



The Effect of Viral Marketing on E-Commerce Shopee's Consumer Purchasing Intention

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Abstract. The purpose of this study is to investigate the impact of Viral Marketing on E-Commerce Shopee's Consumer Purchasing Intention. Viral Marketing can be used to widely disseminate marketing messages by inviting the audience to share marketing messages with others. The increasing use of the internet and technological advancement have promoted the proliferation of viral marketing. Viral marketing is measured in terms of Informativeness, Entertainment, Source Credibility, and Irritation. To test the proposed model, 116 valid questionnaires were used, and then multiple regression analysis was conducted. The questionnaires were collected from undergraduate students of Universitas Brawijaya, who had used Shopee and had seen Shopee's viral marketing messages. The results of this study show that informativeness, entertainment, and source credibility have influenced consumer purchasing intention significantly and positively. In contrast, Irritation negatively affects the consumer purchasing intention.

Keywords: Consumer · E-Commerce · Purchasing Intention · Viral Marketing

1 Introduction

Viral marketing utilizes existing social networks to disseminate marketing messages in which people are encouraged to spread the messages and recommend products to their friends [1, 2]. This strategy relies on word-of-mouth recommendations in promoting a product or service [3]. Decisions to buy products are often affected by other people around the customers [4]. Viral marketing strategies are currently widely carried out by companies because of their impact that can reach potential customers very widely in which viral marketing can be widespread in a short time like a virus [5]. As such, it is important to understand viral marketing's capabilities and characteristics to ensure its effectiveness [6].

The effectiveness of viral marketing can be evaluated through various factors such as informativeness, entertainment, source credibility, and irritation [7, 8]. Informativeness relates to how an advertisement can provide relevant and useful information to customers [9]. Entertainment is closely linked to humor incorporated in advertising messages that make people want to share the messages with their friends [10]. Source credibility can be associated with the respect level given to the sender of the marketing message in which

people tend to pay more attention to credible sources [11]. Lastly, irritation is closely related to the customers' negative attitudes caused by annoying marketing messages [12]. Viral marketing is widely used in various digital platforms, including e-commerce or marketplace.

E-commerce is one of the most widely used platforms in digital transaction activities, particularly in Indonesia. According to We Are Social [13], Indonesia was in first place in terms of e-commerce usage in the world in which less than 12% of internet users did not use e-commerce services. This is certainly a very promising opportunity for Indonesia in using e-commerce as a buying and selling platform. In Indonesia, Shopee is one of the biggest e-commerce platforms. Based on iPrice [14], in the third quarter of 2021, Shopee was able to achieve an average monthly visit rate of 134.4 million visits. In addition, Shopee had the largest number of Instagram followers with a total of 8.2 million followers [14]. Based on research conducted by AppTopia, Shopee became the most downloaded e-commerce application by the global community in 2021 with 203 million downloads. This figure far exceeded Amazon Shopping which was in fourth place with a download figure of 148 million downloads [15]. To increase sales, Shopee also adopted viral marketing strategies.

Previous studies have examined the impact of viral marketing on customer purchase intention but the results have been inconclusive, highlighting the need for further research. For example, previous studies have shown that entertainment, informativeness, irritation, and source credibility had significant positive effects on customer purchasing intentions [10, 16]. However, other studies found that entertainment did not have a significant effect [17] and similarly irritation also did not have a significant impact on customer purchasing intention [18, 19]. In addition, it is important to investigate undergraduate students' behaviors toward viral marketing because they can be potential market segments. The results of this study can offer further insights into understanding viral marketing characteristics and can also be used to develop viral marketing strategies targeted at university students.

2 Literature Review

2.1 Consumer Purchasing Intention

Purchase intention is a commonly used marketing tool for evaluating the success of a marketing strategy [20]. It is something that contains consumer considerations in purchasing products or services [21]. Purchase intention can be measured based on several indicators [22], as follows:

- Transactional interest is a person's tendency to make a purchase of a product.
- Referential interest is a person's tendency to refer to a product to others.
- Preferential interest is an interest that describes the behavior of a person who has a primary preference for the product.
- Exploratory interest is the behavior of a person who is always looking for information about the desired product and looking for information to support the positive characteristics of the product.

2.2 Viral Marketing

A process in which marketing information is shared and spread by consumers, and it starts when marketers use word of mouth (WOM) is defined as Viral Marketing [23]. The internet, social networks, and technology have enabled exponential growth in the exposure and influence of word-of-mouth marketing messages [24]. It works like a virus in which people who receive viral marketing messages massively spread and exchange positive information about a particular brand's product with other people [5]. Factors determining the success of viral marketing include informativeness, entertainment, credibility, and irritation [7, 8].

2.3 Informativeness

The degree to which consumers consider a piece of information to be pertinent and helpful to them is known as its informativeness [9]. To meet their requirements, consumers require information that is pertinent, current, and helpful [25]. The content of viral marketing messages must be succinct and easily understood to draw consumer focus [26]. The efficacy of an advertisement can be determined by how informative the marketing messages are [27, 28].

2.4 Entertainment

Entertainment can be defined as the degree of pleasure brought on by stimuli like humor and endearing qualities in a commercial [10]. Humor functions as an attention-grabbing feature that will reduce customers' unfavorable impressions [29]. Audiences tend to enjoy an advertisement that contains entertaining and fun material [30]. An attractive and fun advertisement can affect consumer attitudes positively [26]. Previous studies have shown that successful viral messages tend to be entertaining [25, 28].

2.5 Irritation

Irritation is defined as how far a marketing message seems messy and annoying [31]. Disruptive techniques used by advertisers in viral marketing strategy can be a source of irritation [25]. Customers are more likely to have a negative attitude towards irritating messages [12]. As such, irritation can reduce the effectiveness of marketing messages [32].

2.6 Source Credibility

Consumers will not pay attention to marketing messages that they think are incorrect or from non-credible sources because they lack source credibility, which refers to a certain level of respect given to the message's sender [10]. The credibility is seen from the aspects of reliability and expertise [33]. While the reputation of the organization can favorably impact its viral messages, the credibility of the organization can also affect the credibility of its messages [11]. Credibility is important since many people avoid advertising on social networks due to a lack of credibility or trust [34]. The above viral marketing factors can potentially affect consumer purchasing intention [10, 16, 17, 35].

2.7 Informativeness and Consumer Purchasing Intention

Marketing messages should include educational content that can give a clear idea of the advertisement and encourage the consumer's intention to act favorably because consumers need to receive current and relevant information [10]. Consumers want to receive informative advertising messages that can help them to make decisions in purchasing the product [17]. Previous studies have shown that informativeness affects positively and significantly the purchase intention [10, 35].

H₁: Informativeness has a significant effect on Consumer Purchasing Intention.

2.8 Entertainment and Consumer Purchasing Intention

Entertainment is one of the most important factors in getting the audience's attention to the advertisement by triggering a feeling of pleasure related to the advertisement [10]. The degree of enjoyment that a stimulus can produce is referred to as entertainment, such as when advertising is made fun and humorous. Entertainment on viral messages will lead to an effective viral marketing strategy. Entertaining messages inserted in viral marketing strategies will encourage audiences to share the message more [10]. Consumers are more interested in viral messages that can provide entertainment in which consumers' intentions to buy can be significantly influenced by entertainment [17].

H₂: Entertainment (X₂) has a significant effect on Consumer Purchasing Intention (Y) E-Commerce Shopee.

2.9 Irritation and Consumer Purchasing Intention

Another factor influencing the attitude towards advertising is irritation. It is believed that irritation can result in a general decrease in the audience's perception of effectiveness and worth [32]. The extent to which a message is disseminated in an unpleasant manner is referred to as irritation [31]. Irritating advertising tactics include those that are intrusive or demeaning [25]. Marketers should also pay attention to irritation in viral marketing. Customers tend to give negative reactions to messages that are considered annoying [12]. Researchers have discovered that annoyance has a significant detrimental effect on advertising and behavioral intentions [36]. The irritants involved in advertising have a negative impact on the attitude toward such advertising. Banner ads of an irritating nature can cause negative behavior toward these ads [37].

H₃: Irritation (X₃) has a significant effect on Consumer Purchasing Intention (Y) E-Commerce Shopee.

2.10 Source Credibility and Consumer Purchasing Intention

Source credibility is one of the factors that affect consumers' desire to receive advertising messages, so advertisers use positive source characteristics so that consumers are interested in receiving advertisements [38]. Source credibility is determined by the

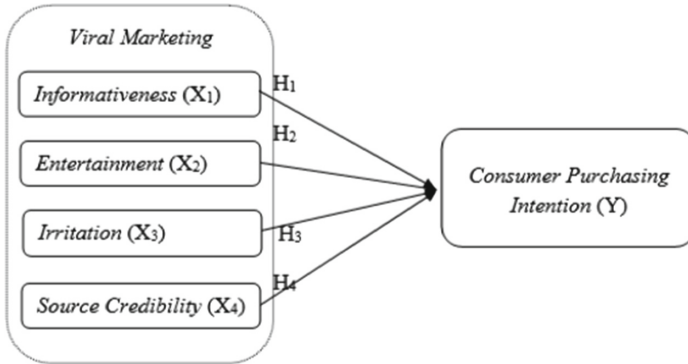


Fig. 1. Conceptual model.

recipient's faith in the information's source [39]. The message contained in the advertisement reflects the credibility of the information disseminated [40]. When creating a viral marketing plan, the source credibility factor is crucial. Researchers note that an organization's credibility has a favorable effect on the credibility of the word it conveys [11]. The credibility of the source is correlated with customers' intentions to purchase in a way that is favorable [10]. Credibility in viral marketing messages affects consumers' purchase intentions [17]. The source credibility of marketing messages greatly influences consumer attitudes such as honesty in the brand, interest in the brand, and purchase intention [33]. To ensure the success of their viral marketing campaigns, businesses must carefully craft their advertising messages so that consumers believe the message's source to be very trustworthy. In addition, the credibility of sources that are in high trust will create a positive impact on the audience as well as their attitude towards the brand [27]. Credibility in the message has an influence on the perceived quality of the source, which is related to trust in the marketing message among consumers. These studies suggest that source credibility significantly affects consumer purchasing intention.

H₄: Source Credibility (X₄) has a significant effect on consumers Purchasing Intention (Y) pada E-Commerce Shopee (Fig. 1).

3 Research Method

A quantitative approach was used in this study, using a purposive sampling technique. Valid completed questionnaires were collected from 116 undergraduate students at Universitas Brawijaya. The respondents had met the following criteria:

- Active undergraduate students aged between 18–24 years old. According to We Are Social and Hootsuite [13], people in these ages tended to see advertising through social media.
- Respondents had seen Shopee's viral marketing messages (either via email, Pop Up notifications, blogs/websites, or social media).

Table 1. Characteristics of respondents based on age and gender.

No	Age (Years)	Number of respondents (Person)	Percentage (%)
1	18	2	1,7%
2	19	8	6,9%
3	20	30	25,9%
4	21	39	33,6%
5	22	34	29,3%
6	23	2	1,7%
7	24	1	0,9%
Total		116	100%
Gender		Frequency	Percentage (%)
Male		58	50%
Female		58	50%
Total		116	100%

- Respondents are Shopee E-Commerce users.

The characteristics of respondents can be seen in Table 1. Equal numbers of men (50%) and women (50%) were recruited as respondents in this study. In addition, almost 90% of respondents were aged between 20–22.

The measurement items for informativeness, entertainment, irritation, source credibility, and purchasing intention were adapted from previous studies [10, 22, 27, 33, 41]. All the variables in this study were valid and reliable. The results of Pearson correlations showed that all the items are valid with a significance value <0.05 . Furthermore, the Cronbach's Alpha of each variable is more than 0.6 indicating that all variables in this study are reliable. Multiple regression analysis was then conducted using SPSS version 25.

4 Results and Discussion

Informativeness, entertainment, irritation, and source credibility significantly influenced the purchasing intention, indicating that these viral marketing factors are predictors of purchasing intention. This is shown by the significant result of the F statistical test (p-value <0.05). In addition, the adjusted R^2 is 0.508, demonstrating that 50.8% of the variation in consumer purchasing intention is accounted for informativeness, entertainment, irritation, and source credibility whereas the remaining 49.2% of the variation is affected by other factors not included in this study.

The regression equation for this study is as follows:

$$Y = 5 + 0,157X_1 + 0,209X_2 - 0,157X_3 + 0,410X_4 + e \quad (1)$$

Y is the dependent variable (consumer purchasing intention) as predicted by the independent variables: *Informativeness* (X_1), *Entertainment* (X_2), *Irritation* (X_3), and *Source Credibility* (X_4). All independent variables showed a positive direction except for irritation as the slope has a negative value. First, the constant is 5, indicating the value of consumer purchasing intention when all independent variables are zero. Second, every additional unit of informativeness will increase consumer purchasing intention by 0.157. Third, every one-unit rise in entertainment will result in a 0.209 increase in consumer purchase intention. Fourth, when irritation increases by one unit, consumer purchasing intention will decrease by 0.157. Lastly, for every unit increase in source credibility, consumer purchasing intention will rise by 0.410.

4.1 Hypothesis Testing

All hypotheses in this study are accepted since the significance value is less than 0.05, as shown in Table 2:

This study has demonstrated that viral marketing has a significant effect on purchasing intention. All viral marketing dimensions have a positive direction except irritation which has a negative direction. First, informativeness has a positive and significant impact on purchasing intention. This finding supports previous studies that show better information in marketing messages will lead to higher purchasing intention [13, 14, 16]. To make informed decisions in purchasing products, consumers need informative advertising messages [14]. Second, entertainment has a positive and significant effect on purchasing intention. This finding is similar to previous findings that suggest purchasing intention will increase when marketing messages are more entertaining [13, 16]. Entertaining marketing messages tend to be viral and lead to more sales [10]. Third, irritation has a negative and significant influence on purchasing intention. Choshally et al. [37] also found similar findings in which purchasing intention will decrease when marketing messages become more irritating. Consumers tend to react negatively to annoying marketing messages [12]. Lastly, source credibility has a positive and significant effect on purchasing intention. This finding supports previous studies that demonstrate higher source credibility will lead to higher purchasing intention [13, 16, 37]. Consumers tend to pay attention to marketing messages when they think the source is credible and can be trusted [10]. The source credibility is the strongest predictor for purchasing intention since it has the largest standardized coefficient.

Table 2. Hypotheses testing.

Hypotheses	β	p-value	Remarks
H1: <i>Informativeness</i> \rightarrow <i>Purchasing Intention</i>	0.152	0,036	Accepted
H2: <i>Entertainment</i> \rightarrow <i>Purchasing Intention</i>	0.222	0,008	Accepted
H3: <i>Irritation</i> \rightarrow <i>Purchasing Intention</i>	-0.253	0,003	Accepted
H4: <i>Source Credibility</i> \rightarrow <i>Purchasing Intention</i>	0.326	0,000	Accepted

5 Conclusion and Recommendation

The results of this study have confirmed the significant impact of viral marketing on consumer purchasing intention. Informativeness, entertainment, and source credibility have a positive and significant effect on purchasing intention whereas irritation has a negative and significant impact on purchasing intention. This suggests that marketers need to develop effective viral marketing strategies that include informativeness, entertainment, irritation, and source credibility dimensions. Viral marketing should provide current and relevant product information that can be used to support purchasing decisions. Marketing messages should be entertaining as well because messages that contain humor tend to be viral and positively affect consumer behavior. In addition, marketers should avoid delivering marketing messages that can annoy or irritate consumers because the messages can give a negative impression of the brand and discourage consumers to purchase. In addition, most importantly, marketers should maintain their credibility because source credibility is the dominant factor in predicting intention to purchase. This study has several limitations. The sample of this study was obtained from Universitas Brawijaya only. Further research can be conducted by involving more students from different universities so that the results could be more generalized to the greater university population. Lastly, this research only investigated the purchasing intention but not the actual purchase. Further studies can focus on actual purchases so that it can be observed how viral marketing can affect product sales.

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