

# Visual Communication @ Jabarsaberhoaks in Digital Literacy Education to Counteract Hoaxes on Instagram

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**Abstract**—Along with development of communication technology, there are several consequences, both positive and negative connotation, for use influences of communication media technology. The development of social media raises the phenomenon of hoaxes increasingly widespread, recent studies on hoaxes explain that social media and internet have changed the way hoaxes are spread. This is due to speed of information dissemination and society connectivity. This study has a purpose that digital literacy education by utilizing social media is important because today's public uses social media a lot. This study uses descriptive content analysis with data collection techniques such as documentation, literature study, interviews, FGD, and observation. Research object is visualization of West Java Saber Hoax (JSH) messages throughout 2020. The result of the study shows that building a media platform which purpose to build digital literacy levels must pay attention to content in accordance with applicable components. Media involvement will continue until media platform is a favorite or followed by a large audience. Instagram, as social media which uses JSH can be measured through number of followers, likers, comments, and increased insight from netizens.

**Keywords**—digitally hoax, visual, digital platform, social media

## I. INTRODUCTION

Indonesia is a country that has high accessibility to media exposure. Every day, Indonesian public consume media in various forms, including print, electronic, and online media. However, this condition is not always in line with public ability to digest media, especially online media. There are still many publics who do not have digital literacy capabilities, even though digital literacy skills are very important in anticipating impacts of media. Digital literacy is a conscious effort to help individuals become more selective in accessing new media, can be analyze, be critical of their content, can evaluate, have ability to respond, and optimize use of information obtained from new media for productive things for their lives. Media literacy can motivate users to understand future effects [1,2]. Media literacy relates to all media, including television and film, radio, and recorded music, print media, the Internet, and

other new digital communication technologies. Media literacy aims to increase awareness of the many forms of media messages encountered in their everyday lives [3].

In 2019, the Ministry of Communication and Information of the Republic of Indonesia released hoax data in 2019 as shown in Fig. 1. A total of 3901 hoax issues exists in Indonesia. Even in conditions of Coronavirus Disease (Covid-19) outbreak, an infodemic emerged. As of May 5, 2020, the results of monitoring by the AIS Team of the Directorate General of Aptika, showed 1,401 hoax content and Covid-19 misinformation circulating in the community. (<https://aptika.kominfo.go.id/2020/05/kominfo-temukan-1-401-sebaran-isu-hoaks-terkait-covid-19/>).



Fig. 1. Hoaxes Data in Indonesia, the finding of hoax issues for period 2018 August to 2019 November (shorturl.at/nFQY7).

Fake news and hoaxes have been there since before the advent of the Internet. The widely accepted definition of Internet fake news is fictitious articles deliberately fabricated to deceive readers". Social media and news outlets publish fake news to increase readership or as part of psychological warfare [4].

The high distribution of this hoax has caused concern among the public. According to Edelman Trust Barometer survey ([www.edelman.com/2019](http://www.edelman.com/2019)), 7 from 10 public in the

world worried that fake news would be used as a "weapon". In Indonesia, 76 until 80 percent of public worried hoax utilization as a weapon to create domestic instability. Public worried is not escape from hoaxes spread which more rapidly through on social media. Fig. 2 shows that social media is a media which is most often used for hoaxes spread, compared to other media.

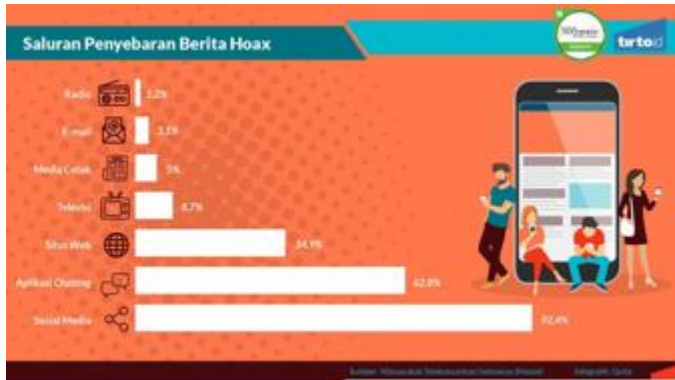


Fig. 2. The most media used to spread the hoax news (<https://tirto.id/hoaks-dan-bahaya-rendahnya-kepercayaan-terhadap-media-cKAX>).

In fighting hoaxes, government has made efforts including making legal products of 2018 ITE Law, forming a National Cyber Agency, and even, the Ministry of Communication and Informatics increasing digital literacy efforts to deal with hoaxes spread. In 2018 in West Java, West Java Sweeping Hoax (JSH) has been formed. Materials with hoax content are analyzed with Hoax Analyzer with mechanism of reports received being processed by application. In 2019, JSH clarify 2,643 complaints from a total of 4,454 complaints. In addition to classifying information, JSH conducts digital literacy to public of West Java. In 2020 JSH has conducted socialization in 13 Cities/Regencies in West Java. In 2019, JSH managed to get a total of 8,360,402 social media page organic reach both through clarifying content and digital literacy. Hundreds of thousands of comments and likes as a form of community response. The blocking action by the Ministry of Communication and Information Technology of the Republic of Indonesia on hoax news was unable to match speed of hoaxes spread. (Interview with Diskominfo West Java, January 17, 2020) [5].

In 2020, the researcher has conducted research "JSH Media Literacy Strategy in Minimizing Spread of Fake News on Social Media". The research only sees the JSH side as an institution that handles problem of hoaxes. Among several strategies which is conducted, the researchers are interested in studying one of strategies conducted by JSH that is providing digital literacy education through Instagram at @jabarsaberhoaks (Darmawan et al., 2020). West Java Saber Hoaxes did several educational efforts to all components of public, through several forms of activity including socialization, counseling, training, fulfilling invitations as resource persons and also utilizing social media used by IG West Java Saber Hoaxes [2].

The term of hoax is an attempt to deceive or trick the reader or listener into believing something, even though the creator of the fake news knows that the news is fake. One of samples fake news generally is claiming an item or event with a different designation from actual item/event. A fake news is different from, for example, a magic show; in fake news, listeners/audiences are not aware that they are being lied to, while in a magic show, audience actually expects to be deceived [6].

In the new media era, hoaxes develop in all their forms in all areas of life, including economics, politics, culture, health, and defense and security. We cannot rely entirely on authorities to eradicate hoaxes on social media. Efforts made by all people, including the government, security forces, educational institutions, and even non-governmental organizations and communities involved in dealing with hoaxes will be in vain when the public does not participate in preventing hoaxes that appear in their environment [7].

The results of research that has been done show individuals with low levels of knowledge tend to believe hoaxes in social media [8]. This study has purpose that digital literacy education by social media utilizing is an important because today's public there are social media using a lot. Today's public there are in visual culture with presence of smartphone technology which has become part of lifestyle of modern public. The function of visual communication design is actually a problem-solving effort to produce the most recent design [9]. Therefore, what is doing by @jabarsaberhoaks in their Instagram can be provide education to public with useful content, so that public have some knowledge about digital literacy content.

## II. METHODS

The study uses quantitative content analysis method. Quantitative content analysis is a scientific research technique that aims to describe characteristics of content and draw inferences from content. Content analyses aim to identify systematically communication content visible (manifest), as objectively, valid, reliable, and replicated. Content analysis method is a method which efficient to investigate content media both print and broadcast media [10].

The research object is Instagram, in this case Instagram @jabarsaberhoaks. The account that is used as focus analysis is Instagram post @jabarsaberhoaks which contains images or information related to digital literacy contained in account. The first important step in content analysis is define unit of analysis. Krippendorff in his book content analysis methodology defines unit of analysis as what is observed, recorded, and considered as data, separated according to its boundaries and identified for subsequent analysis [10]. Unit of analysis in this study is item of information about digital literacy for Instagram posts @jabarsaberhoaks in 2020. Meanwhile, unit of measurement in this study is frequency of occurrence and type of digital literacy content in accordance with categorization that has been made by the researcher.

III. RESULTS AND DISCUSSION

This study mapped digital literacy educational content contained in Instagram @jabarsaberhoaks in anticipating hoaxes spread news in West Java. The achievements in this study can be described in steps that have been taken by the researchers as follows:

The researchers have mapped by identifying posts on Instagram accounts, this process is a process that is quite time consuming. Based on the research sample taken in this study, posts consist of posts on Instagram on @jabarsaberhoaks account throughout 2020.

Field findings throughout 2020 were 900 posts from January 1 to December 31, 2020. Some examples of visual analysis progress can be seen in pictures in figure 3.

No	Period	Category	Title	LIKES	Attachment
471	1 Jul 2020	Clarification	PHOTOS OF THE GENDANA FAMILY PARTICIPATING IN THE ACTION TO REJECT HIP BILL	171	
472	1 Jul 2020	Clarification	DIED SUDDENLY AFTER INJECTED COVID 19 VACCINE RFID	109	
473	1 Jul 2020	Clarification	PRC RED SOLDIERS masquerading as LRT WORKERS	199	
474	2 Jul 2020	Clarification	BILL GATES DIGITAL VACCINE TEST PROJECT BUILT TO TRACK HUMAN MOVEMENTS	188	

Fig. 3. JSH instagram post example.

Based on the sample of research, the posts consist of posts on Instagram on @jabarsaberhoaks account throughout 2020. Field findings throughout 2020 were 900 posts from January 1 to December 31, 2020.

The speed of information rotation makes a lot of existing information biased, so misinformation often occurs. The term of miss information relates to false information, inaccurate and usually widely disseminated to others even though there is no intention to deceive others. Misinformation also information, which is not true or inaccurate, but person who disseminates it believes that information is valid and can be trusted. There are a lot of misinformation spread and social media participated in enlivening of this misinformation report and made many

people even more confused. Therefore, people must be able to sort out information before consuming it. To overcome this, JSH through social media conducted a campaign to educate public on how to identify and prevent spread of misinformation in Indonesia. In addition, it also seeks to direct public to correct and accountable information. Jabarsaberhoaks in providing education to public, including providing education about content of misinformation that is spreading (Fig. 4).

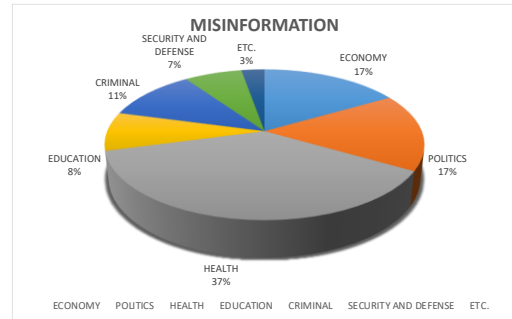


Fig. 4. Distribution of misinformation content types.

In accordance with Covid-19 pandemic that has hit the whole world, including Indonesia, hoax information that dominates is health theme. One of information which is not true based on complaint which enter to West Java Saber Hoax group is popular in conversation groups of recommendation to avoid consumption of turmeric and curcuma if COVID-19 is still endemic (Fig. 5). The message quoted directions from two experts at Bandung Institute of Technology (ITB), there are Taufikurrahman, doctorate at Plant Science and Biotechnology Research Group, School of Life Sciences and Technology, and Daryono Hadi Tjahjono, professor at School of Pharmacy. After investigating facts by JSH, that information was never officially conveyed by Taufikurrahman to public. It's just an internal discussion about scientific journals and some additional readings. The discussion is still under debate and has not been completed. The conversation material went viral after a colleague spread it via Instagram (Instagram JSH, 19 March 2020).



Fig. 5. Visualisation of Misinformation Content Analysis on JSH Instagram (title: consumption of turmeric and curcuma are prone to be exposed to covid-19).



Different with misinformation which is a false information made and spread without intention to harm or deceive then disinformation is misinformation that is made intentionally to deceive or harm people. Both misinformation and disinformation can be spread widely even if sharer himself does not know information is false. Disinformation is an information which also false but indeed engineered in such a way by parties who intend to deceive public, deliberately want to influence public opinion and then get certain benefits from it. A misinformation can turn into disinformation if it is still shared by an individual who already knows it is false but deliberately spreads it to create doubt or create division. In this case, theme of health still dominates distribution of disinformation content (Fig. 7).

One of disinformation example traced by JSH team was content entitled Covid-19 Just Common Flu and Engineering Results for Profit (Fig. 6). Based on the result of the monitoring West Java Saber Hoax Team. News circulated on social media platform such as Facebook claiming that corona virus pandemic was an engineering to seek profit. In that claim, also mentioned that corona virus is only common flu. To public educate, JSH traced a fact based on Stanford Children's Health that SARS-CoV-2 causes Covid-19 new kind of corona virus which is not identify before and not same with corona virus which causes mild illness, such as common flu. Despite being in Corona virus family, SARS-CoV-2 is a new virus that attacks humans (JSH Instagram, 17 July 2020).



Fig. 7. Visualisation of disinformation content education on JSH Instagram. (title: Covid-19 just common flu and engineering results for profit).

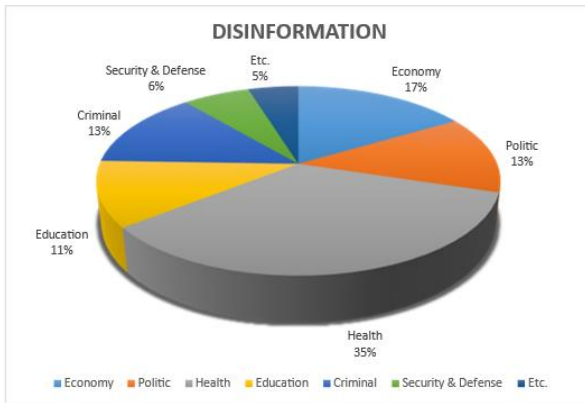


Fig. 6. Distribution of disinformation content types.

Malinformation is information that has sufficient elements of truth, either based on fragments or whole objective facts. However, presentation is packaged in such a way as to carry out actions that are detrimental to other parties or certain conditions, which are not oriented to public interest. Some of example of malinformation are harassment (verbal), hate speech and discrimination, as well as dissemination of information resulting from violations of privacy and personal data. So, malinformation is information true, but is spread with bad intentions behind it, often in form of information that should be kept private but is disseminated to public by other parties. Different with two false information categories before, on malinformation more dominate theme of security and defense (Fig. 8).

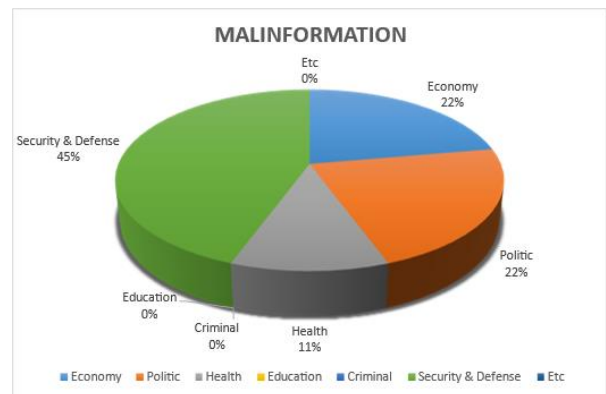


Fig. 8. Distribution of malinformation content types.

One of education examples about mal-information content is Google Maps and Apple Maps such as deleting Palestine from World Map (Fig. 9). Based on Tempo's fact check, claim that Palestine was removed from Google Maps is misleading.

Google has never removed "Palestine" label from its maps, but it has never included "Palestinian" label on Google Maps. When user enters the word "Palestine", Google Maps will continue to take user to current Palestinian administrative areas, namely "Gaza Strip" and "West Bank", with territorial boundaries in form of a dotted line. The dotted line indicates that area is a disputed area. Until now, not all UN member states have recognized Palestine as a state. However, label "Palestine" is listed on Microsoft's online map, Bing Maps (Instagram JSH, 17 July 2020).



Fig. 9. Visualisation of disinformation content education on JSH Instagram.

Fabricated content is 100% pure information intentionally created to deceive readers, with various purposes, such as financial gain, propaganda, or political interests, so that it has potential to mislead and even harm public. Fabricated content according to Ireton and Posseti entered into disinformation category [11]. Disinformation is false information. And disseminator knows that this information is not true. Disinformation is masterminded by actors who intentionally create and disseminate it to public. The impression of slander over political and financial interests is usually expressed in this content. The themes that dominate fabricated content are politics and health (Fig. 10).

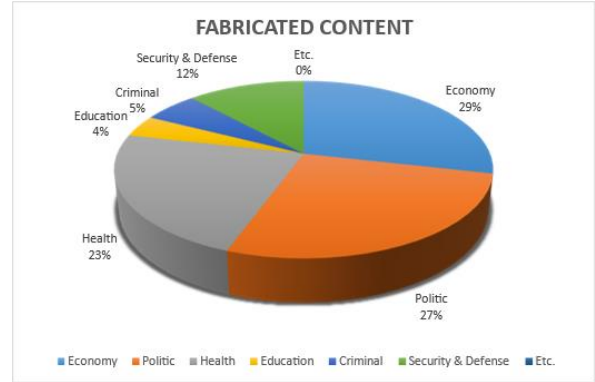


Fig. 10. Distribution of fabricated content types.

For this type of fabricated content, one of things that appeared on JSH's Instagram was Turkey Will Not Close Mosques from the Corona Virus Threat (Fig. 11). Circulating a screenshot of a photo of Turkish President Recep Tayyip Erdogan saying, "no mosques will be closed in Turkey from threat of corona virus". Also mentioned that "The closing of mosque is more dangerous than corona virus. Whoever leaves mosque today, tomorrow he will lose faith because of Dajjal", wrote that screenshot. Based on the search results, Turkey's Head of Religious Affairs Ali Erbas said that since March 2020 Turkey has stopped congregational prayers in mosques until risk of corona virus outbreak ends. However, the mosque will remain open for private prayers. This step is part of preventive measures against new coronavirus outbreak (JSH Instagram, 6 April 2020).



Fig. 11. Visualisation of fabricated content education on JSH Instagram (title: Turkey won't close mosques from the corona virus threat).

#### IV. CONCLUSION

Based on the mapping content of digital literacy educational on JSH's Instagram, there has been a lot of misinformation that has been clarified by JSH team as a step to provide education to public through Instagram social media. The number of JSH Instagram followers that continues to grow (more than 59 thousand, in September 2021) is expected to be able to reduce hoax information that can affect to public. Visual communication featured in JSH Instagram combined with a short explanation in caption, so both mutually support effectiveness of message. Each post feed also has a complete layer, so followers of JSH Instagram account get a more comprehensive explanation in visual form. However, it is also important for followers to have a concern about disseminating digital literacy educational information they get to their networks, so the goal of digital literacy in countering hoax information can be massive and efficient.

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