

# The decision to purchase medical masks is related to price, product quality, distribution and promotion during the Covid-19 pandemic

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## Abstract

The author conducted this study, namely to test the variables of the influence of price, product quality, distribution and advertising on purchasing decisions for medical masks in the city of Bandung. This research was made by the author using descriptive and quantitative data analysis methods. The data was processed using SEM-PLS and SmartPLS software, using 30 samples on the questionnaire data. The statistical model used by the author is the Outer model, Inner model, and Hypothesis Testing. The results showed that the distribution variable had no effect on the decision to buy masks with a t statistic of 0.363. the price variable proved to have no effect on the decision to buy masks with a t statistic value of 1.875 and the product quality variable proved to have an effect on the purchasing decision of masks with a t statistic value of 0.363.

**Keywords :** Price, Quality, Distribution, Medical Masks, Covid-19.

## INTRODUCTION

Several businesses in Indonesia are now growing rapidly. In a business, there is a marketing process because marketing is the most important aspect for the progress of a business. Marketing is a business strategy that aims to promote the sale of a product, besides that the marketing process is carried out as an activity carried out in the movement of goods and services from producers or distributors to the hands of consumers. The purpose of marketing is to maximize profits and entrepreneurs can make a sales strategy, companies can make a strategy, namely a strategy in analyzing the market, determining the target market, making marketing strategies, supervising the marketing process and the company must identify consumer behavior. A consumer always identifies to be able to meet his needs and desires, starting from the process of selecting goods, buying and placing the goods to be purchased.

In organizations whose main orientation is not referring to profit, marketing concepts can be used, for example the COVID-19 pandemic has spread throughout the country. The COVID-19 virus originally came from Wuhan China, this virus has spread to other Chinese countries

and the initial entry to Indonesia on March 2, 2020, at first there were two patients infected with this virus in Indonesia. With the presence of the covid-19 virus, everything is no longer the same, like a job that can usually be done directly outside the home but now is forced to do it indoors, therefore to be able to avoid the spread of this covid-19 virus we must be able to maintain ourselves from the Covid-19 virus, therefore it is important for us to always maintain the health of our bodies by implementing health protocols such as washing hands after activities outside the home, wearing masks, always keeping a distance and avoiding crowds.

Table 1. *Indonesia's COVID-19 distribution data*

Province	Positif	Healed	Die
34	758.473 Soul	625.518 Soul	22.555 Soul

Source: Committee on COVID-19 Handling and National Economic Recovery

Berdasarkan data diatas , Virus Covid-19 melanda di Negara Indonesia yaitu 34 provinsi ,dengan pasien positif yaitu mencapai 758.473,

pasien sembuh yaitu 625.518 dan meninggal dunia yaitu 22.555 jiwa. Dengan adanya virus Covid-19 ini membawa dampak yang sangat buruk untuk semua negara, semuanya tidak lagi sama seperti dulu kehidupan normal yang sesungguhnya, baik dalam hal pekerjaan atau aktivitas ,hal ini terpaksa dilakukan demi

menjaga dari penyebaran viurs COVID-19 ini, maka dari itu minimal diri kita sendiri agar selalu menjaga kesehatan misalkan dengan cara selalu mencuci tangan ketika sudah beraktivitas dari manapun, memakai masker, menjaga jarak dan selalu menghindari kerumunan.

Figure 1 search for mouth masks and hand sanitizer, 2020



Source:: Google Trends

Based on the graph above, it can be seen that with the Covid-19 Virus affecting the need for masks and hand sanitizers, based on the google trends data above, it can be seen that mouth masks were the most sought after on March 2, when it was announced that Indonesia was infected with the corona virus (COVID-19) and cleaners. The hand reached its highest search on March 16.

During a pandemic like this, it is a great opportunity for entrepreneurs to open a business opportunity, one of which is masks. Because at this time masks are the main priority for now in order to maintain health protocols, entrepreneurs also apply a different marketing mix to other entrepreneurs in order to make a profit, therefore with the increasing need for masks, the distribution of masks will also increase, especially Medical masks are currently very easy to get, especially through the online shop marketplace.

The general price is the amount of money paid by the consumer to the seller to obtain the goods to be purchased, therefore in determining

the price the seller or service owner has determined, but in buying and selling transactions, consumers can make an offer at a price depending on the price. agreement between the seller and the buyer.

Product Quality, in determining product selection, consumers will make a product decision, by prioritizing the quality of the product itself. Consumers also want to get a product that is truly guaranteed with good quality.

Distribution, in the current Pandemic situation, it is mandatory for people to always use masks, so in the current situation, mask users are increasing in Indonesia. especially in the market, because masks are a major need for people in the current Pandemic Period.

In marketing , promotion is a business strategy carried out by a company to the wider community so that it can influence the public to know more about a product and encourage consumer interest to buy it .

Comparison Table

Title	Author	Comparison
The Influence of Price and Product Quality on Fabric Maker Purchase Decisions During the COVID-19 Pandemic in Timbang Deli Village, Medan Amplas District	(Sutriyani Pratiwi, Yayuk Yuliana)	This journal discusses the effect of price and product quality on purchasing decisions for cloth masks, while this journal has 2 different variables, namely the influence of price, product quality, distribution and promotion on decisions to purchase medical masks during the Covid-19 pandemic.
The Influence of Product Quality, Brand Image, and Price Perception on the Purchase Decision of Sensi Masks in Tangerang	(Dea Aurani Qiana dan Yenny Lego 2021)	The journal discusses the effect of product quality, brand image and price perception on the purchase of sensi masks while The research journal discusses the influence of price, product quality, distribution and promotion on medical mask purchasing decisions,
The Effect of Price and Distribution on Fabric Maker Purchase Decisions During the COVID-19 Pandemic in Ilir Timur III Sub-district, Palembang City	(M. Wahyu Kurniawan)	The journal, besides having the equation of 2 variables on cloth masks, while the researcher discusses the variables that affect the purchase of medical masks
The Influence of Price and Product Quality on Purchase Decisions for Sensi Medical Makers on Sumbawa Technology University Students	(sumayah Nur Rohmah, Serli Oktapiani)	The journal besides having the equation of 2 variables, it's just that the research in addition uses quantitative methods through a casual associative approach.
The Effect of Marketing MIX and Situational Factors on Maker Purchase Decisions During the COVID-19 Pandemic in Surabaya	(Flavia Rosemary Stelanys Oba Ebang, Raya Sulistyowati 2021)	In addition to discussing marketing MIX, the research is oriented towards product, price, place and promotion as well as situational factors on the decision to purchase masks during a pandemic, while researchers discuss different variables, only one variable is the same in the journal besides the promotion variable.

Based on the background and research above, the researchers conducted a study entitled "The Decision to Purchase Medical Masks in Relation to Price, Product Quality, Distribution and Promotion During the Covid-19 Pandemic".

## LITERATURE REVIEW AND HYPOTHESES

Decision making is the process of problem recognition (problem recognition), information search, evaluation (assessment) and selection of alternative products, selection of distribution channels and implementation of decisions on products to be used or purchased by consumers (Fitria, 2014)

Price, When buying a product, you must consider a price, According to (Kotler &

Armstrong, 2018) In a narrow sense, price is the amount charged for a product or service, more broadly, price is the sum of all values provided by customers. to benefit from owning or using a product or service.

Product Quality, according to (Jeklin, 2016) that product quality is the overall quality or excellence of a product or service related to what is expected by customers. Product quality can help consumers in determining product selection, because consumers will always prioritize the quality of the product itself, and in accordance with consumer expectations.

Distribution, (BARRIOS, 2014) Distribution is the movement or movement of goods or services from the source to the final consumer, consumer or user, through distribution channels, and payment movement in

the opposite direction, to the original producer or supplier.

Promotion, according to (Tjiptono, 2017) is a form of marketing communication which is a marketing activity that seeks to disseminate information, influence/persuade, and/or increase the target market for the company and its products to be willing to accept, buy, and be loyal to the products offered by the company concerned. . Making a business strategy is something important for the development of a business, therefore we must be proficient in making special business strategies in promotion, both disseminating information, persuading consumers to buy and most importantly getting loyal consumers to the products offered by a company. company.

So based on the description that has been described above, the hypotheses of this research are:

- H1 : The effect of price on purchasing decisions
- H2: Effect of product quality on purchasing decisions
- H3 : Effect of Distribution on purchasing decisions
- H4 : The effect of promotion on purchasing decisions

**METHOD**

In this study using a sample of customers or users of medical masks, the authors obtained sample data using quantitative statistical methods, namely in the form of distributing questionnaires with a sample of 30 respondents. The variables of this research are as follows: Price, Product Quality, Distribution, Promotion, and Purchase Decision. The statistical test to process the questionnaire data was assisted by using the PLS3 SEM software using the SMART PLS 3.0 program.

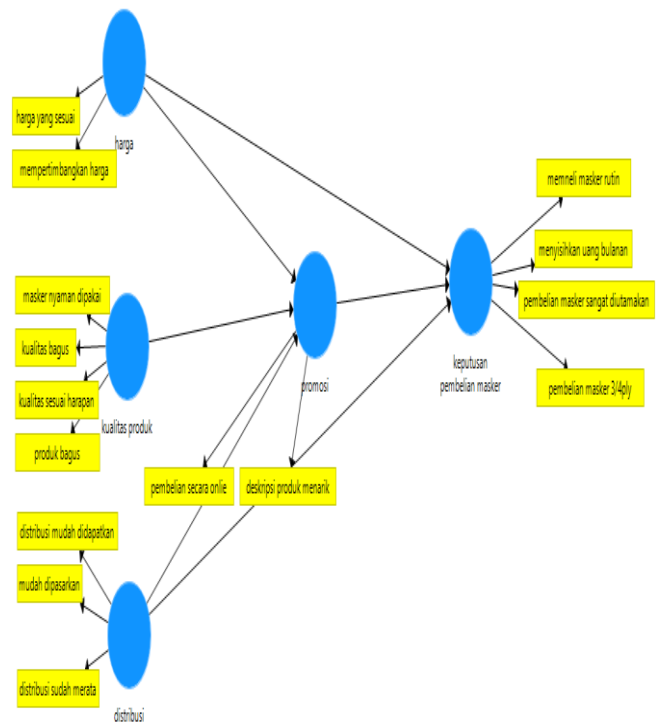


Figure 2.1 research model

**RESULTS AND DISCUSSION**

This research was conducted using questionnaire data to 30 respondents. The results of this study by collecting respondent data in terms of gender and age, as follows:

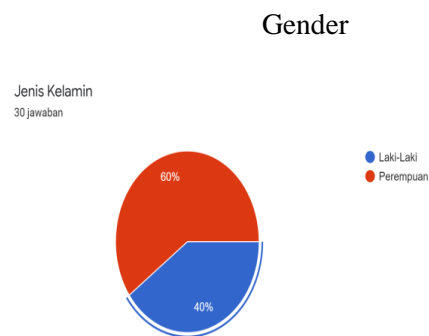


Figure 2.2 gender of respondents

Based on questionnaire data consisting of 30 respondents, there are 60% female respondents and 40% male respondents, more female respondents for this questionnaire.

**Respondent Age**

Usia  
30 jawaban

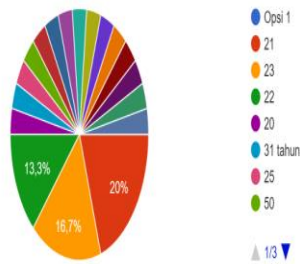


Figure 2.3 Age of Respondents

For the age of the respondents in this study, 13.3% were 22 years old, 16.7% were 23 years

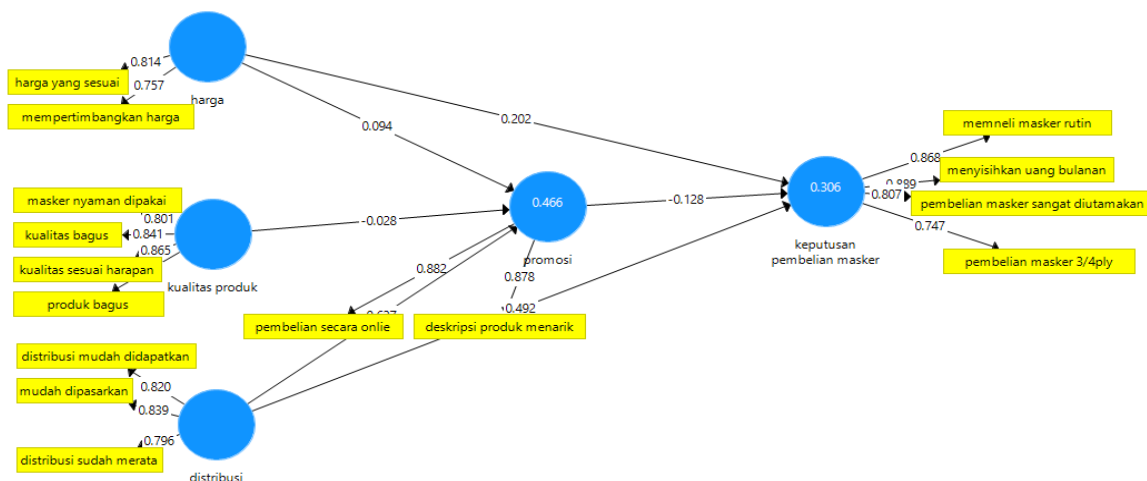


Figure 3.1 Outer Loading Model Algorithm Results

Based on the results above, it can be seen that the outer loading factor has been met because the value of each variable is  $> 0.7$  so that the model in the first stage can be said to be valid.

Average Variance Extracted (AVE).

This method is used to assess Convergent Validity with a value  $> 0.5$ .

Table 3.1 Average Variance Extracted (AVE) Value

Konstruk	Average Variance Extracted (AVE)
X1 Price	0.618
X2 Product quality	0.674
X3 Distribution	0.670
X4 Promotion	0.774

old and 20% were 21 years old, most of the respondents were at the age of approximately 21 years.

TESTING DATA

1. Outer Model

Factor loading

The expected loading value is  $> 0.7$ , if the indicator value is low, it indicates that the indicator does not work on the measurement model, if the value does not meet the requirements then it must be removed from the model, you can see the results of the loading factor below:

Y Buying decision	0.688
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Based on the table, it can be stated that the results  $> 0.5$  for all variables, so there are no problems in testing convergent validity, so that further testing of discriminant validity is carried out.

discriminant validity

Table 3.2 *Cross Loading Value*

Indicator	Price	Product quality	Distribution	Promotion purchase	Keputusan
X1.3 appropriate price	0.814	0.436	0.508	0.214	0.531
X1.4 considering the price	0.757	0.121	0.399	0.521	0.121
X2.2 comfortable mask	0.301	0.801	0.393	0.113	0.482
X2.3 good quality	0.383	0.841	0.484	0.247	0.688
X2.4 quality as expected	0.259	0.865	0.472	0.298	0.537
X2.5 Good Product	0.075	0.773	0.243	0.271	0.373
X3.1 Easy to Get	0.588	0.452	0.820	0.441	0.478
X3.2 Easy to Market	0.502	0.426	0.839	0.750	0.352
X3.4 Distribution is even	0.326	0.303	0.796	0.424	0.477
X4.1 Online Purchase	0.490	0.350	0.558	0.882	0.336
X4.2	0.309	0.192	0.636	0.878	0.187
Y1.1 Regular Maker Purchase	0.433	0.362	0.404	0.333	0.868
Y1.2 Set aside Monthly Money	0.387	0.500	0.441	0.281	0.889
Y1.3 Purchasing Masks is Priority	0.270	0.644	0.494	0.162	0.807
Y1.5 Purchase 3/4 Ply Mask	0.344	0.563	0.384	0.220	0.747

Based on table 3.2, it is stated that the value  $>0.7$  is the price variable with one measurement indicator having a value of  $X1.3 = 0.814$ , the value of the Product Quality variable with 3 indicators having a value of  $X2.2 = 0.801$ ,  $X2.3 = 0.841$ ,  $X2.4 = 0.865$ . The value of the distribution variable with one indicator that has a value of  $X3.1 = X4.2 = 0.878$ , and the value of the Y variable is a purchasing decision that has a value  $> 0.7$  with 3 indicators, namely,  $Y1.1 = 0.868$ ,  $Y1.2 = 0.889$ ,  $Y3.3 = 0.807$ . Based on these results it is stated that all variables that have a value  $> 0.7$ , based on these results are declared valid, if the value is  $<0.7$  then it is necessary to compare the square root of AVE with the correlation between latent constructs.

#### Composite Reliability

Table 3.3 *Composite Reliability Value*

Konstruk	Composite Reliability
Price	0.764
Product quality	0.892

Distribusion	0.859
Promotion	0.873
Buying decision	<b>0.898</b>

Based on the results of table 3.3, Value  $> 0.7$ , namely the Product Quality variable with a value = 0.892, Distribution = 0.859, Promotion = 0.873, and Purchase Decision = 0.898 then these variables are declared reliable, while for one Price Variable with a value = 0.764 the value of the variable is declared unreliable.

#### 2. INNER MODEL MEASUREMENT

The measurement of the inner model is carried out by testing the coefficient of determination (R Square) and significance.

Table 3.4 *Nilai R Square*

	R Square	R Square Adjusted
Buying decision	0.306	0.226
Promotion	0.466	0.405

R-Square . Value

Based on the results of the analysis in table 3.4, the determination value of R-Square is used to measure the extent of the regression model, by explaining the independent variables of price, product quality, distribution and promotion of the dependent variable of purchasing decisions. The value of R Square is 0.306 or 30.6% . The contribution of Price, Product Quality, Distribution and Promotion to Purchase Decision is 30.6% and the remaining 69.4% is explained by other variables not examined. Then the Adjusted R Square value of less than 33% can be stated as X1, X2, X3, and X4 against Y is declared weak.

#### a. Path Coefficients

Table 3.5 Value of Path Coefficients

	P Values
Distribution-> Buying decision	0.137
Distribution -> Promotion	0.005
Price -> Buying decision	0.481
Price -> Promotion	0.748
Product quality -> Promotion	0.906
Promotion -> Buying decision	0.658

Based on the results of table 3.5, it can be stated that the distribution is significant for purchasing decisions with a coefficient value of 0.137, the value is  $<0.05$ . The distribution is significant for promotion with a coefficient value of 0.005 . Price has a significant effect on purchasing decisions with a coefficient of 0.481 because  $<0.05$ . Price does not have a direct effect on promotion because the coefficient value is 0.748, which is  $> 0.05$ . Product quality has no direct effect on promotion because the coefficient value is 0.906 . Promotion is not relevant to purchasing decisions. It can be concluded that the distribution variables on purchasing decisions, distribution on promotions and prices on purchasing decisions have a significant or direct influence.

### 3. TEST HYPOTHESES

The truth of the hypothesis must be proven through the collected data. The hypothesis will be declared accepted if the t-statistics value  $> 1.701$  (t table) and the P Values  $> 0.5$

Table 3.6 Hypothesis Testing

	T Statistics	P Values	Results
Distribution-> Buying decision	0.363	0.717	Rejected
Price-> Buying decision	0.163	0.871	Rejected

Product Quality -> Purchase Decision	1.875	0.007	Accepted
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Based on the results of table 3.6 on hypothesis testing for the relationship between latent variables, namely: 1. Hypothesis Testing of Distribution Variables on Purchase Decision Variables. The results show that the T-Statistics Value for the Distribution Variable to the Purchase Decision Variable is  $0.363 < T\text{-table}$  (1.701) with a P-Value of  $0.717 > 0.5$ . Based on these results, it can be stated that the hypothesis is rejected and proves that the distribution variable has a negative effect on the purchasing decision variable. 2. Hypothesis Testing of Price Variables on Purchase Decision Variables. The results show the T-Statistics Value for the Price Variable on the Purchase Decision Variable, which is  $0.163 < T\text{-table}$  (1.701) with a P-Value of  $0.871 > 0.5$ . Based on these results, it can be stated that the hypothesis is rejected and proves that the Value Variable has a negative effect on the Purchase Decision Variable. 3. Hypothesis Testing for Product Quality Variables on Purchase Decision Variables. The results show the value of T-Statistics for the Product Quality Variable to the Purchase Decision Variable, which is  $1.875 < T\text{-table}$  (1.701) with a P-Value of  $0.007 > 0.5$ . Based on these results, it can be stated that the hypothesis is accepted and proves that the Product Quality Variable has a positive effect on the Purchase Decision Variable.

## CONCLUSIONS

Based on the results of research that has been carried out using questionnaire data as many as 30 respondents and data processing using SEM-PLS using the help of SmartPLS 3 software, namely:

1. The distribution variable has no effect on the decision to buy masks with a t statistics value of 0.363

2. The price variable is proven to have no effect on the decision to buy masks with a t statistics value of 1.875.

3. Product Quality Variables proved to have an effect on Mask Purchase Decisions with a t statistics value of 0.363

Based on the results of this study, Product Quality Variables have a positive influence on the decision to purchase medical masks during

the Covid-19 pandemic, although distribution and price do not have a positive influence on the decision to purchase masks, marketers must be able to adjust distribution and prices, especially during a pandemic such as at this time, because at this time the distribution of masks is very much needed at competitive prices, no less important is the quality of the product being the main thing for buying masks, because products with good quality will always be prioritized to maintain health protocols during a Pandemic.

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