

IDENTIFICATION OF SOCIAL SYMPTOMS USING THE DRONE EMPRIT ACADEMIC AS A SUPPORT FOR STATISTICAL LITERACY

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Abstract: Social problems in Indonesia in particular are caused by social phenomena transmitted to users of social media, especially Twitter. Big data system provided by Drone Emprit Academic is able to find social phenomena. The ability of critical literacy to read and write supported by statistical data is very important in the 4.0 era. The aim of the research is to find out which Drone Emprit Academic works, analyzes, and displays data on social phenomena whose results can be used to support critical Literacy. This research uses a qualitative approach, literature study method. The analysis includes three stages, namely organize, synthesize, identify. The results of this study that Drone Emprit Academic is a big data system that carries out social network analysis of specific conversations on Twitter in semi-realtime and detail. The form displayed is in the form of a percentage of trends, retweet relationships, mentioning trend graphs, most retweet statuses, conversation trends. The data generated can help read information about social phenomena so that it can support critical literacy which has been partially published in online and offline media.

Introduction

Social phenomena that are left like hoaxes cause serious social problems such as public distrust of policymakers, and in the end many create riots with the news base as if wronged. Reports from official government agencies on the hoax case are astounding. (<https://web.kominfo.go.id>) ranging from foreign workers to the issue of the earthquake in early 2019. If there is no prevention, it can be dangerous for the condition of Indonesia itself.

There are several channels used to ward off HOAX on social media. The method used includes 3 channels, namely institutional, technological and literacy approaches. Septanto (2018: 162) Related to Indonesian literacy is currently still in the development stage in digital literacy. This was conveyed by Intan Ahmad who described as Director General of Learning and Student Affairs.

Furthermore, in his presentation related to challenges in the 4.0 era, one of which is the literacy of the media or digital literacy, it can be said that survivors in the era of insutri are people who have critical literacy skills reading data from big data in the media. The importance of reading information from big data is to understand the life patterns of

human behavior that are repeatedly carried out with the aim of predicting what events will occur in the future.

Many of the several manufacturers companies that require this data to sell products to sell. This was raised by the data provider consultant, by selling it to several companies at prices ranging from cheap to expensive. on *tirto.id* news. Zaenudin (2017). if drawn a common thread, if the ancient past that was valuable was gold, now the precious is data.

One of the big data systems is the emprit academy drone. DEA is the one that is raised in the karnel. Founder named Ismail Fahmi, he is an ITB graduate. Many benefits can be obtained if you can read data and analysis results from DEA, specifically identifying social phenomena on social media Twitter, such as detecting hoax news, rogue buzzers, boycott movements, moral movements . Literacy on data analysis by DEA is so important in increasing the critical literacy of social media users in order to avoid negative social phenomena. Fahmi (2017)

The ability of statistical literacy to use digital statistical data from the Empirical Academic Drone is required when conducting social phenomenon analysis. When the statistical ability is used to read data from phenomena that exist in the real world, the ability to think critically will increase. Abdullah (2017: 9) in the journal statistical literacy ability in school learning is interpreted politically. For digital statistics capabilities have not been discussed in the journal.

This study provides an alternative way of utilizing statistical data from bigdata providers to support statistical literacy. By using case studies in the discussion, so that it can be used as simple learning to be more easily understood.

Theoretical Support

Statistical literacy

Statistical literacy is the competence to understand statistical language: words, symbols and terms. Able to interpret graphs and tables, can also observe and understand statistics in news, media, polls, etc. (Garfield, 1999; Hovermill, Beaudrie & Boschmans, 2014, p. 1; Takaria, 2016). More detailed capability is obtained from the explanation of Iddo Gal from the University of Haifa, Israel that statistical literacy includes the ability to interpret, critically evaluate, and communicate information and statistical messages. In simple terms there are examples to describe the importance of mastered statistical literacy for modern society.

1. After the presidential election, there were a lot of data fights conducted between 01 and 02 regarding the results of the quick count of the votes obtained by each party claiming between camps. In this section the statistical function gives a scientific impression to be trusted. (CNN Indonesia)
2. Almost all companies believe that the success or failure of the company is determined by HR who have the ability to gain statistical insight, according to Sekaran and

Bougie in the book "Research Methods for Business: A Skill Building Approach (5th ed.)" Says that knowledgeable management of statistics has advantages over with those who do not, because they can understand, predict, and control the events that have dysfunction in the company. From this explanation it can be concluded that statistical analysis is very important for the company.

3. Many broadcasts and newspapers cover sports matches in the world using statistical data to analyze soccer examples including ball possession percentage, number of moves, goal kicks, etc. The analysis requires ball lovers to understand every piece of information that is being framed. According to the explanation from Bhima Yudhistira, a researcher for the Institute for Development of Economics and Finance (Indef), states that news uses statistical data, which is to respond to the affection of reading millennial generation, the characteristics of millennial generation are known as screen movers or moving to a more specific reading, average generation attention attention Z (post-millennial) can be around 8 seconds. This means that the presentation of data is easier to read. (www.wartaekonomi.co.id). These three examples function statistics as tools that have a large function in life.

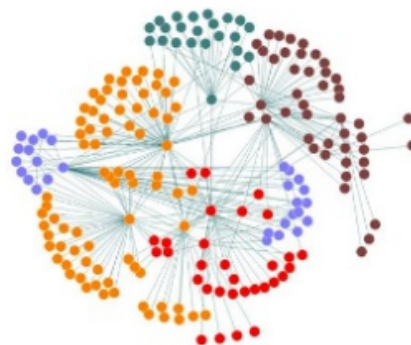
Drone Emprit Academic

Drone Emprit Academi is a big data system that captures and analyzes conversations on social media, especially Twitter, which was developed by PT Media Kernels Indonesia, and installed in the data center of the Information Systems Agency (BSI) at the Islamic University of Indonesia. Drone Emprit uses the API (Application Programming Interface) service from Twitter to capture conversations in realtime through the streaming method. Fahmi (2017) in the data presented by Drone Emprit can present a Social Network Analysis map of how a social phenomenon originates, spreads, who is the first influencers, and who is the group.

SNA: Social Network Analysis



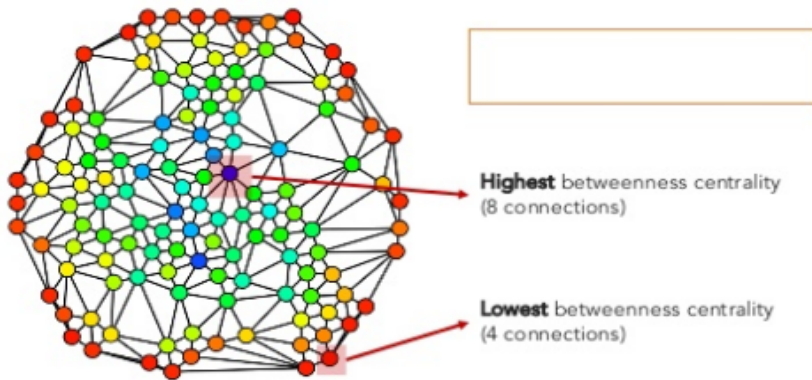
- SNA adalah pemetaan terhadap relasi antar orang, organisasi, topik, lokasi, dan entitas informasi lainnya.
- Node atau titik di dalam jaringan menggambarkan orang, organisasi, lokasi, atau entitas informasi.
- Garis sambungan antar titik menggambarkan relasi antar titik.



Picture 1: Social Network Analysis

(Source : <https://www.slideshare.net/IsmailFahmi3/drone-emprit-konsep-dan-teknologi>)

Betweenness Centrality



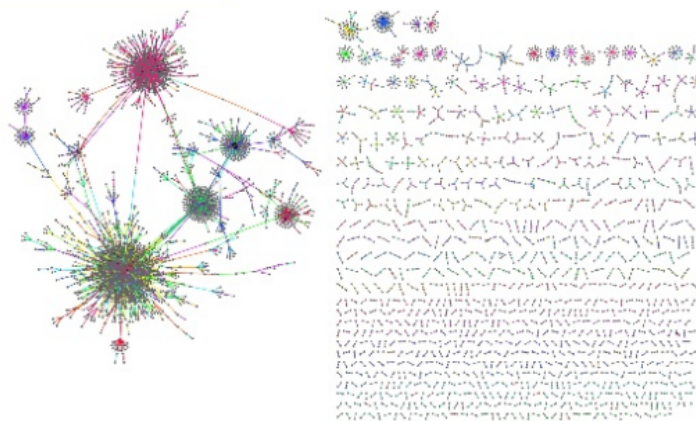
Picture 2 : Betweenness Centrality Anatomy of a tweet on Twitter
(Source : <https://www.slideshare.net/IsmailFahmi3/drone-emprit-konsep-dan-teknologi>)

Anatomi Sebuah Twit



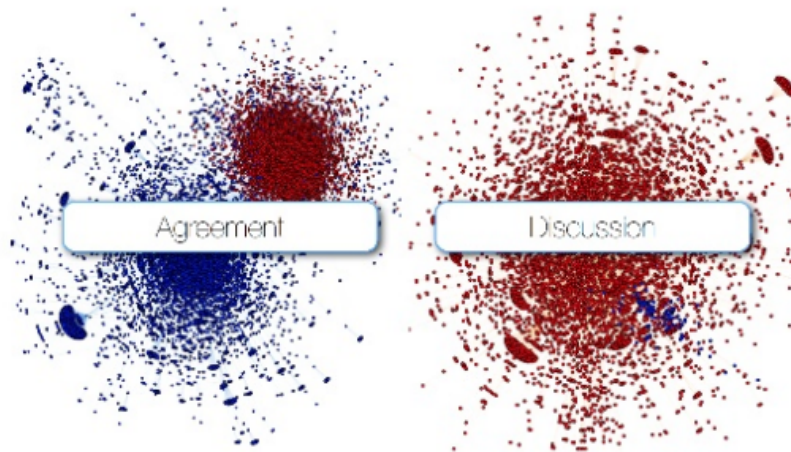
Picture 3 : Anatomy of a tweet on Twitter
(Source : <https://www.slideshare.net/IsmailFahmi3/drone-emprit-konsep-dan-teknologi>)

Relasi Retweet



Picture 4 : Retweet relations between users
(Source : <https://www.slideshare.net/IsmailFahmi3/drone-emprit-konsep-dan-teknologi>)

Link Functions: Retweet / Mention



Picture 5: Display when the tweet is retweeted or mentioned with the narrative agreeing and disagreeing
(Source : <https://www.slideshare.net/IsmailFahmi3/drone-emprit-konsep-dan-teknologi>)

Method

The qualitative approach is the study of literature used in this study. (Moleong, 1996: 3) The things studied in this type of research are ideas and ideas, knowledge, findings in the literature related to the identification of social symptoms of academic emprit drones as supporting critical literacy. Primary data includes statistical literacy from the results of analysis of the big data systems that exist in academic emprit drones especially in the form of case studies that are available in electronic media, especially the internet. Secondary data in the form of research results, books, journals, research reports, and other data relevant to the main source.

Data analysis uses three steps namely organize, synthesize, identify. The Organize stage is the literature reviewed so that it can be relevant to the problem. At this stage the researcher looks for ideas, goals, and conclusions from some of the literature to be included in the category. The Synthesize stage is to compile a summary of data obtained from the initial organization by looking for relationships between the literature. Finally, identify the issue of identifying the symptoms of social phenomena in the literature in order to get an interesting writing to read.

Result

The following cases of social symptoms that can be detected Empirical Academic Drone. Quoted from Ismail Fahmi, Ph.D, published at <https://www.slideshare.net/IsmailFahmi3/drone-emprit-konep-and-teknologi>

Isu 10 Juta Tenaga Kerja Cina



Wajib di Baca, Waspada Migrasi Massal 10 Juta Warga Cina Masuk Ke Indonesia, Sedangkan satu Orang saja Bisa Menggusur Pribumi se-DKI, Apalagi 10 Juta, Bagaimana Nasib Anak Cucu Kita Nanti? Bantu Share

Di Asia, Disoroti, Dasar, Internasional, Migrasi, China, Politik



Uputan77.com - Beberapa waktu lalu, Wakil Perdana Menteri China Lu Yongxing mengumumkan monopoli perusahaan sepuluh juta warga Cina di Indonesia pada 2020, hal ini kemudian menimbulkan kontroversi di Indonesia. Rencana itu bisa di yakin sebagai upaya secara tidak langsung "mengambil" migran dari Cina ke Indonesia.



Picture 6 : hoaxes about Chinese workers are in Indonesia

Klarifikasi



15 September 2016

Jokowi Undang 10 Juta Turis Cina, Bukan Pekerja

Menurut Lubis, 10 juta turis tersebut memang diambil sebagai sasaran, bukan pekerja yang akan bekerja di Indonesia. Dengan dilantik masa liburan, tidak ada alasan yang...

Indonesiaku.com - Bagaimana? 10 juta warga Tiongkok akan datang ke Indonesia? Simak di sini!



Soal Kedatangan 10 Juta Warga Tiongkok, Presiden Jokowi: Itu Turis, Bukan Pekerja

Oleh: Ramas - Dipublikasikan pada: 6 Des 2016 | 24822 Views

Kategori: Berita



Presiden Jokowi saat berpidato di Gedung Sate, Jakarta, Selasa (12/12/2016). (Foto: AFP)

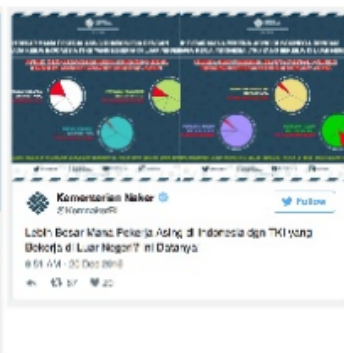
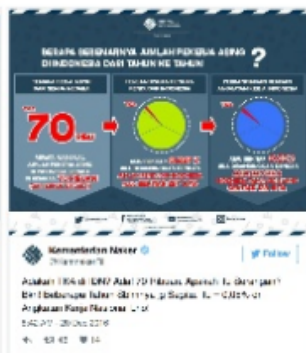
Presiden Joko Widodo (Jokowi) mengumumkan saat upacara kedatangannya 10 juta warga Tiongkok. Saat menghadiri Gedung Sate, Selasa (12/12/2016), Presiden Jokowi berpidato dan mengatakan, kedatangan 10 juta warga Tiongkok ke Indonesia akan dilakukan dengan penuh kehati-hatian. Presiden Jokowi mengatakan, kedatangan 10 juta warga Tiongkok ke Indonesia akan dilakukan dengan penuh kehati-hatian.

Presiden Jokowi yang datang ke Indonesia ke hari ini, bukan pekerja di masa di kedatangan, hanya saja di masa di kedatangan, kata Presiden Jokowi dalam acara yang di dihadiri ratusan pengantar dan keluarga.

Dalam hal ini, Presiden Jokowi memang akan membuka 10 juta di Indonesia, namun jumlah yang datang ke Indonesia yang 10 juta sebagai masa liburan, bukan sebagai pekerja.

Picture 7 : Clarification of the mass media and the government

Klarifikasi (2)



Picture 8 : Clarification on the Twitter account of the ministry of labor

Discussion

Many social media users upload misleading statistical data. Hoax which becomes a social phenomenon is very much present on social media, if left unchecked, it will become a truth that is believed by the wider community. (<https://mediaindonesia.com/read/detail/223648-credibility-doubtful-institution-survey-internal-rated-dangerous>). Become a social problem if the news data is spread through social media. One of the fast social media to spread the word is Twitter. Twitter is a microblogging messaging service that limits you to 140 characters per message, including spaces and punctuation, to post updated content Dixon (2012: 40)

The results of research conducted by Mastel (2017) resulted that the most widely used channels in hoax distribution were web sites, amounting to 34.90%, chatting applications (Whatsapp, Line, Telegram) by 62.80%, and through social media (Facebook, Twitter, Instagram, and Path) which are the most used media reaching 92.40%.

In a study entitled Effectiveness of Social Media for Social Movements of Environmental Conservation shows the results of high involvement in social media can influence participation in social activities. In this context the social movements gathered from social media succeeded in mobilizing the masses significantly. if a social movement that is beneficial will be able to profit, but if the social movement moves to do something that is not useful on the basis of hoax or hoax news, then social phenomena will become social problems. Kapriani & Lubis (2014: 160)

Related to the impact of the HOAX news is the confusion of the truth of information which results in breaking up community unity (The Effect of HOAX and the Hate Speech of a Cyber Crime with Simple Technology in Community Social Life). There are several Channels to anticipate hoax news, in a study entitled Hoax Communication Interactivity in Social Media and Anticipation, the results of three important approaches to anticipate the spread of hoax in the community are institutional, technological and literacy approaches. (Hoax Communication Interaction on Social Media and Anticipation of Hoax Communication Interactivity in Social Media and Anticipation)

In the case of 10 Chinese workers in Kalimantan who were lying, this can be detected from clarification from the media and the government through a Twitter account. If a hoax is identified using Drone Emprit Academic, you will see a graph of significant news increases. Furthermore, the retweet network will display maps of social behavior towards deception. If you see public confidence in the government and national media down and tend to make conversations in the form of retweeting and mentioning about problems that cause problems to develop widely.

Furthermore, even if there is a website blocking action by the government but there is still an alternative domain to process the website, there might be a prize behind it as in

an article written by Rochlin in his paper titled "Fake news: belief in post-truth", in his findings of prizes in the click system make viral news viral. This is a social phenomenon in the post-truth era. Statistical literacy can be done by reading social media analysis from academic empress drones to find out hoax news and the effects that have caused these events, which can then be published on the mass media portal.

Conclusion

Social Network Results Analysis of the Drone Emprit Academi can support statistical literacy in detecting social symptoms, especially hoaxes. For statisticians who are concerned with social analysis, Social Network Analysis from the Empirical Academic Drone presented in the form of graphs, tables, presentations will help facilitate understanding of social symptoms. Furthermore, the data can be used to carry out literacy writing to be published in the mass media. In this study, researchers provide suggestions for further research developing media to support the ability of statistical literacy.

Bibliography

- Abdullah, dkk. (2017) Meningkatkan kemampuan berpikir kritis melalui pembelajaran statistika berbasis pendidikan politik di lingkungan sekolah. *Jurnal Gantang*, Vol. II, No. 1, 2017, 1-9
- Christiany, Juditha. (2018) Hoax communication interactivity in social media and anticipation. *Jurnal Pekommas*, Vol. 3 No. 1, April : 31-44
- Dixon, Bryan. (2002). *Social media for school leaders*. USA: Jossey-Bass
- Era Revolusi Industri 4.0: Perlu persiapan literasi data, teknologi dan sumber daya manusia. Accessed date october 20, 2019. <https://belmawa.ristekdikti.go.id/2018/01/17/era-revolusi-industri-4-0-perlu-persiapkan-literasi-data-teknologi-dan-sumber-daya-manusia/>
- Fahmi, Ismail. (2017). Drone emprit konsep dan teknologi. Jakarta <https://www.slideshare.net/IsmailFahmi3/drone-emprit-konsep-dan-teknologi>
- Fahmi, Ismail. (2017). *Drone Emprit: Konsep dan teknologi, IT Cam on Big data and Data Mining*, Jakarta
- Gal, Iddo. (2002). *Adults' statistical literacy: meanings, components, responsibilities*. University of Haifa, Israel
- Garfi eld, J. (1999). Thinking about statistical reasoning, thinking, and literacy. First Annual Roundtable on Statistical Thinking, Reasoning and Literacy (STRL-1).
- Indonesian, CNN. Beda hasil lembaga survei, BPN kritik lembaga survei yang giring opini publik. https://www.youtube.com/watch?v=_pprCS__q6I
- Kapriani, Dea Rizki, dkk. (2014) Effectiveness of social media for social movements of environmental conservation sodality : *Jurnal Sosiologi Pedesaan*, , Vol. 02, No. 03. 160 -170

- Kominfo. (2019). laporan isu hoax tahun 2019. Accessed date october 20, 2019. <https://web.kominfo.go.id/sites/default/files/kominfo-laporan-isu-hoax-1-feb-2019>
- Mastel. (2017). Hasil survey MASTEL tentang wabah hoax nasional. Accessed date october 20, 2019. <http://mastel.id/infografis-hasil-survey-masteltentang-wabah-hoax-nasional>
- Moleong, Lexy J. (1996). Metodologi penelitian kualitatif. Bandung: PT Remaja. Rosdakarya
- Sekaran, Uma. 1992. Research methods for business: a skill building approach. John Willey & Sons, Inc., 2nd edition. New York
- Septanto, Henri. (2018). Pengaruh hoax dan ujaran kebencian sebuah cyber crime dengan teknologi sederhana di kehidupan sosial masyarakat. Kalbiscentia, Volume 5 No. 2, 157- 162
- Zainudin, Ahmad. (2019) Mudahnya data-data pribadi dijual di dunia maya. Accessed date October 20, 2019. <https://tirto.id/mudahnya-data-data-pribadi-dijual-di-dunia-maya-cviZ>

