THE EFFECTIVITY GOOGLE DISPLAY NETWORK AND GOOGLE VIDEO NETWORK IN YOUTUBE: A LITERATURE REVIEW

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Abstract
The purpose of this study is to analyze the effectiveness of the Google Display Network on YouTube. This study uses a literature review that describes the problems or successes that appear on the features on the Google Display Network platform. This literature review also explains ways to anticipate these problems, such as focusing on the marketing targets to be achieved. The findings in this study are that there are still many products that are not relevant to the main video that is used as a means of advertising of their products. Meanwhile, according to data from businessmen who place ads on YouTube, many successful businesses increase demand for their products and generate a lot of profit. Successful business people already know the marketing targets that their products will target and also know the main video criteria that will be used as a means of marketing of their products.

Keywords: Advertising, Google Display Network, Literature Review, YouTube.

I. INTRODUCTION
The development of the internet in Indonesia has been very fast, as evidenced by internet users in Indonesia reaching 202.6 million people in 2021 [1]. Based on the latest report released by content management service HootSuite and social media marketing agency We Are Social in a report titled "Digital 2021", the number of internet users has increased by 27 million compared to early 2020 [2].

The development of the internet is supported by several BBS in Indonesia that provide Telnet access services abroad. By using the Lynx remote browser in the United States, internet users in Indonesia can access HTTP Internet which makes it easier for internet users in Indonesia to communicate between countries [3].

The use of the internet in any field is very helpful in accelerating the process of disseminating information, including marketing. In the digital era like today, marketing trends continue to develop along with the development of increasingly sophisticated technology with the presence of the internet world [4].

Digital marketing is present as an innovation in the world of marketing. Digital marketing is the process of marketing a product or service via digital or the internet [5]. Digital marketing has grown rapidly considering the increasing number of internet users in Indonesia. Based on a survey by the Association of Indonesian Internet Service Users (APJII), the penetration and behavior of internet users in Indonesia always increase by 10% every year [6].

As in YouTube marketing, the platform also uses a tool from Google that helps with marketing or advertising, namely the Google Display Network. The Google Display Network is a way of advertising that is displayed in the form of display ads [7]. Display ads can be in the form of text ads or visual form. Google Display Network has become one of the complete advertising platforms, in terms of the form of advertising [8]. Advertisers can promote products in the form of videos accompanied by text, so they can maximize persuasive efforts to target ads [9]. Recognizing that Google search engine users reach billions of people, it's no wonder that the Google Display Network can guarantee targeted advertising [10]. Advertising products can appear automatically and make sales turnover or website traffic increase.

With a free registration fee, Google provides a clear step-by-step registration process. In addition, this platform has an accurate advertising reporting system [11].

In addition, various accurate sources prove that this platform has various advantages compared to other advertising platforms. This platform charges an affordable fee, not too expensive, so it is cost-effective [12]. While, the advantage of advertising through the Google Display Network is that it is cost-effective and efficient. Because there are several types of advertising cost calculation systems, one of which is PPC (Pay Per Click) which is adjusted to the budget, consumers are free to determine PPC rates ranging from USD 0.07/click to hundreds of thousands of rupiah [13]. Consumers only need to pay after the ad is clicked by at least a thousand people. If the ads that appear on Google pages are not clicked, then there is no need to pay [14].

Besides the various advantages that the Google Display Network has for advertising, there are also various disadvantages. When using the Google Display Network, the site will appear immediately at the top of the main page. However, the website will have an 'advertisement' description that may discourage Google users from visiting it [15]. Even though there are PPC advertising options, the cost of premium advertising is still expensive. Even for Europe and America, Google has even hooked up with Adwords Qualified Individual for premium ads with a
minimum rate of USD 1,000 (around IDR 14 million). PPC prices are sometimes quite burdensome for SMEs. And lastly, this is the drawback of the Google Display Network, namely that all payment services are only through credit cards or PayPal. These two payment methods are still not used by all business people in Indonesia. Luckily at this time, Google has provided a system of deposit funds for their ads [16].

The effectiveness of the features on the Google Video Network needs further analysis. Therefore, this study aims to analyze the ability and effectiveness of the Google Display Network on YouTube as a medium for advertising and marketing promotions.

II. LITERATURE REVIEW

A. Digital Marketing

Marketing is a social and managerial process by which individuals and groups obtain what they need and want through the creation and reciprocal exchange of products and value with others [17]. Marketing is very important for any business in introducing their products [18]. Humans’ needs and wants may become the foundations of a marketing concept, from product fulfillment, pricing, shipping goods, to promoting goods [19].

B. Google Display Network

Google also contributes to simplifying the marketing process carried out on platforms under the auspices of Google. Google designed the Google Display Network which has reached more than 90% of Internet users worldwide. The Google Display Network helps to show ads according to certain marketing targets in certain contexts, to certain audiences [20].

GDN, which stands for Google Display Network, is a network that cooperates with Google in advertising that will appear on various platforms under the auspices of Google [21]. The Google Display Network provides an interactive way of advertising in the form of text, images, and videos. The Google Display Network also helps to get a large number of customers in the business by helping to spread information across Google's various platforms. The Google Display Network helps find customers outside of the Google search engine [6].

There are many advantages of using GDN in product marketing, such as more efficient cost planning; wider distribution of marketing information and increasing possibility of ads being seen by mock targets because of many Google platforms work with GDN; GDN users can also determine their platform that will be a means to match the marketing targets they are pursuing [22].

The Google Display Network consists of Google properties such as YouTube, Google Finance, Gmail, and others that offer display advertising, as well as a network of millions of partner sites and mobile apps where you can place ads [23].

Some of the targets that are Google’s marketplace [24]:
1. Topic Targeting;
2. Keyword / Contextual Targeting;
3. Interest Targeting;
4. Placement Targeting;
5. Remarketing Targeting
6. Demographic Targeting

C. YouTube Ads

YouTube Ads is a service to promote your business products or services through YouTube. Through the current YouTube advertising service, many businesses use YouTube Ads due to the various benefits it offers, such as you can determine a specific target audience based on their location or interest in the product [25].

The YouTube platform, which is also under the auspices of Google, helps simplify the marketing process in various forms of video. YouTube is a place where advertising content, amateurs, non-profit organizations, government, schools, and activists can co-exist and interact with each other in more complex ways than ever before [26].

YouTube provides wide opportunities for YouTube users who are interested in sharing content in the form of videos and even provide a "salary" from it [27]. The way YouTube AdSense works is by turning your impressions into a means of advertising video entertainment for advertisers [20]. AdSense YouTube helps find a marketplace so that the product video marketing is not misdirected. YouTube matches the product advertisements displayed into videos that correlate with the product itself. Advertisers pay for ads at different prices through the bidding system, so each ad that appears will be different in price and so will the results that will be obtained [28].

4 Types of YouTube Ads that you should know:
1. Display Ads
An ad in the form of a banner that is located next to the video being watched can steal the attention of video viewers.
2. Non-skippable Video Ads
An ad in the form of a marketing video that can be displayed at the beginning, middle, or end of a video cannot be skipped.
3. Skippable Video Ads
An ad in the form of a marketing video that can be displayed on a video either at the beginning, middle, or end can be skipped.
4. Bumper Ads
Contains marketing videos that are only 5-6 seconds long and cannot be skipped [29].
The journals used for reference are Scopus indexed journals. While the video ads used for the case study analysis are several well-known product advertisements that get engagement and many responses from ad viewers.

This study analyses GDN advertisements qualitatively, by observing various aspects such as content quality, strategy, the relevance of content to advertising objectives, and audience responses to advertisements. The literature review stage includes 4 stages, namely: data reduction, data display, analysis, and interpretation, then the process of drawing conclusions and verification [30].

a. Data Reduction

Data reduction in the stage of qualitative data analysis techniques. Data reduction is a simplification, classifying, and removing unnecessary data in such a way that the data can produce meaningful information and make it easier to conclude. A large amount of data and the complexity of the data require data analysis through the reduction stage. This reduction stage is carried out to select whether the data is relevant or not with the final goal [31].

b. Data Display

Data display or data presentation is also a stage of qualitative data analysis techniques. Presentation of data is an activity when a set of data is arranged systematically and easily understood, thus providing the possibility of generating conclusions. The form of presentation of qualitative data can be in the form of narrative text (in the form of field notes), matrices, graphs, networks, or charts. Through the presentation of the data, the data will be organized and arranged in a relationship pattern, so that it will be easier to understand [32].

c. Analysis and Interpretation

The second step in data analysis is data analysis. The data analysis stage is the second stage after the research data has been processed, presented, and compiled systematically. The purpose of data analysis is to simplify, classify, to make the data easier to interpret. In quantitative research, the data is compiled in the form of statistical numbers, while in qualitative research, the data is expressed with symbols or words [33].

d. Conclusions and Verification

Drawing conclusions and verifying data is the final stage in qualitative data analysis. The techniques are carried out to see that the results of data reduction still refer to the objectives of the analysis to be achieved. This stage aims to find the meaning of the data collected by looking for relationships, similarities, or differences to conclude answers to existing problems [34]. The initial conclusions put forward are still temporary and may change if no supporting evidence is found at the next stage of data collection. But if the conclusions put forward at an early stage are supported by valid evidence, then the conclusions generated are credible. Verification is intended so that the assessment of the suitability of the data with the intent contained in the basic concept of the analysis is more precise and objective. One way to do this is by peer debriefing [35].

IV. FINDING AND DISCUSSION

A. Finding

Product review content is a legitimate phenomenon. While it’s unethical to pay YouTubers to review your products, you can still review your products right away. You need to give thoughtful feedback in the comments section. First and foremost, it shows that you take customer feedback seriously. Also, while responding to positive reviews incentivizes other users to create their review videos, responding to negative reviews shows that you are committed to giving your business accountability.

Research results from 5 random videos advertising on YouTube.

1. Video Title: Future - Life Is Good (Official Music Video) ft. Drake [36]
   LinkVideo: https://www.youtube.com/watch?v=l0U7SxXhKPY&list=RDMMM10U7SxXhKPY&start_radio=1
   Advertisement Product: Online Game Valorant (https://playvalorant.com/en-us/) [37]
   Ad Duration: 30 seconds.

2. Video Title: Ministry of Health Says Variant B117 Corona Virus Has Become Local Transmission, 10 Cases Detected in Indonesia [38]
   Video Link: https://www.youtube.com/watch?v=TndAjqFRTGU
   Ad Duration: 14 seconds.

3. Video Title: Covid-19 Mutations from India and Africa Enter Indonesia, Minister of Health Asks People to Be More Disciplined [38]
   Video Link: https://www.youtube.com/watch?v=nNfbZgWutD4
   Advertising Product: My Itemku Game Voucher (www.itemku.com) [40]
   Ad Duration: 53 seconds

4. Video Title: CHALLENGE RRQ ALBERT 1 VS 1 Lancelot!! We muster all the strength of the BOSS!! [38]
   Video Links: https://www.youtube.com/watch?v=7wZz34MbI_0
   Advertising Products: Lazada( www.lazada.com) [41]
   Ad Duration: 13 seconds.
5. Video Title: Highest Record, India Records 3,689 Deaths from Covid-19 in 24 Hours Since the Pandemic Started [42]  
Video  
Link: https://www.youtube.com/watch?v=BC34UFtXM60  
Ad Duration: 5 seconds

Data from business people who advertise on YouTube.
1. William Painter  
As an online sun-glasses retailer, William Painter must visually demonstrate the advantages of a product that can usually be purchased directly. They understand that it takes a media that can show the best quality of the sunglasses they sell, and how cool they are when everyone wears them.  
Goals: Awareness, Consideration.

2. Tulane's Closet  
Thanks to YouTube, our product has become one of the most popular alternatives to plastic dog mouthpieces. The plastic mouthpiece that we designed is used as an alternative to the plastic mouthpiece that is usually applied to dogs after surgery. Those plastic funnels can cause more problems for dogs, from bumping into something to having trouble eating or drinking, to even sleeping. That's what inspired me to start to Cover Me by Tui, a comfortable post-surgery outfit for pets. Our motto, “Cute, but also has a function”.  
Goal: Awareness.

3. Adidas  
Adidas uses video ad sequencing to drive customer focus from awareness to consideration. For the launch of the new Nemeziz soccer boot, Adidas wanted to direct its target audience to see a planned sequence of advertisements in a short amount of time.  
Goal: Consideration.

4. Rakuten  
Ebates is rebranding to Rakuten, using video and Search to drive performance. In 2019, Ebates rebranded into its parent company, Rakuten. With a history and awareness that has been built for more than 20 years for Ebates, they want to bring Rakuten to the same level of awareness, while driving growth amidst the rebranding campaign.  
Goals: Awareness, Consideration, Action.

B. Discussion  
This chapter consists of a report of the researcher's analysis of the data that has been collected during the research procedure. Like the data that has been obtained previously, the Google Display Network feature contained in YouTube ads has disseminated information on how to advertise consumer products. However, there are still many shortcomings found in the Google Display Network feature on YouTube ads. Weaknesses that can still be felt, such as the relevance of the video to the product being marketed, the use of a duration that is still too "wasteful" to market the product make the audience feel uninterested in the product.

Before continuing to explain the findings and analysis, it will be noted that this study aims to find a way to be able to develop the Google Display Network feature on YouTube ads that is felt by the author and open a means of discussion in finding solutions using the data found in the previous chapter.

Google Ads was developed by Google on October 23, 2000. With the 20-year journey of Google Ads, Google Ads has become a major source of revenue for Alphabet Inc, which contributed US$ 134.8 billion in 2019. Sales of Google Ads division in the United States are based in Mountain View, California, with main midsize offices in Hyderabad, Dublin, Singapore, Ann Arbor, and New York City [44].

The Google Display Network is needed by many people in marketing their products because the main reason is that many platforms will support the marketing of their customers' products [45]. The platform that is the main source of revenue for Google Ads is YouTube Ads [46].

YouTube ads are the main income for Google Ads because there are so many that can be a marketplace for various videos that have been uploaded by channels YouTube [47].

YouTube Adsense is also the backbone of the Google Display Network because many people use YouTube nowadays. The features provided by YouTube Adsense for us as users can make money, such as:
- Ad revenue: We can get ads from display ads, overlays, and videos. YouTube's main source of revenue comes from advertising. With advertising, businesses can target relevant audiences and grow their business and brand.
- Channel subscriptions: Our subscribers can make recurring monthly payments in exchange for the special benefits you offer such as giveaways and more.
- Merchandise gallery: Our fans can buy merchandise with the official YouTube label from every advertisement that appears on our videos.
- Super Chat & Super Stickers: Our fans have to pay more than other fans to show different alerts from each chat typed by fans who have paid when you live stream. Fans can also buy stickers sold on YouTube on your channel.
- YouTube Premium Revenue: we may get a share of the cost of a YouTube Premium subscription when subscribers watch our content. We also earn income from monthly subscription businesses such as YouTube Premium. With YouTube Premium, subscribers can enjoy any video on YouTube without ads while continuing to support Creators. Currently, revenue from YouTube Premium subscription fees is shared with Creators based on the share of their content watched by subscribers [48].

<table>
<thead>
<tr>
<th>No.</th>
<th>Main Video</th>
<th>Advertisement</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Future Life is Good (Official Music Video) ft. Drake</td>
<td>Online Game Valorant</td>
<td>Ø Relevant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Life is Good is a song that is often used as the backsound of pieces of online video games that are currently being sought after by gamers on YouTube. Therefore Game Valorant chose music as a means of marketing of game it sin the video.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ministry Health Calls Corona Virus Variant B117 Has Become Local Transmission, 10 Cases Detected in Indonesia</td>
<td>Fiesta Ready Meal</td>
<td>Ø Relevant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>During the 2019 Corona Virus pandemic, many things need to be considered in the health sector, including food consumed by humans. Fiesta Ready Meal sees that the main video can be a good means of marketing its products because when humans are required to be careful in consuming food and maintain their immune system, Fiesta Ready Meal can provide food that is easy to serve and guaranteed hygiene in advertising videos.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Covid-19 Mutations from India and Africa Entering Indonesia, Minister of Health Asks People to Be More Disciplined</td>
<td>Game Vouchers Itemku</td>
<td>Ø Relevant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the main video, it is explained that the mutations of covid-19 that have entered Indonesia came from India and Africa. While the ad video that appears in the main video is my item Game Voucher. There is no relevance between the two. The main video explains health, while the advertising video markets products in the field of online games. Things like this can cause marketing of the intended target to be inappropriate.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CHALLENGE RRQ ALBERT 1 VS 1 Lancelot!! We must all the strength of the BOSS!!</td>
<td>Lazada</td>
<td>Ø Not relevant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The main video presents a video that has elements of online games and the advertisement video presents an online store. Videos can both be relevant and vice versa. Why? Because when the main video brings up the theme of online games, there are game actors that can be purchased at the Lazada online store. But it can also be ignored because there are many specialized stores to sell online game vouchers.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Highest Record. India Records 3,689 Deaths from Covid-19 in 24 Hours Since Pandemic Started</td>
<td>Garena Free Fire Indonesia</td>
<td>Ø Not relevant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the main video, it is explained that the death data in India due to covid-19 in India since the pandemic started has reached more than 3,689 people. While the video ad that appears is the online game Garena Free Fire Indonesia. There is no relevance between the two. The main video explains health, while the advertising video markets products in the field of online games. This can cause marketing of the intended target to be inappropriate.</td>
<td></td>
</tr>
</tbody>
</table>

Table II shows that the Google Display Network has advantages and is effective for marketing promotions.

<table>
<thead>
<tr>
<th>No.</th>
<th>Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>YouTube has over two billion monthly active users.</td>
</tr>
<tr>
<td>2</td>
<td>More than 70% of YouTube watch time is on mobile devices.</td>
</tr>
<tr>
<td>3</td>
<td>More than 100 countries have their local versions of YouTube.</td>
</tr>
<tr>
<td>4</td>
<td>60% of people prefer online video over live TV.</td>
</tr>
<tr>
<td>5</td>
<td>YouTube is the second-largest search engine in the world.</td>
</tr>
<tr>
<td>6</td>
<td>YouTube is responsible for more than a third of mobile internet traffic.</td>
</tr>
<tr>
<td>7</td>
<td>51% of YouTube users visit this site every day.</td>
</tr>
<tr>
<td>8</td>
<td>500 hours of content are uploaded to YouTube every minute.</td>
</tr>
<tr>
<td>9</td>
<td>One billion hours of YouTube content is watched every day.</td>
</tr>
<tr>
<td>10</td>
<td>Relaxation and entertainment are the main reasons to watch YouTube videos.</td>
</tr>
<tr>
<td>11</td>
<td>This year, online videos will account for 79% of internet traffic.</td>
</tr>
<tr>
<td>12</td>
<td>75% of adults watch mobile YouTube videos while relaxing at home.</td>
</tr>
</tbody>
</table>
From the data in the table II, let’s discuss it one by one. In business, YouTube is the second most popular place to post videos. The number one place is still occupied by Facebook. It is recommended to achieve effective and optimal results to upload on both platforms in product marketing. In uploading videos on Facebook, it should be underlined that Facebook does not like content creators to re-upload videos that have been uploaded on YouTube before. With this explanation, it is important to dig up audience data to find out how interesting content is on each platform. By digging into the data, you can see which types of content are performing best on YouTube and which types of content are performing best on Facebook. If you can optimize your content on each of the world’s largest video-sharing platforms, you’ll attract a steady stream of quality leads.

Mobile YouTube ads are 84% more likely to attract leads than TV ads [49]. Because people use TV commercial breaks to search social media and search for stuff on Google. Therefore, I recommend amplifying your YouTube advertising message with your Facebook and Google Ads. That way, even if your prospects choose TV over YouTube, you can communicate the value of your product and keep your brand remembered [44].

Based on the data that has been collected from the results of previous video research, many products are not relevant to the main video that is used as a means of advertising their products. Meanwhile, according to data from business people who advertise on YouTube, many successful businesses increase the demand for their products and generate a lot of profits. Successful business people already know the marketing targets that their products will aim for and also know the main video criteria that will be used as a means of marketing of their products [50].

In the five videos that have been reviewed previously, there are still ad videos that do not match the main video, this can make marketing efforts useless because they do not reach their marketing targets.

New things were also found from previous studies, such as the following data seen in Table III.

<table>
<thead>
<tr>
<th>No.</th>
<th>Previous Studies</th>
<th>New things that appear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ad revenue</td>
<td>Many content creators are popping up to get revenue from ads that use their videos as an advertising tool. Based on data of July 2019, 2 billion monthly active YouTube users. 50 million of which are content creators.</td>
</tr>
<tr>
<td>2</td>
<td>Subscribing to the channel</td>
<td>A drastic increase in YouTube users. Based on data of July 2019, there are 2 billion monthly active YouTube users. 50 million of which are content creators.</td>
</tr>
<tr>
<td>3</td>
<td>Merchandise gallery</td>
<td>Many YouTubers and Influencers in the country have clothing lines and market their products in their merchandise galleries.</td>
</tr>
<tr>
<td>4</td>
<td>Super Chat &amp; Super Stickers</td>
<td>Appear Many YouTubers live stream on their channels account. In live streaming, super chat and super stickers provide another way to monetize your channel while also engaging with the community. Super Chat and Super Sticker can be obtained by buying the owner channel currently live streaming underway.</td>
</tr>
<tr>
<td>5</td>
<td>YouTube Premium Revenue</td>
<td>The emergence of dependence on YouTube platform users who enjoy videos without ads, play music without ads, download YouTube videos, and play music in the background of their cellphones.</td>
</tr>
</tbody>
</table>

V. CONCLUSION

Based on the research objectives aimed at finding ways to develop the Google Display Network feature on YouTube ads, this literature review has described the problems or successes that arise in these features. This literature review also explains ways to anticipate these problems, such as focusing on the marketing targets.

Suggestions from the author to achieve the appropriate marketing target are to re-synchronize the video ad with the main video which is a means of product marketing, and to provide ad video placements that match the duration of the main video. YouTube is also better to provide an age limit for each main video so that the video ad is not targeted by the wrong marketing. Video ads are also better shortened and clarified to attract the attention of the marketing target quickly and avoid boredom.

References

network adalah/#Apa_Itu_GDN_Google_Display_Network.


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[38] Tribunnews, “Ministry of Health Says Variant B117 Corona Virus Has Become Local Transmission, 10 Cases Detected in Indonesia,” 2021.


[40] Itemku, “Situs Jual Beli Online Produk Virtual - Top Up Game Terlengkap, Murah & Aman itemku.”.

[41] Lazada, “Toko Online Tempo Store Official Lazada.”.


