous constructs are constructs that are influenced by other constructs in the model or commonly referred to as dependent variables. The following are the variable constructs used in the study:

Latent Constructs. The independent or exogenous construct in the study consists of one variable, namely Marketing Mix (Product, Price, Place, and Promotion).

Manifest Constructs. The dependent or endogenous construct in the study consists of two variables, namely Purchase Intention and Purchase Decision. The variable constructs in the study can be seen from the Table 1 below:

Table 1. Construct of Research Variables

Variabel	Indicator	Description
Marketing Mix (X)	Product (X1)	Refers to the quality and characteristics of free-range eggs sold, such as freshness, size, color, and other attributes that influence consumer preferences in purchasing the product.
	Price (X2)	Describes consumer perceptions of the price of free-range egg products, including whether the price is competitive and in line with the quality offered, as well as consumer purchasing power in traditional and semi-modern markets.
	Place (X3)	Refers to the availability and accessibility of free-range egg products in traditional and semi-modern markets in Surabaya and Malang, including the ease with which consumers can find these products in the markets they visit.
	Promotion (X4)	Includes promotional strategies used by free-range chicken egg sellers, such as discounts, advertisements, use of social media, or other promotions aimed at attracting consumer buying interest in free-range chicken egg products.
Purchase Intention (Z)	Transactional interest	Describes consumer intention to make a direct purchase transaction of free-range chicken egg products after considering the benefits and value of the product offered.
	Referential interest	Refers to the tendency of consumers to recommend free-range egg products to others, based on their experience or knowledge of the product.
	Preferential interest	Indicates a strong consumer preference to choose free-range egg products over similar products from other brands or sources, driven by loyalty or trust in the product.
	Explorative interest	Describes consumer curiosity to try new free-range egg products, or variants of the same product, because they want to experiment with different options.
Purchasing Decision (Y)	Introduction of requirements	Describes the stage at which consumers realize the need or desire to buy free-range egg products, based on both functional and emotional needs.
	Search for information	Refers to consumers' efforts to find more information about free-range egg products, such as price, quality, purchase location, and available brands before making a decision.
	Evaluation of alternatives	Describes the process by which consumers compare free-range egg products with other similar products, including comparing price, quality and other attributes to choose the best option.
	The decision of purchase	Indicates the stage where consumers finally make a decision to buy free-range chicken egg products after evaluating the information obtained and the choices available.
	Conduct post-purchase	Refers to consumer actions after purchasing free-range egg products, including evaluation of purchase satisfaction and the potential to repurchase or recommend the product to others.

Based on the degree of agreement with the statements contained in the instrument, the instrument design uses a Likert scale with a score of 1-5. The lattice of question items refers to Table 1 above, and thus the hypothesis proposed in this study is as follows:

- H1 = Retrieved Product effect on purchase intention
- H2 = Retrieved Price effect on purchase intention
- H3 = Retrieved Place effect on purchase intention
- H4 = Retrieved Promotion effect on purchase intention
- H5 = Retrieved buying interest effect on purchase decisions
- H6 = Retrieved Product effect on purchase decisions
- H7 = Retrieved Price effect on purchase decisions
- H8 = Retrieved Place effect on purchase decisions
- H9 = Retrieved Promotion effect on purchase decisions
- H10 = Retrieved Product effect on purchase intention through purchase decisions
- H11 = Retrieved Price effect on purchase intention through purchase decisions
- H12 = Retrieved Place effect on purchase intention through purchase decisions
- H13 = Retrieved Promotion effect on purchase intention through purchase decisions

The theoretical model framework of this study is presented in Fig. 1.

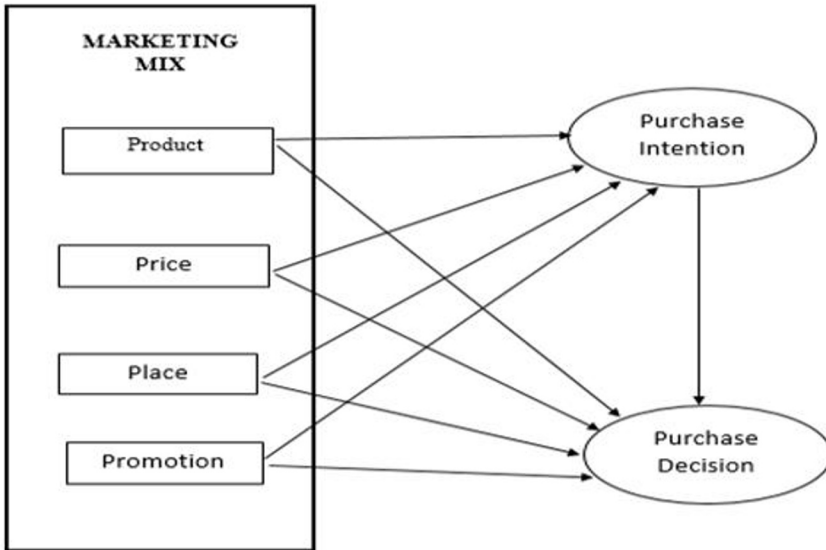


Fig. 1. The theoretical model framework

2.2 Data Collection

Data collection in research consists of two types, namely primary data and secondary data. Primary data is obtained by using a questionnaire directly in collecting the in-

tended research data. Primary data is information obtained directly from respondents in writing regarding research variables. The research variables are contained in the questions in the questionnaire, where the questionnaire here is the media. [7] explains that the supporting tool for respondents' answers in a quantitative approach is a Likert scale using a scoring system. The measuring instrument for answering the questions contained in the questionnaire is called a Likert scale with the following classification: score 1 (strongly disagree), score 2 (disagree), score 3 (neutral), score 4 (agree), and score 5 (strongly agree). Meanwhile, secondary research data was obtained from market office data for each research location, as well as sources and literature related to research parameters.

The number of respondents was 600 respondents, which was determined based on the total number of statement items multiplied by 10 according to the number of indicators in the research variables. The questionnaire was distributed using convenience sampling technique, to respondents who bought free-range chicken eggs in traditional and semi-modern markets in Surabaya City (at Wonokromo Market & Keputran Market) and Malang City (at Pasar Besar & Oro-oro Dowo Market). The sampling method is important to strengthen the representative sample for the research results. Convenience sampling is one of the non-probability techniques, where the method of selecting samples from the population is based on ease of access. The main advantages of using convenience sampling are ease of access where researchers choose participants who are easy to meet such as friends or people who are in the neighborhood, non-probability where not all members of the population have the same opportunity to be selected as samples. In addition, this method is cheap and fast which in terms of time and cost is fairly efficient because it does not require a complicated sampling process [8,9].

2.3 Data Analysis

The research data were analyzed using quantitative studies with statistical tests, namely the Partial Least Square (PLS) method. The statistical analysis conducted in this study used Statistical Package for the Social Sciences (SPSS) software, and SmartPLS 4. SPSS was used to conduct frequency distribution analysis and descriptive statistical analysis on the collected data. Then, SmartPLS 4 was used to conduct validity and reliability tests based on the PLS Algorithm. Furthermore, to test the model in this study, Structural Equation Model (SEM) Analysis with SmartPLS 4 was conducted to test the hypotheses that have been proposed in this research model. Partial Least Square (PLS) is used on the grounds that latent variables (not directly measured) can be measured based on manifest variables on various indicators that form them. Partial Least Square (PLS) is an orientation of structural equation models used for theory development or testing a theory for predictive purposes [10]. This method is a very powerful method because it is not based on assumptions, and data is not required to be distributed with multivariate normal. Research does not have to take a large number of samples, with a sample of at least 30 people, the sample is said to be feasible and can be implemented.

3 Results and Discussion

Partial Least Square (PLS) is the analysis used for this research. Unobservable latent variables can be effectively measured and observed directly through related indicators (manifest variables), not also taking into account errors in measurement. This method allows a more detailed and comprehensive analysis of the indicators associated with the latent variable, identifying the strength of the relationship, from the most influential to the least influential, while still considering the existing error rate.

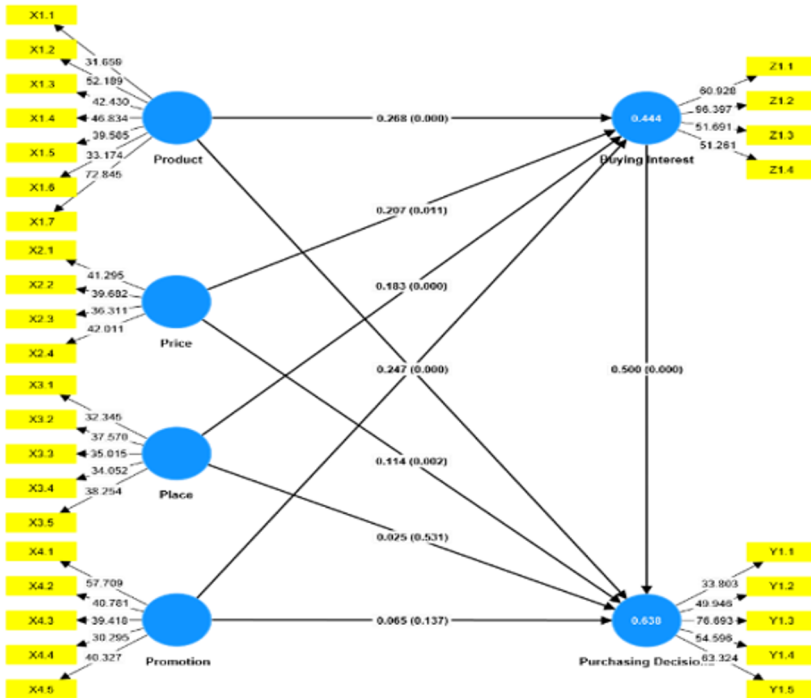


Fig. 2. Inner Model

The results showed that all Loading Factor on each research variable showed an acceptable value because it was greater than 0.6 with a value range of 0.768 - 0.902 (Fig. 2). The Average Variance Extracted (AVE) value obtained in the research model is in the value range of 0.645 - 0.763. The AVE value indicates that the constructs or latent variables in the research model have good convergent validity. The composite reliability value obtained from all variables is in the value range of 0.832 - 0.923, where the value is > 0.7 which reflects high data reliability. The Cronbach's alpha value obtained from all research variables is in the value range of 0.830 - 0.922, which reflects constructs with high internal consistency.

Table 2. Results of Hypothesis Test

No.	Hypothesis	Path coefficients	p-value	Description
1.	$X1 \rightarrow Z$	0.268	0.000**	Affected
2.	$X2 \rightarrow Z$	0.207	0.011**	Affected
3.	$X3 \rightarrow Z$	0.183	0.000**	Affected
4.	$X4 \rightarrow Z$	0.165	0.000**	Affected
5.	$Z \rightarrow Y$	0.500	0.000**	Affected
6.	$X1 \rightarrow Y$	0.247	0.000**	Affected
7.	$X2 \rightarrow Y$	0.114	0.002**	Affected
8.	$X3 \rightarrow Y$	0.025	0.531**	No Impact
9.	$X4 \rightarrow Y$	0.065	0.137**	No Impact
10.	$X1 \rightarrow Z \rightarrow Y$	0.134	0.000**	Affected
11.	$X2 \rightarrow Z \rightarrow Y$	0.103	0.013**	Affected
12.	$X3 \rightarrow Z \rightarrow Y$	0.091	0.000**	Affected
13.	$X4 \rightarrow Z \rightarrow Y$	0.083	0.000**	Affected

Table 2 shows that the direct effect of the product, price, place, and promotion variables has a significant effect on purchase intention, as evidenced by the acquisition of the p-value of each variable is <0.05 . Thus Hypotheses 1, 2, 3, and 4, can be accepted. Based on these results, it is known that the strongest influence on purchase intention is owned by the product variable (path coefficient = 0.183), and followed by the price variable (path coefficient = 0.165). On the other hand, directly, it is found that the product, price, and purchase intention variables have a significant effect on purchasing decisions, as evidenced by the p-value which is <0.05 . Then Hypotheses 5, 6, and 7 can be accepted. However, directly, the place and promotion variables do not have a significant effect on purchasing decisions, because the p-value obtained is > 0.05 , which means that Hypotheses 8 and 9 cannot be accepted. From these results, it is known that the strongest influence on purchasing decisions is owned by the product variable (path coefficient = 0.247), and followed by the price variable (path coefficient = 0.114). Furthermore, indirectly the influence of product, price, place, and promotion, which is mediated by purchase intention, has a significant effect on purchasing decisions, as evidenced by the p-value which is <0.05 , so that Hypotheses 10, 11, 12, and 13 can be accepted. So from these results it is known that the indirect effect on purchasing decisions mediated by buying interest is the influence of the product variable (path coefficient = 0.091), followed by the price variable (path coefficient = 0.083).

Statistically the marketing mix which includes product, price, place, and promotion variables is proven to have a significant effect on purchase intention, with the strongest influence given by the product variable. These results are supported by research by [11] which also proves that product has an effect on purchase intention, [12] also found that the product variable is the strongest variable that affects purchase intention

among other marketing mix variables. In addition, [13] also found that price has an effect on purchase intention, while [14] supports that place and promotion have an effect on purchase intention.

On the other hand, the variables product, price, and purchase intention are statistically proven to have a significant effect on purchasing decisions, with the strongest influence exerted by the product variable. These results are supported by research by [15] which states that consumers tend to choose food with good quality, attractive and informative packaging, easy to navigate store design, and good after-sales service. [16] added that products can dominate the influence of purchasing decisions because the quality, features and benefits offered directly affect consumers' perceptions of the value they get, thus determining whether they will make a purchase or not. In addition, [12] also found that purchase interest affects purchasing decisions.

The results of the analysis of the indirect effect of the marketing mix on purchasing decisions mediated by buying interest, show that buying interest is able to mediate the influence of the marketing mix on purchasing decisions. These results support previous research by [17] which states that buying interest mediates the influence of the marketing mix on purchasing decisions by increasing consumer interest which is influenced by product quality, price, accessibility (place), and promotion, which then leads to purchasing decisions.

4 Conclusion

The purpose of this study was to analyze the effect of the marketing mix (product, price, place, promotion) on purchasing decisions through purchase intentions on free-range chicken eggs in East Java. The research was conducted on consumers who purchased free-range chicken eggs. Marketing mix constructs such as product, price, place, and promotion are the variables selected in the study. The results of the research data analysis explain that product, price, place, and promotion have a partially significant effect on purchase intention. Product, price, and purchase interest have a significant effect on purchasing decisions, while place and promotion have no significant effect on purchasing decisions. Furthermore, product, price, place, and promotion have a significant effect on purchasing decisions through purchase intention. The conclusion can be drawn that buying interest effectively mediates the effect of the marketing mix on purchasing decisions.

Disclosure of Interests. The authors have no competing interests to declare that are relevant to the content of this article.

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