# Influence Analysis of Customer Ratings Reviews Online, Free Shipping Promotion and Discount Promotion on Purchasing Decisions in E-Commerce 

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#### Abstract

This study aims to determine the effect of review rating, free shipping promotion, and discount promotion. This research is quantitative research. The population in this study are e-commerce users. The number of samples in this study was 169 respondents, the data collection method used non-probability sampling with purposive sampling type where the researcher determined the sampling with special criteria. Methods of data collection using a questionnaire. Data analysis techniques in this study are validity test, reliability test, normality test, multicollinearity test, heteroscedasticity test, coefficient of determination test R Square, analyze fit model ( F test), regression coefficient test and partial hypothesis test (t-test). The results indicate that the significant relationship with customer rating reviews online and discount promotion influence purchasing decision. However free shipping promotion was not found to have significant relationship with purchasing decision.


Keywords: Rating Review, Free Shipping Promotion, Discount Promotion, Purchase Decision.

## 1. INTRODUCTION

In 2020 it had been stated that there had been 175.4 million internet users in Indonesia. Compared to the previous year, there was a rise of $17 \%$ or 25 million internet users during this country. Supported the entire population of Indonesia, which amounts to 272.1 million, it means $64 \%$ is half the population. Percentage of internet users aged 16 to 64 who own each sort of device, including mobile phones ( $96 \%$ ), smartphones ( $94 \%$ ), non-smartphone mobile phones ( $21 \%$ ), laptops or desktop computers ( $66 \%$ ), table ( $23 \%$ ), game consoles ( $16 \%$ ), to computer game devices ( $5.1 \%$ ). In this era, people use information and communication technology to shop for or sell goods and services via the web, referred to as e-commerce. The development of information technology getting faster brings some changesin various aspects of life, wrong the only people's lifestyle that becomes all practical. Having the internet makes it easy society in seeking information in the era of globalization as it is today. Information can obtained from all corners of the world without recognize time and geographical boundaries because users are connected through the system computer globally [1]

E-commerce concerns an internet vendor's website, trading goods or services to the user directly from the platform[2]. E-commerce provides an option of entry for people without returning to the shop. According to [3], ecommerce includes transactions buying, selling, transferring, or exchanging products, services or information through computer networks, including the internet. E-commerce can be done by anyone with a business partner, without being limited by space and time the event of e-commerce businesses like the number of ecommerce businesses, the worth of transactions, the number of workers, the kinds of products/services sold, the media used, the tactic of delivery of products/services, and therefore the reasons for businesses not selling online. E-marketing is a new innovation in the field of marketing, more specifically related to promotional strategies that can penetrate across countries very quickly [1]

The widespread use of the web isn't only employed by Indonesians to hunt information and communication but also for economic activities. The sale and buy transaction, which was initially administered by meeting directly between the vendor and therefore the buyer, is now changing. the method of shopping for and selling goods and services are often wiped out the palm of a
finger supported by a network. This is often what's called E-Commerce. The presence of E-Commerce makes it very easy for the community. With the continuous increase of computing power, real-time adjustments in online marketing are growing increasingly common. A growing body of research in information systems (IS) and in marketing (and surrounding fields) supports the idea that online marketing and e-commerce can benefit from the real-time personalization of content. Some personalization methods in e-commerce, such as recommender systems that aim to select a small set of products suitable for an individual customer from a large inventory, are common and well understood from the attitude of business actors. They will expand their market reach. The dissemination of data a few products are often done more quickly and feature a very broad scope so that it's begun to shift consumption patterns and methods and has even become a part of people's lifestyle[4]. The rapid development of an electronic-based economy has high economic potential for Indonesia.

This research is very important to develop body of knowledge in the field of marketing management specifically on online marketing. There is a little research conducted on rating reviews and how this variable influence purchase decision in e-commerce. The first gap in this research is the lack of studies on rating reviews, the effect of free shipping and discount promos on purchasing decisions in e-commerce. Previous research only examines one of the variables that the authors examine. [5] said that rating reviews affect purchasing decisions. [6]this study has linked freeshipping promotion and purchasing decisions. [7] previous studies have suggested that discount promotion affects purchasing decisions. However, previous research has only examined one of the variables that the authors examine. This is the literature gap and literature review. for this study. Therefore, the authors combine several of the problem variables investigated. And compare which variables are the most influential in purchasing decisions.

### 1.1.Literature Review

### 1.1.1. Rating Review

Rating is the opinion of customers on a certain scale. A popular ranking scheme for a rating in e-commerce is to give a star. More and more to give stars then indicate a better seller rating [5]. Usually, a rating is one way to provide feedback that consumers do to sellers[8]. can be interpreted as an assessment of the user's preference on a product's preference for their experience, referring to the psychological and emotional state they live in when interacting with virtual products in a mediated environment. [9] related the rating to the level of customer decision making. They found that the effect of customer ratings on ratings before deciding to buy something depends on how often these customers' ratings
or ratings are made on a product. The relation between online customer rating influence purchasing decision theoritical frame work by [10]. Online customer reviews and online customer ratings on purchase decisions through e-commerce there is a positive influence between online customer reviews and online customer ratings on purchasing decisions research by[11].

## H1 : Rating reviews has a positive significant relationship with purchasing Decision

### 1.1.1.2. Free Shipping Promotion

In Indonesia, the use of the internet for trading activities is familiar. Sellers and buyers can make transactions whenever and wherever connected by the internet network. This online transaction, of course, makes it easier for its users. Even so, purchasing online cost goods actually adds to the costs that must be a customer, namely the shipping cost of shipping costs is one of the reasons why some consumers discourage making online purchases. This happens because not only do consumers have to pay the price of the product they want to buy, but consumers also have to pay for the cost of shipping the product, which is usually not cheap. Based on research by [12]research on the effect of promotion on the success of new products, it is stated that the effect of promotion can attract consumer purchase interest and repurchase from consumers. Free shipping is considered the most effective marketing tactic in etailing. Managers affirm this conjecture, and recent academic research has shown dramatic effects of shipping thresholds on on-site traffic and purchase quantities [13]. This research is also strengthened by previous research by [14], who said that the results of the quasi-experimental design suggest that the free shipping offer works better than a dollar-off discount for lowerpriced goods, but there is no difference between the two for higher-priced goods. Additionally, seasoned online shoppers are more receptive to both types of pricing discounts, no matter the list price, than are a novice online shoppers.

## H2 : free shipping promotion has significant positive relationship with purchasing Decision

### 1.1.1.3. Discount Promotion

Price is one of the most important factors to influence and attract consumer consideration and intention to buy a product. Discounts do not mean if the product has a low price but also determines the service quality of a product, only by differentiating prices for the same product it is a certain money deduction from the total price for a short period of time to increase sales and consumer profits. Sales promotion techniques are instruments that seek to increase sales of products and brands, usually in a short time [15]. The effectiveness and the importance of sales promotion in the market can be viewed when presenting

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the segment numbers. Sales promotions are distributed into two groups: price or monetary promotions (i.e. discounts, coupons, rebates); non-monetary promotions or not geared to price (i.e. free samples, distribution of promotional prizes, gifts, contests and loyalty programs). Based on the research by [16] research, the study results also showed that there's a positive effect simultaneously of flash sale and price discount towards impulsive buying. Based on research by [7] research the result is the influence of online price promotion on purchase intention and verifies the interaction effect of promotion way and products complementary on consumer purchase intention and therefore the mediating effect of perceived promotional benefit and perceived promotional risk.

H3 : Discount promotion has significant positive relationship with purchasing Decision

### 1.1.1.4 Purchasing Decision

Purchasing Decision is the process of selecting two or more alternative options that result in a decision to buy or not to buy. Alternative options must be available when the consumer makes a decision. The decision-making process requires finding or receiving different information[10]. Purchasing Decision is a process by which the Decision of which brand to buy. Purchase decision-making in organizational and consumer contexts has been treated separately, although many authors have pointed out that the differences between the two are more relative than absolute. Purchasing Decision is a process by which the Decision of which brand to buy[17]. Furthermore, Purchase decisions have been influenced by previous stages of the decision-making process, but marketers still have the opportunity to affect consumers who are already at the purchasing stage [18]. Purchase intention behavior could be important information for marketers who launch a new product because this construct provides information on consumer's perception of the newly launched product or even when the concept of the product is introduced to the consumer [19]. The relationship of e-commerce with purchasing decisions as according to[20], the relationship of e-commerce with purchasing decisions has a significant effect on purchasing decisions. Likewise [6]found that e-commerce has a positive relationship with purchasing decisions.

### 1.1.1.5. Research Framework

The research framework shows the effect of rating reviews online, free shipping promotion and discount promos to repurchase intention in e-commerce. A model is built consisting of three independent variables, namely rating reviews online, free shipping promotion, and discount promos. Purchasing decisions become dependent variables.


Explanation :
$\mathrm{X} 1=$ variabel independed rating review
$\mathrm{X} 2=$ variabel independed freeshipping promotion
X3 = variabel independed discount promos
$\mathrm{Y}=$ variabel depended purchasing Decision in ecommerce

## 2. METHODOLOGY

This study is explanatory research employing the quantitative research method. Quantitative research is research by obtaining data in the form where this research is useful to examine the relationship between independent variables and dependent variables. The sampling technique used in this study is purposive sampling. A purposive sample 4 is to produce a sample that can be logically assumed to be representative of the population. The sample used in this study is people who have shopped in e-commerce. The number of representative samples is 169 respondents. Data was collected through an online survey. The list of questions in the questionnaire covers issues related to availability, perceived risk, ease of use, and customer satisfaction. In this study, a questionnaire was used with a Likert index scale of 1-5. The demographic questions of the survey questionnaire designed from this study asked:

Respondent's age, gender, education level, income level, and frequency of shopping in e-commerce and presented the percentage of demographic distribution of 169 respondents are presented in Table 1:

Table 1.

| Item | Frequency | Percentage |
| :--- | :--- | :--- |
|  | Gender |  |
| Male | 39 | $23,7 \%$ |
| Female | 130 | $76,3 \%$ |
|  | Age | $74,6 \%$ |
| $17-25$ | 129 | $18,5 \%$ |
| $26-35$ | 30 | $6,9 \%$ |
| $36-45$ | 10 | $25,4 \%$ |
| $<1000.000$ | 44 | $54,3 \%$ |
| $1000.000-$ | 92 | $12,1 \%$ |
| 3.500 .000 | Monly income |  |
| $3.000 .000-$ <br> 5.000 .000 | 21 | $3,2 \%$ |
| $5.000 .000-$ | 12 | $30,6 \%$ |
| 10.000 .000 | Frequency <br> Shopping Using E- <br> Commerce |  |
| Ootal 169 | $26 \%$ |  |
| Often | 69 | $515 \%$ |
| Sver | 26 |  |
| Sometimes | 51 |  |
|  |  |  |

## 3. FINDINGS

The results obtained from the descriptive analysis more than 4.0 , meaning the high category. Therefore, these four variables can influence purchasing decisions.

The results of the validity and reliability test are presented in Table 2. The research instrument has tested the validity of its construct with confirmatory factor analysis (CFA). Results Based on the Confirmatory Factor Analysis (CFA) test can be it is known that all items have been grouped according to indicators, and it is known that almost all of the question items stated valid with loading factor values above and below 0.50 .

Table 2

| QUESTION ITEM | CRONBACH |
| :--- | :--- | :--- | :--- | :--- | :--- |


| I will recommend people around me to use <br> social commerce | 0,550 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table 3 From the table above, it is known that the results of the reliability testing of the rating reviews, free shipping promotion, discount promotion, and purchasing decision variables obtained that Cronbach's Alpha value is greater than the specified criteria (Cronbach's Alpha > 0.600 ) which explain that all variables show strong Table 3
reliability. Based on the results of the validity and reliability tests above, it can be concluded that the rating reviews, free shipping promotion, discount promotion, and purchasing decision questionnaires are appropriate to be used as research instruments.

| Variable | Cronbach Alpha | Description |
| :--- | :--- | :--- |
| Rating review | 0.664 | Reliable |
| Freeshipping promotion | 0,742 | Reliable |
| Discount promotion | 0,715 | Reliable |
| Purchasing decision | 0,793 | Reliable |


| Table 4 ANOVA $^{\mathrm{a}}$ |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- |
| Model |  | Sum of <br> Squares | Df | Mean <br> Square | F | Sig. |
| 1 | Regression | 598,891 | 3 | 199,630 | 88,758 | , $000^{\mathrm{b}}$ |
|  | Residual | 371,109 | 165 | 2,249 |  |  |
|  | Total | 970,000 | 168 |  |  |  |

have a positive and significant influence on purchasing decisions. The results can be proven by the value of sig being smaller than alpha. This means that the rating review individually has a significant effect on purchasing decisions. The results of this study are in accordance with the results of research conducted by [10].It was revealed that online rating reviews have the potential to influence consumers in purchasing decisions

Table 4 shows the P -value for ANOVA is 0.00 less than .05 , indicating that the model presented in this study is an appropriate model

Based on the findings of this study, all defined constructs have a positive relationship with the Decision except for the free shipping promotion variable relationship between review ratings and discount promotions have a significant effect. As a result, this study explores that rating review and discount promotion are perceived to have a significant positive relationship with purchasing decisions in e-commerce. The result of this study differs from the previous study by [21] review adapt from a review about similar products taken from the websites of major online retailers. They presented to the subject as a randomly selected consumer review to emphasize that one of the reviews for the product may be selected.

Based on the results of the study conducted, it can be revealed that rating reviews affect purchasing decisions

As input in the decision-making process based on the responses to this variable, the questions have a high average so that it can be interpreted that the reviews made by customers honestly influence purchasing decisions.

Also, the result of the research by [5] said reviews and ratings are an important source of information for consumers. However, qualitative feedback from the survey indicates that the perceived helpfulness of rating systems varies. Especially the comparison of user reviews is a very time-consuming process for the customer because of the unstructured nature of textual user reviews.

| Table 5 Coefficients |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | T | Sig. | Collinearity Statistics |  |
|  |  | B | Std. <br> Error | Beta |  |  | Toleranc | VIF |
| 1 | (Constant) | 1,889 | 1,133 |  | 1,667 | ,097 |  |  |
|  | Rating Reviews | ,318 | ,067 | ,317 | 4,754 | ,000 | ,521 | 1,921 |
|  | Freeshipping <br> Promotion | ,022 | ,072 | ,018 | ,305 | ,761 | ,656 | 1,523 |
|  | Discount Promotion | ,566 | ,067 | ,535 | 8,420 | ,000 | ,574 | 1,742 |
|  |  |  |  |  |  |  |  |  |

The findings of this research reveal that the relationship between free shipping promotion and purchasing decisions is not significant. The statistical results that have been carried out do not show a positive and significant effect. This is obtained from the statistical regression test; namely, the $t$ count is smaller than the $t$ table. The results of this study are not in accordance with the results of research from [6] in their research showing that the free shipping method has a significant main effect on purchase intention. The findings have several managerial implications. And there is no sign with the result of the study by [13] in their research, and free shipping is considered the most effective marketing tactic in e-tailing. Managers affirm this conjecture, and recent academic research has shown dramatic effects of shipping thresholds on on-site traffic and purchase quantities. These findings provide some guidelines for online retailers to use the most effective free shipping methods to attract online consumers.

Based on the results of the study conducted, it can be revealed that discount promos have a positive and significant influence on purchasing decisions. The results can be proven by a value significantly smaller than alpha. This means that individually discount promos have a significant effect on purchasing decisions. This statement is also supported by research conducted by [7], examining the results of research on the effect of online price promotion on purchase intention and verifying the effect of the interaction of promotional methods and complementary products on consumer purchase intentions and therefore the effect of mediation of perceived promotional benefits and perceived promotional risks.However, research by [22] said that found that for high priced products, discounts have a greater influence on consumers compared to the increased value from bonus packs. Also also supported by [16] research by The second strategy is that sellers can provide longer discounts than flash sales which are only
a few hours away. Based on [23], it was revealed that there is a positive and significant effect between price discounts on impulse purchases. Based on this, this research will be conducted to determine the effect of flash sales and discounts on impulse buying.

## 4. CONCLUSIONS

Based on the results of the questionnaire data obtained from respondents, the availability of rating review variables and promotional discounts have a significant effect on purchasing decisions, while free shipping promotions do not affect purchasing decisions.

### 4.1.Implications of the Study

This research, can add insight into knowledge with purchasing decisions in e-commerce and the factors that influence it. Especially for those who are interested in knowing more about purchasing decisions in ecommerce, it is necessary to modify the independent variables, either adding variables or adding rows of data series. So it will be objective and varied in conducting research.

E-commerce users as sellers also need to conduct product surveys to consumers, whether the products are effective or not. Sellers also need to improve product performance and review in the comments column from consumers who have purchased products in stores so that stores and products get good reviews so that consumers will indirectly read product review ratings in stores and gain consumer confidence to buy products in store windows.

E-commerce developers or web developers, of course, it is necessary to keep up with technological developments along with the times. Between sellers and buyers to increase interaction with consumers online. That way, the seller can provide product specifications to
be sold not only through writing, but consumers can also see the product significantly.

It is recommended for sellers who use e-commerce applications to participate in programs organized by ecommerce, namely providing voucher codes and following discount trends such as mid-year sales, 9.9 sales, big sale, and giving extra vouchers for free shipping with or without using a minimum purchase.

### 4.2.Research Limitation

There is no definite type of product in research. The majority of respondents in this study were aged 17-25 years and had the status of a student. Limitations indirect data collection because the PPKM program is being held by the government where data sampling can only be obtained using the google form.

## AUTHOR CONTRIBUTION

Niken does data collection. Ihwan Susila contributed to collecting research design and discussion of research results.

## ACKNOWLEDGMENT

I would like to express special thanks to the Head Of The Department Of UMS Management Especially Double Degree Programs, And The Bureau Of Cooperation And International Environment who gave me the golden opportunity to do this wonderful project on Analysis Influence Of Customer Ratings Reviews Online, Freeshipping Promotion And Discount Promotion On Purchasing Decisions In E-Commerce which also helped me in doing a lot of research and I so know about many new things. I really thank them.

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