Surfing the Hoaxes Wave Fabrication During the Pandemic Period in Indonesia

Cosmas Gatot Haryono(✉), Kirana Ratu Sekar Kedaton, and Hadassah Elisha Karsten

Universitas Ciputra, Surabaya, Indonesia
cgharyono@gmail.com

Abstract. The hoax has evolved into a formidable foe in the fight against the Covid-19 pandemic that is sweeping the globe. Indonesia is no different. Hoaxes not only cause public distrust but also jeopardize important government strategies to combat the disease threat currently sweeping the world. The goal of this study is to learn about the various types of hoaxes produced and spread by various parties in Indonesia, as well as how they use social media to influence Indonesian society. This study examined 145 hoax information during the COVID-19 pandemic, particularly in the second half of 2021, between August 1 and December 11, 2021. According to the findings, hoaxes that occurred in Indonesia during the second half of 2021 can be classified into four broad categories: issues related to Covid-19, Politics, Covid-19 Treatment, and abroad. In terms of distribution media, most hoaxes are spread via Facebook, WhatsApp, and Twitter. While fabricated content is the most common type of content, it is followed by manipulated content and misleading content. As a result, the Indonesian government has no light homework to do because the creation and dissemination of false content serves a purpose. The fact that the majority of the content is fabricated indicates that certain parties are 'surfing' through the hoax that was created.

Keywords: Hoaxes · Fabrication · Covid-19 · social media

1 Introduction

Covid-19 has turned into an unavoidable global humanitarian disaster. Because of this unprecedented pandemic, all countries are trembling and, in some cases, facing bankruptcy. In a short period of time, the world seemed to be filled with unending sorrow. Countries around the world are "fashioning" the best solution to combat the COVID-19 threat. Indonesia is one of the countries that has been subjected to extreme shocks. As of December 23, 2021, Covid-19 had infected 4,261,072 Indonesians and killed 144,034 people [1].

The Indonesian government implemented a variety of policies that it deemed necessary to combat the outbreak. As a result, Indonesia will be able to emerge from the pandemic slowly but steadily. This is reflected in a decrease in the positive number of Covid-19 and a decrease in the percentage of deaths, with Indonesia ranking fifth among the five countries with the greatest Covid-19 decline [2]. However, the government encountered numerous difficulties while dealing with Covid-19. One of the most

difficult challenges is the spread of misinformation about Covid-19 [3]. The government is subjected to a barrage of disinformation or hoaxes perpetrated by various parties [4]. Hoaxes and disinformation, like the Covid-19 virus, grow and spread quickly [5].

The distribution or dissemination of false, false, misleading, or intentionally distorted information to mislead, deceive, or confuse the recipient [6] is a literal definition of disinformation. The activity of creating and disseminating fake news is typically carried out by falsifying information or replacing publicly available news [7] as a deliberate effort to create news with the intent of deceiving readers [8]. Some parties purposefully disseminate misinformation to the public in order to influence how they act and spread certain moral judgments [9] to those who read disinformation [6, 10].

Various health-related hoaxes or disinformation were prevalent among Indonesians during the Covid-19 pandemic. According to the facts, more than 90% of the information in the health sector cannot be accounted for because it has ambiguous sources and spreads freely via social media and instant messages [3]. This cannot be separated from the broader conditions that exist, in which health hoaxes are more popular for public consumption and spread faster than true news [11].

The prevalence of communication technology, particularly smartphones, social media, and other cellular technologies, besides promoting and improving access to electronic devices [12], also has aided in the spread of fake news in society [13]. The internet has become the most effective medium for disseminating misinformation, including fake news [14]. The rapid spread of disinformation throughout society will result in a variety of discussions and changes in people's behavior [15].

Of course, under current conditions, the spread of hoaxes is a major issue. The widespread dissemination of hoaxes to the public will have the potential to obscure accurate information and cause people to become disoriented about their health in the midst of a pandemic. It is even possible that these hoaxes and disinformation generate and promote erroneous practices that aid in the spread of the virus and, as a result, lead to poor health choices [16].

Of course, if not handled correctly, disinformation and the spread of hoaxes, which are becoming increasingly common, will have a negative impact on the community and the government. The influence of hoaxes will lead to the formation of true public opinion if the government does not manage it properly and correctly [17]. The government must be able to deal with hoaxes and disinformation by using precise, accurate, and current data. The public can obtain accurate, true, and current information by using data and facts that are accurate, true, and current [18]. Without it all, hoaxes will continue to be a scourge, disrupting our information environment [19].

Understanding and knowing the various categories and sources of hoax news about COVID-19 that are developing in the community is one of the most important steps in managing the spread of hoaxes. With enough knowledge, the government can devise practical and effective strategies to combat the spread of misinformation during this pandemic.

This paper, in particular, attempts to categorize disinformation into different types, categories, and claims. The main goal is to determine what patterns of misinformation are spreading in Indonesia during the Covid-19 pandemic. Furthermore, we investigated the sources of misinformation (where misinformation can be found on social media and

actors who clarify the news) (government, mass media, etc.). Hopefully, this research will provide useful insights for future research on information dissemination during a crisis.

2 Methodology

The purpose of this study is to identify the various types of COVID-19 hoaxes that have been created and spread via social media. They attempted to unite how differences in public opinion were established by people who purposefully created and promoted the fake by asking researchers how to determine the hoax content that was developed. The researcher employs qualitative content analysis to investigate how misinformation spreads [20].

The process of reading and recording data related to disinformation in Covid-19 is used to collect data. To maintain the validity and reliability of the research, qualitative content analysis is carried out by developing a model or employing a rigorous coding and analysis technique. As a qualitative research method, content analysis is used to interpret the meaning of the text's data content and thus adheres to the naturalistic paradigm [21].

The primary data source for the spread of hoaxes is https://covid19.go.id/p/hoax-buster. To accomplish this, the researcher thoroughly examined the content of the Hoax Buster website. Hoax Buster is a government website that provides a Hoax List, which includes a detailed explanation of every hoax article that circulates in the community through various media. It also discusses various types of disinformation articles, clarifications, news sources, and references to true information.

Researchers used a manual data collection process to collect hoax data from August 1 to December 11, 2021. In the hoax buster, researchers collected content analysis data from 145 hoaxes. Researchers created detailed data sets beginning with the date, title, disinformation content, sources, clarifications, and actors who clarified the disinformation. The researcher then analyzed and classified each disinformation in the dataset into specific categories. This includes categorizing hoax sources and actors who clarify the news.

The researcher used Microsoft Excel as a tool for coding and content analysis. To categorize the disinformation, the researcher used a qualitative interpretive content analysis [22]. Because no studies had attempted to classify the characteristics of COVID-19 disinformation, the researchers devised their own grouping strategy by creating a list of new categories and sub-categories. While adhering to the precautionary principle, the researcher reads each data (hoax) in detail in order for it to be grouped into specific categories or subcategories, and the categories are gradually modified and expanded inductively.

The researchers followed the coding model proposed by Bellström et al. (2016) [23], namely coding in three stages. The first author carried out the first stage of coding and analysis, which resulted in a series of categories. The second author follows suit and creates a set of categories. The two lists were then processed by a research assistant who did not participate in this study, and if there was a difference in the code, the three authors discussed it until they reached an agreement. Finally, the researcher compiled a list of categories listed in a new table [24].

3   Result

There are 145 hoaxes that have spread from August to December 2021, out of the various hoaxes that have been produced and disseminated. Following the categorization, the researchers discovered four major categories of hoaxes: virus issues, politics, medicine, and abroad. Each category describes how hoax content influences and 'surfs' people's behavior.

There are several ways in which hoaxes are produced for virus categories, namely through several subcategories, such as story development as if COVID-19 is a product of a perfectly designed global conspiracy; vaccines are built with various conspiracies of global interest groups, including WHO; the impact of vaccines on recipients, particularly pregnant women, and children; a care and protection website that helps the government monitor people's mobility; and job placement (Table 1).

In the political category, hoaxes emerge through four channels (sub-categories), namely those related to government assistance policies (beginning with cash assistance, sleeping assistance, and credit subsidies); Indonesia's G20 presidency; PPKM policies adopted by the government; and government policies related to tourism that are beginning to reopen. Furthermore, many hoaxes about the treatment of COVID-19 have emerged in the community. From strange traditional treatments to medicines that are medically acceptable to common sense.

Other hoaxes, on the other hand, are classified as foreign. Where there are three main lines of hoax development carried out, namely the use of information or events from abroad; the use of media from abroad, which is often considered more credible than local media; and the use of news about public figures from abroad related to covid-19.

Overall, the hoaxes produced and distributed (Fig. 1) are mostly related to Covid-19 virus issues, with approximately 62 types of information, or approximately 43 percent. Hoaxes are built in the second position by developing issues about events in other countries, which account for approximately 45 hoaxes or approximately 31 percent of all hoaxes. Hoaxes were developed in the third position by selling issues about politics, particularly the government's strategic policies, which accounted for approximately 27 hoaxes or approximately 19 percent of all hoaxes. While in the last position, hoaxes were constructed by selling alternative Covid-19 treatments, accounting for approximately 11 hoaxes or approximately 7% of the total.

3.1   Issues About Covid-19

There are several dominant issues among the 62 types of hoax information related to covid 19 issues that can be grouped into five sub-categories, namely hoaxes about the covid-19 virus conspiracy as many as 21 pieces of information that fall into the hoax category; 25 details about vaccination conspiracy issues; 12 details about the impact of vaccines; 3 details about caring to protect; and 1 detail about job openings for vaccination workers. Some of these issues are addressed by presenting data and information in a variety of formats, such as writing, graphics, photos, and videos.

Hoaxes in the first subcategory (covid-19 conspiracy) are created by convincing the public that covid-19 is part of a global conspiracy designed by certain groups for their own benefit. In fact, they had planned ahead of time and enlisted the assistance of the

Table 1. Categorization and description of hoax

Category	Sub-category	Description
Virus Issues	Covid-19 conspiration	Various content considers the Covid-19 virus as a conspiracy
	Vaccine conspiration	Various contents related to harmful ingredients in vaccines
	Vaccine effect	Various content explaining that vaccines are dangerous for the recipient
	Peduli Lindungi	Various Hoaxes about the application of care to protect
	Job vacancy	Content related to job vacancies as a vaccination officer
Political	Government Assistance Policy	Various content that utilizes content about government assistance, be it direct cash assistance, credit, and wage subsidies
	G20 Presidency	Various contents try to link Indonesia's position which will lead the G20 presidency with covid 19
	PPKM Policy	Various contents about social restrictions and claims of violations made by the government related to it
	Tourism	Government policy regarding the reopening of tourism activities
Medication	Covid-19 Medication	How can COVID-19 be prevented and treated both traditionally and with certain drugs?
Foreign	Country	Various information from various countries abroad became the main content of Hoaxes: Singapore, Belgium, United States of America, United Kingdom, Madagascar, Libya, Brazil, Romania, China, Korea, Russia, Africa, Egypt, Turkey, Japan, Austria, Greece, and Germany
	Media	Foreign media that are mistakenly used as references for Hoax content
	Public figure	Various contents related to famous figures from abroad related to covid-19

World Health Organization (WHO). On August 21, 2021, for example, a video circulated on Facebook claiming that the Covid-19 outbreak and lockdown mechanism had been planned by a small group of the world's elite since 2010. This plan was then published in the form of an article disguised as a scientific study, involving many world-renowned
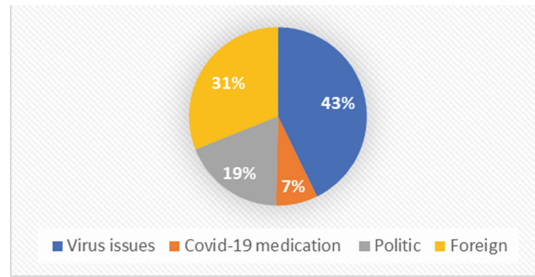
Fig. 1. Hoax categories composition

universities, academics, and important figures. Of course, if this issue is not handled properly, the public will easily believe it, and it is not impossible to make people doubt the current Indonesian government's efforts.

The vaccine conspiracy subcategory was dominantly constructed. From August to December 2021, at least one vaccine-related hoax was perpetrated by the government. Hoaxes are created by persuading the public through various means, such as the presence of harmful substances in the human body or the existence of electromagnetic waves that are hazardous to data security and public health. All are based on a narrative of concern and a global conspiracy involving the widespread use of vaccines in Indonesia. Still related to vaccination, the covid vaccine's side effects (impacts) are used to create various hoax content. There are at least 12 pieces of content that spread rumors about the dangers of vaccination. The impact of vaccination on pregnant women, infants, and children, in particular, has received a great deal of attention.

Meanwhile, other issues that receive attention include websites concerned with security and job openings, though the numbers are small. There were three hoaxes related to caring for protection and one hoax related to job vacancies opened by the government for vaccination workers in several regions of Indonesia between August and December 2021. Regarding the Caring to Protect hoax website, the method is carried out by stating that Caring to Protect is not safe to use because the author is from Singapore so the user's personal data is very vulnerable to being misused by foreign parties (Table 2).

3.2 Political

Although not dominant, hoaxes have been widely disseminated during this pandemic. The majority of the political issues raised concern government policies regarding COVID-19. There were a lot of hoaxes about government assistance to the community at the end of 2021, in particular. There are at least 15 hoaxes circulating about government assistance policies. Credit assistance policies, direct cash assistance (BLT) policies, business assistance, and wage subsidy assistance are all examples of assistance policies.

The Indonesian government's policy on the Implementation of Restrictions on Community Activities (PPKM) is another source of material for the creation of hoaxes. It was discovered that up to nine hoaxes about PPKM policies were created. Many parties take advantage of changes in PPKM policies, which are frequently implemented by the

Table 2. Hoax Frequency in Indonesia (August-December 2021)

Category	Sub category	Frequency
Virus issues	Covid-19 conspiration	21
	Vaksin conspiration	25
	Vaksin effect	12
	Peduli Lindungi	3
	Job vacancy	1
	Government Assistance Policy	
Political	G20 Presidency	15
	PPKM Policy	1
	Tourism	9
	Covid-19 Medication	2
	Country	
Covid-19 Medication	Media	11
	Public Figure	
Foreign	Covid-19 conspiration	38
	Vaksin conspiration	4
	Vaksin effect	3

government, to construct various hoaxes. Various content about social restrictions, as well as claims of violations made by the government, were also made available.

Meanwhile, the government's tourism policy and Indonesia's G20 presidency were used sparingly as hoax material. There were only two hoaxes concerning tourism and one concerning the G20 presidency. Regarding Indonesia's G20 presidency, there is content (November 8, 2021) that attempts to link Indonesia's position as G20 presidency leader with covid 19. Using the WhatsApp messaging app, news spread that Indonesia was elected President of the G20 because the country was successful in controlling the economy during a pandemic. In reality, Indonesia's election as G20 President has nothing to do with the Covid-19 pandemic.

Meanwhile, hoaxes about the opening of all tourist attractions in Pangandaran Regency on August 9, 2021, were circulated in the form of an invitation to visit his relatives in the village by a regional head in East Java on September 15, 2021, and the circulation of hoaxes about the opening of all tourist attractions in Pangandaran Regency on August 9, 2021. The hoax also included provisions such as limiting the number of incoming tourists, implementing health protocols, providing free antigen swab tests to tourists outside the driveway, and spraying disinfectants at tourist attractions on a regular basis.

3.3   Covid-19 Medication

Seven percent (7%) of the 145 types of hoaxes produced and distributed to the people of Indonesia offer an alternative treatment for COVID-19 patients. There are 11 hoaxes that offer COVID-19 prevention and treatment. Starting with traditional methods and progressing to scientific methods because it is a treatment that is "as if" in accordance with medical rules.

For example, on August 21, 2021, a WhatsApp chain message circulated containing a statement from Dwiyono, the Head of the Covid-19 Task Force. The method of inhaling hot water vapor with a temperature of 70 degrees Celsius was mentioned in the message as an effective way to kill the Coronaviruses. However, this is not the case. Similarly, on September 3, 2021, a hoax about the discovery of a covid-19 drug will emerge. A short message circulated via social media WhatsApp stating that a drug that could cure Covid-19 patients had been found, the drug Molnupiravir. Through this narrative, it is reported that Molnupiravir will start circulating and can be used in September 2021.

3.4   Foreign

Hoaxes are the second most prevalent category during the second half of 2021. There are 45 hoaxes, accounting for approximately 31% of all hoaxes. People with an interest in spreading hoaxes use three important sub-categories: taking advantage of events in other countries abroad, utilizing foreign media publications, and utilizing public figures who are the center of attention of people all over the world.

There are 38 hoaxes related to hoaxes based on events that occur in other countries. This is the most common type of hoax when compared to all other sub-categories. This type of hoax is constructed by presenting events that occur in other countries as the main content of hoaxes. At least 18 countries (Singapore, Belgium, the United States, the United Kingdom, Madagascar, Libya, Brazil, Romania, China, Korea, Russia, Africa, Egypt, Turkey, Japan, Austria, Greece, and Germany) are used.

Four types of hoax content are included in the media subcategory. They take advantage of mistakes made by the media (particularly foreign media) in informing something and then use it as a reference. On September 14, 2021, for example, a screenshot of an article purporting to be from CNN circulated. The article discusses a vaccinated 40-year-old Covid-19 patient. The article's title is "Healthy 40-year-old [sic] COVID Victim's Last Words: "I blame unvaccinated."

Meanwhile, public figures have been used as hoax material three times. Various content related to famous foreign figures related to covid-19. For example, consider Bill Gates and Albert Bourla (CEO of Pfizer).

3.5   Media Platforms

Our search on the Hoax Buster portal during the second half of 2021 reveals that many parties have made significant efforts to clarify the spread of hoax information. We discovered three major groups that are always working hard to clarify various types of hoaxes that are constructed through these various media, namely: online media, government, communities, and related parties or organizations.
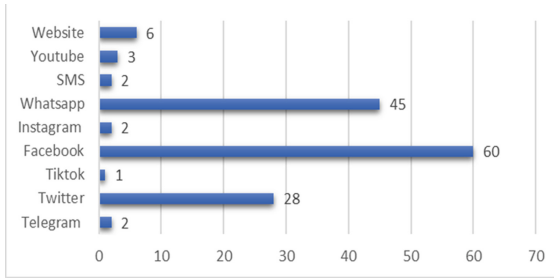
Fig. 2. Platform media

In terms of the media platforms used in the spread of hoaxes in the second half of 2021, three social media platforms dominate Facebook, WhatsApp, and Twitter. In Indonesia, these three social media platforms control more than 90% of the spread of hoaxes. There are approximately 60 hoaxes spread through Facebook, 45 hoaxes spread through WhatsApp, and 28 hoaxes spread through Twitter. The remaining hoaxes were disseminated via YouTube (3 hoaxes), SMS (2 hoaxes), Instagram (2 hoaxes), TikTok (1 hoax), Telegram (2 hoaxes), and Web sites (6 hoaxes) (Fig. 2).

Facebook, as the most popular platform in Indonesia, contributes the most hoaxes. Despite Facebook's efforts to improve applications [25] so that they are not used as a medium for spreading hoaxes [26], Facebook remains the preferred medium for spreading COVID-19 hoaxes. Facebook claims to have used artificial intelligence to help protect users from potentially harmful content. This allows us to scale the work of human experts and act proactively before potentially harmful posts or comments are made [27]. However, the facts show that there are still a lot of hoaxes being spread through Facebook. The language algorithm is most likely one of the primary sources of many of these hoaxes' escapes [28].

WhatsApp, a popular messaging app in Indonesia [29], was also named as a medium that is frequently used to spread hoaxes. It was discovered that 45 COVID-19-related hoaxes were spread via WhatsApp during the second half of 2021. This discovery is quite intriguing, because WhatsApp, as a messaging app, is not designed to display complete and interesting information like social media (YouTube, Facebook, and Twitter). WhatsApp's features are extremely limited, allowing users to communicate directly with a small number of people via chat rooms, though it has recently allowed users to post short videos. Despite these limitations, WhatsApp appears to be an effective tool for disseminating hoaxes [30]. Apart from tips and tricks, there is no security related to the use of WhatsApp for various hoaxes.

Furthermore, WhatsApp as a social media application has distinct characteristics. WhatsApp operates in a private environment with a higher level of intimacy than social media. The credibility of the source (sender) and the information is also high because it is well-known and usually located in a nearby environment. It's not surprising that rumors can sometimes be more credible because they're spread through group chats, which many people join voluntarily and have members they trust [29, 31].

The WhatsApp platform, on the other hand, is more difficult for him. This occurred because the hoax was spread in private chats and groups, where the spread can go

unnoticed. This is the most difficult challenge in predicting the spread of hoaxes on WhatsApp. The psychological aspects, rather than the numbers or statistics, are more important. There is a tendency to believe information shared by trusted individuals or in private and intimate settings [32].

In third place, Twitter is a social media platform that is also widely used to spread hoaxes. Twitter, in addition to Facebook, is extremely popular in Indonesia. After the United States, Japan, India, the United Kingdom, and Brazil, Indonesia has the sixth-highest number of Twitter users in the world [33]. Twitter users in Indonesia totaled 15.7 million. Twitter users are primarily young people. Indeed, the spread of hoaxes has reached young people in Indonesia. Until now, most previous research on platforms like Twitter has failed to distinguish between different audiences when analyzing discussions and opinions [34].

If the three media platforms are combined, they will become the dominant platform for disseminating fake news in Indonesian society. The three media channels account for 91 percent of hoax news in the community. Of course, this fact cannot be separated from the unstoppable technological revolution. The rapid advancement of communication technology has resulted in significant changes in the way humans communicate and gather information [35]. Furthermore, the increased use of smartphones and easier internet access in many countries has shifted the primary sources of news away from traditional media and toward social media [36].

3.6   Hoax Information Types

The content of hoax information captured by the hoax buster is very diverse and needs to be sorted so that it can be mapped more easily. Wardle, Claire (2017) [37] Information that is a hoax can take several forms, including: 1. Satire or parody: content is created with no intention of causing harm; 2. Incorrect connection: the title, image, or text does not support the content. 3. Misleading content: the use of false information to frame an issue or an individual; 4. Fake context: the sharing of original content with false contextual information; 5. Fraudulent content: content that imitates original sources; 6. Manipulated content: original information that has been manipulated to deceive; and 7. Fake content: content refers to new content that is 100 percent fabricated to deceive and harm. When it comes to the types of hoaxes classified by Claire Wardle, the majority of the 145 hoaxes that emerged from early August to mid-December 2021 are dominated by fabricated content, which accounts for approximately 92 content (Fig. 3). Then there's manipulated content (25 items) and misleading content (up to 16 items). Fabricated content is a type of hoax in which the content is entirely new and untrue. This type of content is created with the intent of deceiving and harming other people or parties.

The prevalence of fabricated content hoaxes in Indonesian society demonstrates that the government is facing serious challenges in dealing with Covid-19. Some parties deliberately spread fake news to disrupt people's lives so that they do not follow government instructions on how to deal with Covid-19. People are fed fake news for their benefit. The majority of manufactured news content is created by editing images, manipulating news content, and assigning the incorrect narrative to an image or news item [38].
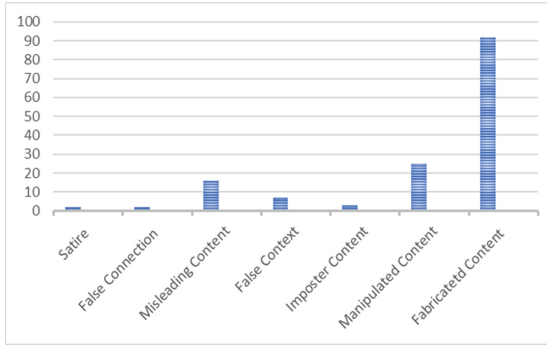
Fig. 3. Types of Hoax Content

4   Discussion and Conclusion

The rise of fake news production is inextricably linked to the advancement of communication technology, which makes it simple to create and spread stories quickly. It must be acknowledged that the rapid development of information and communication technology, as evidenced by the emergence of social media, has lifted a new veil of life, namely a very open public space [39]. Technology that is simple to use for users has enabled anyone to create content that can be distributed to anyone. Content creation is no longer difficult or expensive. On the other hand, it is so simple and inexpensive that anyone can produce it [40]. The filtering and gatekeeping processes are not carried out in the context of mass communication. Almost no one oversees specially created content. Without significant third-party filtering, fact-checking, or editorial judgments, anyone can easily share stories among social media users [41]. This is in contrast to traditional news media [42]. Where a news story must go through several stages before it is published. As a result, the potential for utilizing or 'controlling' these contents is enormous [43]. Social media platforms could be the most effective medium for disseminating fake news. People can now quickly create websites, post stories, and share them on social media platforms to go viral [29]. The findings of this study appear to confirm what Telematics Indonesia has reported about the pattern of spreading hoaxes in Indonesia, where social media and messaging apps rank first as the platforms most frequently used to spread fake news [44].

Given these circumstances, the government's ability to anticipate various hoaxes is critical. The fact that hoaxes are designed with a specific goal in mind necessitates the government's readiness to detect them. The government must devise a better strategy for dealing with these various fabricated hoaxes. If you don't plan ahead of time, public discourse will be filled with various hoaxes and disinformation, which will not only confuse the public but will also create public distrust of the government.

If the government does not pay attention, the development of this hoax can be used by political interests to identify electability gaps and assert political positions, and policies that are not based on public input [45]. A hoax can be used as a primary tool for political propaganda and to agitate society. It must be admitted that one of the black campaign

models used by politicians is to stage and take advantage of various hoaxes that are developing [17, 46].

According to our findings, the Indonesian information world will be filled with various hoaxes in the second half of 2021, which can be classified into four broad categories: issues related to Covid-19, Politics, Covid-19 Treatment, and abroad. In terms of distribution media, most hoaxes are spread via Facebook, WhatsApp, and Twitter. While manufactured content is the most common type of content, it is followed by manipulated content and misleading content.

Communication (both by the government and the community, as well as communication between communities) will run smoothly if hoaxes and other obstacles to communication are well understood. Propaganda efforts that cause agitation against society can be avoided. As a result, the media can continue to play an important role in educating and informing the public. Those who control the media no longer have a bad hand.

Based on these findings, the government has no light homework because creating and disseminating false content serves a purpose. The fact that the majority of the content is fabricated demonstrates that certain parties are surfing through the hoax that was created. They have political objectives, both short and long-term. This condition, if not managed properly, has the potential to make Indonesian society uncertain.

Another factor to consider is how the government should collaborate with social media application providers and messengers to develop algorithms that are appropriate for the Indonesian language. The facts show that, even though social media has implemented certain algorithm systems in their applications, it is still not optimal (if not a failure) to prevent the spread of hoaxes. The government should encourage application organizers to take a more serious approach to develop a system that can reduce the spread of hoaxes.

This study emphasizes the importance of understanding hoaxes that circulate in society. Hoaxes seriously disrupt communication and, as a result, people's understanding of an issue. Every time a government policy (in this case, COVID-19) is implemented, a slew of hoaxes spring up around it. These hoaxes were designed to mislead the public's knowledge and understanding of government policies, causing the government's communication with the public to fail. As a result, it is critical for the government to make efforts to minimize hoaxes that develop and respond to hoaxes that develop with counter-narratives so that government communication runs smoothly.

References

1. Kominfor, "Data Vaksinasi COVID-19 (Update per 23 Desember 2021)," *covid19.go.id*, 2021. https://covid19.go.id/artikel/2021/12/23/data-vaksinasi-covid-19-update-23-desember-2021.
2. R. L. Putri, "Indonesia Masuk 5 Negara dengan Penurunan Covid-19 Terbesar," *inews*, Jakarta, 2021.

3. C. Juditha, "2020. People Behavior Related To The Spread Of Covid-19's Hoax," *Perkommas*, vol. 5, no. 2, pp. 105–116, 2020.

4. S. Tasnim, M. M. Hossain, and H. Mazumder, "Impact of rumors or misinformation on coronavirus disease (COVID-19) in social media," *J. Prev. Med. Public Heal.*, vol. 53, no. 3, pp. 171–174, 2020, doi: https://doi.org/10.3961/jpmph.20.094.

5. C. P. Rodríguez, B. V. Carballido, G. Redondo- Sama, M. Guo, M. Ramis, and R. Flecha, "False news around COVID-19 circulated less on Sina Weibo than on Twitter. How to overcome false information?" *Int. Multidiscip. J. Soc. Sci.*, vol. 9, no. 2, p. 1, 2020, doi: https://doi.org/10.17583/rimcis.2020.5386.

6. J. Fetzer, "Disinformation: The Use of False Information," *Minds Mach.*, vol. 14, pp. 231– 240, 2004, doi: https://doi.org/10.1023/B:MIND.0000021683.28604.5b.

7. D. R. Rahadi, "Perilaku Pengguna Dan Informasi Hoax Di Media Sosial," *J. Manaj. Dan Kewirausahaan*, vol. 5, no. 1, pp. 58–70, 2017, doi: https://doi.org/10.26905/jmdk.v5i1.1342.

8. R. Firmansyah, "Web Klarifikasi Berita untuk Meminimalisir Penyebaran Berita Hoax.," *J. Inform.*, vol. 4, no. 2, pp. 230–235., 2017.

9. J. Haidt, "The emotional dog and its rational tail: A social intuitionist approach to moral judgment," *Psychol. Rev.*, vol. 108, pp. 814– 834, 2001.

10. D. A. Effron and M. Raj, "Misinformation and Morality: Encountering Fake-News Headlines Makes Them Seem Less Unethical to Publish and Share," *Psychol. Sci.*, vol. 31, no. 1, pp. 75–87., 2020, doi: https://doi.org/10.1177/0956797619887896.

11. S. Vosoughi and S. A. Deb Roy, "The Spread of True and False News Online," *Science (80-.).*, vol. 359, no. 6380, pp. 1146–1151., 2018, doi: https://doi.org/10.1126/science.aap9559.

12. F. Hinojo-Lucena, I. Aznar-Díaz, M. Cáceres- Reche, J. Trujillo-Torres, and J. Romero-Rodríguez, "Sharenting: Internet addiction, self- control and online photos of underage children. [Sharenting: Adicción a Internet, autocontrol y fotografías online de menores]," *Comunicar*, vol. 64, pp. 97-108., 2020, doi: https://doi.org/10.3916/C64-2020-09.

13. B. Ridout and A. Campbell, "The use of social networking sites in mental health interventions for young people: Systematic review," *J. Med. Internet Res.*, vol. 20, no. 12, pp. 1–11., 2018, doi: https://doi.org/10.2196/12244.

14. T. Khan, A. Michalas, and A. Akhunzada, "Fake news outbreak 2021: Can we stop the viral spread?," *J. Netw. Comput. Appl.*, vol. 190, no. 15, 2021, doi: https://doi.org/10.1016/j.jnca.2021.103112.

15. S. Talwar, A. Dhir, D. Singh, G. S. Virk, and J. Salo, "Sharing of fake news on social media: Application of the honeycomb framework and the third-person effect hypothesis," *J. Retail. Consum. Serv.*, vol. 57, no. 102197, 2020, doi: https://doi.org/10.1016/j.jretconser.2020.102197.

16. D. Orso, N. Federici, R. Copetti, L. Vetrugno, and T. Bove, "Infodemic and the spread of fake news in the COVID-19- era.," *Eur. J. Emerg. Med.*, vol. 1, 2020, doi: https://doi.org/10.1097/mej.0000000000000713 No Title.

17. D. W. Rasidin, B. Z. Y., R. F. P., and W. N., "SOSIALTHE ROLE OF GOVERNMENT IN PREVENTING THE SPREAD OF HOAX RELATEDTHE 2019 ELECTIONSIN SOCIAL MEDIA," *Diakom J. Media dan Komun.*, vol. 3, no. 2, pp. 127–137, 2020, doi: https://doi.org/10.17933/diakom.v3i2.76| e-ISSN: 2623-122 (online).

18. A. Budiman, "Berita Bohong (Hoax) Di Media Sosial Dan Pembentukan Opini Publik," *Info Singk.*, vol. 9, no. 1, pp. 17–20, 2017.

19. M. D. Molina, S. S. Sundar, T. Le, and D. Lee, "'Fake News' Is Not Simply False Information: A Concept Explication and Taxonomy of Online Content," *Am. Behav. Sci.*, vol. 65, no. 2, pp. 180–212, 2021, doi: https://doi.org/10.1177/0002764219878224.

20. T. Schellekens, A. Dillen, L. Dewitte, and J. Dezutter, "A Lay Definition of Grace: A Quantitative and Qualitative Content Analysis," *Int. J. Psychol. Relig.*, vol. 0, no. 01–23, 2020, doi: https://doi.org/10.1080/10508619.2020.1793593

21. H. F. Hsieh and S. E. Shannon, "Three Approaches to Qualitative Content Analysis.," *Qual. Health Res.*, vol. 15, no. 9, pp. 1277–1288, 2005, doi: https://doi.org/10.1177/1049732305276687.

22. K. Krippendorff, *Content Analysis. An Introduction to Its Methodology (3rd ed).*, 3rd ed. California: SAGE Publications, 2013.

23. P. Bellström, M. Magnusson, Pettersson., and J. Sören, "Facebook usage in a local government: A content analysis of page owner posts and user posts," *Transform. Gov. People, Process Policy*, vol. 10, no. 4, pp. 548–567., 2016, doi: https://doi.org/10.1108/TG-08-2013-0026.

24. O. M. Bafadhal and A. D. Santoso, "Mapping Hoax Messages of COVID-19 in Indonesia Accros Categories, Sources, and Types of Disinformation Komunikasi," *Bricol. J. Magister Ilmu*, vol. 6, no. 2, pp. 235–249, 2020.

25. T. Buchanan and V. Benson, "Spreading Disinformation on Facebook: Do Trust in Message Source, Risk Propensity, or Personality Affect the Organic Reach of 'Fake News'?," *Soc. Media + Soc.*, vol. 5, 2019, doi: https://doi.org/10.1177/2056305119888654.

26. BBC, "Coronavirus: Facebook alters virus action after damning misinformation report," *BBC*, 2020. https://www.bbc.com/news/technology52309094.

27. Facebook, "Here's how we're using AI to help detect misinformation." [Online]. Available: https://ai.facebook.com/blog/heres-how-were-using-ai-to-help-detect-misinformation/.

28. "Posing as Satire, Misinformation Spreads Quickly Online.," *Japantimes*, 2021.

29. F. Rahman and T. Faza, *WhatsApp Hoax: Why Do People Believe Them?* Yogyakarta, 2018.

30. J. Suminar and P. Hadisiwi, "Becoming a hoax buster in WhatsApp groups as an effort to limit the dissemination of misleading health information.," *J. Stud. Komun. (Indonesian J. Commun. Stud.*, vol. 5, no. 1, p. 58, 2021, doi: 5. 58. https://doi.org/10.25139/jsk.v5i1.2408.

31. D. Halpern, M. Piña, and C. Ortega-Gunckel, "School performance: New multimedia resources versus traditional notes. [El rendimiento escolar: Nuevos recursos multimedia frente a los apuntes tradicionales].," *Comunicar*, vol. 64, pp. 39–48, 2020, doi: https://doi.org/10.3916/C64-2020-04.

32. C. Breuer, J. Hüffmeier, F. Hibben, and G. Hertel, "Trust in teams: A taxonomy of perceived trustworthiness factors and risk-taking behaviors in face-to-face and virtual teams," *Hum. Relations,* vol. 73, no. 1, pp. 3–34., 2020, doi: https://doi.org/10.1177/0018726718818721.

33. V. A. Dihni, "Inilah 10 Negara dengan Pengguna Twitter Terbanyak, Ada Indonesia? Databoks.co.id. published," *Databoks.co.id.*, 2021. https://databoks.katadata.co.id/datapublish/2021/11/04/inilah-10-negara-dengan-pengguna-twitter-terbanyak-ada-indonesia%0A.

34. R. Carrasco-Polaino, M.-A. Martin-Cardaba, and E. Villar Cirujano, "Citizen participation in Twitter: Anti-vaccine controversies in times of COVID-19. Comunicar, n. DOI," *Comunicar*, vol. 29, no. 69, pp. 21–30., 2021, doi: https://doi.org/10.3916/C69-2021-02.

35. M. H. Nguyen, J. Gruber, J. Fuchs, W. Marler, Hunsaker, and E. Hargittai, "Changes in Digital Communication During the COVID-19 Global Pandemic: Implications for Digital Inequality and Future Research.," *Soc. Media + Soc.*, 2020, doi: https://doi.org/10.1177/2056305120948255.

36. N. P. Rahul De' and A. Pal, "Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice.," *Int. J. Inf. Manag.*, vol. 55, no. 102171, 2020, doi: https://doi.org/10.1016/j.ijinfomgt.2020.102171.

37. C. Wardle, "Fake News. It's Complicated [online] First Draft News.," 2017. https://firstdraftnews.com/fake-news-complicated.

38. H. N. Ilahi, "Women and Hoax News Processing on WhatsApp," *J. Ilmu Sos. Dan Ilmu Polit.*, vol. 22, no. 2, pp. 98–111., 2019.

39. C. Fuchs, "Social Media and the Public Sphere," *TripleC*, vol. 12, no. 1, pp. 57–101, 2014, doi: https://doi.org/10.31269/vol12iss1pp57-10.
40. A. Kaplan and M. Haenlein, "Users of the World, Unite! The Challenges and Opportunities of Social Media," *Bus. Horiz.*, vol. 53, pp. 59–68, 2010, doi: https://doi.org/10.1016/j.bushor.2009.09.003.
41. M. Martínez-Costa, J. Serrano-Puche, I. Portilla, and C. Sánchez-Blanco, "Young adults' interaction with online news and advertising. [La interacción de los jóvenes adultos con las noticias y la publicidad online]. Comunicar," *Comunicar*, vol. 59, pp. 19-28., 2019, doi: https://doi.org/10.3916/C59-2019-02.
42. J. Edo, C., Yunquera and H. Bastos, "Content syndication in news aggregators. Towards devaluation of professional journalistic criterio. [La sindicación de contenidos en los agregadores de noticias: Hacia la devaluación de los criterios profesionales periodísticos]. Comunicar," *Comunicar*, vol. 59, pp. 29–38., 2019, doi: https://doi.org/10.3916/C59-2019-03.
43. M. Schmid-Druner, "Disinformation and propaganda – impact on the functioning of the rule of law in the EU and its Member States," 2019.
44. M. T. Indonesia, "Hasil Sur vey Mastel tentang Wabah Hoax Nasional [online]," 2017. [Online]. Available: https://mastel.id/hasil-survey-wabah-hoax-nasional-2017/.
45. A. H. Samudro, "How Far the Authorities are Going to go on Tackling Political Motive Hoax Spreading.," *J. Kertha Patrika*, vol. 43, no. 1, pp. 14–36, 2021.
46. C. Ireton and J. Posetti, "Journalism, 'Fake News' & Disinformation," France, 2018.