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The effect of distribution strategy and price on buying decisions minimarkets in Surabaya City, Indonesia

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Abstract: The research was conducted to know the impact of changes in distribution strategies and prices on buying decisions made by retail stores or minimarkets due to government policies on social restrictions of the COVID-19. This study uses quantitative research with population data distribution in one of Indonesia's major cities. It uses a structural model in data analysis with all latent variables linked. They were measuring instruments used using Smart PLS. This study found that with changes in distribution strategies by combining all types of intensive, exclusive, and selective, significant results were obtained at prices and purchasing decisions by customers. The main finding in the study was that the implementation of distribution strategies for government policy adjustments was very effective in reaching customers in all corners of the city so that price adjustments and customer purchase decisions could occur on an ongoing basis.

Keywords: distribution strategy; price; buying decisions; minimarkets; Indonesia.

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1 Introduction

During the COVID-19 pandemic that hit the entire world today, many changes occurred in the economic situation, including in Indonesia. The most notable difference is social restrictions and the imposition of curfews for all financial activities. This policy is done nothing but reduce the rate of transmission of COVID-19. Government policies like this do businesses and retail stores, especially minimarkets, follow the existing dynamics by changing strategies to retain customers and provide convenience in buying products. In Indonesia, minimarkets have had a high trend as a place to shop in recent years. The distribution strategy is the first step used as a supplier channel to minimarkets and other retailing businesses. To find out the increasingly complex challenges, companies in the field of minimarkets, in particular, are looking for a distribution model that performs well with cost-effectiveness, customer satisfaction, and sustainability (Janjevic and Winkenbach, 2020). Distribution strategies are focused on connecting producers to consumers quickly and directly. In pandemic times, every minimarket offers convenience and speed for the needs that customers want.

Therefore, differentiation is needed between upstream and last-mile supply chain management (Edwards et al., 2010). While at the same time, it takes a longer time and energy to distribute goods to the shops because of social restrictions, one of which is the closure of several major roads in the city. This resulted in the cost required becoming greater and will affect the base price of the marketed product. Pricing is usually done by assuming the distribution probability and guaranteeing the item (Mykland, 2019). The Bureau of Labour Statistics (BLS) explains that the underlying price index of consumers, producers, and imports shows important distribution patterns for price changes over time. From this theory, changes in distribution patterns result in dynamic price changes that indicate that if government policies with social restrictions and access to major roads are closed, automatically changes in increases are inevitable. The study tried to find out whether the government's policy patterns could result in significant price changes or not. It has become widespread concern that distribution strategies bring about price changes, and empirical studies prove that a higher distribution moment will lead it to a broader business cycle (Klenow and Malin, 2010). Buying decisions are made with many considerations from customers; it relies heavily on understanding how individuals make purchasing decisions and what elements make up these decisions (Wu et al., 2014). The most prominent aspect in purchasing decisions is the price (van Doorn and Verhoef, 2015). Price is a critical factor in buying decisions (Medina et al., 2020). Under challenging circumstances amid the covid-19 pandemic, price increases significantly affect purchasing decisions, reduce product consumption, and open up opportunities for substitute goods to rise (Nugroho et al., 2020). Price agreements greatly influence purchasing decisions, but price agreements occur under social restrictions that can affect future price growth (Zhang et al., 2012) influenced by dynamic distribution strategies following government policies. One example of research (Du and Lin, 2017) is the decision to buy oil by changing the purchase expectation by choosing a low-emission vehicle to reduce gasoline costs. From the example of this product, it can be seen that the product is not only offered but, more fundamentally, that the manufacturer must provide understanding to the customer that the value and profit obtained by the customer with the decision to buy the product offered is much higher than the price. This research is based on the dynamics of government policy amid the covid-19 pandemic that significantly impacts economic development in general.

For this reason, this research with variable limitations is tested to get the value of a problem regarding purchasing decisions. The first is that strategy distribution can be done quickly and precisely to overcome the difficulties. One of the underlying indicators of a distribution strategy is how to pattern the distribution of products intensively, exclusively, and selectively. The three main focuses and accuracy in decision making significantly affect the costs incurred (Nugroho et al., 2021). Accuracy in determining prices and price adjustments must also be calculated appropriately not to burden customers who want affordable products (Arif et al., 2020).

With the background that has been put forward, some can be drawn some formulas to find out the influence that occurs:

- 1 Does the distribution strategy directly influence the price of minimarket products?
- 2 Does the price directly influence the buying decision of a minimarket product?
- 3 Does the distribution strategy influence buy decisions through price as a variable moderator?

1.1 Research purposes

- 1 To analyse the direct effect of distribution strategy on the price of minimarket products.
- 2 To analyse the direct effect of price on purchasing decisions for minimarket products.
- 3 To analyse the effect of distribution strategy on purchasing decisions through price.

1.2 The scope of research

The scope of this research consists of the independent variable, namely the distribution strategy, the moderator variable is price, and the dependent variable is buying decisions. Distribution strategy variables were measured using indicators of consumer purchasing intensity, product exclusivity, and selective attitude in determining purchases by consumers. Another variable is the price calculated using competitive, affordable, and suitable. At the same time, the dependent variable in this study is represented by the variable buying decisions made in Surabaya, focusing on retail traders centres with 100 respondents.

2 Literature review

2.1 Distribution strategy to price

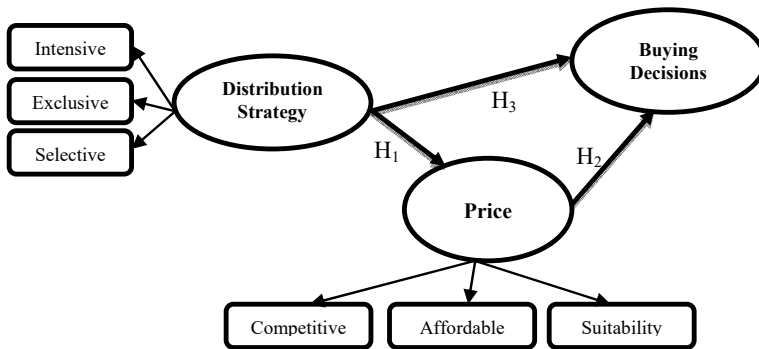
The distribution strategy is carried out by choosing the proper steps in the crisis conditions caused by the COVID-19 pandemic. One new literacy source mentions (Dong et al., 2018) that the distribution path is carried out by coordinating the top and bottom layers to maximise shipments and minimise deviations from the total distribution without reducing revenue. This study's first source of literacy focuses on the concept, characteristics, and typology determination of distribution strategies (Durand and

Gonzalez-Féliu, 2012). Literacy in this study also explicitly discusses the delivery of goods to stores or retailing (Hübner et al., 2016). This theory determines the right decision or action in analysing the economic situation nationally. The approach taken in this study is from (Lim et al., 2016) regarding the typology of last-mile distribution strategies, prioritising the delivery of products to direct customers. But it becomes whether all customers with different incomes can pay more for the service. (Ohazulike et al., 2013) proposed a purpose-based distribution pricing model for elastic demand, which was considered more supportive of the administrative system of retail companies. The delivery of goods becomes crucial because determining the cost of each path traversed will add to the operational burden (Li et al., 2020).

2.2 *Distribution strategies and buying decisions*

Distribution strategy becomes one of the essential parts of determining customer buying decisions. The timeliness and availability of goods in the store will significantly affect the psychological of the customer to buy the product. Study literature (Ding et al., 2015) explains the different reasons for supply chain lines, especially distribution. Customer trust will solve the problem of short supply lines in the distribution of food products to provide many customer choices in determining product purchases. Create new reconnections between producers and consumers by reducing the amount involved along the supply chain (Giampietri et al., 2018). It is possible to encourage the customer's speed and accuracy in the final supply to achieve its buying decision objective. In a panic situation resulting from social restrictions by the government, purchasing decisions will be significantly influenced by the choices of their peers (Zheng et al., 2021). So that it can be concluded that a fast distribution path in the group will influence one group to decide on the purchase simultaneously. This kind of behaviour is considered very reasonable when there is interference due to the situation of the blocked distribution line. For that, the solution of the distribution strategy needs to be done so that problems like this can be resolved immediately. The literacy resource (Sawik, 2019) selected an innovative portfolio approach with a primary supply and assembly to reduce supply chain risk disruption by using networking systems.

Figure 1 The framework of research concepts



3 Research methods

This research method uses experimental methods to determine the causes caused by the independent and dependent variables, which are descriptive and quantitative. Empirical research is used to carry out a quantitative approach to the effect of the independent variable on the dependent variable when conditions are controlled (Thomas and Frankenberg, 2015). Furthermore, this study focuses more on a proper experimental design by controlling all external variables that affect the course of experiments (Zaborowska and Jalali, 2017). The actual experimental design uses 100 randomly selected samples from customers for the experimental group. The procedure used is the first pretest will be done with the distribution strategy will be done pretest directly to the purchase decision.

In contrast, the second pretest uses the price as a control against the variable purchase decision. This research data will be operated using a PLS statistic tool with 100 random samples. Statistical test assessment using a reflective measurement model is also the external model that connects all manifest variables with latent variables. This method should not use assumptions of normality with data rules that are not normally distributed and can be used in this study (Huang and Huang, 2020).

The assessment of the measurement model against the results of statistical testing can be measured using standards such as Table 1 (Frost, 2017).

Table 1 Measurement value amount

Composite reliability	Internal consistency measurement with a \leq value of 0.6
Reliability indicators	Absolute raw loading ≥ 0.7
AVE	An average variant of an extract with a value of > 0.5
Criteria for Fornell-Larcker	The AVE value must be higher than R^2 with all its latent variables
Cross-loading	To check the validity of the discriminant. An indicator has a higher correlation than a latent variable.

4 Result

This research was conducted in the capital of East Java province, precisely in the city of Surabaya. They use a minimarket-type retail store as a research object with 100 random samplings from store customers. Minimarkets are growing very fast in Indonesia, especially in urban areas; many minimarkets are built and stand alternately in almost every city corner. In Indonesia, two large minimarkets are very advanced development, the Alfamart, and Indomaret brands. Both companies use the same means in the distribution process. Price competition is also applied to attract consumer interest and take advantage by approaching small areas of consumers, for example, in the village.

Karakteristic customer respondents from the most dominant age are at the age of 25–34 years, with a percentage of visits reaching 71% in the first week of each month and the same rate indicated at the same age range in the fourth week of each month which is 78%. In the productive age, it is seen that more customers provide more significant opportunities to make repeat purchases at the mini market.

Table 2 Description of respondents' characteristics by age

	<i>N</i>	<i>Min.</i>	<i>Max</i>	<i>Mean</i>	<i>Std deviation</i>
Age	100	15–24	45–54	7.23	4,216
Repeat buying	100	45–54	25–34	38.65	9,152
Valid N	100				

From Table 2, it is seen that vulnerable aged 45–54 years tend to limit themselves to shopping continuously but done at the beginning of the month only to stock ready-made materials for the next month. In contrast to the age range of 25–34 years who prefer to do regular shopping to meet their needs in a relatively shorter period. So the data shows a more significant productive age percentage of shopping in minimarkets.

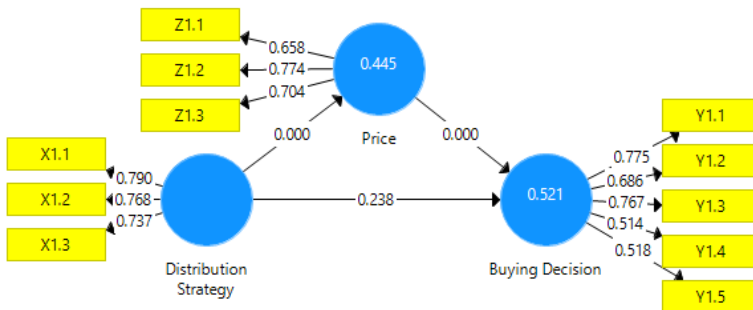
Table 3 Description of respondents' characteristics by gender

		<i>Frequency</i>	<i>Percent</i>	<i>Cumulative percent</i>
Valid	Man	28	28%	28%
	Woman	72	72%	72%
	Total	100	100	

The data in Table 3 shows the most frequent purchases made by women, with a percentage reaching 72% of the total respondents. Furthermore, it is also known that the average income of respondents varies between 3 million rupiah to more than 5 million rupiahs each month, and they also spend daily in minimarkets around > 35% of their income. Customer statements with the more dominant female gender also stated that women prefer goods because the desire to have rather than based on their needs is much stronger.

The results of the PLS algorithm run test show some research indicators that do not show a reliable limit value of > 0.6 against the construct, so it must be discarded and run again (Frost, 2017).

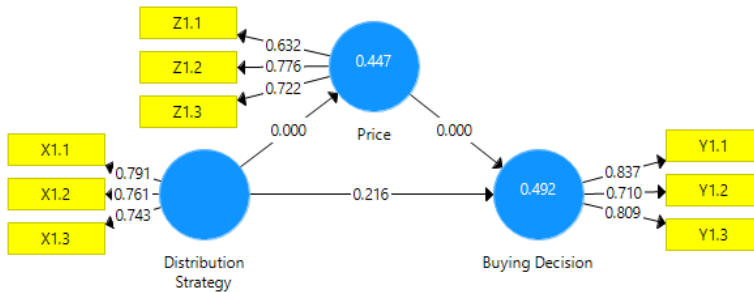
Figure 2 PLS algorithm run 1 (see online version for colours)



The second running result of the PLS algorithm shows that all construct indicators have an outer charge > 0.6, so all components in the variable used as a measuring instrument for this research become reliable. The calculation results of the PLS algorithm also obtained the value of the first R² (X1) distribution strategy against (Y) buying decision of 0.492 which means that the magnitude of the influence of variable X1 with its three

indicators against Y with the three indicators amounting to 0.492. As for R², to three by 0.447 shows the influence (Z) price result with the three indicators against (Y) buying decision with both indicators amounting to 0.447.

Figure 3 PLS algorithm run 2 (see online version for colours)



Further testing is done by testing the construct’s reliability and validity to determine the latent variable’s feasibility value.

Table 4 Construct reliability and validity

	<i>Cronbach’s alpha</i>	<i>rho_A</i>	<i>Composite reliability</i>
Distribution strategy	0.790	0.793	0.830
Price	0.746	0.746	0.809
Buying decision	0.719	0.730	0.754

The latent variable (X1) distribution strategy has Cronbach’s alpha value of 0.790, a rho_A value of 0.793, and a composite reliability value of 0.830 greater than 0.6. Thus the variable distribution strategy is declared reliable and valid.

The latent variable (Z) price has Cronbach’s alpha value of 0.746, a rho_A value of 0.746, and a composite reliability value of 0.809 greater than 0.6. Thus the variable price is declared reliable and valid.

The latent variable (Y) buying decision has Cronbach’s alpha value of 0.719, a rho_A value of 0.730, and a composite reliability value of 0.754 greater than 0.6. Thus variable buying decision is declared reliable and valid.

Table 5 Path coefficient

	<i>Original sample</i>	<i>T statistic</i>	<i>P values</i>
Distribution strategy → Buying decision	0,442	3,766	0,000
Distribution strategy → Price	0,669	8,088	0,000
Price → Buying decision	0,323	2,399	0,017

First hypothesis: T table 100 sample is 1.66023

H0 X1 insignificantly affects on Y with criteria if P value > 0.05 T statistic < T table.

H1 X1 significantly affects Y with criteria if P value < 0.05, statistic T > T table.

The decision obtained from the above criteria is the first hypothesis (X1) distribution strategy has a significant effect on (Y) buying decision with criterion P-value < 0.05,

which is 0.000. Because the value P-value of 0.000, H₀ is rejected, and H₁ is accepted. T statistic value 3.766 > 1.66023.

The second hypothesis:

H₀ X₁ insignificantly affects on Y with criteria if P-value > 0.05 T statistic < T table.

H₁ X₁ significantly affects Y with criteria if P-value < 0.05, T statistic > T table

The decision obtained from the above criteria is the first hypothesis (X₁) distribution strategy has a significant effect on (Z) price with criterion P-value < 0.05, which is 0.000. Because the value of the P-value of 0.000, H₀ is rejected and H₁ is accepted. T statistic value 8.088 > 1.66023.

The third hypothesis:

H₀ X₁ insignificantly affects on Y with criteria if P-value > 0.05 T statistic < T table.

H₁ X₁ significantly affects Y with criteria if P-value < 0.05, T statistic > T table.

The decision obtained from the above criteria is the first hypothesis (Z) price has a significant effect on (Y) buying decision with criterion P-value < 0.05, which is 0.017. Because the P value is 0.017, H₀ is rejected, and H₁ is accepted. T statistic value 2,399 > 1.66023.

Total indirect influence: this value results from multiplication between X₁ and Y.

Table 6 Total indirect effect

	<i>Original sample</i>	<i>T statistic</i>	<i>P values</i>
Distribution strategy → Price → Buying decision	0.216	2.237	0.026

H₀ X₁ insignificantly affects on Y with criteria if P value > 0.05 T statistic < T table.

H₁ X₁ significantly affects Y with criteria if P value < 0.05, T statistic > T table.

The decision obtained from the above criteria is that the distribution strategy indirectly influences buying decisions through price as a variable moderator with criteria P-value < 0.05, which is 0.026. Because the P-value of 0.026 < 0.05, H₀ was rejected, and H₁ was accepted. T statistic value 2,237 > 1.66023

5 Discussion

Social restriction policies to reduce the rate of transmission of the COVID-19 virus have made many retail sectors work hard to change their strategies in the face of complex challenges. One is a distribution strategy focusing on distributing goods to consumers through retail stores. For this reason, changes in the sector become critical in maintaining the company's internal financial health and maintaining the needs of consumers to still buy products of daily needs without being constrained by government policies. This study found that combining all units of distribution strategies such as intensity, exclusivity, and selectiveness will significantly impact sales and distribution of products to customers. This is evidenced by the increasing fulfilment of the needs of retail store products and the ease of getting the goods that consumers want at affordable prices. The government carries out no significant impact on social restrictions. Even retail stores still provide discounts for the type of essential goods in each particular period. This proves

that the retail store group in Indonesia, especially the rapidly growing cities, has benefited from implementing this distribution strategy. The application of prices after the merger of distribution strategies also impacts the affordability of prices to customers has reached the highest point so that price adjustments will be easier for the company to control the profits generated in the future. The successful implementation of distribution and pricing strategies has proven that significant customer purchase decisions will be achieved. From several indicators of purchasing decisions in the digital transformation, the era is also very helpful in implementing plans of intensive and exclusion of goods to customers. Indicators of purchasing decisions consist of aware, appeal, act, ask and advocate; only two should be removed in the additional research space because they do not meet the criteria of reliability and validity, namely ask and advocate. Purchasing decisions in the digital age and this research ultimately depend on how customers realise (aware) that the products offered are widely available in retail stores, so that customer concerns do not cause products to become smaller. Furthermore, customer interest (appeal) to the many products not reduced from the store makes the purchase decision even more significant. The last is the act of buying (act) against the desired item.

6 Conclusions

- 1 *Distribution strategies directly and significantly influence prices on purchasing minimarket products in Surabaya, Indonesia*: this indicates that the price is very flexible when operational costs for the distribution of goods can be done effectively. Changes in distribution strategies during the COVID-19 pandemic are believed to connect customers with stores without burdening customers with higher costs.
- 2 *There is a direct and significant effect of price on buying minimarket products in the City of Surabaya, Indonesia*: price is very dominant in influencing customers in determining buying choices. Therefore, affordability and suitable price adjustments will positively impact the customer's decision to buy the product.
- 3 *An indirect and significant influence of distribution strategies on buying decisions through price as a variable moderator*: thus, both endogenous variables can influence customer buying decisions despite social restriction policies by the government as a result of the COVID-19 pandemic.

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