

# Buzzer Works on Human-Machine Agency Role in Securing Indonesia's Voters Precinct

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**Keywords:** Buzzer; Political Algorithm; Polarization; Trending Topic, Human-Machine Agency.

**Abstract:** This paper investigates political polarization observed on Twitter during the 2019 Indonesia presidential election to illuminate a complex and organized human-machine interaction driven by the personalized algorithm and its impact in securing designated voters. In this research, the theory of Interactive Media Effects (TIME) leverages to verify that personalized algorithm provides a myriad opportunity for buzzers to commercially politicize using the bot as machine agency in targeting undecided and swing voters for a Trending Topic Operation. An autonomous application NodeXL and Twitter API successfully acquired 328.474 tweets as the source for social network analysis. Snowball technique in obtaining data interviews from 6 field experts served as triangulation along with related literature support. A study on the 2019 Indonesia Presidential election revealed that buzzer activity played a significant role in securing votes by deceiving the Twitter algorithm. The human agency has proven more impactful than machine agency in creating trending topics. Findings also show that bot use was still widespread among 2019 Indonesia presidential candidacies. These findings redefine the electoral voter's sphere in Indonesia as the new promising precinct emerged and raise further concerns of the possibility of instigating a specific behavior through manipulating one's political preference.

## 1 INTRODUCTION

On April 17, 2019, 192 million Indonesians who were eligible to vote in a general election chose the nation's destiny. In an essential democratic exercise, presidential, parliamentary, and regional elections are conducted simultaneously on the same day for the first time in history. Current President Joko Widodo is running against former military commander Prabowo Subianto in this election.

The Elections Commission reports that approximately 80 million individuals, or 40% of eligible voters, are between 17 and 35. Because young people are the most crucial voters, social media is the best method to reach them. In Indonesia, social media reigns supreme (the nation has the world's fourth-largest Facebook user base). Since the election, the country has been plagued by fake news problems, with political false news and disinformation rising by 61 percent between

December 2018 and January 2019. Despite Facebook's dominance, Twitter has been extremely popular among social media users throughout election season owing to its ease of sending political instructions and reachability via trending topics. Political participation, for example, has changed as a consequence of social media. Because of changes in the platform for political mobilization, the emergence of uneven distribution of media power, and a flood of information on a mobile phone, some campaigns utilize crowd mobilization as an offline tactic, while others use a virtual environment platform. (Akmaliah, 2018). The massive number of social media users, coupled with a lack of digital literacy, further obscures the purpose of social media; in reality, many have a negative effect owing to the abundance of false and untrustworthy news.

Political interests and propaganda of contemporary political objectives are often expressed via social media through sponsored tweets,

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sometimes known as the buzzer. When Twitter burst in popularity in 2006, the term "Buzzer" became well-known. Along the process, Twitter coined new terms such as netizens, followers, influencers, twitwar, and buzzers, which became popular in 2009 for brand promotion. Since then, social media usage in Indonesia has skyrocketed, as has the flow of information in the media (Dimedjo, 2019). Twitwar especially (means of combating issues through social media) driven by the buzzer, on the other hand, has begun to emerge, polarizing, and dividing society by bringing up the subject of religious and racial feeling (SARA), which was previously deemed taboo in political contestation in Indonesia.

During the 2019 election season, there were two types of buzzers: volunteer or unpaid buzzers and paid buzzers who received specific requests. (Saraswati, 2018). According to research was done by the Center for Innovation Policy and Governance (Camil et al., 2017), the buzzer generates in two ways, naturally and organically driven by market demand. There are two main reasons why a specific person or account is buzzing. The flow of money defines commercial incentives, while ideology or a feeling of fulfillment defines volunteer incentives.

The presence of a political buzzer has divided the two sides, with supporters of Jokowi called "*cebong*" and opponents branded "*kampret*." The buzzer highlights the problem of insults, hate, and provocation aimed at one another by the two groups, who are progressively separating themselves from the intended democratic atmosphere.

A method for trending topics is part of Twitter's algorithm. The buzzer works by distributing news and tricking trending algorithms, then filtering the content that shows on a user's account page depending on views and likes. The number of posts and re-posted (retweeted) in a given time by netizens from various geographic areas, and a minimum of about a thousand tweets at the same time within the scattered area tagging are some of the criteria by which one can create trending topics at the national level in a short period. Furthermore, network functions such as muting, unfollowing, and unfriending are linked to polarization. Only those who have the same viewpoint will be addressed. Because of this, both *kampret* and *cebong* arise.

Another research conducted by Samantha Bradshaw and Philip N Howard (Bradshaw, n.d.) revealed that buzzers are utilized in Indonesia for engagement behaviors, tools, and resources for propaganda distribution. One of the ways for negating the message you want to magnify is to use a bot. The buzzer will communicate bot account tales and use automated accounts. Bot accounts will create posts

from unknown sources. Once information is made public, it gets picked up by influencers and buzzers.

We discovered that a study on buzzer activity in the Indonesian presidential election restricted the reach of social media and its polarizing effect. Based on this context, we examine how political commercial and volunteer buzzers work in Twitter and the use of human and machine agency interaction to secure voter choices.

## 2 LITERATURE REVIEW

### 2.1 Online Disinhibition Effect on Political Interest

The concept of a new public sphere, popularized by Jurgen Habermas' book *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society* (Habermas, 1989), is essential to begin the literature review of this research because it explains the concept of space created by a collection of people. Specific individuals (private individuals) seem to have been formed as a kind of attitude against governmental authority. A public place free of ruler dominance appears to be worthy of being incorporated in an internet that is readily available and free of state and commercial constraints, allowing people to engage in political discussions. The low degree of political literacy and reading culture in Indonesian society adds to the negative aspects of social media. It is elementary to spread false news or hoaxes. Hoax news spreads fast via the fingertips of regular people who don't know what information he just delivered by exploiting the innocence of ordinary people. This is due to people may communicate something in the realm of media that is socially impossible in real life. It also demonstrates the user's lack of self-control on social networking, known as the online disinhibition effect: the ability to freely communicate anything you want to say (Suler, 2017). The use of social media to disseminate information to the public or voters in elections is seen as an effective and crucial step, particularly in shaping political opinion and agenda-setting (Woolley & Howard, 2018). However, though social media has a significant impact on voter political engagement, it impacts political knowledge (Dimitrova et al., 2014). The presence of social media in political campaigns in Indonesia has altered the tactics and strategy of winning both 2019 presidential and vice-presidential candidates, as shown by the development of a dedicated team that handles social media. The use of social media as a channel for community members to

communicate during social and political protests can potentially upset the status quo by changing policies or causing structural changes. The Arab Spring in 2011 was an example of a regime's demise due to social media encouragement (Tufekci, 2017) by allowing for public involvement, which social media aids movements are calling for political change (Lim, 2012). As a media tool, Twitter disseminates general information acquired by the community and most impact political change via opinion formation through a hash mark (#hashtag), which canonicalize the subject, concentrate on themes, and assist internet-based search engines (Syahputra, 2017). From here, the dominance of online political discourse on social media, more or less influenced by the resources owned by each political party. Thus, it is not surprising that political figures from major political parties often dominate political discussions online or on social media (Klinger, 2013).

## 2.2 Algorithm and Polarization

In general, three aspects become the main focus of research in the parties/candidate's category: the characteristics of political parties or candidates who use Twitter as a political medium, how they use Twitter as a political medium, and the effectiveness of using Twitter as a political communication tool by them (Jungherr, 2016). Moreover, Twitter is used by politicians to produce a high buzz effect that the mainstream media can amplify. In this case, tweets are more of a reactive action and not a tool to predict the contest (Murthy et al., 2015). Twitter becomes a location that is regarded as the most appropriate for gossiping even in cyberspace due to the social aspects of people who want to gather and talk, debating rumors or problems (Pohjonen & Udapa, 2017). The gossip arena in cyberspace sometimes turns into war. For instance, Twitter accounts affiliated with presidential candidates such as @GarudaPrabowo, @Gerindra, @Jokowi4me, @PDI\_Perjuangan, @Relawan\_Jokowi, @FansGerindra, and other accounts are often seen debating online (twitwar). Not to mention communally managed accounts like @PartaiSosmed, @99army, @Triomacan2000, who are part of the campaign interests of the presidential candidates, are often involved in twitwar defending their presidential candidate. Hashtags are in close relation to an algorithm. In simple terms, the algorithm works in two stages: (1) knowing tastes and preferences of social media account owners which data can be found from various activities on social media such as clicking, searching, or share social media content to provide content according to your

sense of humor, liking, phobias, and even sexual tendencies, and (2) the algorithm engine works by classifying people who have in common: tastes, ideologies, phobias, and so on.

Simply put, like-minded ideologies and tastes are put together. The existence of traditional propaganda containing lies and misinformation spread online is powered by social media, in this case, Twitter algorithms (Woolley & Howard, 2018). Further, lack of control and ambiguity about algorithmic assessment may create algorithmic anxiety as individuals are labeled and categorized by the machine (Jhaver et al., 2018). Another negative consequence of an algorithm is the Filter Bubble that separates a person through personalization which may undermine the internet's initial function as an open platform for exchanging ideas, leaving us all in an isolated, echoing world. The filter bubble also creates a false consensus effect; that is, a person tends to claim that others agree with him, and conclude his opinion is the majority's conclusion (Pariser, 2011). The harmful effects of filter bubbles are getting worse due to the bad habits of netizens and media. The media likes to make bombastic titles (clickbait), and netizen's practices to share content without thorough reading played a role in the enormous effect of this bubble.

## 2.3 Buzzer Activity

Buzzer activity in Indonesia began to be used in 2009 for promotional interests. Buzzer involvement in political events started used in 2012 during the political contestation of the DKI Jakarta Pilkada. On 2014 presidential election, the use of buzzers is increasingly being used in the political arena 2014 Presidential Election. Buzzer involvement in political campaigns has contributed negatively to the image and the meaning of society towards the buzzer. Buzzers produced negative content and even hoaxes on social media (Camil et al., 2017). Even after the Reformation Order, the internet is still seen as one of the media over which the government has little influence in terms of social and political problems (Setianto, 2015).

### 2.3.1 Types of Buzzers

Based on the motive (Camil et al., 2017), buzzer can be divided into three, namely: (1) professional commercial buzzer, which indicated by the flow of funds, motives are purely for money and has nothing to do with ideological or personal principles, also have good command technical and reading skills

well, (2) voluntary ideological buzzer or neutral buzzer works on an equal of ideological, political views and goals to create a better situation for himself and society, (3) paid ideological buzzer, which support for one of the presidential candidates by focusing more on winning the presidential candidate where there is monetary reward for being obtained.

### 2.3.2 Human-Machine Agency

The nature of human communication alters as they utilize media. Communication takes on new forms, speeds, processes, scales, and even content due to media. Every kind of media has the potential to influence the user. Mass media is more than simply a medium for gathering and disseminating information that has the potential to affect viewers' ideas and behaviors. It is not enough to study the contents of the media to assess their effect; it is also necessary to examine themselves and the character of the media itself (McLuhan, n.d.). (Shyam Sundar, 2008) discovered that the present machine agency plays a more prominent role as an agent in determining the message, which is now more decided by an algorithm. Sundar's research has resulted in the proposal of a dual framework, a synergy between human and machine agency, with the application of Theory of Interactivity Media Effects (TIME) to investigate symbolically and allows the ability of media effects powered by AI on user perception and experience. TIME is based on four interactive media models, namely: (a) The Interactivity Effects Model, (b) Agency Model of Customization, (c) Motivational Technology Model, and (d) Modality-Agency-Interactivity-Navigability (MAIN), which set the TIME signal route. Together these four models serve to explain how interactive media technologies shape perceptions of online action.

The term interactive in the context of media refers to to users who can intervene directly and can change the images and text they access. In new media, the audience becomes a user compared to a viewer (audience) or becomes a reader. TIME argues that the nature of user engagement depends on the mediators involved in specific interactions (Sundar et al., 2015). Buzzer's action plays the human agency's role by using bots (machine agency) during message amplification. Bots (machine agencies) are used as part of an amplification strategy towards trending topics. Humans create bots. Bots are also designed to interact with each other as if functioning as a regular Twitter account. Commercial buzzer teams deploy programmed bots (robots) to add tweets per minute/hour and are expected to keep going up. Bots

Table 1: Four Interactive Media Models (The Handbook of the Psychology of Communication Technology, 2015).

The Interactivity Effects Model	Agency Model of Customization	Motivational Technology Model	Modality-Agency-Interactivity-Navigability (MAIN)
Source interaction leads to more user engagement significant (contribution) with the media by increasing user capabilities to customize, curate, and create content	Contingency-enhancing interactions, modalities, and navigation capabilities messages, self-acknowledgment, and individual exploration that serve to increase self-recognition as a news source	Navigation, interaction, and customization capabilities on greater intrinsic motivation by increasing user competence, interconnectedness	Interfaces of modality, agency, interaction, and navigation capabilities that makeup perception and user experience by using cognitive heuristics about content quality and credibility

that have followers and follow each other seem to be involved in a natural chat/conversation so that the conversation is recorded continuously, rotating mutual interaction between them until the number of discussions up and can become a trending topic. Professional buzzer teams take advantage of trending topics to assign hashtags #, attack/tweet simultaneously at almost the same time, and playing with public emotions to gain viral tweets.

## 3 RESEARCH METHOD

To achieve the purpose of this study, we conducted social network analysis using autonomous application NodeXL and Twitter API acquiring 328.474 tweets for analysis. This study employed a qualitative descriptive approach, which was preceded by exploratory research. To complete literature study, we deploy snowball technique, a technique for locating, selecting, and sampling in a continuous network or chain of relationships. To collect data from informants, we begin by conducting interviews with informants we have been appointed with. We requested a recommendation from the first informant, whoever informant was available for the consultation. In this instance, we will conduct in-depth and structured interviews with the Presidential Candidate 01 Jokowi-social Amin's media team. Structured

interviews were conducted with key informants (team controllers/coordinators), key informants (the commander of the team that runs the bot), and the buzzer team located throughout western Indonesia, central Indonesia, and parts of eastern Indonesia.

Additionally, in-depth interviews were performed with key informants of the presidential candidate 02 Prabowo-social Sandi's media team coordinator. This is done in order to obtain information on the balance. Additionally, informants or resource persons interviewed originate from social media observers and activists and prominent data activists who serve as opinion-makers. Additionally, data triangulation interviews with observers / digital communication professionals will be done to ascertain data confirmation and dependability.

## 4 RESULTS AND DISCUSSION

### 4.1 The Buzzer's Existence

From Twitter data processing, researchers gathered 328.474 tweets as the source for Social Network Analysis. Researchers also interviewed key informants such as political buzzer coordinators and experts in media to do triangulation. From here, it is known that most of the buzzers are recruited from grassroots voters who bear the exact preference of choice in the 2019 Presidential Election contestation. Organic volunteers are recruited through introductions between friends in the same profession and organization. The buzzers were recruiting in stages to fulfill one strategy: establishing a 7500 Twitter account from Aceh to Gorontalo. From here, these 7500 accounts will be targeting to set 1000 accounts for each account (downline), projected to secure in total 7,5 million voters (including undecided and swing voters). The role pattern of these buzzers aims to create a smooth transactional information form up to the bottom simply. A facility such as a salary and an internet quota are provided. Its mission is to establish a dependable image and deliver positive messages to the candidates. Aside from the buzzer team that played a role on the positive side, it is also known that another one played on the dark side. This team specially recruited specialized information technology skills to control a bot (machine) and read through an algorithm. However, some buzzers recruited voluntarily, consisting of professionals in media and digital technology put together under one organization. This organization aimed to target voters' precinct weakness of one candidate and volunteered to provide voice support

for social media operations, especially Twitter. Militancy is not only built from official consolidation in the campaign team but also Indonesia-wide buzzer network. The result of triangulation shown that all teams have recruited cyber troops and bot. The number of cyber troops and bots from Presidential Candidate 01 Jokowi is more than Presidential Candidate 02 Prabowo. Moreover, the pattern of cyber troops and bots for Presidential Candidate 01 is more spread and fluid in various topics, while the bot and cyber pattern of Presidential Candidate 02 is more centralized and militant.

### 4.2 Trending Topic Operation

Buzzer mechanism needs to work and succeed at Operation Trending Topic (OTT). This operation uses the hashtag to categorize messages. If a hashtag fulfills specific requirements, it may be featured in the most popular trends (trending topic) list in the Twitter timeline. One of the indications that a hashtag is trending is a rise in the number of tweets over a specific time period rather than the overall number of tweets using the hashtag. Trending topic algorithm based on how many hashtags were mentioned in tweets in a short period of time. For example, a hashtag reached the hot topic list because it was referenced in messages (including retweets) in 3K tweets within an hour. However, during the following hour, that hashtag was used 3000 times in tweets. Despite the large quantity, Twitter considers it to be a constant. On the other hand, if a new hashtag emerges and is referenced in a thousand tweets within an hour, that hashtag will become trending. Placing a hot topic on Twitter is a technique for winning over the masses' psychology in the 2019 *Pilpres* contest. As it displays which hashtags are being spoken about by tweeps, Twitter's Trending Topic column is often used as a battlefield for political topics. The trick is to comprehend the algorithm that Twitter employs. The positive-message buzzer team is assigned to create trending topics with the ability to 7500 organic accounts carried positive messages and the buzzer team on the dark side spreading negative messages of opposing candidates. This technique is called an operation is known as Trending Topic Operations (OTT: *Operation Trending Topic*). This research also unfolded that the buzzer team has no standard method or strategy for using hashtags to the target trending topic. They only interpret the Twitter algorithm by closely monitoring it and relying on tactile experiences. Generally, carrying out the Trending Topic Operation (OTT) requiring four work patterns, namely: (1) ripple or wave system that moves based

on local issues, for example, a presidential candidate is visiting a particular area, the buzzer team in that area becomes the conversation leader on Twitter and then followed (retweet, comment) by teams from other regions, (2) a central system (blasting), where this system made one narrative that moves simultaneously, for example, the Jakarta buzzer team sends the same narration to 7500 accounts and is immediately blasted simultaneously by all accounts in the same time, (3) the shift system, which is used to maintain trending topic, where the system is carried out in turn by each region, coordinating with the head office in Jakarta to maintain trending, and (4) conversation strategy, i.e., making interactions between Twitter accounts, mentioning and greeting each other. Through Twitter API, we successfully gathered 328,474 Twitter accounts, with a total of 27,635 hashtags for Social Network Analysis (SNA) a week before voting day, from 10 to April 16, 2019, aiming to investigate the general behavior of two presidential candidate campaigns as follows:

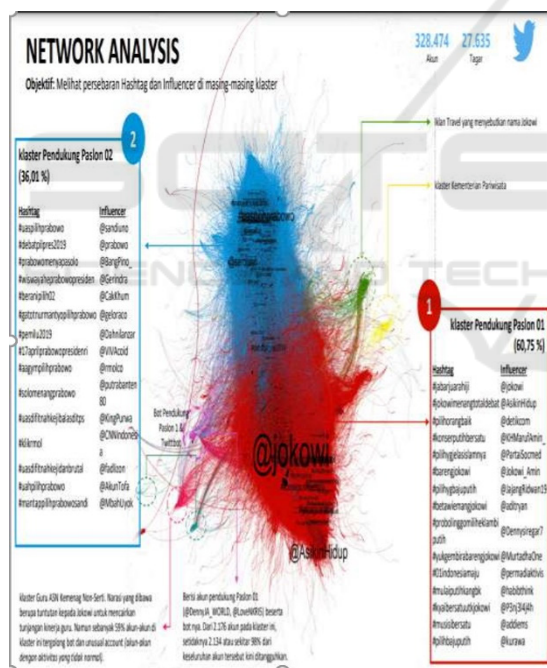


Figure 1: Social Analysis Networking result of two candidacies.

From figure 1, the cluster tweet of presidential candidate 01 (Joko Widodo - Ma'ruf Amin) supporter is marked in red, while the presidential candidate 02 (Prabowo Subianto - Sandiaga Uno) supporter is marked blue. Further, we analyzed the cluster formation and connections to see the interaction among these accounts independently.

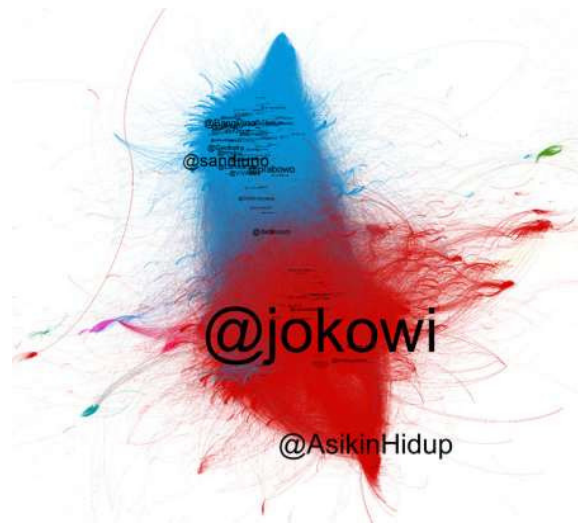


Figure 2: Interactivity among the cluster

The above hashtag-less network visualization shows that interaction between accounts in the presidential candidate 02 cluster is more solid than the presidential candidate 01. The interactions that occur between accounts in cluster 02 tend to be more intense. On the other hand, accounts in cluster 01 tend to be split with the central cluster as the center and connected to the clusters of the smaller ones. This indicates that there are small groups in this cluster. Small groups may form due to differences in discussion in each small group. Our view is that cluster 01 is formed from many *driving groups* (presidential candidate social media team) on Twitter.

This research also found an interesting paradox that significantly elevated our perspective on voters' precincts in Indonesia. A monthly Political Indicator Institute survey in January 2019 stated an exciting finding that Twitter is one of the platforms rarely used by Indonesian netizens compared to Whatsapp, Facebook, and Instagram. If referring to the National Survey Release of this indicator, the relation of electability opportunities with each other's hashtag wars of presidential candidate supporters is even more challenging to measure. Twitter echo and counts are still minimal (only 2% of total social media users in Indonesia). However, the presidential election-winning strategy doesn't always talk numbers in quantity, but there are also quality considerations. For the Jokowi-Amin 01 Presidential Candidate winning team, this strategy is somewhat successful. The selected political communication approach is to dominate the hot issues or establishing trending topics on Twitter. One of the reasons is that trending topics on Twitter, which is typically a subject of discussion on social media, generates a

resonance of information that travels across platforms. This may happen due to the user segments of these channels who post on other social media. In addition to being a trending topic, interesting tweets often become references, angles, or quotations from traditional media such as newspapers, television, online media, and numerous other social media. Trending Topic Operation has taken propaganda to a new level and been linked to the general process of socialization. From the expert's perspective, OTT is one of the keys to success in winning votes in the Presidential Election, especially among millennials. Undecided voters can also be affected by the trending topic. The massive number of social media users, coupled with a lack of digital literacy, further obscures the purpose of social media; in reality, many have a negative effect owing to the abundance of false and untrustworthy news. Persuasion is seen as an individual psychological process, a mass message, and an intended audience is a large number of people (O'Shaughnessy, 2004). Social media is an "echo chamber" that prevents the interchange of ideas and critical thought since users are not seeking opposing information but rather any material that confirms their viewpoint. This phenomenon is rather problematic from a unity perspective.

### 4.3 The Agency of Change

The machine-human interactivity shown in bot and human accounts describes the form of interaction that widens its effect on the media. It affects the communication psychology of its users and poses significant consequences for knowledge, attitudes, and user behavior in real life. The most striking change brought by interactive features is active users who are passive recipients of media messages. They are empowered to perform various actions through the media, participate in construction messages they consume, and engage across multiple interaction activities. This model is used as one of the strategies of the presidential candidate support team to grab the top spot in trending topics. Their strategy calls it a "conversation" strategy or greets each other between the group and systematic and measurable arrangements that provoke other Twitter users to respond, which is seen as natural by the Twitter algorithm. The use of artificial intelligence of bots to create counter-message, respond to specific issues, and initiating twitwar, has been widely used by both presidential candidacies. The bot will infiltrate the opposite candidate side to interact naturally in their cluster while assuming their essential task; to prevent the cluster from establishing a trending topic. The

actors consisting of organic accounts (human agency) and bots (machine agency) support each other with various strategies that are determined in stages. Individual organic accounts and bots create respective threads in the form of a new narrative, reply, retweet, and like to achieve the target goal, namely trending topic.

## 5 CONCLUSIONS

In the research conducted, we concluded that the buzzer's actions managed by the team of each presidential candidate impact the number of voters, especially those who have not found a choice (undecided voters) and who still have not made a choice (swing voters). The condition resulted in the promising massive voter's precincts by deceiving the Twitter algorithm. The human agency played an essential role in creating trending topics, being unable to stand alone, and interacting with the bot as a machine agency to amplify the messages. Its use was prevalent among 2019 Indonesia presidential candidacies. Findings also showed that after the 2019 presidential election, polarization was unavoidable as the result of the election. The stigma of *cebong* and *kampret* is deeply rooted at the grassroots level and hardly vanishes. Prabowo Subianto and Sandiaga Uno, who have joined in Jokowi's cabinet, should have been one way to cease differences. But there is no actual movement to extinguish polarization at the grassroots. This fact shows that the behavior of voters who are frantically defending their decision is just a method of play for elites, including accessing people's brains via digital media as a buzzer. All in all, the condition may cause polarization to persist, and it is not inconceivable that it will become a bomb at a critical time.

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