



Analysis of Twitter Users Sentiment of the Phenomenon of Using Online Loan Services

Nofy Afifah Anggrahini^(✉)

Sociology, Faculty of Social Sciences and Law, Universitas Negeri Surabaya, Surabaya, Indonesia

Nofyafifah.0035@mhs.unesa.ac.id

Abstract. Online loans (pinjol) are common in Indonesian lives in recent years. Easy requirements and only need to be done via a smartphone does not mean that the loan is free from flaws and dangers. Today's social media can be a reflection of people's thoughts on a phenomenon or event and knowing public sentiment and the response of Twitter social media users about the pinjol phenomenon among the public can be considered by the government and law enforcement in dealing with the pinjol problem in Indonesia. Therefore, this study aims to determine public sentiment and the response of Twitter social media users about the pinjol phenomenon. The research method begins with collecting data from the big data system "Drone Emprit Academic" by applying the keyword #pinjol; online loans with a one month deadline from May 30 to June 28 2022. The results obtained are the overall volume of conversations, opinions and responses. of social media users who responded to the pinjol phenomenon, a total of 7,141. It is recorded in the sentiment analysis that negative sentiment dominates with 51%. Twitter users responded to pinjol with disappointment and dismay.

Keywords: Pinjol · Twitter · public sentiment

1 Introduction

Society is one of the basic concepts in the social sciences of sociology. Basically we live among people, interact and influence each other. In society there are certain phenomena and situations which are to be analyzed and studied using sociology. Explain the motives of certain individuals or situations that drive them to do certain things. Sociology is here to see various phenomena and stories of life in society or what is called sociological imagination [1].

In society there is a social system that regulates patterns of life and behavior. There is no society that does not occur in it a change, even in the smallest generation because society will always change [2]. Changes can occur in small aspects and wide aspects. Changes in small aspects are changes in individual behavior and how people think about somethings. Meanwhile, changes in wide aspects are changes in the level of community structure which can then affect the development of society in the future.

© The Author(s) 2023

S. Setiawan et al. (Eds.): IJCAH 2022, ASSEHR 724, pp. 325–332, 2023.

https://doi.org/10.2991/978-2-38476-008-4_37

The development of communication and information technology has had a major impact on society. This development seems to be able to change many habits and mindsets of the community. All the facilities provided make the community dependent on it. For example, the presence of smartphones has become an object that must be owned by all levels of society, not limited to age and background. Smartphones come with cameras, internet access, and various social media applications. Habits that have changed due to the presence of smartphones, for example, nowadays people don't need to leave the house to shop, people don't need to walk to the taxi base to go somewhere, or go to faraway places to meet their love ones because now they can interact with them by video calls.

In technological advances it is important for the community to understand and be able to use it well, the understanding in question is Science and Technology. For human civilization in the field of production, it has changed, which initially prioritized considerable physical abilities, now these physical abilities are replaced by automatic machines. Technology continues to be developed over time, new formulations of computer capacity are found, as if they have exceeded the capabilities of the human brain. In other words, technological advances are now recognized and felt to provide convenience and comfort for human daily activities [3].

But on the other hand Muhammad Ngafifi views technology as being able to deceive oneself into the fact that technology in the future can be the cause of a catastrophe and misery of modern humans [4]. The progress that initially became an easier method for humans in their daily lives and the more humans bound with these conveniences would lead to "loneliness".

The phenomenon of alienation is when we focus more on what is on the smartphone or computer screen compared to the environment around us. Nowadays it's easy to find friends who prefer to be stuck into their smartphone screens when meeting with their friends. Or when a child spends more time in their room playing games than leaving the room to talk to their parents and siblings. From the side of a child, many of them feel neglected when their parents are busy watching soap operas or football matches.

A change that is currently happen because it is considered miserable for its victims which also occurs because of the development of science and technology, namely the phenomenon of online loans. Online loans is when the borrower and the lender do not need to meet in person and only require the borrower's personal data to be filled in online in the application or online form that has been prepared. And the quick and concise process of disbursing funds attracted the interest of many community members.

In the view of Islam, lending and borrowing activities are when we borrow an object from someone to take its benefits or useability of the object, on condition that it must be returned to the owner after being used in the same condition before being borrowed. In other words, lending and borrowing activities in the past generally involved goods. But now that has changed, money has become a common thing to borrow and lend. In its development, borrowing money which was initially only the scope of colleagues or family turned into a business and involved groups or agencies [5].

Back to the early discussion about the other side of technological developments, online loan or Pinjol becomes a problem and a threat to society. Because when a change or technological development is not balanced with knowledge and principles, it will be

misleading and detrimental. Pinjol is convenience but also drags the user into trouble also threatens and terrorizes them brutally to force them to pay back the money and the interest on the loan, this is the scary side of this business.

Until the government took action against the pinjol phenomenon that occurred in Indonesia. Counseling on the importance of Otoritas Jasa Keuangan (OJK) or the institution that works to organize an integrated regulatory and supervisory system for all activities in the financial services sector, both in the banking sector, capital market, and non-bank financial services sector such as Insurance, Pension Funds, Financing Institutions, and other Financial Services Institutions [17]. OJK guide the public to be careful when taking loans. As well as the release of OJK regulation number 77/POJK.01/2016 concerning Information Technology-Based Lending and Borrowing Services (LPMUBTI) which contains laws regarding the provision, management, and operation of fintech services.

Based on Statistik Fintech Lending data by OJK at the beginning of 2021, online loan has been distributed to the community is around Rp. 159 Trillion. But only for five months that number increase became Rp. 207 Trillion. Around 63% of online loan users are between 19–34 years old. The older the customer, the higher the loan value tends to be. Calculated on average by dividing the amount of debt that is in the customer (outstanding) by the number of borrowing entities, the amount of online loans per entity in Indonesia is not that high, which is around Rp. 829,000. Grafikota by Kompas shows the accumulation of the online loan reaches to 22.211.396 entity [19]. This based on Statistic Fintech Lending of Mei 2021 by OJK.

Various kinds of public responses related to the pinjol phenomenon in Indonesia were spilled on social media. Like when Covid-19, people used the twitter to be their forum to provide their responses and comments related to Covid-19 [6]. These opinions and comments certainly provide useful input for the government and researchers to study and analyze the conditions that occur from the community's point of view [7]. The benefits of these comments are assessed by Syarifuddin (2020) as useful information if processed properly. According to that, with public responses on social media can help the government to find the best way to solve a problem like online loan.

One of the best ways to process big data is to use data mining methods [8, 16]. This method includes several processes that start with preprocessing the data set and continue with the selection of methods to produce information that has value [9]. The resulting analysis is a sentiment analysis which is an analysis that groups the polarities of a collection of texts to find out the opinion given is positive, negative, or neutral [10].

The purpose of the description above is to analyze the public's response to the phenomenon of lending or online loan (pinjol), including comments to users of loan services and their responses to the loan business method. The analysis is based on data obtained from social media big data with data mining analysis methods.

2 Method

In this study the I used a quantitative approach. This type of approach was chosen because with this type of approach researchers can generalize to existing social phenomena or problems [11]. The data collection process was obtained from the Twitter social media

application, using the Big Data system “Drone Emprit Academic” and applying the keyword #Pinjol; Online loans. For this research I manage to collected data from May 30 to June 28 2022. The big data system above applies a service called API (Aplicatio Programming Interface) from Twitter to get conversations, opinions, or discussions in semi-realtime with the streaming method [12].

The scraping data contained in all Twitter posts is then classified, clustered, and calculated and forwarded to the analysis process by the system contained in the Drone Emprit Academic [13]. This type of research is applied to research on Social Network Analysis conducted by Mahdi Shiddieqy and Dodie Tricahyono using Gephi software Version 0.9.1 as an assistant in the analysis process [14].

A similar method was also applied by Made Kevin Bratawisnu and Andry Alamsyah (2018) in their journal entitled “Social Network Analysis for User Interaction Analysis on Social Media Regarding E-commerce Business” [15].

3 Results and Discussion

Drone Emprit Academic (DEA) is a application that I used to collect the main data of this research. DEA can analyze social networks specifically in the form of conversations on Twitter and Instagram in semi-realtime and detail [20]. According to it, I used the ability to read the trend of conversations that are happening on the users of Twitter in the present with keywords #Pinjol and Online loans.

The big data provided by Drone Emprit Academic is able to discover social phenomena. The form shown is in the form of trend percentage, relationship retweet, mention trend graph, most retweet status, conversation trend. Furthermore, the Drone Emprit Academic application will analyze conversations through several stages, namely, (1) Analyzing all clusters of citizen conversations based on the keywords Bank and Muhammadiyah. (2) Determine the time span of the netizen’s conversation. (3) Analyzing keywords through Social Network Analysis and then describing them based on influencers, buzzers and followers. (4) Sorting conversations by number of retweets, mentions, content usage and hashtags. (5) Detect the percentage of bot accounts (robots) in the conversation. (6) Identifying netizens based on the total age of the users. (7) Determine the territory of the participating users.

Based on the research method, these are the result related to online loans (Fig. 1).

The volume of conversation in a period of one month, starting on May 30–June 28, 2022, recorded 7, 414 times the online loan/borrow keyword was mentioned on social media. The number is divided into three kinds. The first is a positive opinion, namely an opinion that means support, benefits or advantages from borrowing. The second is negative income, which is an opinion that contains shortcomings, weaknesses, to the ugliness of borrowing. And the last is neutral income, which is an opinion that has no negative or positive meaning (Fig. 2).

Public sentiment from social media is recorded that the correlation of positive sentiment towards borrowing is 3,339 or 45%, while negative sentiment is more with 3,795 or 51% (Fig. 3).

The picture above is a number of posts related to online loans that some of Twitter users respond to the most. One of the posts from an account named @Alvinlie21 mentions

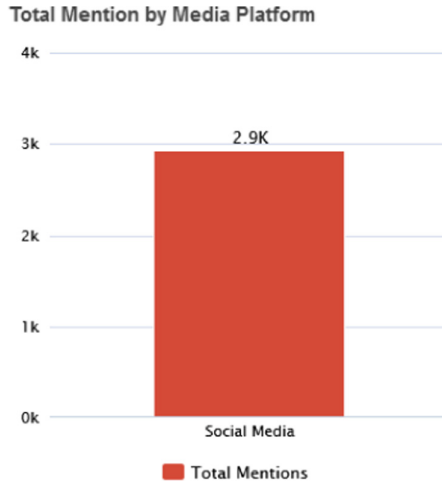


Fig. 1. The Total of public mentions on twitter about pinjol

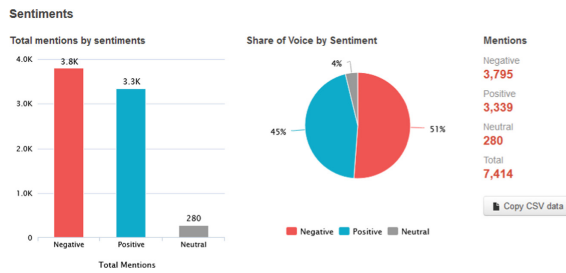


Fig. 2. Total mentions

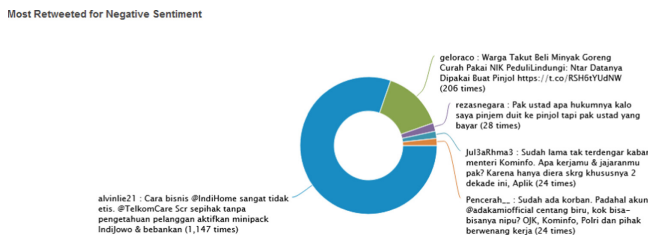


Fig. 3. The negative sentiment of Pinjol

that the pinjok business method is unethical and he regrets that this method has begun to be applied by other businesses. While the account with the username @geloraco stated that he felt anxious about the security of his personal data, he was worried that his personal data was being blamed for being used by Pinjol. Two other accounts, @Jul3aRhma3 and @Penmerah_ pressure the government and authorities to address and regulate the flow of loan business (Fig. 4).

Most Retweeted for Positive Sentiment

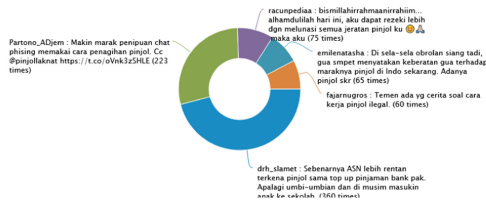


Fig. 4. The positive sentiment of pinjol



Fig. 5. Tweets containing advice to avoid illegal borrowing

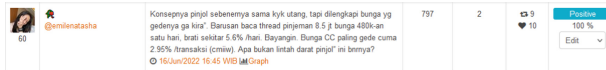


Fig. 6. Tweet from @emilenatasha about her opinion for how online loans works

In the picture above, tweets with positive sentiment groups still contain complaints and vulnerabilities. The @racunpediaa account is positive because he said that he was grateful to be able to pay off his loan, and this post also did not contain his complaints or worries while using online loan services. Even though it is categorized as positive sentiment, there are actually many posts containing advice to stay away from borrowing, several fraudulent strategies to attract customers, to cases of borrowing (Figs. 5 and 6).

4 Conclusion

The overall volume of conversations, opinions and responses from social media users who responded to the pinjol phenomenon was 7,141. It is recorded in the sentiment analysis that negative sentiment dominates with 51% of all mentions on social media.

Twitter users responded to the spike phenomenon with disappointment and dismay. The misuse of personal data by Pinjol is a problem that worries Twitter users. Advises to stay away from pinjol are also widely posted by users. Urges to the government and law enforcement to control and eradicate illegal pinjol are also often expressed by these social media users.

Socialization to be aware of illegal online loans is actively posted by the official police account, for the convenience and safety of the community. unpleasant experience with pinjol is also voiced by the User.

Drone Emprit as a one of data sources provides me data of Twitter Users posts but in general. No specification where their live, how much they earn in a month, or what they do for leaving. It's becomes limitation for me during research.

As a suggestion, I suggest you to check the licence of the online loan before do the transaction or they can check on official website of OJK it is listed as a online loan with licensed or not. Also you can report illegal online loan to www.patrolisiber.id, info@cyber.polri.go.id, or call OJK 157 (Whatsapp 081157157157) [18].

Acknowledgments. The author wishes to thank God for providing fluency in writing the article. Thanks also to the reviewer, who provide input to the article through the process of writing it appropriately. We would also like to thank the other researchers whose research findings we cite as references, which allowed all of these publications to be completed on time and ready for publication.

Authors' Contributions. The author comprises one member. Article writing is separated into numerous stages of research and writing that are completed in 3 (three) months. The author investigates related themes based on observations made in the field over many months. The writer offers the ideas in this scientific article based on observable data.

References

1. Murdiyatmoko, J, Septiningsih. B. D., *Sosiologi: Memahami dan Mengkaji Masyarakat*, Grafindo Media Pratama, 2007.
2. Martono, N., *Sosiologi Perubahan Sosial: Perspektf Klasik, Modern, Postmodern, dan Poskolonial*. Raja Grafindo Persada, 2012.
3. Dwiningrum, S.I., *Ilmu Sosial dan Budaya Dasar*. UNY Press, 2012.
4. Ngafifi, M., J.P., *Kemajuan Teknologi Dan Pola Hidup Manusia dalam Perspektif Budaya*, in: *Jurnal Pembangunan Pendidikan: Fondasi dan Aplikasi*, vol. 2, Yogyakarta, 2014, pp. 33-47. DOI: <https://doi.org/10.21831/jppfa.v2i1.2616>
5. Fitra, A. E., *Dilema Pinjaman Online di Indonesia: Tinjauan Sosiologi Hukum dan Hukum Syariah*, in: *Jurnal Syariah dan Hukum*, Vol. 19, Parepare South Sulawesi 2021, pp. 109-119. DOI: <https://doi.org/10.35905/diktum.v19i2.2162>
6. Kurniawan. R, Aprliani. A, *Analisis Sentimen Masyarakat Terhadap Virus Corona Berdasarkan Opini dari Twitter Berbasis Web Scraper*, in: *Jurnal INSTEK*, Vol. 5 Makassar, 2020, pp. 67-75. DOI: <https://doi.org/10.24252/instek.v5i1.13686>
7. Syarifuddin. M, *Analisis Sentimen Opini Mengenai Covid-19 Pada Twitter Menggunakan Metode Naïve Bayes dan KNN*, in: *Inti Nusa Mandiri*, Vol. 15, Malang, 2020, pp. 22-28. DOI: <https://doi.org/10.33480/inti.v15i1.1347>
8. Pratama. E. E., Ripanti E.F., *Analysis of student Academic Performance and Social Media Activities by Using Data Mining Approach*, in: *ICEBA 2020: Proceeding of the 2020 The 6th International Conference on E-Business and Applications*, Malaysia, 2020, pp. 111-115. DOI: <https://doi.org/10.1145/3387263.3387279>
9. Wati, A.I., *Implementasi data mining pada kasustenaga listrik yang dibangkitkan berdasarkan provinsi*, in: *KOMIK (Konferensi Nasional Teknologi Informasi dan Komputer)*, Vol. 3, Sisingamaraja, 2019. DOI: <https://doi.org/10.30865/komik.v3i1.1683>
10. Kamal. R. M., *Analisis Sentimen Cyberbullying pada komentar Facebook Dengan Metode Klasik Vector Machine*, in: *other Thesis Universitas Komputer Indonesia*, West Java, Bandung, 2019.
11. Sugiono, *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta, 2012.

12. Fahmi, I., Drone Emprit: Konsep dan Teknologi, IT Camp on Big Data and Data Mining. IT Camp, 2017.
13. Bashith, A., Waluyo. Analisis Sentimen Publik Terhadap Pembelajaran Daring, in: SUB-ULANA: Journal of Education and Islamic Studies, Vol. 3, Bangkalan, East Java, 2020, pp. 67-74.
14. Setetama, K. M., Alamsyah, A., Implementasi Social Network Analysis Pada Penyebaran Country Branding Wonderful Indonesia, in: Indonesia Journal on Computing, Vol. 2, Bandung, West Java, 2017. pp. 91-104. DOI: <https://doi.org/10.21108/INDOJC.2017.2.183>.
15. Bratawisnu K. M., Alamsyah, A., Social Network Analysis Untuk Analisa Interaksi User Dimedia Sosial Mengenai Bisnis E-Commerce, in: SOSIOHUMANITAS, Vol. 21, Bandung, West Java, 2019, pp. 163-69. DOI: <https://doi.org/10.36555/sosiohumanitas.v21i1.1000>
16. Pratama, E. E., Sastypratiwi, H., Yulianti., Analisis Kecenderungan Infomasi Terkait Covid-19 Berdasarkan Big Data Sosial Media dengan Menggunakan Metode Data Mining, In: Jurnal Informatika Polinema, vol. 7, Malang, East Java, 2021, pp. 1-6. DOI: <https://doi.org/10.33795/jip.v7i2.453>
17. Otorias Jasa Keuangan, Fungsi OJK: Tugas dan Fungsi, Jakarta. Accessed in 2022 August on <https://www.ojk.go.id/id/>
18. KOMINFO, Saatnya Bersih-bersih Pinjaman Online nakal, Jakarta. Accessed in 2022 September on <https://www.kominfo.go.id/content/detail/36705/saatnya-bersih-bersih-pinjaman-online-nakal/0/artikel>
19. Sidik, B., Pinjaman “Online” Semakin Jadi Pilihan, Jakarta. Accessed in 2022 September on <https://www.kompas.id/baca/metro/2021/07/08/pinjaman-online-semakin-jadi-pilihan>
20. Arianto, B., Pemanfaatan Aplikasi Drone Emprit Academic dalam Menganalisis Opini Publik di Media Sosial. In: Journal of Social Politics and Governance (JSPG), Vol. 2, Yogyakarta, 2020, pp. 177-191. DOI: <https://doi.org/10.24076/jspg.v2i2.415>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

