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COMMUNICATION NETWORKS ANALYSIS ON INFORMATION DISSEMINATION OF THE MOVING OF CAPITAL CITY FROM JAKARTA TO EAST KALIMANTAN

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ABSTRACT

Jakarta as the state capital of Indonesia faces complex problems in daily life, especially those related to high population density, urbanization, traffic congestion, natural disasters, and severe environmental conditions. These problems are becoming justifications for the need to move the country's capital to East Kalimantan as decided by the government. East Kalimantan was chosen as the new capital, based on the results of intensive studies, having very minimal disaster reserves such as floods, earthquakes, tsunamis, forest fires and landslides. East Kalimantan is also considered to have a strategic location. If drawn coordinates, its location is in the middle of Indonesian territory, and is near urban areas. Dissemination of information about those planning is done through various communication networks, including on social media. This study aims to identify the dominant actors in communication networks on Twitter with the hashtag #IbuKotaBaru

during the periods of August 1 to September 22, 2019. The study was conducted using quantitative approach by employing GEPHI tools. The results revealed that in the #IbuKotaBaru communication network, there were three dominant actors who actively disseminate the relevant information namely detikfinance, yulionta and derupiston. The most popular actor was detikfinance. There are 63.33% of actors who have a high closeness with other actors, there are no actor who mediate with other actors in communication. Yulionta and Derupiston are the two most important actors in disseminating information about the move to new country's capital in the #IbuKotaBaru communication network as indicated by its highest values of Eigenvector Centrality.

INTRODUCTION

The overpopulated of the Province of Special Capital Region of Jakarta causes the complex of problems in daily life, including those that related to urbanization, traffic congestion, economic disparity, environmental quality, disaster risk and other social problems. Geographically, Jakarta is located on a coastal area, in which become estuary of 13 rivers, making it vulnerable to flood disasters that can disrupt government and business activities. Those situations have the disruptive effects leading to environment that less conducive to the administration of the central government, thus, it is necessary to move the location of the Capital to outside of Java.

The plan to move the Capital of Indonesia has ever been done by President Suharto's administration (new order government) to the Jonggol region, Bogor, which is located 60 km from Jakarta, but failed along with the fall of the regime due to 1998 reform movement. On April 29, 2019 President Joko Widodo announced plans to move the Capital out of Java. On August 26, 2019, the president announced the more detailed information, that new Capital of Indonesia would be located at the administrative regions of North Penajam Paser Regency and Kutai Kartanegara Regency, in East Kalimantan Province. The reason for choosing this location is due to that it geographically located "in the middle of Indonesia", historically has relatively low evidence of natural disaster risk, and close to the developing cities of Balikpapan and Samarinda, with "relatively complete infrastructure". Following those announcement, the government would immediately draft a law for moving the Country's Capital to get approval from the House of Representatives. The construction of a new Capital

will begin in 2020, and the moving to the new capital city will be carried out in stages starting from 2024.

The plan to move the country's Capital raises to pros and cons. Communities response to the plan can be observed from the different social media, among them on the communication network on Twitter with the hashtag #IbuKotaBaru. There are many actors involved in the #IbuKotaBaru discussion.

This study aims to identify the dominant actor in information dissemination about the new Capital in the communication network via Twitter with the hashtag of #IbuKotaBaru. Research conducted at the actor level with observed parameters comprise of the popularity of actors in the network (degree centrality), how close an actor is to other actors in the network (closeness centrality), the position of the actor as an intermediary of the relationship between one actor and other actors in #IbuKotaBaru (betweenness centrality), and measure how important people who have a network with actors (eigenvector centrality).

CONCEPTUAL FRAMEWORK

As social beings, humans need the presence and establish contact, communication and relationships with others, with or without certain goals. Contact between one person and another person will form a communication network. Humans live in a network, both in small networks whose members know each other, close, and interact with each other, as well as in broad networks where involved many members that may not know each other. Communication can be done directly through face to face, or indirectly through media or communication technology. Communication via the internet using social media such as Facebook, Twitter, Instagram and others, allows us to enter into an even bigger network.

Social media platform that is used in this study is Twitter. This platform was founded in 2006, and dedicated as a virtual personal interaction, which brings hundreds of millions of users through the minimalist model of microblogging. The concept of "following" users without mandatory reciprocity, combined with a very open application programming interface (API), make it the perfect tool for the analysis of online actions (Grandjean, 2016). Virtual public space is a place where the public aspires their opinions towards recent public issues and the following public measurements. This wider use of social media has encouraged a number of researchers to research Twitter in exploring the other potentials of the platform as well as exploring new knowledge about people's online behavior multidimensionally, interdisciplinary, globally or within Indonesia. As a few examples of research related to Twitter usage, such as: crowdsourced disaster management in Indonesia (Carley, Malik, Landwehr, Pfeffer, & Kowalchuck, 2016), its application in responding Urban Flooding in Depok City Indonesia (Mansyur, 2020), health surveillance (Aramburu, Berlanga, & Lanza, 2020), Riots in England (Panagiotopoulos, Bigdeli, & Sams, 2014), and many others.

The main aspect examined in this study is the network. A Twitter social media account that belongs to someone or an organization is symbolized by a node and is called an actor. Relationships between one actor and other actors can be represented in a line, then interaction between members will be drawn as a network (Eriyanto, 2014). There are several studies that use this social network analysis method, such as Foresight and Modelling for European Health Policy and Regulations (Uhl, Kolleck, & Schiebel, 2017), examining social media sustainability (Ballestar, Cuerdo-Mir, & Freire-Rubio, 2020), mapping digital humanities (Grandjean, 2016), examining social movement (Isa & Himelboim, 2018), examining the use of social media by The Government of Indonesia (Idris, 2018), and of course there are still many other relevant studies.

The study of communication networks illustrates the relations of actors (person, institutions, companies, countries, etc.) with each other in certain social structure. There are two main

keywords of communication networks, namely actor from the micro point of view and how these actors interact (Eriyanto, 2014). An actor is represented by a node in the network. A path will connect between node, and thus network can be defined as a set of actors who have relations with other actors in certain types of relations.

Communication networks consist of individuals connected by patterned communication flows (Rogers & L. Kincaid, 1981). Likewise Hanneman and McEver stated that communication networks are exchanges of information that occur regularly between two or more parties (Djamali, 1999). The communication network is a structural aspect of a group, the network explains to us how groups remain united or bound to one another (Leavitt & Bahrami, 1988). Communication network analysis is used to describe the communication structure and position of actors in the network.

The network analysis allows us to identify the structure of a network, how members in a network interact closely and intensively. This method is also used to describe the position of an actor in the network structure, such as who is the most decisive party in the network, who play as intermediary between one actor and others in the network. In this context, position is associated as an actor's place in the interaction traffic of communication networks.

A social or communication network is a constellation that can be represented by nodes and links. A node or vertex, also known as an actor is the fundamental unit of any network, including social network. Nodes are found across social media platforms such as users on Twitter, Facebook, Instagram. A link on social media is a symbolic connection between two nodes. A link on Twitter can be represented by different types of social ties, such as follow, retweets, or replies, and therefore, a link may not necessarily be mutual. Network analysis measures patterns of those interactions, the overall structures of the network, and their implications.

Social network analysis (SNA) provides a visualization to the smallest relationship that occurs in one actor with another actor in the network. This SNA method can also be used to identify patterns of relationships between nodes or actors, including to identify the node or actor that

has the most influence in the network by determining the central node or actor in a network. By employing the graph theory, centrality can be measured quantitatively expressed as an index indicates which node takes up critical position in one whole network.

At the actor level, the most frequent analysis employed is to measure centrality that comprise of the degree centrality, closeness centrality, betweenness centrality and eigenvector centrality. Centrality is an index that shows which nodes play critical positions in the entire network (Scott, 2000). Central positions always associated with remarkable leadership, good popularity or excellent reputation in the network (Luo, 2010). The degree of measurement of centrality consists of various degrees of individuals in a sociogram that can show how closely connected certain individuals are with their environment. A higher centrality value means that the actor has closer relationship to the centre of the network, that higher power, influence, convenience from the network he/she may acquire. The degree of centrality represents the popularity of actors in social networks. Degree can be indicated by the number of links to and from the actor. Theoretically, the maximum number of degree centrality for actors is N-1, in which N represents the number of actors in the network. If there are 100 actors in the joined in the network, then the maximum link for an actor (node) is 100-1 = 99, it shows that the actor is contacting with (outdegree) or contacted by (indegree) of all actors in the network. The common used measure for centrality comprise of degree centrality, betweenness centrality and closeness centrality (Freeman,1978).

Degree centrality measures the extent to which a node is connected to the nodes adjacent to it (Freeman 1978). The degree centrality in a network graph is measured by the formulae $CD(n_i) = d(n_i)$, in which $d(n_i)$ denotes the number of interaction of a node with other nodes in a network. A node's in-degree and out-degree centralities represent the degree to which the node is a receiver or sender of information from or to the node's neighbors, respectively. A node's in-degree centrality is an indication of the node's accessibility to information, while

out-degree centrality is an indication of the node's control over a network and of the dependence of the network upon the node.(Wasserman and Faust 1997).

Closeness centrality measures the distances of a node to every other node in the network (Freeman 1978). Distance is defined as the number of intermediaries, which two nodes have to go through to communicate. Closeness centrality reflects the extent to which the network is concentrated around one node, and thus reflect of its dependence/ independence. If the length of node N's shortest paths with other nodes in the network is small, then node N has a high closeness centrality. The fundamental formula CC is equation $CC(n_i) = [N\text{-}1/\Sigma\ d(n_i, n_j)]$, where N denotes the total number of nodes in the network and $d(n_i, n_j)$ denotes the number of shortest paths connecting the node n_i and n_j. Closeness centrality measures which actor is the fastest in reaching all other actors in the network, both directly and indirectly through other actors' intermediaries. Actors who are at the center of the network, associated with a higher likelihood of having higher value of closeness centrality compared to actors who are on the periphery of the network. However, actors with a high degree of centrality do not necessarily to have a high closeness centrality index. The value of closeness centrality is between 0 and 1, where the greater the value indicates the closer distance of the average actor to all other actors in the network.

Betweenness centrality measures the extent to which a node plays the part of a coordinator of different nodes' activities by controlling the information flowing between them (Freeman 1978). If one node locates in the only way which others nodes have to go through in the network, then this node play a critical role in the network in that they keep the network together, and very likely have a high betweenness centrality. The quantitave measure of Betweenness centrality $CB(n_i) = \Sigma g_{jk}(n_i)/g_{jk}$, where $g_{jk}(n_i)$ denotes the number of shortest path from node j to node k that through node I and g_{jk} represents the number of shortest path between 2 nodes in the network. Betweenness centrality measure is important, because it relates to the control and manipulation of information. Actors who have positions as

intermediaries for other actors can determine the membership of actors in the network. Betweenness centrality takes the value between 0 and 1, which is the greater the better.

Eigenvector centrality is a measure of the influence of a node in a network. It indicates how important an actor in the communication compared with other actors in the network that may take the value between 0 and 1. It refers to how important or how popular an actor in the communication network. Actors who have a high level of popularity will also have high eigenvector values.. Relative scores are assigned to all nodes in the network based on the concept that connections to high-scoring nodes contribute more to the score of the node in question than equal connections to low-scoring nodes. A high eigenvector score means that a node is connected to many nodes who themselves have high scores. The formula for Eigenvector centrality $C_i(\beta) = \Sigma(\alpha + \beta_{cj}) A_{ji}$, and $C(\beta) = \alpha (I-\beta A)-1A1$. Where α denotes the normalization contant, β denotes node weight, A is adjacency matrix, I denotes identity matrix, A1 is the original matrix. The value of β is the radius of power of a node. If β is positive, then it has a high centrality and is connected with people who are in central position. The negative value of β indicate that the node has a high centrality but is connected with nodes who are not in central position. Eigenvector centrality is a variable used to evaluate the influence or authority of a node on a network, or in another expression, is the relationship between a well-connected user and other well-connected users on a network (Riquelme & González-Cantergiani, 2016).

METHODOLOGY

This research uses a social network analysis approach, where network visualization is modeled using the undirected graph. Communication network is a set of actors who have relations with other actors in certain types of relations (Eriyanto, 2014). There are two main keywords in the communication network, namely actors and relations. The communication network sees the phenomenon from the micro side, namely the actors, not the macro. Relationship shows how the actors interact with each other. The data used is secondary data

in the form of all user uploads on the Twitter social media platform that contains content with the hashtag #IbuKotaBaru and at least has one interaction with other actors such as retweeting or mentioning. Retrieval of data on the Twitter platform using data crawling. The research data was collected during the period of August 1st to September 22nd, 2019. Data processing in this study was carried out using Gephi software, an open source application that are able to visualize the obtained data into sociograms.

The stages of the research consisted of several stages which included (1) Identification of the problems carried out by observing the phenomena related to the research; (2) Determine the object of research, namely the actors involved in the dissemination of information through the social media platform Twitter with the hashtag #IbuKotaBaru; (3) Data extraction through data crawling from actors involved in the dissemination of information on #IbuKotaBaru which has at least one interaction that occurs between two actors in the network: (4) measurement of Centrality values that include degree centrality, betweeness centrality, closeness centrality, and eigenvector centrality; (5) Ranking based on the value of the centrality obtained from the previous stage and (6) interpretation of the results including the implications based on the measurement of centrality.

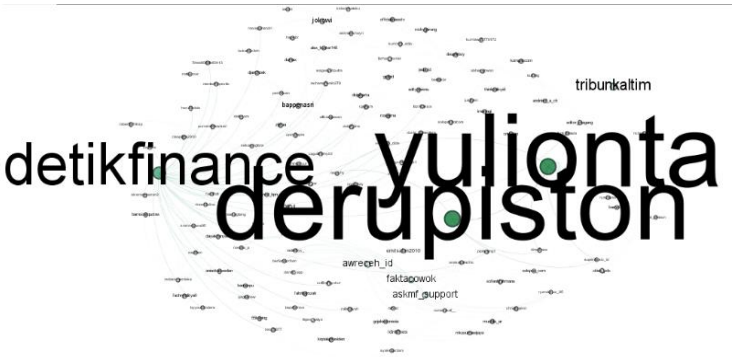
This study is not only intended to display and discuss the findings that are numerical and mathematical. Consequently, in order to provide an adequate explanation of the findings , this study also uses one of the features provided by Twitter that is called Twitter Advanced Search. This method also allows the author to extend the search with a specific hashtag, time period, specific targeted account, and also require the search engine with a minimum level of the virtual engagement. This method allows authors to look further at content with full display that has a high level of engagement. Thus, the author can analyse the various possibilities of reasons that could lead to a high level of involvement in the post.

FINDINGS & DISCUSSION

A. Communication Network: Low Intensity Interaction

On the overall, the communication network with the hashtag #IbuKotaBaru can be presented in Figure 1.

Figure 1. #IbuKotaBaru Communication Network



Visually, the #IbuKotaBaru communication network is dominated by three clusters, namely @detikfinance, @yulionta and @derupiston as shown in Figure 2.

Figure 2. Communication Networks Clusters of the @detikfinance, @yulionta and @derupiston

In the @detikfinance cluster, there are several contexts of discussion about the news made by @detikfinance. The context concerns land concessions by billionaires, environmental studies by the Ministry of Environment and Forestry (KLHK), the concept of smart cities in new capitals, housing for civil servants, transportation in new capitals, and working visits by the Minister. While the context that is discussed between actors in the @yulionta and @derupiston clusters is the influence of the transfer of the capital to the music scheme on the island of Borneo as we can see in Figure 3.

Figure 3. Music Scheme

Kancah Musik Kalimantan dan (Apabila) Ibu Kota Berpindah ke Sana

HOME / SUPEREXCLUSIVE / SUPERNOIZE

By: YULIO ONTA Selasa, 17 September 2019 | 1769 Views | 19 Likes | 272 Shares

Rencana pemindahan ibu kota dari DKI Jakarta ke Kalimantan mendapat respons beragam dari berbagai lapisan masyarakat. Pro-kontra muncul menanggapi keputusan dari presiden terpilih. Beragam aspek dikaji secara mendalam sambil menimbang-nimbang neraca keuntungan dan kerugiannya.

Wacana pindah ibu kota sebetulnya bukanlah gagasan kemarin sore. Ide ini dicanangkan dari era Presiden Soekarno yang saat itu ingin memindahkan ibu kota ke Palangkaraya. Hingga era Presiden Joko Widodo yang sepakat menunjuk Kutai Kertanegara dan Penajam Paser Utara sebagai calon ibu kota baru Indonesia.

Kementerian Perencanaan Pembangunan Nasional-Bappenas ditunjuk oleh presiden Joko Widodo untuk melakukan kajian selama 1,5 tahun, demi meninjau lahan-lahan baru yang nantinya akan

Source: https://supermusic.id/superexclusive/supernoize/kancah-musik-kalimantan-dan-apabila-ibu-kota-berpindah-ke-sana

There are 120 actors involved in the hashtag #IbuKotaBaru network. The measurement of the degree of centrality in the #IbuKotaBaru network results in various values, in which 11 actors occupied in the top ranks with Degree Centrality in the #IbuKotaBaru network as presented in Table 1.

Further exploration of this study is about Closeness Centrality measurements. A total of 76 out of 120 actors (63.33%) have a closeness of centrality value of 1, which can be interpreted that among them have a high proximity with other actors. A total of 44 actors (36.67%) have a closeness centrality value of 0 which means that the actors do not have interactions with other actors. This visualization of the network characters can be seen in Figure 1.

Table 1. Degree of Centrality

LABEL	DEGREE
@detikfinance	37
@cagubnyinyir2	9
@askmf_support, @awreceh_id, @faktacowok	8
@redaksimerdeka, @yulionta	6
@noershay, @jokowi	5
@bappenasri, @derupiston	4

Some accounts appear to be close to the account that is the center of density, namely detikfinance, as well as to other accounts that make up their respective density clusters. The pattern of information dissemination is brief, in the sense that the information is disseminated but not viral chained that becomes a multi-level branch of information dissemination.

A. Media Account as The Most Popular Account in Network

Table 1 clearly indicated that the highest degree of centrality occupied by detikfinance with a value of 37, followed by cagubnyinyir2 with a value of 9, askmf_support in the 3rd position with a value of 8. This condition shown that detikfinance is the most popular actor or most actively in disseminating information about the moving the Indonesia's capital in the #IbuKotaBaru network. Detikfinance is an online mass media institution that focus on the

topics of economics, business, finance, infrastructure, property, energy, and industry. The indegree value of the detikfinance actor is the highest value, which is 37 as shown in Table 1 and Table 2. It measures the number of links that lead to the detikfinance actor, or the number of actors that make mention of detikfinance. In this case, detikfinance becomes a reference for information for other actors related to the theme of the new Indonesia's Capital.

Table 2. In-Degree Centrality

LABEL	IN-DEGREE
@detikfinance	37
@askmf_support, @awreceh_id, @faktacowok	8
@jokowi	5
@yulionta @bappenasri, @derupiston	4

The most likely and plausible explanation for the popularity of the detikfinance account for the spread of #IbuKotaBaru are the nature of detikfinance as a news agency and netizens' conversations relating to news substance it self. Detikfinance as a news agency certainly seeks to spread the news as effectively as possible, and one of the strategies considered is to use social media as a means of dissemination. Nowadays, this behavior has become a major consideration in journalism practice and production (Bednarek, 2016), It has even become a new form of political communication mechanism linking the public, democratic institutions and the media, considering the news content that was being discussed is particularly closely related to the political and public agenda (Bennett & Pfetsch, 2018). In addition, Bednarek (2016) found that there are several values in the news that affect the popularity of news content that is widely distributed through social media. It has been argued that 'negativity' is becoming more important than the positivity. It is very likely that news content related to the movement of the capital city have illustrated some of the negative potential impacts to the

Indonesian people. On the other hand, netizens who were busy discussing it might have the same negative perception which then influence netizens' affective.

Based on the Twitter Advanced search method, there are at least 3 news content posted by detikfinance account, which result in a relatively high level of engagement compared to other posts. The first is a news link posted at 1 august 2019, entitled "Building a New Capital City Needs IDR 466 T, Where Is Money From?"[1]. This post was successfully replied for 35 times, liked 57 times, and retweeted for 20 times. The headline can be interpreted as a satirical tone about the country's financial inability to provide such huge funds to move the capital city. Interestingly, the majority of netizens who responded to the posting responded with sarcasm, as some said that the form of funds prepared by government is tree leaves. There were also those who respond with more serious comments, such as saying that foreign debt must be the source of the funds. Another form of comment concerns the involvement of the private sector, which was said to be often squeezing the state. This commentary actually had a quite close relevance to the body of the news story, where there is a statement by an official who expects private participation in the construction of the new capital.

The second is a news link posted on August 19, 2019. This news link is a coverage of the opinion of a well-known Indonesian political celebrity who often casts his counter-government opinion, He is Fadly Zon. Twitter's caption related to this news link is "Moving to Jonggol is considered far more efficient than moving to Kalimantan as Jokowi's plan. Then what are the advantages and disadvantages if the capital city moves to Jonggol?". while the original title of the message is "Considering Fadli Zon Proposal the Capital City Moves to Jonggol"[2]. Again, both the news and the detikfinance caption contained a satirical tone for

[1] https://finance.detik.com/properti/d-4647776/bangun-ibu-kota-baru-butuh-rp-466-t-duitnya-dari-mana?utm_content=detikfinance&utm_term=echobox&utm_medium=oa&utm_campaign=detikcomsocmed&utm_source=Twitter#Echobox=1564633671

[2] https://finance.detik.com/properti/d-4671085/menimbang-usul-fadli-zon-ibu-kota-pindah-ke-jonggol?utm_content=detikfinance&utm_term=echobox&utm_medium=oa&utm_campaign=detikcomsocmed&utm_source=Twitter#Echobox=1566185024

the planned transfer of capital to Kalimantan. Even though the headline and the caption given were sarcastic, the news body was neutral enough to present Fadly Zon 's opinion, which expressed positive and negative aspects when the capital city was moved to Jonggol.

Netizens' comments on this post seem less sarcastic. Netizens' comments seem to be balanced in supporting governments idea and also contesting it but did not directly supporting Fadly Zon's idea. Some of them continue to support the plan to move the capital city to East Kalimantan as a form of equitable development, where comparing with Jonggol that is still on the island of Java, which has been the centre of Indonesia's economic development for many decades. Another comment still doubts the government's ability to realize this plan but in less sarcastic expression, regarding the magnitude of the project and the amount of funds needed. Some netizens' comments also attempted to relate the capability of the government with government performance on other programs such as the BPJS, which were considered to be in shambles. Netizens serve this comparison as a standard for assessing the government's ability to successfully implement the capital city relocation project. This post was successfully replied 16 times, liked 99 times and retweeted 32 times.

The third post with a high level of engagement is a news link that illustrates the opinion of Andre Rosiade, who criticized the development of the Hongshi Holdings Cement Plant from China in East Kalimantan[3]. Andre Rosiade is a member of the Indonesian Parliament of the Gerindra Party for the period 2019-2024. A quote from the interview with Ade is taken by detikfinance account as the post caption. The caption is "Just imagine that a new capital city that will be built up to Rp. 500 trillion is likely (to use the cement from) the cement factory of Hongshi cement plant, said Andre". In the news, Ade expressed his concern about the impact of the construction of a cement company from China on the workforce, and the sustainability of the local cement company due to the state of Indonesia, which currently has a surplus of

[3] https://finance.detik.com/industri/d-4698936/andre-rosiade-kritik-china-bangun-pabrik-semen-di-kaltim?utm_content=detikfinance&utm_term=echobox&utm_medium=oa&utm_campaign=detikcomsocmed&utm_source=Twitter#Echobox=1568017052

cement stock. This situation led Ade to insinuate the motivation of Indonesian government that granting permission of the construction of a foreign cement plant, is it whether for the sake of the nation or to accommodate foreign interests. In fact, Ade specifically expressed his concern, along with his suspicion that the mega-project of Capital City Relocation would be the source of revenue for the foreign cement company, given the enormous need for infrastructure construction.

This post was liked up to 203 times, retweeted up to 64 times, and replied 14 times. Netizens' comments were mixed, some expressed their agreement with Ade 's opinion by questioning the fate of several Indonesian cement factories, and posting amateur video footage claimed as coverage of student demonstrations in the East Kalimantan governor's office yard as an attempt to reject the establishment of foreign cement factories in East Kalimantan. In addition, there were also those who expressed their disagreement with the opinion of Ade.

The facts of the above findings show that the slightly sarcastic language style of the detikfinance account and also the news contents that discuss the various potential negative impacts of the plan to move the capital city can trigger a high level of virtual engagement from netizens to the detikfinance account. This engagement is manifested in the form of commenting or replying to detikfinance posts, delighting those posts by affixing the love symbol, and reproducing those posts using the retweet feature. This is one of the reasons for the high popularity of detikfinance accounts on the conversation network in this study.

Another explanation related to the high popularity of detikfinance account in the conversation network is the fellow same enterprise group media account also found actively reproduces detikfinance posts. In this case, the detikcom account, which is the detik news agency 's "holding" account under PT Trans Corporation, often retweets detikfinance posts. This is an information dissemination strategy that is quite effective given that

detikcom account followers are 15.9 million while detikfinance is still around half a million followers. The followers are actually the captive audiences of a twitter account. A wider range of information dissemination can be achieved by redistributing detikfinance posts by detikcom. It's interesting to see the Detik social media group strategy, where each news segment has its own Twitter account. Such as detikfinance, which covers the economic news segment, detikfood that is related with food and culinary, detikhot which updates celebrity news, detiksport that has speciality on the development of the world of sporting, detikoto that is related with automotive, and a number of other accounts with their specific segments. As we can see, these accounts are segmented accounts, but actually rooted from detikcom as the holding account.

B. The Connection With Popular Account Makes Two Personal Accounts Become The Most Important Actors in Network

The measurement of eigenvector centrality shows that there are only three dominant actors with significant eigenvector values, namely yulionta and derupiston with a value of 1, followed by detikfinance with a value of 0.70. Other actors have low eigenvector values, below 0.25, as presented in Table 3. The measurement results show that yulionta, derupiston and detikfinance are actors who have an important role in spreading information about the transfer of new capitals in the communication network #IbuKotaBaru.

The core of the eigenvector centrality analysis is measuring the importance of a node while considering the importance of its followers. The main principle is that links from important nodes (as measured by the degree of centrality) are worth more than links from non-important nodes (Golbeck, 2013). In this study, detikfinance emerged as one of the key players in the #IbuKotaBaru network. Various opportunities for reasons have already been explained. Then what about the Derupiston and Yulionta accounts, which have the highest eigenvector values.

Based on the eigenvector centrality assumption, although these two accounts do not appear to create a massive information dissemination networks that links to many accounts, the accounts that interact with these two accounts are assumed having a greater importance than the accounts that interact with the detikfinance account. The accounts that interact with the @derupiston and @yulionta accounts in #IbuKotaBaru communication network were little but have a great level of influence. One of them is a SuperMusicID account with 53,370 followers. A large number of SuperMusicID account followers make this account important in the sense that it is a popular account that can disseminate information in a massive and effective manner.

Table 3. Eigenvector Centrality

LABEL	EIGENVECTOR CENTRALITY
@yulionta	1.0
@derupiston	1.0
@detikfinance	0.7
@tribunkaltim	0.2

Based on Twitter's advanced search, it can be traced that the level of influence of the @yulionta and @derupiston accounts was preceded by the article, written by owner of the @yulionta account that posted by a popular account with thousands of followers, @SuperMusicID. The link to the article was then reposted by @derupiston. The article illustrates the anxiety and hopes of the owner of @yulionta over the development of the creative industry, in particular the music show business on the island of Kalimantan, regarding the plan to move the Capital city to Kalimantan. In line with the explanation of the popularity of the @detikfinance account above which is adapted from Bednarek (2016) findings, the value of the unexpectedness and affective sense of the issue make the article's initiator accounts have a significant role and influence on the #IbuKotaBaru conversation network.

The #IbuKotaBaru hastag contains various opinions from the public. The variety of opinions is divided into two parts, namely opinions that support the transfer of capital and opinions that do not support the transfer of capital.

Figure 4. Sentiment Opinion

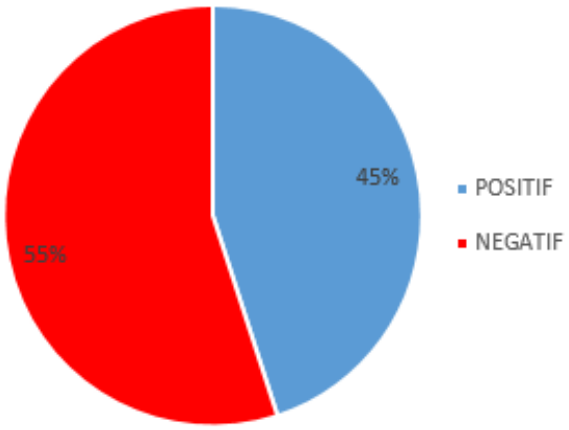


Figure 4 shows that opinions that supported the relocation of the capital city were 45% and opinions that did not support as many as 55%. The context of the discussion for the people who support the relocation of the capital city is the information on financing the relocation of the capital city, supporting infrastructure, answers to doubts about the relocation of the capital city by the community, economic equality, studies for the relocation of the capital city, the activities of DPR members in supporting the relocation of the capital city, the location of the new capital city, a hope for the future of a new capital city, the problems of Jakarta, culture in a new capital, tourist attractions in a new capital, and others.

While the context of the discussion in opinion that opposes the relocation of this capital is the new capital city is not for the people, forest destruction for the new capital city, the land of the new capital city is controlled by the conglomerate, the government does not care

about the voice of input from the community, comparison with failure in other countries, alternatives other locations for new capitals, sale of state assets, etc.

Figure 5. History Word Trend and Post OverTime

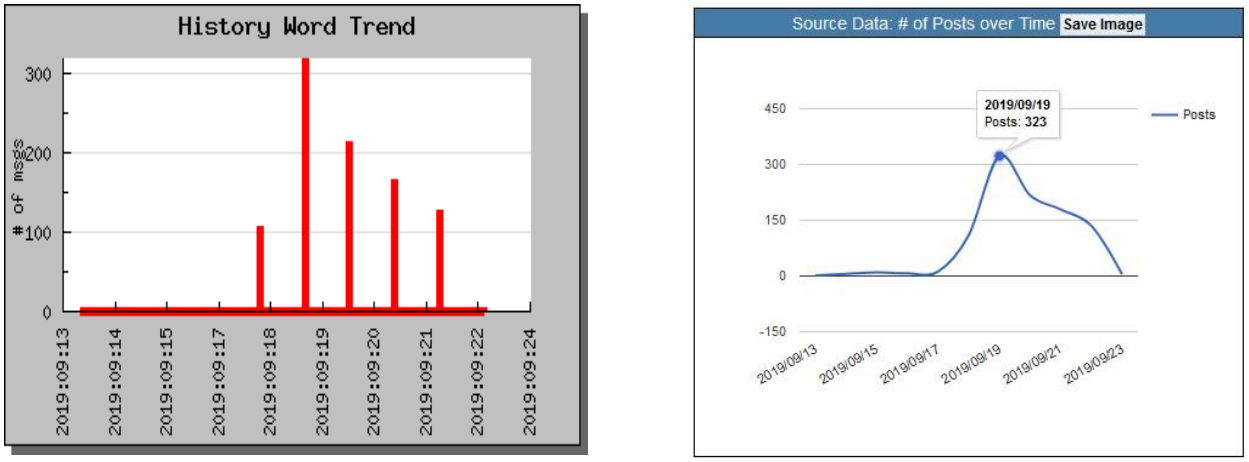


Figure 5 shows the trend of using hashtags on several days. The use of #IbuKotaBaru hashtags has increased in frequency between 18-21 September 2019. The peak on September 19, 2019 is 323 posts using the #IbuKotaBaru hashtag. This increase in frequency is due to the many conversations and participation of buzzers who only tweet to raise the hashtag #IbuKotaBaru both pros and cons. There are a number of hashtags included in #IbuKotaBaru, which have been carried out by buzzers supporting the transfer of capital such as #Indonesia, #News, #Works, Real, #Facts, #Viral, #JokowiPresidenKu, #InfoAccurate #Besternews, #News, #NKRI, #News, #Facts, #Viral, #JokowiPresidenKu, #InfoAccurate #BeritaTncini, #NKRI, #NKRI, #IbuKotaBaru, #IbuKotaBaru #Kaltim, #kalimantan #DukungIbuKotaBaru #IndonesiaTurur, etc. Meanwhile, the buzzer that is contra with the relocation of the capital focuses on reporting on the ownership of the land of the new capital.

Figure 6. Tweet from @malakmalakmal

Source: Timeline twitter account @malakmalakmal

The buzzers of the contra relocation of the capital city focused on the context of the conversation raised by the @malakmalakmal account regarding the news conducted by detik.com.

CONCLUSION

The #IbuKotaBaru communication network is a network of information dissemination about plans to move Indonesian capital from overpopulated Jakarta to Borneo Island. Based on data collected from the communication network on Twitter during the periods of August 1 to September 22, 2019 with the hashtag of #IbuKotaBaru, there are three dominant actors in the network, namely detikfinance, yulionta and derupiston. The most popular actor disseminating information about the moving to the new capital city in Indonesia is detikfinance. Around 63.33% of actors have a high closeness with other actors, but there is no actor who play role as intermediary with other actors in communication network. Yulionta and Derupiston are the most important actors in the #IbuKotaBaru communication network.

LIMITATION AND STUDY FORWARD

The study certainly has limitations as a result of the methodology used. Some limitations are that the time period of data crawling is very limited and certainly not capable of describing the escalation of Twitter conversations related to #IbuKotaBaru from the beginning to the present. This study also focuses on automated mathematical algorithm of social network analysis, thus, more extensive and inductive research might be needed to further explain #IbuKotaBaru as a virtual form of democratic debate in public spaces. This opens up wide opportunities for other researchers who may be interested in the substance of the same issue. In this study we found that Yulionta and Derupiston are the most important actors in the #IbuKotaBaru communication network. We recommend further research to study why they are become the most important actors and the implication of their difference in term of information dissemination strategy for the public policy maker.

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