

How Do Online Reviews on YouTube Construct Perception?

Fajria Fatmasari^{1*}, Dedi Febrianto², Ahmad Cahyo Nugroho³

¹Department of Marketing Management on Electronics Industry, Politeknik APP Jakarta, Indonesia

²Department of International Trade for ASEAN & China Region, Politeknik APP Jakarta, Indonesia

³Department of Marketing Management on Electronics Industry, Politeknik APP Jakarta, Indonesia

Email: fajria.fatmasari@poltekapp.ac.id¹, dedi.febrianto20@gmail.com², ac.nugroho999@gmail.com³

Abstract. Online reviews are a step to communicate various brands or products. Product reviews usually contain product features, advantages, and disadvantages, as well as other products for comparison. Electronic product reviews conducted online on YouTube channels are the object of this research. With certain criteria, five videos were obtained as review objects that will be studied in this research. The 458 dataset of audience comments on this review will be studied qualitatively using machine learning in the form of software of Nvivo, as well as internet ethnography and pragmatics. From the analysis results, it is known that each electronic product review video provides positive, negative or neutral perceptions and attitudes from the audience. Audience sentiment is formed from product features, images of reviewers, how it was reviewed, and product image. By the limitation of the research, it needs to be developed further with different methods and objects to provide more input to producers or reviewers.

Keywords: Review, Perception, Electronics

1. Introduction

Online consumer reviews have now mushroomed on various social media. This can be understood as a form of word of mouth (WOM) which explores the specifications of a product and the assessment of that product. This is also quite common considering that currently social media users in Indonesia have reached 167 million or the equivalent of 60.4% of the entire population of Indonesia [1].

Product reviews can be carried out by consumers or credible figures who are asked by the company to provide testimonials. This review can be done via various channels, one of which is via the YouTube channel. At the beginning of 2023, YouTube will have 2.51 billion users, of which 139 million are in Indonesia [2]. Thus, Indonesia is big-four country for Youtube users in the world.

YouTube is a digital platform in the form of long or short videos uploaded by the public for certain purposes, one of which is to provide information [3]. YouTube is seen as the most informative platform in providing explanations of a product, so with a rating of 4.6 on a scale of 5, YouTube holds rank 1 in this regard [4].

The large number of people taking advantage of monetization opportunities on YouTube channels has resulted in the emergence of many video uploaders, including product reviews, on this media [5], [6]. Moreover, when a new product is launched by a company, people compete to provide reviews of the product on the YouTube channel, which is then known as YouTube marketing [7].

With so many reviews, the viewing public may be divided into whether they are pro- or con- regarding these reviews. In several studies it can be seen that consumer reviews influence purchasing decisions, for example in [8]. Research shows that prices, ratings and consumer reviews simultaneously and partially influence buying interest in market places [9].

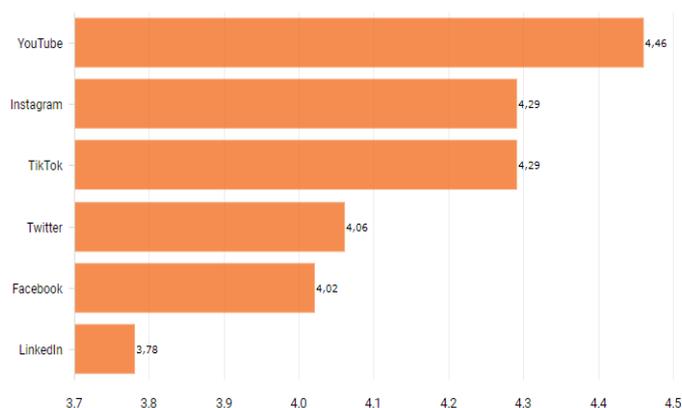


Figure 1. Social Media Rank

Much research has been conducted on consumer attitudes towards reviews on online media. A researcher have conducted research on the attitudes and purchasing intentions of food reviewers on the Instagram platform using SEM analysis techniques [10]. Research on consumer attitudes using similar techniques was also carried out by [11], and [12]. Other previous researchers such as Shuyang Qu et al (2017) used one-way ANOVA to observe the effect of online videos on consumer attitudes. Similar research was also conducted by [13] using one-way ANOVA to observe the effect of consumer attitudes towards fashion video creators' broadcasts. The SMART PLS technique was used by researcher [14] to observe the purchasing attitudes of Indonesian people based on product reviews on YouTube.

On the other hand, interviews and appraisal techniques have been carried out to reveal consumer attitudes towards product reviews on YouTube channels [15], [16]. Similar research was also carried out by other researchers, but used different methods, namely Naïve Bayes Classifier (NBC) [17], [18], [19] and Social Network Analysis [20], [21]. Based on these considerations, there has been no research that uses sentiment codes to express consumer perceptions and attitudes towards electronic product reviews developed through the Nvivo method and internet ethnography. In addition, current research on attitudes towards electronic products is only limited to certain products, for example [22] only used smartphone products. The difference is, this research seeks to reveal the audience's perceived attitudes and buying interest in electronic products reviewed online via YouTube channels through sentiment codes and internet ethnography and pragmatics.

2. Method

This research is a qualitative descriptive study that involves the wider community in revealing consumer attitudes and perceptions towards product reviews on YouTube channels. On the YouTube platform, you can observe the content and comments from followers or visitors. The comments on the YouTube channel are in the form of narratives or sentences that are not presented in numerical form, so the research can proceed using qualitative methods. It is further stated that 90% of digital information consists of unstructured content accounts, including surveys, consumer responses, online forums, and other information that is not presented numerically so it cannot be easily quantified [23], [24]. The qualitative method chosen was felt to be appropriate considering that a qualitative approach can show the possibility of understanding the audience's interpretation of social phenomena and their role in the media [25]. In addition, a qualitative descriptive approach can be used to reveal data accurately [26]. In its development, the digital world presents a lot of data, including comments on YouTube channels. For research with in-depth examination of comments, researchers involve internet ethnography in this research. By using internet ethnographic studies, researchers will contextually look at the comments produced by the audience. The electronic products used as objects in this research are based on the 2021 Brand Choice Index phase 1. In this survey, the 10 most sought-after products on the internet were obtained, including 5 (five) electronic products, namely air conditioners, blenders, laptops, washing machines, and printers [27]. Considering that this research is limited by the territory of Indonesia, the YouTube channels that discuss the 5 (five) electronic products above originate from Indonesia and use Indonesian. There are also more than 1 YouTube channels that provide reviews of the 5 (five) products above, so, as data, YouTube channels that have at least 100 (one hundred) comments are selected. The YouTube channels studied in this research include:

1. Selka ID-AC specialist with reviews of Panasonic ACs with 2 different types with the title Which is Better? Review of AC Panasonic CS-YN5WKJ Standard & CS-LN5WKJ Si-Biru 1/2 Pk - Cici Compare #3 on the channel <https://www.youtube.com/watch?v=0U5Jd9WGzuA> with 63 sample comments.
2. GadgetIn with a review of the 600 thousand VS 12 million blender with the title POP ICE from the 600 thousand vs 12 MILLION blender! Which one is better? on the channel <https://www.youtube.com/watch?v=MwqZ8UaIsYw> as many as 100 samples.
3. Jagat Review with a review of light laptops with the title Recommendations for Super Light Laptops Under 1 KG for Studying & Working Feat ShopBack on the channel https://www.youtube.com/watch?v=oeDcHyS_YXo with 100 samples.
4. Yunita Rahayu Dewi with a review of the Polytron washing machine entitled Review of the Zeromatic Laguna Polytron PAW 1028Y Washing Machine | Cheap & Quality washing machines on the link <https://www.youtube.com/watch?v=YGVNArGII74> with 94 samples.
5. Kantong Ajaib with a review of recommendations for the best cheap printer, all in one in 2023 on the channel <https://www.youtube.com/watch?v=FR7-7IGGAYa> with 71 samples.

Primary data, research data in the form of a dataset of comments that appear on YouTube channels, was taken using the site www.exportcomments.com. This site can attract 100 comments at a time per channel. Comments that have been successfully withdrawn are then processed with the help of NVivo software. Data is processed per product which is the object of this research. Data in the form of comments is processed using sentiment analysis so that the percentage of sentiment is visible, whether neutral, positive or negative. It was also done by [28] who revealed sentiment result of Twitter by sentiment analysis. [29] did something similar, namely that data on social media in the form of photos, text, video and audio can be valuable information [29]. Furthermore, comments containing neutral, positive and negative sentiments were taken randomly to be studied in more depth to see trends in perceptions and attitudes. Audience purchasing interest is studied pragmatically by analyzing the context of the comment dataset from the five objects studied. Audience purchasing interest is reported based on existing theme code findings and discussions are carried out on these findings using a pragmatic approach. The final results of data analysis are presented in the form of tables and narratives.

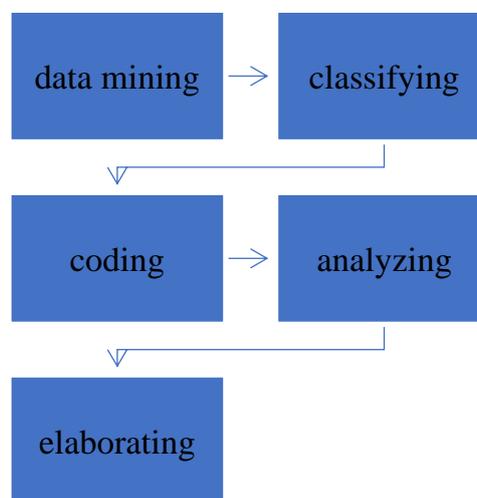


Figure 2. Analytical Methods

3. Result and Discussion

From reviews of electronic products, it is known that each review provides a different perception for each audience. In general, electronic product video shows have positive perception sentiments that are as large as the audience's negative perception sentiments. This can be seen in the number of references that appear in each perception sentiment. The greatest positive perception sentiment was created by the laptop product review video, while the largest negative perception was created by the blender product review video. Positive sentiment can be created if the review creator's perception matches the audience's perception. In this way, the audience

will be supportive, agree, and even express their enjoyment of the product review. Apart from that, a positive perception of reviews can also be created through the figure of the reviewer.

Table 1. Positive-Negative Perception of Electronics Products

Name	Positive		Negative	
	References	Coverage	References	Coverage
Comments of AC	1	0.378%	1	1.58%
Comments of Blender	7	7%	18	17%
Comments of Laptop	12	11%	1	1%
Comments of Washing Machine	1	1.06%	0	0
Comments of Printer	2	2.85%	4	5.7%
Average		3.6%		3.6%

Source: NVivo, 2023

It is known that the laptop review received a positive perception due to repeated requests to upload content regarding recommendations for a laptop with a 13-inch screen. Another positive perception can be seen in the comments which expresses its approval of reviews of light laptops. In this comment, there is also a presentation of experiences when using a lighter laptop, which better supports user mobility. The similarities in perceptions and attitudes of these two comments are also supported by a number of other comments, so that the positive perception of this review reaches 11%. This percentage of positive perception is the highest among electronic products in this study.

It may also take place on the reviewer's capability. The reviewer of laptop is well known as a reviewer of gadget. Thus, everybody believed that he would reveal a trustworthy review of electronics products, including laptop. The image of laptop reviewer is as less famous than blender's reviewer. Yet, other factors cause the opposite.

When we take look at blender review, it had the biggest negative perception amongst audience, we knew that image of the product intervening their perceptions. It can be seen that the blender being reviewed was the same as the blender that other people use to do "cat blender" or chop cats finely. This negative perception appears more likely to refer to the 12-million-blender object and not to the reviews. Cat blenders circulating on social media involving certain blender products are considered not an interesting event because cats are considered noble animals in the Islamic religion, like cows which are considered sacred in the Hindu religion. This view then gave rise to negative perceptions in the audience of online reviews of blender products. It means that image of reviewed products can determine audiences' perception.

One thing that may also construct audiences' perceptions is the features of the products. Electronic product specifications are generally also disclosed through websites or product packaging, so that the public can find out what features the electronic product has. However, the audience expects to see directly the features that are the advantages of the product. This is what ultimately determines the perception of the review. If the features of the product being reviewed are appropriate and the benefits are truly felt, the public will give a positive perception of the review.

Lastly, the public will give a positive perception of how reviews are carried out. For example, in a washing machine product review, the reviewer carries out clothes washing activities. People follow the process starting from putting dirty clothes into the machine, setting the washing machine, showing the product when it is used, until showing the final result of the clothes that have been washed. The audience will have a more positive perception if the product performance results are not the reviewer's settings. By showing real situation how it works, brings positive perception as we see in some electronics products' online review.

Audience comments appear as part of the response to reviews that appear on videos shown on the YouTube channel. Comments are a manifestation of expression that expresses the audience's perception after watching video reviews of electronic products. This is in line with what was expressed by [30] who stated that comments on social media are a form of expressive expression. It was also revealed by [31] that stated that online video can bring positive attitude towards local food.

In general, electronic product video shows have positive perception sentiments that are as large as the audience's negative perception sentiments. This can be seen in the number of references that appear in each perception sentiment. The greatest positive perception sentiment was created by the laptop product review

video, while the largest negative perception was created by the blender product review video. Positive sentiment can be created if the review creator's perception matches the audience's perception. In this way, the audience will be supportive, agree, and even express their enjoyment of the product review. Apart from that, a positive perception of reviews can also be created through the figure of the reviewer.

In the AC, laptop and blender review video, the reviewer is a person who works in the electronics sector. The experience and credibility of the reviewer can also move the sentiment of the audience's perception of the review produced. In the washing machine review video, the reviewer is not someone who operates in the electronics sector, but is a product buyer who actually uses the product in his household. This was also considered positive by the audience. It was in line with [22] who stated that perception was influenced by the attitudes towards the vlogger and the product.

Negative audience perception sentiment usually arises due to contradictory reviews of experiences that the audience may have had, for example product features. The unique thing revealed through this research is that the audience's negative perception sentiment can be driven by the associative nature of the product. This can be seen when the blender review video shows a similar product that was once used by another character to blend a cat. Brand and color associations will immediately call up the audience's bad memories of bad events in the past and provoke the audience to give negative perception sentiments towards product reviews.

Based on the results of the analysis in this research, it is concluded that the audience can provide positive and negative perception sentiments expressed through comments. A product review video that provides a good explanation does not necessarily provide a good perception and attitude from the audience. Positive perceived sentiment in this research provides the same average percentage value as negative perceived sentiment from the audience.

Audience perception can be constructed through these factors: (1) image of products or brand. It appeared when a brand or product has negative image in society, it will imply audience to have negative perception to the review. The audience regretted the choice of product which they felt was not in line with the image that has been circulating in society so far; (2) image of reviewer, credibility becomes a key for doing online trustworthy review; (3) product features, it will create audience's perception to the fitness of explanation and the reality; (4) the way the review is done may also simply imply audience to make their perception. Since the activity will give them clue to the real product's performance well, audience more likely to provide positive perception towards the review.

4. Conclusion

Online reviews of electronics products provided positive and negative perception amongst the audience. The reviews have positive perception sentiments that are as much as the audience's negative perception sentiments. The greatest positive perception sentiment was created by the laptop product review video, while the largest negative perception was created by the blender product review video. Positive sentiment can be created if the review creator's perception matches the audience's perception. It was influenced by the good experience and credibility of the reviewer. Meanwhile, the negative sentiment was influenced by the contradictory reviews of experiences that the audience may have had on the products.

The study showed that the construction of the audience perception is based on many factors that they see, they listen to, and they feel. In order to enhance more positive perceptions from the audiences, the online product reviewers are to possess a more in-depth experience on the products being reviewed. The more closed related the product to audience good experience, the more positive perceptions to achieve.

This research has potential limitations. It was conducted through online reviews in the same language. Yet, it need more research in online review across the language from many countries all over the world to get various data. By doing so, larger audience perceptions can be investigated in order to explore global perceptions on the products. This can further provide a clear view on how the products can penetrate the global market. Besides, the limitation is on the product chosen which was based on the Index of 2021 which include only five electronic products, namely air conditioners, blenders, laptops, washing machines, and printers. This is because the last Index did not provide much elaboration about kinds of electronic products. In general, these types of products are relevant and representative for electronic products. Yet, certain electronic product may need a specific review to investigate audience perception.

It is suggested that future researchers to investigate the reviews in various languages. This is to examine the audience perception globally as well as to measure the competitiveness of the products in global market. In addition, it is important that future researchers to carry out different method to further investigate the audience perception. An in depth-interview to several audiences may be conducted to clearly investigate the perceptions

which is useful in determining the product's success in markets. This is possible to do as the audiences who give comments can easily be reached on the YouTube platform.

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