ABSTRACT

The internet allows consumers to easily provide testimonials about sellers and the products they buy. This testimony is a form of E-WOM with the dimensions of intensity, positive valence, negative valence, and content. By taking Tokopedia as the context, this study is intended to determine the effect of these dimensions on the purchase intention of Tokopedia consumers. The sample consisted of 70 respondents who were selected using non-probability sampling. By using multiple linear regression, data analysis shows that intensity, negative valence and content have a significant positive effect on repurchase intention, but positive valence has no effect. It seems that consumers are more concerned about the risks of online purchases. Other researchers are advised to investigate this possibility further.

Keywords:
Electronic word of mouth, intensity, content, positive valence, negative valence, online shopping intention

INTRODUCTION

In the era of globalization, the Internet allows users to connect electronic media to each other instantly and is also used to access information. Currently, the internet is also a means of transactions that produce a new market or marketplace, which is no longer bound by time and place.

According to Kusnandar, (2021, 12 July), at the end of March 2021, 76.8% of Indonesia's population has internet access. Internet World Stats data shows that there are 212.35 million internet users in the country with an estimated total population of 276.3 million. The large number of internet users is caused by the increase in e-commerce. Currently, there are many companies based on e-commerce platforms in Indonesia, such as Bukalapak, Matahari Mall, Tokopedia, Lazada, Shopee, Blibli, JD.id.
Tokopedia is the most famous e-commerce in Indonesia. Founded in 2009, it provides an online marketplace, which allows individuals, small shops, and other businesses to open online stores, with a platform that connects sellers and buyers. (Tokopedia, n.d.).

In 2009-2013, Tokopedia received seed funding from PT Indonusa Dwitama and received investment from several global ventures. Tokopedia's rapid growth has made it one of the leading E-commerce companies in Indonesia until now.

Online consumer decisions are influenced by the information obtained through the internet. Online shoppers are sensitive to online information. They respond to news about products, sellers, and marketplaces, especially negative ones. For example, as reported by RBC (2018, August 27), Tokopedia employees were accused of fraudulent flash sales during the flash sale from August 15 to 18, 2018, conducted as part of the celebration of Tokopedia's ninth anniversary. This news sparked a lot of public comments on Twitter, which spread word of mouth (electronic word of mouth) rapidly and reduced consumers' interest in shopping at Tokopedia.

Figure 1. The Most Searched Marketplace in 2018

![Figure 1. The Most Searched Marketplace in 2018](https://iprice.co.id/trend/insights/kilas-balik-e-commerce-di-indonesia-tahun-2018/)


As shown in Figure 1, the chart for the most searched e-commerce platforms in 2018, Tokopedia experienced a decline in mid-August 2018. The decline occurred because there was news of a flash sale promo fraud caused by Tokopedia employees and the news spread very quickly, because the news has been shared through all digital news and social media. This phenomenon tells us that an e-commerce company must have a
good E-WOM from all sides, because the negative news that has been told spreads quickly through all digital news and social media (Electronic Word of Mouth).

Schiffman and Wisenblit (2015) state that evaluation results in preference among a set of choices, as well as an intention to buy the most desired brand. Completeness variables such as product, price, and promotion have an important role in the formation of consumer purchase intentions (Kotler and Keller, 2016). However, when the information is overloaded, consumers also rely on the testimony of other consumers. This study is intended to investigate the effect of the dimensions of intensity E-WOM, positive valence E-WOM, negative valence E-WOM and Tokopedia's E-WOM content on shopping intentions through Tokopedia.

**LITERATURE REVIEW**

**Electronic Word-of-Mouth**

Electronic Word of Mouth is an informal communication tool used to inform consumers about the use or attributes of certain goods and services via the internet (Muis et al., 2020). According to Goyette et al., (2012), there are various dimensions of Electronic Word of Mouth, including:

1. **Intensity**

   The number of opinions generated by customers or buyers on social networking sites is referred to as the intensity of Electronic Word of Mouth. Here are indicators of intensity:
   
   (a) How often you use social networking sites to get information.
   (b) How often interaction with users of social networking sites.
   (c) Number of user generated reviews on social networking platforms.

2. **Positive Valence**

   The positive impression of consumers towards products, services, and brands is referred to as Positive Valence. The following are indicators of Positive Valence:
   
   (a) Users of social networking sites give favorable statements to product reviews.
   (b) Get recommendations about products from users of social networking sites.

3. **Negative Valence**

   Unfavorable consumer opinions about products, services, or brands are known as Negative Valence. Negative comments from users of social networking sites are an indicator of Negative Valence.

4. **Content**

   Content is information on social networking sites about products and services. Here are indicators of content:
   
   (a) Information about different types of products or services.
   (b) Information regarding the quality of products and services.
   (c) Information on the prices of products and services.

   **Behavioral Intention**
Purchase intention refers to the customer's desire to buy certain goods (Ajzen, 2020). According to Curtis et al. (2011) the behavior of purchasing the same goods or services on more than a few occasions is referred to as purchase intention. According to Ferdinand (2016), there are four indicators of purchase intention, which consist of:

1. Transactional intentions, namely the tendency of someone to buy a product.
2. Referential intention, namely the tendency to recommend something to others.
3. Preferential intentions, namely intentions that characterize a person's behavior when he has a strong desire for a product. If something happens to the product of desire or preference, then preferences can change.
4. Exploratory intention, this intention is to image the behavior of someone who is constantly seeking knowledge about the product they are interested in, as well as information to support the attributes that the product likes.

**Intensitiy and Online Shopping Intention**

Intensity is one of the dimensions of electronic word of mouth that can affect purchase intention. According to Goyette et al. (2012), the intensity of electronic word of mouth is the number of opinions written by consumers on a social networking site. Marketing Chart (2019) found that internet is the most trusted source of information. They found that as many as 72% of consumers trust information from the internet and only 33% trust information from advertisements.

According to the law of information and belief, information from the internet has a large effect on belief. Furthermore, beliefs affect attitudes and purchase intentions (Azjen, 2020). Widya and Istiharini (2018) found that intensity had a positive effect on purchase intention.

**H1:** Information intensity influences online shopping intention positively.

**Positive Valence of WOM and Online Shopping Intention**

Positive valence is a positive consumer opinion about products, services, and brands (Hajli, 2020; Goyette et al. (2012). Positive valence is one of the dimensions of electronic word of mouth that can affect purchase intentions (Hajli, 2020; Widya and Istiharini (2018). Logically, positive information can affect trust in products and companies (Rahayuningsih, 2019). Trust is critical factor in online shopping. Therefore, we can expect that trust affects attitudes and purchase intentions (Schiffman and Kanuk, 2012). In this study, this argument enables the formulation of the following hypothesis:

**H2:** Positive value of E-WOM influence online shopping intention.

**Negative Valence of WOM and Online Shopping Intention**

Negative valence is one of the dimensions of electronic word of mouth that can affect consumers' online purchase intentions. Goyette et al. (2012) and Hajli (2020) stated that negative valence is a negative consumer opinion about products, services, brands, which in this study were conveyed through the internet media. Negative valence is one of the dimensions of electronic word of mouth that can affect consumers' online purchase
Intensity, positive valence, negative valence, and content of E-WOM

intentions. Although Widya and Istiharini (2018) found that negative valence has no significant effect on purchase intention, based on Hajli (2020), the authors propose the existence of the influence, as stated in the following hypothesis:

H2: Negative value of E-WOM influence online shopping intention.

Effect of Content on Purchase Intention

Goyette et al. (2012) defines content as content or E-topics related to products, services, and marketplaces. Consumers need information to form beliefs about purchases (Azjen, 2020; Schiffman and Wisenblit, 2015). Content is one of the dimensions of electronic word of mouth that has the potential to influence a consumer's purchase intention, as found by Widya and Istiharini (2018). This argument allows the formulation of the following hypothesis:

H4: Content dimension has a positive effect on purchase intention.

METHODS

Sampling technique

The sampling technique used in this study is non-probability sampling or the sampling technique is not chosen at random. The type of non-probability sampling technique used for this research is judgment sampling to obtain data from respondents with the criteria of having used Tokopedia E-Commerce and respondents with an age range of 15-35 years. Determination of the number of samples in this study was done by multiplying the number of indicators by the number 5, as suggested by Hair et al. (2014). In this study, there were 14 indicator items, so that 5 was multiplied by 14 to 70. This means that the minimum sample size is 70 respondents.

Data collection technique

The data collection technique used in this study is a communication technique, in which the researcher distributes questionnaire questions online via Google Form. The type of data contained in this study is primary data obtained directly from the first source.

Data analysis technique

1. Validity & Reliability Test

a. Validity test

According to Herlina (2019: 58), the validity test is to measure the correlation coefficient between the score of a question or indicator being tested and the total score on the variable. To determine whether an item is feasible to use or not is to ensure that its correlation with its construct is 0.70 or higher (Simamora, 2022). An item is valid if its correlation value is the same with or exceeds that cut-off point. The Pearson correlation is used for this requirement.
b. Reliability Test

The reliability test is used to determine the level of consistency of a questionnaire (Herlina, 2019: 70). The reliability test used is Cronbach's Alpha. The following are the criteria for measuring reliability using Cronbach's Alpha:

1. Cronbach's Alpha < 0.6 = poor reliability.
2. Cronbach's Alpha 0.6 - 0.79 = accepted reliability.
3. Cronbach's Alpha > 0.8 = good reliability.

2. Classical Assumption Test

a. Normality test

The purpose of the normality test is to know whether the distribution or distribution of the data in the variables used has a normal distribution or not (Herlina, 2019: 77). The statistical test used in the normality test is the One Sample Kolmogorov-Smirnov test. The measurement criteria for the One Sample Kolmogorov-Smirnov test are:

1. Sig > 0.05 then the data is normally distributed.
2. Sig < 0.05 then the data is not normally distributed.

b. Multicollinearity Test

According to Ghozali (2018: 107), the multicollinearity test aims to test whether the regression model finds a correlation between the independent variables. The following are the measurement criteria for the Multicollinearity test:

1. Multicollinearity occurs if VIF > 10 and TOL < 0.10.
2. There is no multicollinearity if VIF < 10 and TOL > 0.10.

c. Heteroscedasticity Test

According to Ghozali (2018: 137), the heteroscedasticity test tests whether in the regression model there is an inequality of variance from the residual of one observation to another observation. In the Heteroscedasticity test, the researcher uses the Spearman correlation test where if the probability value is > 0.05 or 5%, there is no heteroscedasticity.

RESULTS

1. Validity & Reliability Test

The validity test is to measure the correlation coefficient between the score of a question or indicator being tested and the total score on the variable (Herlina, 2019). To determine whether an item is feasible to use or not is to ensure that its correlation with its construct is 0.70 or higher (Simamora, 2022). An item is valid if its correlation value is the same with or exceeds that cut-off point. The Pearson correlation is used for this requirement.
The reliability test is used to determine the level of consistency of a questionnaire (Herlina, 2019: 70). The reliability test used is Cronbach's Alpha. The following are the criteria for measuring reliability using Cronbach's Alpha:

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(2) Cronbach's Alpha 0.6 - 0.79 = accepted reliability.
(3) Cronbach's Alpha > 0.8 = good reliability.

As we can see in Table 1, all items are valid and reliable. Therefore, the data fulfill the requirement for further analysis.

### Table 1
Validity and Reliability Analysis Results

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimensions and Items</th>
<th>Product-Moment Correlation</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Intensity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I often access the internet to get information on goods and services on Tokopedia</td>
<td>0.756</td>
<td>0.757</td>
</tr>
<tr>
<td>2</td>
<td>I often open the internet to interact with other internet users to get information about the products and services available at Tokopedia.</td>
<td>0.924</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I often see the number of reviews of goods and services on online stores at Tokopedia before making a purchase transaction</td>
<td>0.800</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Positive Valence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I get a lot of positive information about goods and services on Tokopedia</td>
<td>0.836</td>
<td>0.758</td>
</tr>
<tr>
<td>2</td>
<td>I get a lot of recommendations regarding goods and services on Tokopedia from consumers who use Tokopedia</td>
<td>0.867</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Positive information provided by previous Tokopedia buyers can be trusted</td>
<td>0.777</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Negative Valence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I get a lot of positive information about goods and services on Tokopedia</td>
<td>0.896</td>
<td>0.867</td>
</tr>
<tr>
<td>2</td>
<td>I get a lot of recommendations regarding goods and services on Tokopedia from consumers who use Tokopedia</td>
<td>0.915</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Positive information provided by previous Tokopedia buyers can be trusted</td>
<td>0.857</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Content</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I get a lot of information about goods and services on Tokopedia</td>
<td>0.814</td>
<td>0.715</td>
</tr>
<tr>
<td>2</td>
<td>I get a lot of information about the quality of goods and services on Tokopedia</td>
<td>0.834</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I get a lot of information about the prices of goods and services on Tokopedia</td>
<td>0.756</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Online Shopping Intention</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I'm interested in buying the product I want through the Tokopedia application again</td>
<td>0.926</td>
<td>0.851</td>
</tr>
<tr>
<td>2</td>
<td>I prefer to buy the products needed in the Tokopedia application again</td>
<td>0.942</td>
<td></td>
</tr>
</tbody>
</table>
2. Multiple Linear Regression

a. Equation

The relationship of online shopping intention and its determinants is figured out by the following equation:

\[
\text{Online shopping intention} = 2.278 + 0.219 \times \text{intensity} + 0.082 \times \text{positive valence} - 0.078 \times \text{negative valence} + 0.268 \times \text{content} \\
\]

To make sure whether the above equation is statistically acceptable or not, in the following section, the author conduct classical assumptions and goodness-of-fit test.

b. Classical Asumption Tests

1) Normality test

The purpose of the normality test is to know whether the distribution or distribution of the residuals has a normal distribution or not (Hair et al., 2014; Herlina, 2019: 77). The statistical test used in the normality test is the One Sample Kolmogorov-Smirnov (K-S) test. Statistical value of K-S is 0.066 with the p-value of 0.200, and there is no enough evidence to reject null hypothesis. Therefore, the residuals are normally distributed.

2) Multicollinearity Test

The multicollinearity test aims to test whether the regression model finds a correlation between the independent (independent) variables (Hair et al., 2014; Godzali, 2019). Multicollinearity occurs if variable inflation factor (VIF) > 10 and tolerance (TOL) < 0, 10. On the hand, multicollinearity is not exist if the variable inflation factor (VIF) > 10 and tolerance (TOL) > 0.10.

<table>
<thead>
<tr>
<th>Variabel</th>
<th>TOL</th>
<th>VIF</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensity</td>
<td>0.526</td>
<td>1.901</td>
<td>No multicollinearity</td>
</tr>
<tr>
<td>Positive Valence</td>
<td>0.508</td>
<td>1.970</td>
<td>No multicollinearity</td>
</tr>
<tr>
<td>Negative Valence</td>
<td>0.825</td>
<td>1.213</td>
<td>No multicollinearity</td>
</tr>
<tr>
<td>Content</td>
<td>0.558</td>
<td>1.791</td>
<td>No multicollinearity</td>
</tr>
</tbody>
</table>

3) Heteroscedasticity Test

The heteroscedasticity test tests whether in the regression model there is an inequality of variance from the residual of one observation to another observation (Hair et al., 2014; Godzali, 2019). In the Heteroscedasticity test, the researcher uses the Spearman correlation test where if the probability value is > 0.05 or 5%, there is no heteroscedasticity.
Intensity, positive valence, negative valence, and content of E-WOM

c. Goodness-of-Fit Test

This test investigates whether the value of dependent variable is the same with and without its determinants is the same or not. The author expects the good-fit decision achieved when the equation with determinants produces the different value of dependent variable than without the determinants.

The author uses F-test for this requirement. The hypotheses in this test are as follow:

- Ho: β1= β2= β3= β4=0 or the equation with or without independents variables generate the same value of dependent variable (Y).
- Ha: Ho: β1≠β2≠ β3≠β4=0 or at least one among beta coefficient is not the same with zero or the equation with or without independents variables generate the different value of dependent variable (Y).

The regression analysis with SPSS generated the statistical value of F=15.105 with the p-value of 0.000. There enough evidence to reject Ho, and therefore the equation with or without independents variables generate the different value of dependent variable (Y) or the above regression model is a good-fit.

d. Hypotheses Testing

Hypotheses testing uses t-test which purposes to test whether the coefficient in the equation (1) is significant or not. The tested hypotheses are:

Ho: βi=0 or the X_i variables has no influence on the dependen variable Y.
Ha: βi>0 or the X_i variables influence the dependent variable Y positively.

The values of beta coefficient (β_i) and their one-tailed significance (Sig./2) are presented in Table 3. As we can see in that table, intensity, negative valence, and content of WOM influence online shopping intention positively, but positive valence has no influence.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Beta</th>
<th>Sig.</th>
<th>Sig./2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensity</td>
<td>0.352</td>
<td>0.006</td>
<td>0.003</td>
</tr>
<tr>
<td>Positive Valence</td>
<td>0.126</td>
<td>0.319</td>
<td>0.160</td>
</tr>
<tr>
<td>Negative Valence</td>
<td>-0.167</td>
<td>0.095</td>
<td>0.048</td>
</tr>
<tr>
<td>Content</td>
<td>0.355</td>
<td>0.004</td>
<td>0.002</td>
</tr>
</tbody>
</table>

DISCUSSION

This study reveals that intensity, negative valence, and content of WOM influence online shopping intention positively, but positive valence has no influence. The content and intensity represent the informativeness aspects of E-WOM. This aspec influences the attitude (Cahyani & Artanti, 2020; De Battista, 2021). We can expect that the higher the
informativeness, the stronger the attitude toward object (De Battista, 2021), and the higher the possibility of attitude-object related behavior (Ajzen, 2020).

In this study, the positive valence of E-WOM has no influence on shopping intention. It seems that shoppers’ motivation is mainly developed based on the informativeness. In other words, positive testimonies given by the other shoppers have less strength to build the shoppers’ belief. This result is in line with Apolina´rio-Hagen et al. (2021) who found that positive information shared by the media has little effect on positive attitude that has been formed solidly.

The significant effect of negative E-WOM on online shopping intention strengthens the notion that risks are the main factor of online shopping (Tham et al., 2019). This effect can be understood by offering the notion that negative testimonials strengthen negative emotions which in turn increases perceived risk (Burns et al., 2011). In sum, this result strengthens previous finding where the negative feedback is stronger than positive feedback (Feedberg et al., 2017; Zenger, 2014).

CONCLUSION

This study concludes that intensity, negative valence, and content of E-WOM influence online shopping intention positively. Positive valence of E-WOM has no influence on online shopping intention.

SUGGESTION

The study perceives that content and intensity represent the informativeness of E-WOM. From the above conclusion we can say that the E-WOM informativeness influence online shopping behavior. However, Fan et al. (2021) reported that too many information in internet can create distrust and negative emotions about the website. Therefore, optimal informativeness of E-WOM is required to create a strong online shopping intention. Further research can investigate this gap.

REFERENCES


Cahyani, N. I., & Artanti, Y. (2020). The influence of informativeness, entertainment and e-mail marketing irritation on online buying intentions with attitude toward advertising as mediation variable. *SENTRALISASI*, 9(2), 77–86. https://doi.org/10.33506/sl.v9i2.927

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Herlina, V. (2019), Panduan Praktis Mengolah Data Kuesioner Menggunakan SPSS, Jakarta: PT Elex Media Komputindo


