

Sentiments Analysis on Twitter Towards Hoax Information on Social Media News

Ansar Suherman¹, Ferdi², Harry Fajar Maulana³, Muhammad Rizal Ardiansah Putra⁴

^{1,2,3,4} Universitas Muhammadiyah Buton, Program Studi Ilmu Komunikasi

Jl. Betoambari No. 36 Kel. Lanto Kota Baubau, Provinsi Sulawesi Tenggara, Indonesia

E-mail: ansar.suherman@umbuton.ac.id^{1*}; ferdyparewa@gmail.com²; harryfajarmaulana@umbuton.ac.id³; mrmap@umbuton.ac.id⁴
(08114030818)

*Corresponding author

Abstract

Hoaxes are a perilous byproduct of huge technology advancements, particularly the rise of social media. Using Twitter as an example, it is one of the most popular social media platforms for information sharing, communication, and entertainment. As a consequence, Twitter users may readily propagate fake or hoax information. The aim of this study is to find public opinion about hoaxes derived from Twitter user conversations around COVID-19. This study makes use of Twitter data obtained from Drone Emprit Academic. This study examined all processed tweets and surveyed public opinion on "Hoaks" (including mentions, retweets, and replies). The DEA engine analyzes the word frequency and mood of Twitter users to determine if a predominant emotion is good, negative, or neutral. According to the study results, netizens remarked on the COVID-19, alleging that the appearance of the Delta type variation was caused by the vaccination, not the virus. They do not regularly check facts owing to boredom, laziness, and reliance on just one source of information verification. Furthermore, only information that corresponds to their interests and needs will be approved. Thus, via discourse about Hoax, social media allows the formation of a platform for mutual understanding, sharing, and dynamically debating the meaning of demonstrations. This research provides a contribution to the disclosure of information about public opinion towards a discourse discussed on Twitter with the help of a DEA engine.

Keywords: Sentiments Analysis; Hoax; Twitter; Infodemic

Abstrak

Hoax adalah produk sampingan yang berbahaya dari kemajuan teknologi, terutama munculnya media sosial. Latar penelitian ini menggunakan Twitter sebagai contoh karena twitter merupakan salah satu platform media sosial paling populer untuk berbagi informasi, komunikasi, dan hiburan. Akibatnya, pengguna Twitter dapat dengan mudah menyebarkan informasi palsu atau hoax. Tujuan penelitian untuk menemukan opini publik tentang hoax yang berasal dari percakapan para pengguna twitter seputar COVID-19. Penelitian ini memanfaatkan data Twitter yang diperoleh dari Drone Emprit Academic. Studi ini memeriksa semua tweet yang diproses dan mensurvei opini publik tentang "Hoaks" (termasuk sebutan, retweet, dan balasan). Mesin DEA menganalisis frekuensi kata dan suasana hati pengguna Twitter untuk menentukan apakah emosi yang dominan baik, negatif, atau netral. Menurut hasil penelitian, netizen berkomentar tentang COVID-19, menuduh munculnya varian tipe Delta disebabkan oleh vaksinasi, bukan virus. Mereka tidak secara teratur memeriksa fakta karena kebosanan, kemalasan, dan ketergantungan hanya pada satu sumber verifikasi informasi. Selanjutnya, hanya informasi yang sesuai dengan minat dan kebutuhan mereka yang akan disetujui. Dengan demikian, melalui wacana tentang Hoax, media sosial memungkinkan terbentuknya platform untuk saling memahami, berbagi, dan secara dinamis memperdebatkan makna demonstrasi. Studi ini berkontribusi pada pengungkapan informasi tentang opini publik tentang sebuah wacana yang diperbincangkan di twitter dengan bantuan mesin DEA.

Kata kunci: Analisis Sentimen; Hoax; Twitter; Infodemi

Introduction

Nowadays, the advancement of information and communication technology is increasing rapidly, and it is proven to provide benefits for social media users. Social media has evolved into one of the main tools for exchanging information and interacting in cyberspace. Each user can only access information by utilizing a mobile phone or other communication device connected to the internet. People of various ages and groups can easily access the internet as a medium of communication and sharing information regardless of time restrictions, one of which is through the social media platform Twitter (Sadat et al., 2022). The Internet is increasingly available and affordable. Every citizen can now engage in the field of journalism not only as a news consumer but also as a news provider, for example by creating a personal weblog (Ardhianti, 2019). The spread of hoax news in society causes the emergence of anxiety, one of which is panic buying (Aprilia, 2021). Panic buying behavior is caused by psychological variables that often arise due to society's receiving incorrect and inconsistent information. As a result, there is an overabundance of worries in society, which leads to cruel purchases in an attempt to defend them. Uneven information that exaggerates people's concerns results in panic buying. The basis of panic buying is irresponsible individuals who spread fake news on social media. Of the many major impacts of social media, it turns out that it also has a detrimental influence if users cannot properly filter material or information that contains lies, hoaxes or fake news, sara problems, religion, and other activities carried out provocatively (Qadri, 2020).

The distortion of meaning in communication science can be defined as the meaning of the original message that shifts or even changes from the previous goal when the message passes through people and groups in the communication network. The flow of communication conveyed changes and the true meaning changes, whether it is a coincidence

or not. The impact of communication or feedback is essential for all information flows, without exception, for the final result to be truly appropriate (Perdana, 2019). The government's involvement is strong in providing information and responding to misinformation that appears on various social media platforms (Bafadhal & Santoso, 2020). One of the applications of text classification is hoax news. Hoax news should be categorized because it has the potential to affect the behavior and mindset of readers (Athallah et al., 2020).

A social media literacy strategy that focuses on identifying hoaxes in order to build self-efficacy in obtaining information and investigating the impact of hoaxes to reduce the behavior of spreading hoaxes. Hoaxes are one of the dangerous consequences of technological advances. Twitter is one of the most popular social media platforms for information exchange, communication, and entertainment. As a result, Twitter users can easily spread false information or hoaxes (Tambunan et al., 2021).

Hoaxes can quickly go viral if someone spreads them recklessly and without understanding or accountability. The public must understand what a hoax is to prevent or mitigate adverse impacts, as well as be smarter in responding to changes in information technology. Indonesia needs a number of specific solutions that can be done by considering the motivations of people who receive and share false information. Hoaxes dominate the flow of social media information and endanger the diversity of the nation, which is viewed differently by social media users and the general public. Another consequence is that tactics and communication patterns are needed to combat hoaxes that damage national unity (Susanto, 2019). The idea of persuasive arguments in agenda-setting research by stating that the efficacy of persuasive arguments does not depend only on the features of the substance (Vu et al., 2020). Because we live in a media-saturated society, media literacy is very important to everyone. Media literacy must begin in the household because that is

where values are carried out in order to live in society (Amah & Hana, 2019).

The use of social media has more influence than just its users. In addition to the beneficial impact, the widespread spread of hoaxes through social media will have a negative impact on individuals who are harmed by the presence of the hoax. Online social networks have emerged as a new way for people to communicate their thoughts and ideas on various issues and themes with friends, family, and relationships, among others. Through texts, photos, messages, and audio and video posts, we can express certain ideas, mental states, situations, social attitudes, and national and world concerns (Sailunaz & Alhajj, 2019).

Twitter demonstrates the competitiveness of the proposed algorithm versus a complex approach to achieve a balance between cluster performance, the number of clusters provisioned, and runtime (Rehioui & Idrissi, 2020). Big data includes social networking sites, such as Twitter, which is a popular microblogging social media platform for political campaigns. Twitter data exploded in reaction to political campaigns (Budiharto & Meiliana, 2018). Users' voices and expressions on social media do not constitute public participation. Their voices and expressions do not always indicate the involvement of the people in the political process. User noise cannot motivate individuals to solve problems or influence decision-making, implementation, or policy evaluation (Sokowati, 2019).

Hoax information that is communicated in the community, especially on Twitter, is mostly done through dissemination within Twitter rather than being disseminated online openly through someone's account. The spread of hoaxes on Twitter has become more intense, and they are more likely to be read by many people (Hesthi Rahayu & Utari, 2018). The spread of fake news is just an invitation, and hope is not needed. This relates to information sent in the form of information that does not always occur, implying that the request is not urgent (Amrullah et al., 2020). In addition, social media activists

must be smarter in using information, namely an understanding of media literacy, which is generally considered a source of truth, as well as the important role of the government in controlling the spread of fake news (hoaxes).

Seeing quite a lot of tweets about hoaxes, there is a process of exchanging information that occurs between Twitter users in finding and spreading information related to hoax issues related to COVID-19. This research is very relevant to research because it is closely related to the COVID-19 problem. Seeing that there is a previous study that discusses the spread of fake news (hoaxes) during the COVID-19 pandemic and its countermeasures in Maluku province, The findings of previous studies say that the spread of fake news (hoaxes) is currently one of the actions that are very troubling to the public, especially carried out using social media. This is because the content of fake news (hoax) sometimes causes panic and trauma in people as a result of various events, such as the problem of terrorism and the problem of radicalism. Likewise, with the spread of COVID-19, almost a large part of the Indonesian people are very afraid of contracting this deadly virus (Latupeirissa et al., 2021). The difference in this research is that researchers focus their research on the spread of hoaxes and on actors who play a role in the spread of fake news information (hoaxes) on Twitter. It is hoped that this research can improve the accuracy of previous research on hoaxes.

Hoaxes on social media are becoming more common on all platforms. Due to the ease with which individuals receive and create information on social media, citizens have the ability to express themselves and their opinions regardless of whether the information is factual or false. During times of crisis, the media can play a useful role by publishing effective ways to assist society in preventing the spread of the pandemic. They have the potential to spread a sense of community by reaching out to many people, but they can also be a source of disinformation and bigotry. In 2017, journalists were concerned

about hoaxes, as news organizations sought to distinguish themselves from misleading material distributed by social media, websites, and public figures (Finneman & Thomas, 2018). Fact-checking has become one of the most important tasks in recent years due to the increasing flow of hoaxes and the ease of spreading news through platforms such as social media (Vizoso & Vázquez-Herrero, 2019). To control reactions to poor information and filter out false material, the Indonesian government created a Basic Law, an Electronic Information and Transaction Law that can be useful in controlling the use of social media in other countries (Hidayat & Mahardiko, 2020). There is a higher intention to spread hoaxes when accompanied by comments that support the news vs. comments that are critical of the content and/or its creators.

Deceptive communication and disinformation are critical challenges that now affect people's lives. Understanding why such content is spreading is just as important as recognizing disinformation on digital platforms (Inwood & Zappavigna, 2021). The spread of hoaxes is an increasing problem in the media ecosystem, which has worsened with the healthcare crisis during the COVID-19 era. Pandemic-related hoaxes challenge the media, which does not hesitate to implement various plans to combat this content. The trend of people's enthusiasm to vaccinate against COVID-19 is determined by information obtained on social media. The government can understand the complexity of the widely discussed topics on COVID-19 immunization, which can be utilized to promote policies and improve service quality (Lawelai, Sadat, Suherman, et al., 2022). People with limited issue knowledge but high issue involvement are more likely to receive social media hoaxes. Belief in hoaxes leads to active communicative actions such as problem solving and behavioral adjustment when mediated by situational incentives.

The goal of this study is to determine how the general public feels about hoaxes coming from Twitter users' COVID-19 chats. In order

to identify any gaps or novel findings from the research conducted, some prior research findings relevant to the topic of this study are compared, including: research from Yang (Yang et al., 2020), who explained that as the coronavirus spreads globally, concerns about the spread of false information about this virus have also increased. Yang calculated the frequency of links to unverified information during the outbreak and the contribution of bots to the dissemination of these links. They discovered that the volume of tweets pointing to unreliable information was comparable to the volume of links to CDC and New York Times stories. This reveals the politicization of the epidemic through content analysis. Retweets were primarily used to spread this news. Content analysis was also performed in this investigation. The distinction between our study and those that were conducted. The information identification method is one of them. Our study makes use of information identification from Drone Emprit Academic data that is later processed by the DEA engine for analysis. In the meanwhile, URLs are used in research that employs information identification, and experts are consulted.

Another study on a related topic was conducted by (Memon & Carley, 2020), who looked at a number of communities and discovered that those who received inaccurate information about COVID-19 were more likely to organize themselves than those who received accurate information, with a higher estimated quantity of inaccurate information being a component of a disinformation campaign. Additionally, Memon's data reveals that the majority of ignorant users are anti-vaccination. Last but not least, Memon's sociolinguistic research revealed that narrative usage was higher among individuals who were aware of COVID-19 than among those who weren't. Memon's research does not rely on the private information of Twitter users; rather, it merely identifies information as a community. Personal ideas regarding COVID-19 cannot be homogenized, despite the fact that they are all members of the same group and share the same

beliefs. Another study by Yang, dkk., (2021) examined the frequency and propagation of connections to dubious information regarding the epidemic on the two most popular social media sites, Twitter and Facebook. Cheng-Yang identified platform-to-platform parallels and variances in terms of well-liked sources, patterns of dissemination, influencers, coordination, and automation. Differences between the prevalence of well-known sources with poor reputation and suspicious movies were discovered by contrasting the two platforms.

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The aim of the study was to gather and examine a Twitter dataset of individual comments regarding the various COVID-19 that could be used by the scientific community to carry out insightful analysis.

Research Methods

This study employs a qualitative descriptive technique, secondary data analysis, and a social media analytic strategy, particularly

on Twitter. The author employs Sentiment Analysis, as provided in Drone Emprit Academic (DEA). This DEA website uses artificial intelligence to provide social media statistics and analysis on a variety of fascinating social problems (AI). AI-based tools are becoming more significant in the media, from smart tools that assist academics in automatically analyzing data to the tools they utilize (Helberger et al., 2020). The author additionally looks for credible publications with the term "hoax" from other views.

The Ismail Fahmi app (Fahmi, 2018), DEA, was used to trawl Twitter data for this investigation. The term "hoax" refers to the presentation of data. From April 1, 2021 through December 31, 2021, the DEA gathered conversations. The DEA collects data from Twitter through the App Program Interface. Use the following techniques to access this data through API call: {"id":1132,"name":"Hoaks","start_date":"2021-4-1","end_date":"2021-12-31","data":{"neg":326284,"pos":7476034,"net":130165}}

The research looked at all of the tweets that were processed. The public's perception of "hoaxes" was researched (including mentions, retweets, and replies). The DEA engine analyzes Twitter's word frequency and mood to determine if the predominant emotion is positive, negative, or neutral. Machine learning approaches are used to develop the DEA sensing algorithm, and the results are interpreted using a probabilistic classifier. Currently, telecoms service providers create a large amount of data. The cornerstone to every institution's success is a thorough grasp of its clients. Network analysis is often used to find influencers and shared groups on social media in order to study consumer behavior and connections (Lawelai & Sadat, 2022).



Figure 1. Data Analysis

Results of Research and Discussion

Although data and information disseminated through social media platforms such as Twitter can be regarded as untrustworthy because anyone with an account can disseminate such information, social media facilitates the creation of a space where people can understand, share, and interactively negotiate the meaning of protest through dialogue about democracy (Lawelai, Sadat, & Suherman, 2022). Social media has evolved into a new way for individuals to convey their political aspirations. Social media is regarded as the most effective and practical means of communicating ideas and points of view in order to critique a government policy.

This is strongly tied to the ease with which mobile devices may access social networking sites. Initially, social media was solely used for social networking, but it has since been utilized as a platform for democracy. Users make decisions on how to employ technology to suit their everyday requirements. The findings of CK Jha and Kodila-study Tedika’s look at the link between social media and democracy in over 125 nations throughout the globe (Jha & Kodila-Tedika, 2020).

During the research period, 8. 039. 956 Twitter mentions were gathered. According to Figure 1, the greatest mentions occurred on September 7, November 18, and July 30, 2021.



Figure 2. The Trend of Total Mention in Twitter.
Source: Database DEA, 2022

Figure 1 shows the trend of tweeting cyber citizens seen responding to various issues related to hoaxes on Twitter. One of the countries that has commented the most on this issue is Indonesia. The issue that many Twitter users in Indonesia commented on was the COVID-19 issue. Posts circulated on social media claiming

that the emergence of a new COVID-19 variant of the Delta strain was caused by the COVID-19 vaccine, not because of the virus. In his post, it was also mentioned that people do not need to get the vaccine because it is considered dangerous and can transmit the Delta Variant of the Corona virus and other diseases to unvaccinated people.

The information is not true, aka a hoax. The COVID-19 vaccine, in fact, does not contain a live virus; rather, it is given to form antibodies or immunity to the virus, including the Delta variant. This was also conveyed by infectious disease specialist and vaccine researcher at the School of Medicine of the University of Maryland, United States, Dr. Matthew Laurens said that no COVID-19 vaccine with emergency use authorization anywhere contains the sars-CoV-2 virus that is alive and can infect others. Transmission occurs because the coronavirus

enters a person's body through droplets (Tan et al., 2022).

Public Sentiment regarding Hoax Information in Social Media News

As for the trend of hoax sentiment in 2021, based on April 1, 2021-December 31, 2021, the sentiment is dominated by positive sentiment if it is rivaled by negative sentiment, and neutral, as seen in Figure 2 below:

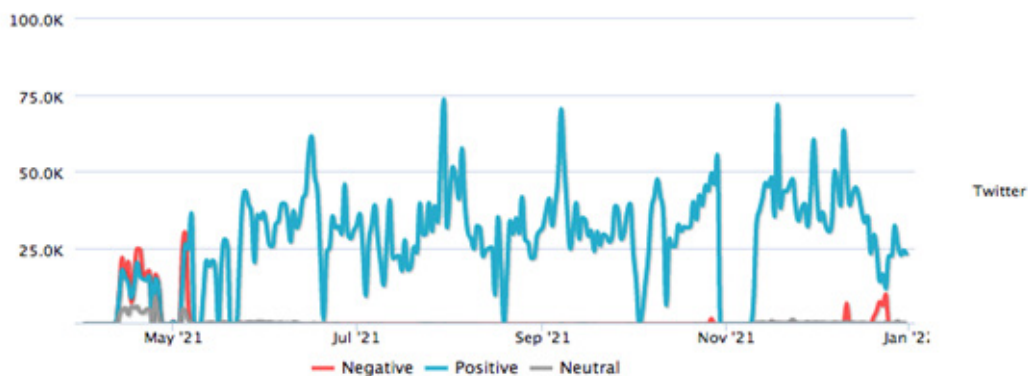


Figure 3. Trend Sentiment about hoax information on social media news on Twitter.
Source: Database DEA, 2022

Figure 3 above illustrates a positive tweet about the hoax, as seen on December 31, 2021. The social media platforms used interactively are displayed and illustrate that users communicate interactively both ways after a year of positive momentum (Chahine & Malhotra, 2018). These suggested smart contracts can effectively regulate user behavior in distributing fake news and improve the quality of material on social media by analyzing indicators of user credibility and reputation during the news distribution process (Sari et al., 2021). Through discourse,

which includes praises, suggestions, criticism, and reflections of positive sentiments such as satisfaction, pleasure, and joy, social media supports the construction of venues where people can comprehend, share, and interactively negotiate meaning regarding protest. Meanwhile, the negative category includes complaints, insinuation, criticism, and negative emotional responses such as wrath, resentment, and disappointment. Figure 4 shows the amount and proportion of public emotion concerning false information in social media news.



Figure 4. (a) The number of public sentiments about hoax information on social media news. (b) Percentage of public sentiment about hoax information on social media news.

Source: Database DEA, 2022

Figures 3 and 4 above show that the most negative tweets were made by netizens on May 27 and July 15, 2021. As a result, the unpleasant feelings were exaggerated, and the real negative sentiment was more than recorded. Furthermore, figures 3 and 4 showed that from April 1 to December 31, 2021, the public mood toward hoax was positive, 326,284 (4 percent) responded negatively, and the remaining 130,165 (2 percent) responded neutrally. In addition, there is also a lot of evidence challenging social media relationships. As the popular narrative says, anyone with an internet connection and a Twitter account can make news (Kalpokas, 2016). The Twitter platform plays an important role in mobilizing and connecting social media users (DEMIR, 2020). The media's role in exercising freedom of expression is essential to communicate thoughts, views, ideas, philosophies, ideals, and activities (Hudoch, 1999).

Social media is changing the landscape of information media and newsroom practices. They are measured by social media analytics in terms of who uses social media content, where they are, what they do with it, and how the content circulates on the network (Mackay, 2017). The internal governance adopted by the idea market is little compared to the influence that legislation may have. They can only be used with the utmost care and discipline in the industry. Fake news is a

difficult problem to overcome (Yue & Ju, 2021).

Because of the participatory, interactive, and cost-effective nature of new media, they have become a truly effective instrument for deepening democratic ideals and processes in terms of information sharing, monitoring and evaluating electoral processes, reducing tensions and anxieties associated with elections, and ensuring and, to a large extent, enforcing transparency and accountability. However, the research notes that, although social media can present difficulties like as misuse and blasphemy, they may be successfully mitigated, if not eradicated, with adequate monitoring and regulatory control without limiting freedom of speech.

Total Retweet, Reply, and Mentions about Hoax Information on Social Media News

Social media is a type of communication transaction that occurs between two or more computers (instant messaging, email, chat, and so on), referred to as a Computer Mediated Communication (CMC) network. CMC, according to Herring, is communication between people using computer instruments. Meanwhile, according to Greenberg, CMC is a human communication process that involves a person who is placed in a certain environment and participates in the process of forming media for various purposes.

The transition to digital broadcasting has prevented Indonesia from reaping digital benefits that could possibly be used to create faster and wider broadband internet access. The importance of information as a form of preparation for entering the era of civilization 5.0 (Nurizar, 2020), where internet access plays an important role in the advancement of science and technological innovation, To reflect the phenomenon of reporting on social media, a three-dimensional model has been developed (structural, economic, and pragmatic) with the aim of clarifying the relationship between the logic of the spread of hoaxes on the Internet and the role of conventional media in their reporting propagation (Cano-Orón et al., 2021). The use of certain methods of communication by digital newspapers to increase visitors. By adjusting to the irresponsible misinformation dynamics

of the attention economy, the media ecosystem contributes to and exacerbates the credibility problems of the media ecosystem.

Social media is often a source of public information, coordination, and adequate financing. The efficient use of disaster media marks the beginning of the growth of new media and social media in disaster communication in Indonesia (Widyastuti, 2021). During the COVID-19 pandemic, this medium was also used in disaster management. The use of media in the two case studies is considered sufficient to mitigate the negative impacts of various disasters. Retweeting status so that it can be seen by other followers is one way the public approaches sharing information about hoax information on social media. That is, it does not matter whether the message is positive, negative, or neutral. The ten most retweeted tweets are shown in Table 1.

Table 1. Top 10 most retweeted

Rank	User	Status	Sentiment
1.	@vrosen11	Founder of The Weather Channel tells Brian Stelter climate change is a hoax https://t.co/8CctLzlip8 21/Jul/2022 08:01 WIB Graph	Positive
2.	@DashDobrofsky	A 10 year old girl in Jim Jordan's state of Ohio was raped. Jim accused her of "making up" the story & called it a "hoax." Today, the Ohio rapist was arrested. Jim tried to silence a 10-yr old rape victim. Just like Jim silenced 43 students who were molested at OSU on his watch. 14/Jul/2022 03:05 WIB Graph	Positive
3.	@dgaytandzhieva	4 years ago I was expelled from the European Parliament for confronting the US Assistant Secretary of health over Pentagon-funded biolabs in 25 countries across the world. I was smeared by US media as "fake news". Who is the fake news now? 10/Mar/2022 23:25 WIB Graph	Positive
4.	@KojiPro2015_EN	#KojimaProductions strongly condemns the spread of fake news and rumors that convey false information. We do not tolerate such libel and will consider taking legal action in some cases. https://t.co/fDi0FR9kB0 9/Jul/2022 19:45 WIB Graph	Positive
5.	@symphony_221B	To be honest, not liking any artist is a personal matter. But if you don't like it, then take it for a spin on fake news and insult him in the public to guide others. It's not normal for good people to do this. It's an anti-nature. 3/Jan/2022 23:53 WIB Graph	Negative
6.	@pnjaban	This FBI: * Pushed Russia collusion hoax * Spied on law-abiding Americans * Lied to FISA court * Ignored Hillary's server escapades * Ignored Biden Family criminal activity * Persecutes journalists at Project Veritas * Treats J6 trespassers like terrorists * Goes after PTA moms/ 9/Aug/2022 07:31 WIB Graph	Negative
7.	@LumenaAleluia	a maior fake news da história foi que a pandemia nos tornaria pessoas melhores 27/Jun/2022 19:57 WIB Graph	Negative

8.	@gal_el	!!! HOAX TIKTOK/WHATSAPP BERBAHAYA !!! Nyokap gua barusan kena keracunan klorin karena “cleaning lifehack” berikut yg rame dishare di Whatsapp, tolong kasitau ke orang tua yg main WA untuk JANGAN ASAL CAMPUR ZAT PEMBERSIH!!! https://t.co/yX3Evv0rMV 23/Jan/2022 16:32 WIB Graph	Positive
9.	@OccupyDemocrats	BREAKING: FOX News’ finances take a massive hit as the internet’s top news certification appraiser downgrades its news ranking over its content publishing of fake news, putting FOX News’ advertising revenue in serious jeopardy. RT IF YOU HOPE THAT FOX “NEWS” GOES BANKRUPT! 25/Jul/2022 04:40 WIB Graph	Positive
10.	@LiliMuVe	Se vienen los 4 años de mayor desinformación y fake news que ustedes se puedan imaginar. 23/Jun/2022 00:31 WIB Graph	Negative

Source: Database DEA, 2022

Total Posts are based on emotions surrounding hoaxes in social media news and are based on Twitter’s emotional network evaluation of user behavior based on text (Replies, Mentions, and Retweets) and numerical scores such as the number of tweets. To analyze the impact of values, we combine them with the attitudes and emotions of users on a specific topic. Previous research concentrated on tweet content, but current research takes into account tweets and answers to detect human-to-human exchanges among users.

Since 2020, the spread of false COVID-19 material has been a concern that any government, including Indonesia’s, must address. Local

governments conduct fact-checking by looking for official sources such as the media, authorities, and national and international expert sources for data on various hoax subjects (Fardiah et al., 2022). Correction notes for COVID-19 clarification findings have been posted to Instagram. Stakeholders are increasing efforts to educate the public about COVID-19 information literacy in order to better understand and react to the COVID-19 phenomenon. Due to the effects of the disease and the lack of knowledge around it (Kant & Varea, 2021), medical misinformation has spread rapidly on several social media sites.

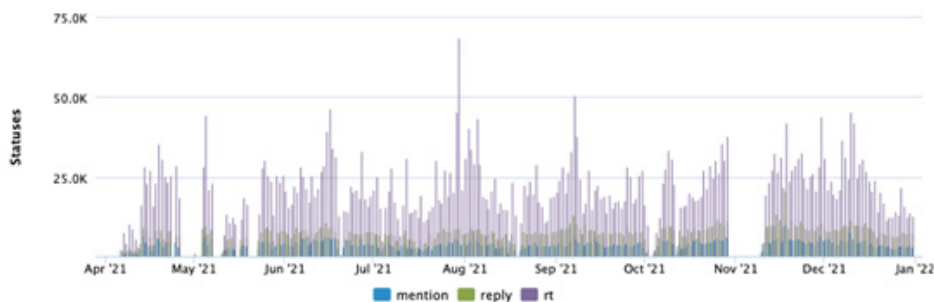


Figure 5. Trends reply, mention and retweet about Hoax Information on Social Media News.
Source: Database DEA, 2022

Based on Figure 5, there is a trend based on time that shows that retweets dominate with a 5. 215. 378 (64.87 percent) status, followed by a reply with a 1. 841. 701 (22.91 percent) status, and mentions with a 982. 924 (12.23 percent) status.

Public Emotions about Hoax Information in Social Media News

Fake news, dubious comments, and other untrustworthy material vary not only in terms of

the amount of disinformation but also in terms of underlying intentions (L. Wang et al., 2019). One of the most important channels for spreading true and false news is online social networking (OSN). Many OSN users use fake or social bot accounts to spread malicious data, fake news, and hoaxes for economic, political, and entertainment purposes (Verma et al., 2022). The lies created during the Post-Truth era used a variety of emotional responses and inspired interest groups

to act on their main instincts that support a particular political agenda. It is believed that negative turbulence in identity politics caused by

the spread of hoaxes and irregular disinformation will lead to a post-democracy scenario (Sawitri & Wiratmaja, 2021)

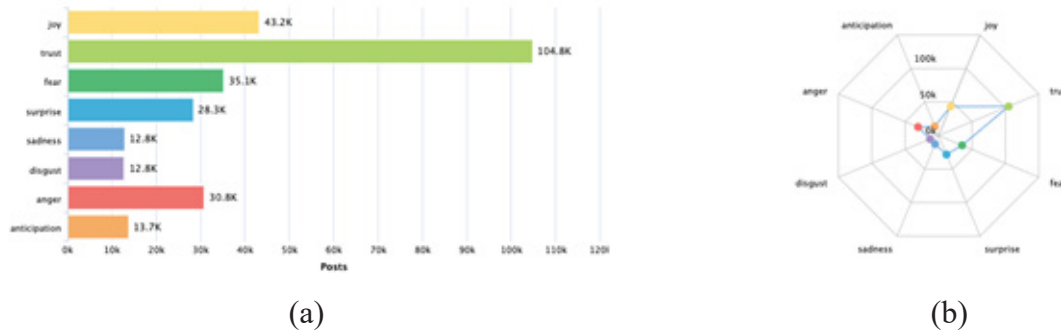


Figure 6. (a) Number of public emotions about hoax information on social media news. (b) Public emotion network relations around hoax information on social media news.

Source: Database DEA, 2022

Some modern phenomena that challenge or help the creation of critical public opinion include the use of lies as a political tool, as well as fake news and other false phenomena (García-Orosa, 2021). While online misinformation is a broad term that encompasses many different phenomena, it can be defined in this context as

high-quality information that spreads due to the efficiency of online communication rather than low-quality information that spreads due to its inefficiency (Acerbi, 2019). The difference is that “quality” is associated with psychological attraction rather than honesty.

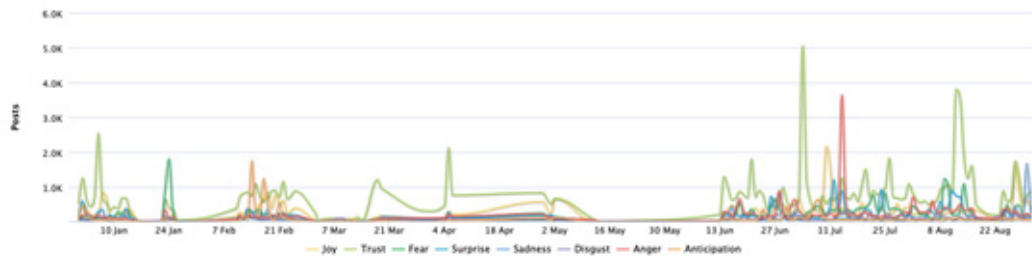


Figure 7. Trends in public emotions around hoax information on social media news.

Source: Database DEA, 2022

Figures 6 and 7 depict the primary sentiments experienced throughout the research period, which were anticipation, despair, and rage. The most dominant emotion is hope, which represents the public’s future preparedness and aspiration. Significant trends in topic size and mood were discovered for several subjects, which corresponded with certain major pandemic occurrences and policy changes, underlining their importance on social media (Y. Wang et al., 2021).

The small amateur network of information stands out, as does the frequent

appearance of certain people who, as opinion leaders in an atmosphere of institutional delegitimization, become the catalysts of hoaxes and news lies that call for civil disobedience and, at times, show a connection with the extreme right (Calvo et al., 2022). Although the news industry plays a vital role in setting agendas and framing, Twitter’s effect on news discourse has expanded. Opportunities for strategic science communication exist, as do challenges posed by unfounded scientific claims shared on social media (Jones-Jang et al., 2020).

Conclusion

Social media has evolved into one of the most important instruments for transferring information and communicating in cyberspace. The spread of fake news in the community raises concerns that lead to panic buying. Panic buying behavior is influenced by psychological factors, which are often the result of consumers' obtaining inaccurate or contradictory information. As a result, there is excessive worry, which leads to violent purchases. One of the harmful effects of technological advances is hoaxes.

Hoaxes can quickly go viral if they are spread without awareness or responsibility. Indonesia needs a variety of specific solutions that can be implemented, taking into account the motives of those who spread fraudulent content, especially on social media. Twitter has evolved as a new platform for individuals to share their views and opinions on a variety of subjects and topics with friends, family, and partners. Individuals harmed by the rise of hoaxes will suffer as a result of their spread through social media. Media literacy must start at home because that is where values are carried out so that they can live in society. Social media hoaxes are becoming increasingly widespread across all platforms. There are procedures for sharing information between Twitter users in order to uncover and disseminate information related to COVID-19 hoaxes. Hoax material can sometimes cause fear and distress due to the large number of events that occur, such as terrorism and extremism problems.

Social media has become a new trend for people to communicate their political goals. While data and information transmitted through social media can be considered untrustworthy, social media promotes the construction of platforms where people can understand, discuss, and interactively debate the meaning of protest through conversations about democracy. After a year of good momentum, an interactively used social media platform was showcased, showing that people are connected interactively

in two ways. These proposed smart contracts can efficiently manage user behavior in the spread of fake news while improving the quality of content on social media.

Through discussion, social media supports the construction of a place where individuals can understand, share, and interactively negotiate meaning around demonstrations. In terms of sharing information, monitoring, and evaluating the electoral process, reducing election-related tensions and concerns, and ensuring and even upholding openness and accountability, social media has become a true weapon for advancing democratic values and procedures. The study acknowledges that, although social media presents issues such as vulnerability to abuse and blasphemy, they may be managed to be reduced, if not eliminated, by adequate monitoring and regulatory restrictions. The spread of fake COVID-19 content has become a major issue that must be addressed by any country, including Indonesia. Misinformation has been circulating rapidly on various social media platforms as a result of the consequences of the disease and a lack of awareness about it.

During the Post-Truth era, falsehoods elicited a variety of emotional reactions and encouraged interest groups to act on underlying impulses that promoted political goals. During the research period, the most common emotions were anticipation, sadness, and anger. Although the news industry plays an important role in setting agendas and framing, Twitter's importance in the exchange of news has grown. Strategic science communication opportunities as well as hurdles due to unsupported scientific claims spread on social media.

We categorize the data collected from tweets made during the COVID-19 pandemic. It is possible to compare data gathered from many sources with information from well-known and reliable sources. According to earlier studies, social media accounts, particularly Twitter, are more likely to broadcast and spread unreliable information.

This analysis has certain limitations and is only preliminary. The COVID-19 hashtag sampling technique may create unidentified biases. Low-confidence sources cannot be identified based on an account and disinformation in tweet content, including images and videos, cannot be captured. Undoubtedly, Twitter's bot identification systems are never 100 percent accurate.

Future studies using different criteria, sampling techniques, and techniques for recognizing conversations on Twitter can corroborate the validity of our results.

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