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# The Use of Social Media as a Source of News in Natural Disaster Areas

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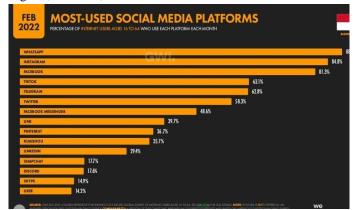
**ABSTRACT:** Nowadays, uploading surrounding events to media social has been part of people's daily life. They can upload many things such as their personal activities or even certain circumstances occurred, such as natural disaster. On the other hand, social media can also be a means to convey official statement or information by many parties, including organization, corporation, and even the government, through their official account. These information will then be quoted by journalists to carry out their journalistic tasks. Twitter is one of many brands of social media that is often used by the government to share natural disaster related information which then will be quoted by journalist. In addition to the tweet column, twitter is also equipped with hashtag that encourages easier access to find certain related information. Further, it also provides the space to complete the shared information with pictures and/or videos, along with captions, to provide a brief information related to the picture or video.

This study aims to find out how media outlet leverages the information shared on Twitter as a source for their published articles during this digital journalism era, especially for natural disaster related information. This research uses descriptive qualitative method. It will adopt the gatekeeping theory to analyze ethics practices in the development of natural disaster related articles sourced from social media, Twitter. The research found that there is a phenomenon where journalists rely on the information shared through social media, either by an official government owned account or personal owned account, to develop natural disaster related news, especially for those cases when the natural disaster occurred in isolated areas or when the disaster made the areas become isolated. The Twitter-sourced published information presented by the journalist through their media outlets can be in form of articles, pictures, or even videos.

KEYWORDS: Social Media, Twitter, Natural Disasters, Reporting, Gatekeeping Theory

#### INTRODUCTION

Originally, the media outlets use the social media to widen their news exposure among public by sharing a short part of the news equipped by a backlink. Along with the evolution of the use of social media, nowadays, media outlet has been leveraging social media as one of quotable source of information. Currently, the practice of journalism cannot be separated from technological developments. This is applicable for all kinds of media, including print, video and online media. Technological developments have presented opportunities and convenience for online journalism to get an instant source of information. Social media is an online media, where users can create various types of content in the form of blogs, wikis, social networks and virtual worlds. Users can also participate by sharing some available content to people around the world. Social media is built on the ideology of creating and exchanging user-generated content (Purbohastuti, 2017). Some of the social media that are currently booming are Whatsapp, Facebook, Twitter, Instagram, Youtube, Tiktok and others.



Picture 1. Most Accessed Social Media Data in 2022, Source: (Social, 2022)



Twitter, which is currently known as X, is a social media that can display 10 trending topics, based on its user's country location. Twitter's users can see topics that are being widely discussed along with the related latest uploads. Twitter has become a new medium to convey information. In this era, Twitter is not only used to build social relationships, as a means of entertainment, but also to find out trending topics in real time that are widely discussed by people in Indonesia. (Puspita & Suciati, 2020). Trending topics that appear on Twitter can be utilized as a source of news information. Technological sophistication has made it easy for people to upload all information via social media.

The use of social media is usually backed with certain motives surrounding the users. Some users simply aim to utilize social media as a means of communication while others use it to share information, establish their self-existent, and to find some information or follow current trends. This is since the media social encourages its users to freely interact.

The Indonesian Internet Providers Association (APJII) reveals that up to 210 million people in Indonesia or 77% of the population had been connected to the internet in 2021-2022. Before the pandemic, the number of internet users in the country was only 175 million people. In other words, there has been an increase in the number of people accessing the internet of about 35 million people. About 98.02 percent people in Indonesia utilize the internet to access social media, 92.21 percent to access news or information, 90.21 percent to support their work or study process, 84.9 percent to access public services, and 79 percent for online transactions (Firmansyah, 2022). The relatively affordable price of smartphones has contributed to the increase in internet literacy in Indonesia.

The increase in internet user is in line with the increase in Twitter user in Indonesia. Quoting Data Indonesia, a data provider portal managed by one of economic media outlets in Indonesia (Bisnis Indonesia Group), the number of Twitter users in Indonesia as of August 2022 was 18.45 million users. It increased by 4.4 million compared to 14.05 million users by the end of 2021. When compared to 2019, the number of Twitter users has tripled, from 6 million users. The majority of Twitter users utilize the social media to get a grasp of most-discussed topics on the internet, to communicate with colleagues, friends, relatives, and/or family, by posting Tweets containing videos, opinions, news links, retweeting and liking posts from other users.

Currently, social media is increasingly popular as a new technology that is able to reach young people. It is also known as a forum for information exchange among its users globally. Social media and advanced technology have become new avenues and challenges for digital journalism (Thuseethan & Vasanthapriyan, 2015). Social media users can share any information as long as they are connected to the internet. The internet, technology and social media have accelerated the spread of technology in the world.

Indonesia is an archipelago of active volcanoes. In addition, Indonesia is also located between three major plates, namely the Eurasian Plate, the Indo-Australian Plate, and the Pacific Plate. The natural shifting of the earth's plates in Indonesia can trigger natural disasters, such as earthquakes, volcanic eruptions and eruptions, tsunamis, and others. This natural condition makes Indonesia included in the Pacific Ring of Fire, which means areas that often experience volcanic eruptions and earthquakes in the Pacific Ocean basin. Early warning of natural disasters is important for the people of Indonesia, to inform them about natural disasters that have occurred and the potential for subsequent disasters, with the aim of making the community more vigilant.

The government in Indonesia established the Meteorology, Climatology and Geophysics Agency (BMKG), which is responsible to warn the public of potential natural disasters. Then BMKG installed seismographs at earthquake-prone points. A seismograph is a device capable of measuring and recording the strength of an earthquake, as well as the direction of the earthquake through an image of the earthquake's motion, in the form of a seismogram. Public can access up-to-date earthquake information via the landing page of BMKG's website. The information provided includes the time of the earthquake, its strength, depth, location, epicenter, and the areas that felt the earthquake.

In addition to broadcasting earthquake information, BMKG also published the information on rain and extreme weather forecasted to occur within the next week through press releases posted on its website. The press release is then used by journalists to craft stories, aiming to provide information for wider public audience, while expecting they can be prepared and vigilant to overcome potential natural conditions that will come. In line with technological developments, BMKG also uses Twitter to convey projections and earthquake events that have occurred. The dissemination of information through technology and the social media, especially Twitter, can help the BMKG in disseminating early warning information on natural disasters, due to the huge number of Twitter users in Indonesia (Kirana et al., 2019).

On the other hand, victims of natural disasters can also share related information that in real time via Twitter. On Monday, November 21, 2022, the hashtag Cianjur earthquake immediately became the top highlight among Twitter users. At that time, a 5.6 magnitude earthquake struck Cianjur, destroying hundreds of houses and claiming many lives. Information experienced by earthquake victims was immediately shared via Twitter and there were 43,000 users who wrote about the Cianjur earthquake on Twitter (Herdiana, 2022). Users consisted of earthquake victims and netizens.

Smartphone technology and social media applications that can be downloaded free of charge have created the phenomenon of citizen journalism and sharing via the internet. This condition also facilitates the distribution of information related to areas of severity after the earthquake in Cianjur.

#### **RESEARCH METHODS**

This study uses descriptive qualitative methods. The qualitative methods enable the researcher to generate broader and deeper insight on the use of social media (Twitter) as a source of information considering the current development which is in line with technological sophistication and social situations. Qualitative research is a scientific activity carried out to discover and develop, and asses the truth behind a problem or knowledge in order to find solutions to these problems (Rukin, 2019). This research process utilizes a theoretical foundation to focus and cover the facts in the field.

The qualitative method is a research process that can be exploited in the investigation process of social phenomena and human interest. It allows researcher to generate a more complex depiction, examine words, produce a deeper and more detail report, and to conduct studies in natural situations (Aprinta, 2011). The theoretical foundation in descriptive qualitative research can provide an overview of the research background and encourage further discussion based on the result of the research. Qualitative research produces descriptive data in the form of written or spoken words, based on the behavior of the parties observed. Qualitative approaches are popular, especially in the fields of social psychology and sociology, and communication (Abdussamad, 2021).

The study used BMKG's Twitter as the object of research and also interviewed journalists from national media who use social media as a news source. The dissemination of natural disaster information through Twitter has made the information a source of news, especially in reaching remote areas affected by the disaster. The data collection technique used is secondary data in the form of journals, books, documentation and online news related to the researcher's case.

#### **RESULTS AND DISCUSSION**

Considering the development of social media, the Meteorology, Climatology and Geophysics Agency (BMKG) created the Twitter account @infoBMKG in January 2010. The creation of the account, which now has up to 7.7 million followers, aims to inform and provide wide spread alerts about natural disasters occur throughout Indonesia. Twitter can also be used to speed up the distribution of information while mitigating and managing natural disaster crises (Zamarreño-Aramendia et al., 2020).



## Picture 2. Pikiran Rakyat, Tribun Cirebon, and CNBC quoted Twitter @infoBMKG as a source of news and delivered it to the public.

**Sources:** (Rakyat, 2022), (Tribun, 2022), dan (CNBC, 2022)

The optimization of Twitter by government agencies can strengthen their communication, with the aim to becoming more closely connected to the public and accelerating the dissemination across all regions. In Safko's academic study, Twitter is also considered microblogging, meaning it can be used to deliver text messages; send files in form of audio, video, and photos, strengthen friendship networks; post respond, and to give and receive information (Ayuningtyas & Suryadi, 2018).

Communication through social media is especially important in times of natural disasters. This communication channel plays an important role compared to telephone or voice calls. Social media can create closeness and enrich sources of information. Currently, the government in Indonesia is optimizing the role of social media to channel information and also to clarify both misinformation and disinformation. Online media journalists also produce news by referring from social media or blue tick accounts as their source of information.

Researchers considered that the utilization of BMKG's Twitter account as an official source of information regarding the Cianjur earthquake by journalists is influenced by the condition in which the account is directly managed by BMKG.

Information from the Twitter account also equipped by images and a link that will direct the reader to related and accessible further information on the BMKG website. The three online media above, namely Pikiran Rakyat, Cirebon Tribune, and CNBC, positions Twitter @infoBMKG as one of their primary sources of information in news writing. The hashtag #gempacianjur immediately went viral on Twitter. Pictures of collapsed houses immediately appeared on social media.

Digital transformation in the 20th century has led journalists to rely on social media platforms as one of online news sources. However, there are some ethics that Journalists must adhered in quoting information sourced from social media. such as paying attention to accuracy, credibility, and including credit attribution to the original sources quoted in the news and photos published (Bor, 2014). Further, journalists also need to aware of verified sources that can be quoted and the types of content that are newsworthy so as not to be consumed by hoax.

In the midst of natural disasters and rampant information on social media, journalists must be able to convey true, objective and accurate information. This is because journalists have the legitimacy of the news broadcast ed to the public (Muqsith et al., 2022). This is because, in the event of a natural disaster, information on social media flows very fast, even bringing up unrelated videos and pictures claimed to be sourced from the actual situation.



**Picture 3. Viva.co.id and Jawapos.com found misinformation and hoaxes circulating on social media. Source:** (Viva, 2022) and (JawaPos, 2022)

Jawa Pos, one of national media outlets in Indonesia, found widespread hoax on Twitter claimed to be the situation in Cianjur. The media outlet eventually clarified that he information (video) was actually a footage from Donggala earthquake in 2018. Researchers consider that journalists hold an important role as a gatekeeper from the swift flow of information on social media in the midst of natural disasters. They need to provide a true and verified information.

In the digital era, journalists and editors need to work swiftly and possess the ability to assess whether an information is worth airing or not. Journalists' experience will sharpen their instincts to assess and verify information for editorial purposes. These are among the pivotal skills should be possessed by journalists. (Rusdi & Rusdi, 2020).

The interview with journalist from CNBC, found that official accounts of government institutions with blue tick, such as @infoBMKG (Official Twitter account of BMKG) and @DivHumas\_Polri (official account of Indonesian National Police), are often utilized as primary source of related information during natural disaster. The reason behind this decision is since the social media account had been verified and could be accounted for as an official source. Later, journalists will do further confirm to related officials to find the latest information.

Name	Media	Quoted Account
HA	CNBC	BMKG, @DivHumas_Polri, and BNPB
TR	Tribun	BMKG
PR	Viva	BMKG, BNPB, and Basarnas
ТА	Bisnis.com	BMKG
FE	Kompas.com	BMKG

**Source:** Interview results with informants

Meanwhile, a journalist from Viva.co.id, another national media outlet in Indonesia, revealed that he also utilized information from social media as a source to generate news story. When a natural disaster occurs, he will quote information posted by BNPB, BMKG, Basarnas, and similar institutions to be crafted into news articles. Amid the information overload, he considers that any information in forms of images and videos must be checked and verified through Google Image to avoid misinformation and disinformation.

The internet has changed the information distribution model. As such, gatekeepers, namely journalists, are highly required to monitor and fact-check the information circulating on social media. In this era, journalists have new roles, s curators and gatekeepers of information circulating on the internet (Schwalbe et al., 2015). Gatekeeping theory is a process of selecting, writing, editing, positioning, scheduling, repeating, and transforming information to become news (Tandoc, 2014).

A journalist from Bisnis.com firmly stated that he does not quote social media content from personal accounts, especially when natural disasters occur. He seconds that, content posted by netizens on social media has not been verified and journalists should only quote official sources for editorial purpose.

Every journalist must adhere to set ethics and capable to eliminate hoax sourced from social media through fact checking. Along with the widespread use of social media, online media is the most widely read and consumed by the public (Al-Rawi, 2019). The heavy flow of digital information requires more actors to act as gatekeepers. Digital gatekeeping does not only involve humans, but also requires the role of news aggregators, search engines, and social media bots (Yang & Peng, 2022). The role of gatekeepers is very important, especially when natural disasters occur, so as not to cause panic, hoaxes, and misunderstandings in communication.

#### CONCLUSIONS

In conclusion, society utilizes social media as a tool to publish or share information about their activities, including the information regarding ongoing natural disasters. Government institutions also leverage social media to expedite the distribution of information to the public and mass media. On the other hand, media outlets and journalists also recognize a shift in the function of social media. Initially used as a platform to publish news, it has transformed into a source for obtaining information. The majority of media in Indonesia rely on Twitter, one of the most used social media in Indonesia, especially from official account of government agencies such as BMKG and BNPB, as reliable sources of information to be used in editorial purpose. However, amid the deluge of information and the proliferation of circulating content on the social media, journalists continue to reinforce their role as gatekeepers in news writing. Thus, fact checking and choosing accurate information have been one of their responsibilities

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