

The Influence of Online Customer Reviews on Consumer Purchasing Decisions through the Shopee Marketplace

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Abstract. The purpose of this study is to observe the extent of the impact of online customer reviews on consumer purchase decisions from the shopee marketplace. Respondents tend to consider customer reviews before making a purchase decision, both in terms of product quality and user satisfaction. The population of this study is people who provide online customer reviews on wardah matte lip cream products through the shopee marketplace, while the sample of this study is 100 respondents. This study uses multiple linear regression analysis techniques to show if partial and simultaneous variables are perceived usefulness, source credibility, argument quality, volume of online reviews on purchasing decisions.

Keywords: Shopee, Consumer Reviews, Purchase Decision

1 Introduction

Technology that is increasingly rapid in this modern era certainly makes it easier to access anything, especially in shopping for products. If in the past we needed to come to the store to get the desired product, and now only with a smartphone, and an internet connection we don't need to leave the house already get the desired item by ordering the products needed from e-commerce, online shops and marketplaces.

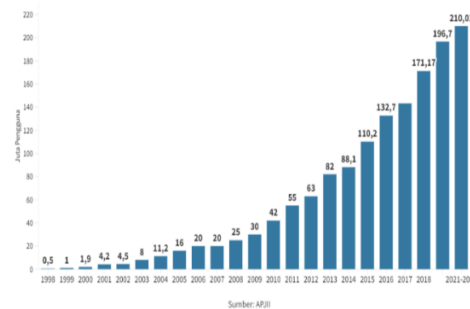


Fig. 1. Internet Usage in Indonesia (1998-2022)

In the use of smartphone technology, of course, it requires an internet network in its use, the total internet users in Indonesia are increasingly ascending it knows. Through the APJII survey, there are 210.03 million internet users from 2021-2022. The total is up 6.78% from the initial number of 196.7 million individuals [1].

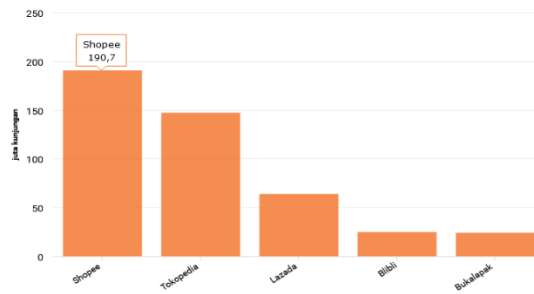


Fig. 2. August 2022 - Marketplace visits data

Through Similar web data, since August 2022, the Shopee marketplace has gained 190.7 million accesses through Indonesia. This figure increased by 11.37% from the initial month, where Shopee marketplace access totaled 171.2 million since July 2022 (Annur, 2022). The emergence of online shopping activities, especially through the Shopee marketplace, has become the choice of consumers to find various desired products, one of which is beauty products that are very popular with women. Wardah is an original Indonesian halal cosmetic brand established since 1995 under PT. Paragon Technology and Innovation (PT. PTI) [2].

Brand	TBI	
Wardah	26.00%	TOP
Maybelline	19.30%	TOP
Revlon	6.30%	
Pixy	3.60%	
Viva	1.50%	

Fig. 3. Top brand Award Makeup 2023

Above is the famous top brand award data from the top 5 categories and the highest of makeup products, which is Wardah 26%. What become now no longer mentioned withinside the preceding studies from the reference entitled "The Influence of Online Customer Reviews and Online Customer Ratings on purchase decisions on Wardah product consumers through the Shopee marketplace" is a hallmark through growing it from on-line patron evaluations approximately wardah products, particularly perceived usefulness, supply credibility, argument quality, extent of on-line evaluations so that you can be mentioned on this studies entitled "The Influence of Online Customer Reviews on Consumer Purchase Decisions Through Shopee Marketplaces".

2 Literature Review

2.1 Marketplace

Through Strauss in 2021 within the shape of the use of packages and digital records for sequencing and organizing distribution, theory and pricing of a service, concept and product to understand a trade that satisfies the goal set and a person [3].

2.2 Online Customer Review

Online Customer Review is used by consumers to find and obtain reports that in the future can affect spending decisions [4]. The purpose of the review itself depends on each reviewer. The characteristics that are usually found from a review include:

- a. Reviews that focus on adjectives
- b. Using words that are quite long, but complex
- c. Using a parable

In Online customer review there are indicators developed in it, the following indicators are in the form of:

1. Perceived Usefulness
This variable can be described by the following indicators [5]:
 - a. Very frequent use
 - b. Repeat Usage
 - c. Satisfaction
 - d. Hassle
2. Source Credibility
The form of expertise possessed by information to share true and reliable reports. [6] Accurate information certainly wants to make the recipient of the message believe the information written [7]. Source credibility has indicators in it, namely:
 - a. Dimension of attractive
 - b. Belief
 - c. Skill
3. Argument Quality
This is about reports that can trust individuals to believe something [8] In the argument quality has the following indicator [9]
 - a. Online writing style
 - b. Reviewer's Expertise
 - c. Timeliness of online reviews
4. Volume Of Online Reviews
This is in the form of total testimonials through reviewers about a detailed service and goods.[10] Indicators in the volume of online reviews are [11]:
 - a. If the total review is positive so that it goes up. Then, the reputation of the product will be good.
 - b. Total reviews illustrate the product's fame.

2.3 Purchasing Decision

According to [11] explains the final decision of individuals and households by shopping for services and products for personal use. The indicators are [12]:

- a. Shopping after observing the item report
- b. The act of shopping because of the brand of interest
- c. Shop because of desire and need
- d. Shopping because of getting advice [12]

2.4 Framework of Thought and Hypothesis

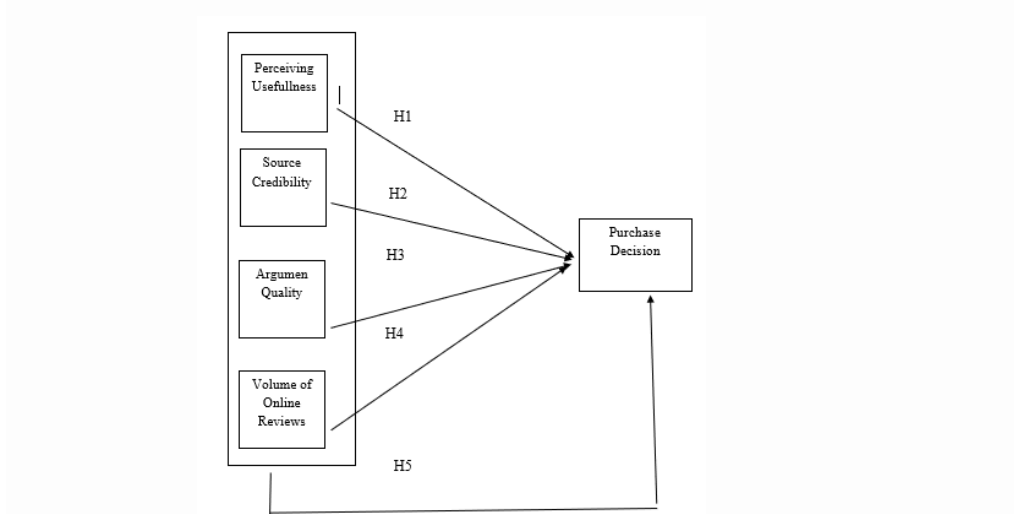


Fig. 4. Frame of Mind

Description:

H0: rejected

Ha: accepted

- a. H1: It is suspected that the perceived usefulness variable has a significant impact on the purchase decision variable (Y).
- b. H2: It is suspected that the source credibility variable has a significant effect on the purchase decision variable (Y).
- c. H3: It is suspected that the argument quality variable has a significant effect on the purchase decision variable (Y).
- d. H4: It is suspected that the variable volume of online reviews has a significant effect on the variable purchase decision (Y).
- e. H5: It is suspected that there is a simultaneous influence of the variables source credibility, perceived usefulness.

3 Research Methods

Research in question reveals the position of the variables to be studied and the correlation between one variable and another variable, and tests hypotheses that have been formulated previously [13]. In collecting population data in this study, customers who provide online customer reviews of Wardah matte lip cream products through the Shopee marketplace and the sample for this study is 100 respondents from online customer reviews of one of the Shopee marketplace brands, namely Wardah. In this study the number of samples was calculated using the Lemeshow formula.

The questionnaire measurement scale used is a 5 (five) point likert scale from values 1 to 5 with levels of strongly disagree, disagree, enough, agree and strongly agree. The questionnaire data obtained by the researchers was processed using SPSS verse 24 with multiple linear regression analysis processing techniques. This research uses purposive sampling, because it uses certain criteria in sampling.

Table 1. Operational Variables

Variable	Indicator
Perceived Usefulness (X1) is the extent to which someone believes that using information technology can improve the performance of real conditions of use [4]	<ol style="list-style-type: none"> 1. More frequent use 2. Increase productivity 3. Satisfaction 4. Hassle
Source Credibility (X2) is the ability of a message source to provide accurate and reliable information. Accurate sources certainly make message recipients believe in the information written [7]	<ol style="list-style-type: none"> 1. Attractiveness dimension 2. Trust 3. Positive influence 4. expertise
Argument Quality (X3) is about information that can give a person confidence to perform a behavior. Strong arguments will be more influential than weak ones [14]	<ol style="list-style-type: none"> 1. Online writing style 2. Reviewer's expertise 3. Timeliness
Volume of online Reviews (X4) is the number of testimonials from customers about a more specific product or service [15]	<ol style="list-style-type: none"> 1. The more positive reviews, the better the reputation of the product 2. The number of reviews, discussions show the popularity of the product.
Purchase Decision (Y) is the final decision of customers who buy goods and services for personal consumption [14]	<ol style="list-style-type: none"> 1. Buying Stability After Knowing Product Information 2. Decide to buy because of the preferred brand 3. Buying out of want or need 4. Buy because you get recommendations from others

Analysis Methods and Reliability

a. Validity Test

Explained that this test is in the form of an instrument used to measure between the data experienced in the object and the one collected by the reviewer. This test can be carried out by comparing the calculation on the r-table ($df = n-2$) if the calculation is $>$ r-table and has a positive value so that the question is called valid. [17]

b. Reliability Test

This take a look at is performed internally and externally. With outside assessments performed equally, take a look at-retest and a mixture of both. With inner consistency, it's far examined through studying the consistency of the to be had grains. Assumption Test.

a. Normality Test

This data test aims to test whether residual variables against the regression pattern spread normally. The normality of the data can be reviewed using the Kolmogorov-Smirnov normal test. In calculations using the Kolmogorov-Smirnov test, there is a significance level of 5%. The condition for a decision is if the $sig < 0.05$ so that it does not spread normally [18].

b. Multicollinearity Test

This test is used when determining if the regression model obtains a correlation between independent variables and can be observed through VIF as well as tolerance to regression if VIF is below 10 and tolerance above 0.1 so that multicollinearity is experienced.

c. Heteroscedasticity Test

This test is experienced when there is no standard deviation alignment of the values of the independent variables. The test graphically scatterplot shows that there is no heteroscedasticity conflict, if the points are spread below and above 0 on the Y axis and there is no tangible pattern [19].

Multiple Linear Regression Analysis

States that when two or more independent variables are altered as predictor factors (ups and downs), multiple regression analysis is utilized to forecast the state (ups and downs) of the dependent variable (criterion). or more independent variables are adjusted (up and down) as predictor factors. Equation for Multiple Linear Regression looks like this [20]:

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n \quad (1)$$

Partial Hypothesis Testing (t-Test) T

The study hypothesis about the partial effects of each independent variable on the dependent variable was tested using the t test. Among the statistical tests used to evaluate the hypothesis

is the T test. H_a is rejected and H_0 is accepted if (1) the t test's significance value is greater than 0.05. This indicates that there is no relationship of impact between the dependent and independent variables. (2) H_0 is accepted and H_a is rejected if the t test significance value is less than 0.05. This indicates that the independent and dependent variables are influenced by one another [18].

Simultaneous Hypothesis-F Test

To determine how each independent variable affects the dependent variable collectively, the F test is used. If the significant result of $F < 0.05$ indicates that the independent variable concurrently influences the dependent variable or vice versa, the level employed is 0.5 or 5% [18].

Coefficient of Determinant (R^2)

This is used to test goodness-fit through regression models. The values range from 0 and 1. A minimal R^2 value means that the expertise of the independent variable to describe the variety of dependent variables is limited. In order to prevent this, so this study uses adjusted R^2 , because R^2 can increase and shrink if one independent variable is increased to the model.

4 Result and Discussion

Wardah is Indonesia's original halal cosmetics brand established in 1995 under PT Paragon Technology and Innovation (PTI). Founded by Nurhayati Subakat, who currently serves as Commissioner of PTI, Wardah prioritizes the best service to inspire women to always look beautiful according to their nature. This lip cream is a matte lip cream product with a velvet powder finish with discolor free endless power and has a staying power of up to 12 hours, this lip cream has a light texture, not sticky and no longer chapped on the lips. This matte lip cream has 14 colors variation.

Classical Assumption Test

This test is used to test whether residuals to the regression model spread normally. This test was carried out using the Kolmogorov-Smirnov test on the condition that a decision was taken in the form of a sig > 0.05 so that it spread normally.

- a. Normality test in this research. if the significant value of the variable is 200 which is above the alpha of 0.05 then it shows that the distribution is normal.
- b. Multicollinearity Test in this research. The results of calculating the tolerance value based on the table above each variable has a tolerance of > 0.10 and a VIF of < 10 , the conclusion is that if multicollinearity is not experienced
- c. Heteroscedasticity Test in this research. The points spread above or below and these points create a pattern so that Heteroscedasticity does not occur.

Multiple Linear Regression Results and Hypothesis Test Results

$$Y = 10,546 + 0,028X_1 + 0,128X_2 + 0,178X_3 + 0,532X_4 + e \quad (2)$$

- a. The constant value has a positive value of 10.564. If the variables perceived usefulness (X1), source credibility (X2), argument quality (X3), volume of online reviews (X4) = 0 then (Y) 10,546.
- b. The regression coefficient value of the Perceived Usefulness (X1) variable is -0.028. Every addition of 1 unit of value (X1) will decrease the value (Y) by -0.028. perceived usefulness (X1) to (Y) There is a significant value of 0.000. Sig value. smaller than probability value 0.05 or $0.000 < 0.000 < 0.05$. Then H1 is accepted, H0 is rejected.
- c. The regression coefficient value of the Source Credibility variable (X2) is -0.128. Every addition of 1 unit of indigo (X2) will decrease the value (Y) by -0.128. Source credibility (X2) against (y) There is a significant value of 0.000. Sig value. smaller than probability value 0.05 or $0.000 < 0.000 < 0.05$. Then H2 is accepted, H0 is rejected.
- d. The value of Argument Quality (X3) coefficient on purchasing decisions has a positive direction of 0.178. Each addition of 1 unit of value (X3) will increase the value (Y) by 0.178. Argument Quality (X3) Against (Y) There is a significant value of 0.000. Sig value. smaller than probability value 0.05 or $0.000 < 0.000 < 0.05$. Then H3 is accepted, H0 is rejected
- e. The coefficient value of Volume of Online Reviews (X4) on purchasing decisions has a positive direction of 0.532. Each addition of 1 unit of value X4 will increase the value (Y) by 0.532. Volume Of Online Reviews (X4) Against (Y) There is a significant value of 0.000. Sig value. smaller than probability value 0.05 or $0.000 < 0.000 < 0.05$. Then H3 is accepted, H0 is rejected.

Based on the results of the calculation above, the significant value is $0.000 < 0.05$, then H5 is accepted and H0 is rejected. This means perceived usefulness, source credibility, argument quality, volume of online reviews simultaneously influences purchasing decisions. This test obtained an R Square value of 0.943. The percentage for the coefficient of determination (R2) is 94.3%. As for 5.7%, it can be explained by another variable, namely valence.

Discussion

One of the keys to success in determining acceptance of the use of information systems is perceived usefulness. Source credibility affects purchases. The research test findings show that source credibility influences purchasing decisions well. Customers can evaluate product quality and information sources more easily when they have access to online customer reviews, which also helps lower ambiguity. The overall number of interactions with online customer reviews is measured by volume. The number of reviews can indicate how many potential customers have made previous purchases and have first-hand knowledge of the item. Volume measures the total number of online customer review interactions The number of reviews can represent the number of interested consumers with previous purchases and with experience about the product. The

more the number of positive reviews, the better the reputation of the product and the number of reviews, discussions indicate the popularity of the product

In online customer reviews the information available in the review helps customers assess product attributes as well as the source of information and this can reduce uncertainty. Thus it can be assumed that when faced with many product reviews, consumers are likely to be influenced by how the review author presents the information in a review. The results of the research findings indicate that the perceived usefulness source credibility, argument quality, volume of online reviews of respondents simultaneously influence purchasing decisions through the Shopee marketplace can be accepted.

5 Conclusions and Suggestions

Conclusion

Through the analysis that has been carried out, conclusions can be formed in the form of:

- a. The variable perceived usefulness has a significant effect on purchasing decisions.
- b. The variable source credibility has a significant effect on purchasing decisions.
- c. The variable argument quality has a significant effect on purchasing decisions.
- d. The variable volume of online reviews has a significant effect on purchasing decisions.
- e. Test calculation result (F) shows that the variables perceived usefulness, source credibility, argument quality, volume of online reviews simultaneously influence purchasing decisions.
- f. Observed through the Adjusted R Square value, the rest can still be explained by the valence variable.

Suggestion

Based on the results of these conclusions, some suggestions were distributed in the form of:

- a. Judging from online customer reviews, in the future it is better if the marketplace provides feedback so that respondents get feedback from purchasing these products in the form of points.
- b. Judging from the online customer reviews on Wardah's matte lip cream products, if the online customer reviews are responded to or responded to, of course it will provide benefits between the marketplace and the customer. So that it can increase the source credibility of writers and online customer reviews are useful for future customers.
- c. We recommend that after buying a Wardah matte lip cream product, the customer immediately provides an online customer review accompanied by a picture or video to increase the trust of other customers about the product and to increase the quality of arguments from online customer reviews.
- d. For customers who buy products from Wardah matte lip cream, they must give online customer reviews, they must be more specific to convince other customers.
- e. It is hoped that further research on measuring purchasing decisions on online customer reviews can use more diverse or different variables so that the research results are more relevant and different from the current conditions. It is also necessary to carry out further research on a larger scale in terms of the sample.

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