Digital Communication of BMKG Non-Departmental Government Institutions: Studies on Conveyance of Earthquake Disaster Information via Social Media Twitter @infoBMKG

Kumala Hayati[1], Ayu Wardani [2], Nuril Ashivah Misbah[3]

[1,2,3]*Communication Studies Program, Faculty of Social and Politic, Universitas Pembangunan Nasional "Veteran" Jakarta*

Abstract

BMKG is aware exists urgent information related to earthquakes needed fast movement and accurate messages to society. Besides that, BMKG as an institution non- departmental government has not quite enough answers for open information to the public like disaster earthquakes according to Law No. 14 of 2008 concerning Openness Public Information (KIP). BMKG did digital communication with Twitter platforms to convey information related to the earthquake. So, the problem for this study is how BMKG did digital communication to deliver their information about natural disaster earthquakes through social media Twitter. The study uses a qualitative method. The result of the study This shows that digital communication carried out by BMKG utilizes feature hashtag (#) and keywords earthquake every tweet as a storyteller for convenience user Twitter For the following topic. The topic brings up citizen journalism Because there are two positions users on Twitter as the recipient of messages and sources of the messages alone. So, there is engagement among the public that makes information earthquake the develop in accordance condition latest this makes the image institution government as an information validator earthquake through increasing use of Twitter confirmed.

Keywords: *Digital Communication, BMKG, Twitter, Disaster Earthquake, Openness Public Information*

Introduction

In the digital age, the proverb ' your mouth is your tiger ' has metamorphosed to your finger is your tiger' which is a description free individual to do various possible activity done with use ten finger hands. One of the activities is using social media. Based on the results survey We Are Social has recorded as many as 204.7 million or 73.7% of the total population of Indonesian citizens are social media users counted since month February 2022 (Kemp, 2022).

Amount the increase as much as 2.1 million users from one year before.

Enhancement users show that social media can fulfill diverse needs user. One of them is because the internet provides the required information to society. The advent of the internet revived the mass of society information you have character distribute, use, and manipulate information in activity economy, politics, and culture (Webster, 2014). This is also confirmed by survey data We Are

Social stated that the main reason 80% public uses the internet reason is looking for information (Kemp, 2022). So, conditions can be exploited by anyone including institutional non-departmental government Meteorology, Climatology, and Geophysics (BMKG) for their participation in communicating via the internet with society.

As an institution non-departmental government, BMKG must intertwine communication with society particularly to convey necessary information which need to know by the public with the existence of Law no. 14 of 2008 concerning Openness Public Information (KIP). One of UU KIP's objectives is to ensure the right citizen know plan making policy public, policy programs public, process and reason-taking decision public; (b) push the participation public in taking policy public; (c) increase the role of the active public in taking policy public (Kemenkumham, 2023). Society can obtain the right related information public like disaster nature that happened in a manner fast.

Using Twitter can make it easy for BMKG task for conveying information specifically about disaster natural earthquakes. Twitter is one of the social media types in Indonesia. The characteristic of social media alone is the ability to involve users in participation active and interact with each other. So, social media own functions as a channel of communication for the user.

Not only function as a channel of communication, social media also has two benefits main other. First, social media can be used by parties external like customers, vendors to the public broad. Second, social media can be used by an internal party institution non-departmental government. Communication can be done by something institutional non-departmental government that has a multi-pronged strategy where it can use on a variety of platforms (Leonardi, PM, Huysman, M., & Stienfield, 2013). Twitter provides something special like a room displaying communication by criteria personal (relevance with users), aimed at audiences, and carried out conversational model (Schmidt, 2014). So, Twitter speeds up deployment information from BMKG to the audience.

Condition supported by upgraded user Twitter in Indonesia in 2022 is 31.3 %. this data was obtained from the results survey We Are Social stated that there are 18.45 million users of Twitter in Indonesia (Kemp, 2022). Amount user on Twitter Indonesia occupies position fifth of the total _ user of Twitter around the world. Of course, the development of social media Twitter in Indonesia interested the BMKG for Participants use platforms Twitter to objectively convey information, especially about disaster natural earthquakes.

Explanation aligned with draft digital communications where prioritize speed and ease of ordering messages or information received by the communicant (Rully Khairul Anwar, 2017). Twitter gives the matter as platform delivery information. The presence of Twitter for the institution BMKG non-departmental government becomes very important Because remembering urgent information about disasters natural must be quickly delivered to the audience.

Before exists Twitter, information about exists disaster natural only can be delivered through traditional media like television as well as radio. Information about disaster nature can be delivered through breaking news on broadcast television or radio with participating displays translator language so they can be accepted by society common and the deaf (McKee, 2014). So, it happened limitations of space, time, and even language when communicating information disaster natural with using traditional media.

Because of that, BMKG as an institution non-departmental government has aware information disasters natural specifically earthquakes depends on speed. Because of that, BMKG uses Twitter To give discretion in conveying information about disorders of natural events and details incidents in a manner real-time or under-time events. this _ caused Twitter to blur the boundaries of traditional media and simplify deployment information with existing digital communication inside.

There is a diffusion process innovation own factor main give influence how information about innovation has communicated, time-related matter the as well as characteristic social can introduce (Hanley, T., & Cutts, 2013). presumption regarding social media Twitter is great innovation _ give influence on improvement and use in delivery information disaster natural earthquakes. social media can associate with every institution's non-D departmental government decision to do innovation. It caused theory diffusion innovation to focus on how

something information is disseminated.

This article aims to analyze How deep digital communications deliver information on disaster natural earthquakes by BMKG through social media owned Twitter namely @infoBMKG. From the researcher's hook with theory diffusion innovation where assumptions from theory describe that Twitter as a digital media influences novelty and all development innovation in the environment society.

Research Methods

The qualitative method is easy for the researcher to enter the world of informants through continuous interaction continuously done Because the aim looks for meanings as well as corner view informant.

Researchers also use the technique of Systematic Literature Review (SLR). SLR components themselves form a summary brief, literature review, questions research, and goals research. In its implementation, two things are needed that is discussion literature about the object under study and questions research already have clear consideration. From researcher must do an activity search for data and usage terms by informants. Next, researchers do data extraction and view how the digital communications agency BMKG as non- departmental institution conveys information disaster natural through social media Twitter (@infoBMKG) delivered to its followers

Researchers can make a conclusion meaning from something existing text pass stages trusted as well as has been applied in several contexts.

Results and Discussion
Hashtag feature (#) as Storytellers Disaster Natural Earthquake for User Twitter

One indicator to show how easily and fast it conveys information through social media Twitter is exists feature hashtag (#). Hashtag or pound signs or sign on the fence (hashtag) is symbolized where # is the keyword or phrase used in a _ topic or theme. In its application n, the user the puts symbol '#' in front of the word you want to use.

Based on history, hashtags first released by social media Twitter in August 2007 can show interaction between users on Twitter. Moment event happens, use hashtag #sandiegofire which appeared in October 2007 _ popping up in a manner massive on Twitter To look for information related to the fire in San Diego County (Zaenudin, 2018). So, the goal of Hashtag Alone at first is to make it easy to search for users on one topic specifically on Twitter. Appearance hashtag inspired from room chat named IRC (Internet Relay Chat) Where is system messaging that was present at the very beginning of Internet presence using the same symbol. For open canal or room conversation. For example, #Surabaya is a canal conversation between with Surabaya residents via IRC. So, features hashtags on Twitter can be affixed with a word that represents what wants to be discussed by users. BMKG takes advantage of ge matters For starting a conversation with riser especially related to earthquakes with the writing format #earthquake.

Like the other institution's non-departmental government, the BMKG account is also formal in nature conveying information about the disaster nature specifically using #earthquake in each tweet displayed on his account. In one tweet (the term for mention one uploaded to the Twitter user), exists pictures and descriptions incident earthquake in a manner detail.
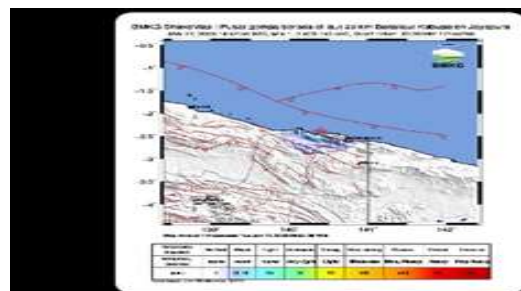

Figure 1. The point location source earthquake is listed on the tweet. (*#Gempa Mag:5.6, 21-Nov-22 13:21:10 WIB, Lok:6.84 LS,107.05 BT (10 Km BaratDaya KAB-CIANJUR-JABAR), Kedlmn:10 Km, Tdk Berpotensi Tsunami #BMKG*, 2022)

In one of the uploaded tweet, BMKG explained what happen in an incident earthquake on manner detail with including location, period source, and depth of earthquake, time incident to the area that can feel the existence of earthquake. Not only in the form of words but also pictures that emphasize happening earthquake on site.

It shows digital communication carried out by the institution BMKG non-departmental government as issuing party statements related disasters natural specifically earthquakes in Indonesia. Digital communication is a technique convey messages or information from sender to recipient matter that using digital media (Rully Khairul Anwar, 2017) There is factor difference between digital communication with communication traditional. It could be

seen from how formation, packaging as well as presentation message.

The usage of Twitter platforms is the right choice for supporting digital communication is carried out. Especially remember the need to convey information earthquake in a manner fast and accurate. Digital communication makes it quick and easy to message or information received by the communicant. Besides it is more powerful than communication traditional because load feature technology where available ways to pack message in a manner unique and interesting (Rully Khairul Anwar, 2017).

The interest things of digital communication are the base formation response from the recipient message. The resulting response also originates from capable coverage areas reached through digital communication. Communicating can ignore factor space and time For each other to communicate Because their access is in hand (Rully Khairul Anwar, 2017). So, there is a factor differentiator other between digital communications and communications traditional that is related to flexibility and access well by the sender noorecipient message.

In tune with history beginning to use hashtags on Twitter, initial idea hashtags one of them influenced by the amount user Twitter in San Francisco No feel Confusedfollowingw something story with theme certain (Zaenudin, 2018). Hashtags can group each tweet from BMKG to theme earthquake where it easy user on Twitter for follow the story beginning incident until development information from earthquake. Objective from the use of its own hashtag by the @BMKG account for

looks in the eye user other (Hayati & Afriani, 2023).

Figure 2. Search results for the keyword #earthquake on Twitter. (*Fenomena Geologi Pasca #gempa 7,9 SR Muncul Daratan Dari Dalam Laut Di Desa Teinema, Kecamatan Wuarlabobar, Kab. Kepulauan Tanimbar*, 2023)

The convenience for follow something topic can happen Because when user Twitter give hashtag on a link or posts, then hashtag characteristic clickable or can clicked (Nations, 2021). So that, whoever saw hashtag can open with do click and take to display page feeds from all link latest from topic already given the hashtag.

Condition the show exists hashtag can call as storyteller where have ability for tell an incident with its write method. User Twitter wants follow Suite story the can do click on hashtag. Condition This potentially exists conversation together (Nations, 2021). User Twitter Can each other exchange information until opinion they about topic earthquake through hashtag.

Figure 3. Responses user Twitter on informational tweets disaster natural earthquake from @infoBMKG account. (*Retweet @infobmkg*, 2023)

Based on conversation of user Twitter can too give response come back on tweet uploaded by BMKG as well can know development latest from information related earthquake with do click on the hashtag (#) that you already have available. It shows that Twitter capable for the flow of two ways communication between user with different purposes each other and look for information and respond source information from @infoBMKG account with give information addition related topic earthquake.

In fact, when earthquake currently on going, #Earthquake is in first rank of trending topics in Indonesia. Trending topic is part from Twitter that shows topic what just discussed by the user at the time. This feature can use for promote certain hashtag in a manner together to show incident latest (Schmidt, 2014). The ratings are in the section trending topic determined from how much lots tweets that include the topic that currently discussed by users Twitter crowded.

Figure 4. #Earthquakes are ranked first Trending Topic Indonesia when incident earthquake is happened. (Wardani, 2023)

So, conditions the show exists changes in the environment public related delivery information disaster natural like earthquake.

Twitter in Delivery Information Disaster Natural Earthquake: Citizen Journalism

Change delivery information disaster natural specifically earthquake in Indonesia in the end bring up exists citizen journalism in the realm of Twitter. Citizen journalism is a term for describe involvement party that is not profession journalist in create, analyze as well as spread news and information in interest public (Roberts, 2019). It can be seen from results keyword search (keyword) about earthquake topic. Twitter user for aware participate share for share information advanced and latest around incident related to what happened in each area.

Figure 5. (*Tweets from Twitter Users That Contain Information Related Earthquake*, 2023)

It can be done with utilize column search is already provided by Twitter by entering keyword in accordance topic you want talked about it. This activity shows that source information earthquake in Indonesia is not only originate from @infoBMKG account, but also came from user Twitter others who follow give response related topic the first earthquake issued by BMKG.

Twitter give effect to all matter from journalism and response to disaster nature, activity social and health (Murthy, 2013). Usage of Twitter as a medium for communicate in a manner is method of BMKG as institution non- departmental government in convey information related earthquake. It happened because BMKG saw response of user Twitter which gives feedback with add information about earthquake. It makes the tweet complete from BMKG itself. Technology give user a place for individual and group collective thought, binding in a communal

activity (Murthy, 2013). Thus, citizen journalism can happened on Twitter.

The growth of citizen journalism is also inseparable from the ability of the social media platform Twitter to provide a space for users to interact with each other even if they do not know each other. This is because Twitter is an experiment in "starting a conversation rather than concluding it." Furthermore, Twitter is an active medium and has a broader reach. Furthermore, Twitter is an active medium and has more area wide (Murthy, 2013). User feel free to share opinion each other about something topic like earthquake.

Besides share, Twitter user also does activity tagging or mark something topic with topic labels the with keywords. For example, when user do search about topic earthquake, they stay enter the keyword "EARTHQUAKE" in the column search .

Figure 6. (*Activities User Tagging Twitter.*, 2023)

Activity the show that delivery format information the earthquake occurred between users also vary more focuses on audio visuals such as photos and/videos. It becomes power to pull growth of citizen journalism in

the environment Twitter. Citizen journalism have role important in delivery information related disaster natural specifically earthquake Because exists addition information on matter. Usage of language every day that tends to be informal to make it easy understanding information for user other. Twitter has already become room public can put audience with binding network in implied manner (Schmidt, 2014). Topics which discussed become bond between user. So, users have interest to participate when they know information which is similar from earthquake topic.

Figure 7. (*Citizen Journalism That Occurs between User Twitter When Happen Earthquake.*, 2023)

Thus, citizen journalism can grow between user Twitter with make the original tweet from BMKG as opening conversation on earthquake topic which happen at the moment. The characteristic of existing information models in realm of public room personal like Twitter tend more lots own form conversation than one direction communication model (Schmidt, 2014). Then, earthquake information establishes with what is

experienced by the user and shared to other users. So, they can know the development from earthquake incident. It gives benefit to Twitter user as source because they always do renewal in accordance its development by contributing to update information about earthquake topic.

Twitter: Strengthening the image of BMKG as Validator of earthquake Institution in Indonesia

The development of citizen journalism on Twitter Of course bring positive growth for BMKG. Especially from culture side of earthquake keyword search when it happening in accordance with use theory diffusion innovation. Innovation is owned form diverse such as ideas, practices, or considered object new by individuals which is contained in an information or news (Ma et al., 2014). So, there are novelty can be measured in a manner subjective in accordance corner view recipient and communicated through various platform used by the public like social media. Theory diffusion innovation give knowledge around related questions with a process where an innovation can adopted and accepted by members society. Innovations made by BMKG with one of them with utilize feature hashtag (#) on the Twitter platform make it easier to user search something incident like earthquake. convenience the grow habit new between user Twitter that is do keyword search earthquake when they experience or look for more about the incident. Besides BMKG is involved to convey correct information about earthquake, another user also responded same topic. It also becomes factor of the

growth of citizen journalism on Twitter.

It is also visible from use hashtag (#) that don't only associate with earthquake topic, but also the name institution non-departmental government That Alone namely BMKG in every tweet. For example: #BMKG. Hashtag (#) followed by the word or phrase capable connect between user and text Because made easy _ his search with interface where is device or system used _ somebody for interact between programs or system certain (Schmidt, 2014). Every Twitter user can produce and use hashtag. BMKG takes advantage features on social media the Twitter only for earthquake topic, but also the name institution existing non - departmental government at the end message from each tweets .

Actually, BMKG has challenge for pack message in a manner short and concise through platforms Twitter. The main reason from the matter is characteristics of Twitter owns limitation character in each tweet uploaded by users is of 140 characters (Southern, 2016). So, BMKG must get around arrangement of words and sentences in each tweet to be displayed to user other Twitter. One of them with use abbreviation for each uploaded tweets without reduce the meaning from message conveyed.

Figure 8. Tweets from @infoBMKG account about disaster natural earthquake and description incident the earthquake that happened. (@infoBMKG, 2023c)

Based on tweet, there is some abbreviated words like "tdk" for no, the word "mag" for magnitude (scale of earthquake), the word "lok" for location , the word "kdlmn" for depth , the word " LU " for latitude north, the word "BT " for longitude east . Abbreviation from these words only delete letter vocals and sustain letter consonant. More further, there some words indeed abbreviated in accordance term frequent official _ used like LU and BT for show direction. BMKG also put earthquake information with attach picture map point of source. So, users don't have difficulties for understand information without reduce the core of message.

Convenience in understand message the prove exists system existing attention - aware -systems formed between BMKG and Twitter user. System conscious attention (attention-aware-systems) is placement something proper attention can build system. It recognizes attention processes which play role important in various situations faced by existing users in

digital environments and aims reduce excess information, limit effect negative from interrupt, boost awareness stimulation (especially in virtual environments). Twitter user become more aware about topic earthquake given by the agency non-departmental government is important thing for is known together in a manner right.

The one of reason that the system can run is using abbreviation of the word continuously or consistent on each tweet. It becomes pattern or style delivery messages that can become benchmark from user Twitter for understand message from earthquake topic. All Twitter users share same understanding about topics and details like expectations, presentation, and style (Schmidt, 2014). So, the style of conveying information that has been done by BM is KG structured. They realize to adatoith the language which is used by the Twitter user.

Twitter users also use abbreviation with a similar pattertoth BMKG namely reremoving nthe umber of letter vocals and sustaining letter consonant. For example: " sy " is abbreviation from I and "sbntr" is abbreviation from just a minute. The existence pattern without reduce information can understood completely by the user which visible from how they use the same way for communicate. It shows that BMKG as non- departmental government is institution that can adapt to convey information depend on condition from existing audience. Of course, it makes easier to receipt the information which provided by BMKG as well get attention from user Besides that, attention also makes possibility for We For reach objective without

distracted from various type stimulation and objective for convey information earthquake with fast and accurate can done successfully in order to get attention from Twitter user in Indonesia.

Another way to obtain attention, BMKG also participate to provide information about anticipation when earthquake happened. Uploaded Tweets _ in an audio-visual format the displays tips - tips that can and can't can done somebody when is at in the building when earthquake happened. It summarized in material "DO and DON'T" when earthquake happened". The video contains explanation with example action. So, it make Twitter users easier to understand message.

Figure 9. Do 's and Don'ts When It Happens Earthquake ' shared with audio-visual format as well text (@infoBMKG, 2023a)

The tweet also mentions user as BMKG friends (Sobat BMKG). The term is a stimulus for the institution non- departmental government to get attention as feedback. By giving term special to recipient message have seen as effort of BMKG to receive more attention. BMKG also use "tweets

pinned" feature on Twitter to mark important information that could be missed by Twitter users. Tweets position is on top of first page. The characteristics of the tweet embed is a pin icon with the words ' Pinned Tweet '.

Figure 10. The pin icon with the words ' Embed Tweet ' appears in the order First page beginning @infoBMKG account (@infoBMKG, 2023b)

According to diffusion innovation theory, the strategy used by BMKG in conveying disaster natural that is earthquakes through Twitter has a purpose for information acceptance faster along with details of what happened in real-time. Without being noticed, pubbecomescome closer with BMKG as a non-departmental government institution.
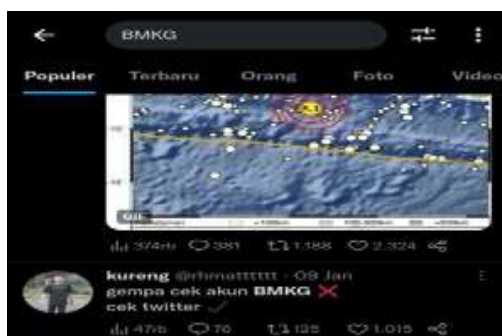

Figure 11. (*BMKG Keyword Search Results*, 2023)

The decision for using the BMKG keyword can be seen as a result of the habit of the Twitter user when the incident earthquake happened.

They direct open application Twitter to know what happened related earthquake. It happened because Twitter has already built a connection between institution non-departmental government and users related topic earthquake. Twitter is a social media that relies on articulation from connection social for built connection between sender and audience (Schmidt, 2014). In this kind of moment, user feel Twitter is a social media that can become legal source about earthquake information until its development conditions (valid) than other media

Usage of social media Twitter helps for strengthen trust between institution and user through provide information by the BMKG. So, the image of the BMKG itself as institution official who has the right to give a true statements or everything related to the earthquakes. It legitimizes the role of BMKG as an official verifier of information about earthquakes in Indonesia.

Conclusion

Digital communication carried out by institutions BMKG non-departmental government with utilize digital platforms such as social media Twitter brings half new in delivery information disaster natural specifically earthquake. BMKG takes advantage of one feature of Twitter named hashtag that works as a storyteller for the user wants to follow a moderate topic _ talked about Because characteristics from own hashtag is capable describe incident latest in a manner detail through verbal words, pictures to videos. Hashtags are also capable to compile story time by time and search the topic.

This condition becomes trigger for citizen journalism on Twitter. It caused position user Twitter in convey information earthquake by themselves. There are two roles for users as recipient as well as source of information. It contains detail information and experience based on earthquake incident flow in initial conversation from institution non-departmental government then spread to other user Twitter Because user respond topic with develop information based on current condition and their personal experiences to topic. It gives addition information to user other Twitters related the earthquake that happened. Situation the cause formation pattern in environment social media users itself which type keyword in the column search Twitter when incident earthquake happened. The speed of information is received by public about earthquake make platforms Twitter get recognition as source of accurate and reliable information which related to earthquake. Twitter has built intercourse between institution non- departmental government and users through conversation on topic which is discussed together. Slowly but sure, the image of the BMKG is getting better as institution non-departmental government that is entitled give statement truth on disaster natural earthquake in Indonesia or official verifier which trusted among society.

References

@infoBMKG. (2023a). *Do 's and Don'ts When It Happens Earthquake ' shared with audio-visual format as well text.* Twitter @infoBMKG. https://twitter.com/infoBMKG/status/1585602250604302336

@infoBMKG. (2023b). *The pin icon with the words ' Embed Tweet ' appears in the order First page beginning @infoBMKG account.* Twitter @infoBMKG. https://twitter.com/infoBMKG?t=LsDCAoZp4Xw0hX8lIjAX1A&s=08

@infoBMKG. (2023c). *Tweets from @infoBMKG account about disaster natural earthquake and description incident the earthquake that happened.* Twitter @infoBMKG. https://twitter.com/infoBMKG/status/1616891095237144577?t=NS3FZTA5CTMXeXnFAFyJtw&s=19

#Gempa Mag:5.6, 21-Nov-22 13:21:10 WIB, Lok:6.84 LS,107.05 BT (10 km BaratDaya KAB-CIANJUR-JABAR), Kedlmn:10 Km, tdk berpotensi tsunami #BMKG. (2022). Twitter @BMKG. https://twitter.com/infoBMKG/status/15945781161819189248

Activities user tagging Twitter. (2023). Twitter @adechan. https://twitter.com/_adechan/status/1617098240062816256?t=8TuUW1q4BbAsooWasaoydQ&s=19

BMKG keyword search results. (2023). Twitter @rhmatttttt. https://twitter.com/rhmatttttt/status/1636700768500867078?t=gIYpDHwuYsnMFMFbZDXCcw&s=19

Citizen Journalism that occurs between user Twitter when happen earthquake. (2023). Twitter

@infoBMKG. https://twitter.com/jefanonly/status/1616588467055767554?t=UBALWssQNi-FmPaYYwH07g&s=19

Fenomena geologi pasca #gempa 7,9 SR muncul daratan dari dalam laut di desa Teinema, kecamatan Wuarlabobar, kab. Kepulauan Tanimbar. (2023). Twitter @dafideff. https://twitter.com/dafideff/status/1612720627533893635

Hanley, T., & Cutts, L. (2013). What is Systematic Review. *Counselling Psychology Review*. https://pure.manchester.ac.uk/ws/portalfiles/portal/32908640/FULL_TEXT.PDF

Hayati, K., & Afriani, A. L. (2023). Pemanfaataan Fitur Instagram Hashtag (#) di Era Konvergensi. *Jurnal Komunikasi, Masyarakat, Dan Keamanan*, *5*(1), 46–61.

Kemenkumham. (2023). *UNDANG-UNDANG REPUBLIK INDONESIA NOMOR 14 TAHUN 2008 TENTANG KETERBUKAAN INFORMASI PUBLIK.* https://ntt.kemenkumham.go.id/produk-hukum/produk-keterbukaan-informasi/10855-uu-no-14-tahun-2008-tentang-keterbukaan-informasi-publik

Kemp, S. (2022). *Digital 2022: Indonesia*. Datareportal.Com. https://datareportal.com/reports/digital-2022-indonesia

Leonardi, PM, Huysman, M., & Stienfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*. https://doi.org/10.1111/jcc4.12029

Ma, L., Lee, C. S., & Goh, D. H. L. (2014). Understanding news sharing in social media: An explanation from the diffusion of innovations theory. *Online Information Review*, *38*(5), 598–615. https://doi.org/10.1108/OIR-10-2013-0239

McKee, R. (2014). Breaking news: Sign language interpreters on television during natural disasters. *Interpreting. International Journal of Research and Practice in Interpreting*, *16*(1), 107–130. https://doi.org/10.1075/intp.16.1.06kee

Murthy, D. (2013). Twitter: Social Communication in the Twitter Age. *Cambridge Polity Press.* https://doi.org/10.5771/1615-634x-2014-1-110

Nations, D. (2021). *What Is a Hashtag on Twitter?* Lifeware Tech for Humans. https://www.lifewire.com/what-is-a-hashtag-on-twitter-3486592

Retweet @infobmkg. (2023). https://twitter.com/dwi_agustien/status/1616588240051634176?t=2HHRmBUTGpE1qijp9x9Elw&s=19

Roberts, J. (2019). The International Encyclopedia of Media Literacy. *The International Encyclopedia of Media Literacy*, *May*. https://doi.org/10.1002/97811

18978238

Rully Khairul Anwar, A. R. (2017). Komunikasi Digital Berbentuk Media Sosial Dalam Meningkatkan Kompetensi Bagi Kepala, Pustakawan, Dan Tenaga Pengelola Perpustakaan. *Komunikasi Digital*, *6*(3), 1–5.

Schmidt, J.-H. (2014). Twitter and the Rise of Personal Publics. *Twitter and Sochiety*, 3–15.

Southern, M. G. (2016). Twitter May Be Upping Character Limit From 140 to 10,000. *Searchenginejournal*. https://www.searchenginejournal.com/twitter-may-be-upping-character-limit-from-140-to-10000/152921/#close

Tweets from Twitter users that contain information related earthquake. (2023). Twitter @butuhorangdalam. https://twitter.com/butuhorangdalam/status/1681629930080325632?t=CoBU_N8IkHqO0ObqwGVMRg&s=19

Wardani, A. S. (2023). *Gempa Trending Topic di Twitter, Warganet: Terasa Sampai Jaksel*. Liputan6.Com. https://www.liputan6.com/tekno/read/5261656/gempa-trending-topic-di-twitter-warganet-terasa-sampai-jaksel

Webster, F. (2014). *Theories of the Information Society.* Routledge.

Zaenudin, A. (2018). *Evolusi Tagar, dari Simbol Digital Jadi Perang Slogan Dunia Nyata*. Tirto.Id.