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Reproduction of Discourse on the Issue of Data Leakage in Kominfo

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ABSTRACT

Data leaks are not only the responsibility of the government but also a shared responsibility individually. In July 2024, Kominfo experienced a ransomware attack that had an impact on the leak of people's personal data. Various responses from netizens on social media X pressured the government to immediately handle this case firmly. This study uses the digital discourse analysis method by analyzing the response of netizens in X in responding to the handling of the Kominfo crisis in the period of July 2024 – May 2025. The data collection technique is carried out by *scrapping* data with API X. This study aims to look at the interactions formed in social media users X through a review of digital discourse on Kominfo's response in overcoming data leaks through the SCCT Coombs model. The results of this study found a tendency of negative public sentiment towards the handling of the Kominfo crisis. Public response is influenced by perceived experience, cognition, and expectations to the government for handling data leaks. This research provides development insights for communication crisis practitioners and organizations, especially Kominfo, to optimize their communication crisis strategies based on digital media.

KEYWORDS Crisis communication, digital discourse, social media

INTRODUCTION

The public's response through social media related to the issue of data leakage has one purpose, namely as input and criticism for the government to more firmly address issues that occur repeatedly (Amal et al., 2022). The public has high hopes that problems related to personal data leakage can be resolved decisively based on a legal basis that guarantees the security of their data (Nurhayati, 2023). In dealing with data leaks and maintaining the security of public data, the government already has regulations that serve as a benchmark for the importance of personal data protection and how to handle data leaks (Budhijanto, 2024). The government, through the Ministry of Communication and Informatics, established a *National Data Center* (*PDN*) that integrates data to facilitate bureaucracy in network protection according

to standards, in order to carry out mitigation in line with the principles of international data security standards. However, in practice, data leaks are not only the responsibility of the government but also a shared responsibility at the individual level.

As happened to *Kominfo*, it was attacked by *Ransomware*, which resulted in the leakage of citizens' personal data. In the news written by Hardiantoro and Afifah (2024) in *Kompas.com* regarding the leak of the Ministry of Communication and Informatics' data that was traded, it was stated that the data allegedly belonging to *Kominfo* contained *Population Identification Numbers*, bank account details, and bank account numbers sold for 121,000 USD or around Rp 1.9 billion in a dark forum. The personal data was obtained from the security system of software licenses and contact documents from the *National Data Center* (*PDN*) between 2021 and 2024. CNN Indonesia (2024) reported that the alleged hack was revealed by an account that routinely disseminates information related to data leaks, namely @FalconFeedsio, which uploaded narratives related to the hack and screenshots from BreachForums.

Various public responses continue to pressure the government to handle this case immediately, not merely with public statements but by taking real action. Based on the report by Singgih (2024) in BBC News Indonesia regarding the sale of *Kominfo*'s leaked data in dark forums, the public believes that the government has been slow and unsolution-oriented in dealing with the case. The public expressed dissatisfaction and tended to criticize *Kominfo*'s indecisive response.

Individuals have been heavily involved in the use of social media, making the most of it as a primary means for building digital communication (Tsoy et al., 2021). Communities on social media play an important role in taking proactive steps to express opinions and respond to topics discussed in digital life (Roy et al., 2020). Considering the current development of social media, there is an opportunity to use the digital public space for every individual to comment and express themselves on various issues or discussions, making social control unavoidable (Abduh & Cangara, 2022).

There are many agencies and institutions in society, as well as the government, that are responsible for addressing crises or important situations on social media platforms (Lovari & Bowen, 2020). Various parties involved in interaction in the digital world still need to observe one another in how communication is formed (Noor et al., 2024). Through the *Kominfo* data leak phenomenon, the public demands that the government provide statements and accountability openly to the public in real terms, including through social media. The public needs to observe how organizations use social media platforms to communicate in response to such crises (Lovari & Valentini, 2020).

Previous research related to crisis management using social media indicates that there has been an increase in the use of social media during

crises, making public and institutional participation a crucial aspect in shaping crisis management strategies (Chatfield & Reddick, 2018). Government agencies on social media can facilitate the dissemination of up-to-date information, provide problem-solving efforts, and give direction for allocations or other measures during a crisis (Mackay et al., 2021). To create increasingly resilient communities, organizations or related institutions must integrate their social media into emergency crisis management strategies (Auxier & Anderson, 2021). When facing a major crisis, governments often form strategies to change public behavior or responses, frequently relying on their social media posts to provide information to the public (Page & Hansson, 2024). Governments may respond through self-protective communication or by blaming others to safeguard their reputation (Hansson & Page, 2022).

Previous studies conducted by Wang et al. (2021) and Noor et al. (2024) discuss the importance of proper coordination through consistency and harmony in providing responses by the institutions involved in overcoming crises. The communication patterns formed in conveying information related to a crisis will impact how the public assesses and understands the situation and the meaning of the message, ultimately helping them determine how to respond. Furthermore, research by Lerouge et al. (2023) on government crisis communication found that the messages conveyed through government institutions' social media during crises can positively influence public emotions or feelings when facing such situations. However, the impact is also influenced by the content of the crisis response, as it can affect the *Public Mood*, underlining the importance of crisis communication strategies in controlling and monitoring public emotional responses through social media.

The data leak incident and *Kominfo*'s response to it became the focus of netizens as an issue to be observed and criticized. This encouraged netizens to express their opinions in various forms—whether as dissatisfaction, suggestions for improvement, criticism, or as an emotional projection regarding the case. The communication strategy of government institutions, as the party delivering messages to netizens, can influence the formation of opinions and perceptions on social media. Opinions expressed by netizens on *X* regarding the topic of data leaks can provide insight into their expectations and assessments of *Kominfo*'s crisis management performance, as well as their hopes for a stronger personal data protection system.

Based on the discussion above, the researcher is interested in examining the interaction of the community in shaping the reproduction of discourse through *X* in response to the crisis communication strategies of Indonesian government institutions—especially *Kominfo*—in overcoming the data leak crisis. Public expression on social media is also influenced by observations of interactions that occur (Purnama et al., 2022). Therefore, the

researcher aims to analyze the interaction patterns formed among *X* users through a review of digital discourse on *Kominfo*'s response to the data leak, using the *Situational Communication Crisis Theory* developed by Coombs. The study will also explore the main focus of public discussion regarding the government's response when handling data leaks.

Based on this research background, the purpose of the study is to describe how *Kominfo*'s crisis communication strategy in addressing data leaks is perceived by netizens on *X* through the reproduction of digital discourse. This research originates from the phenomenon of the data leak experienced by *Kominfo*, which received a variety of public responses—both supportive and critical—through social media *X*. The contribution of this study lies in advancing communication science, particularly theories related to digital discourse and crisis management. It may also help government agencies identify strategies that the public expects during a crisis, enabling them to strengthen future crisis management efforts. Furthermore, it can serve as a reference for how the implementation of appropriate crisis communication strategies can influence the handling of phenomena or issues on social media.

RESEARCH METHOD

This study uses a descriptive qualitative approach with Susan Herring's *digital discourse analysis* (*DDA*) method, which aims to explore how language and communication patterns are used in digital communication—such as social media uploads, conversation threads, digital texts, and online communities—so as to form a digital public discussion space. The research focuses on the *PDN* and *Kominfo* data leak events in July 2024 and observes the digital interactions related to these events from July 2024 to May 2025.

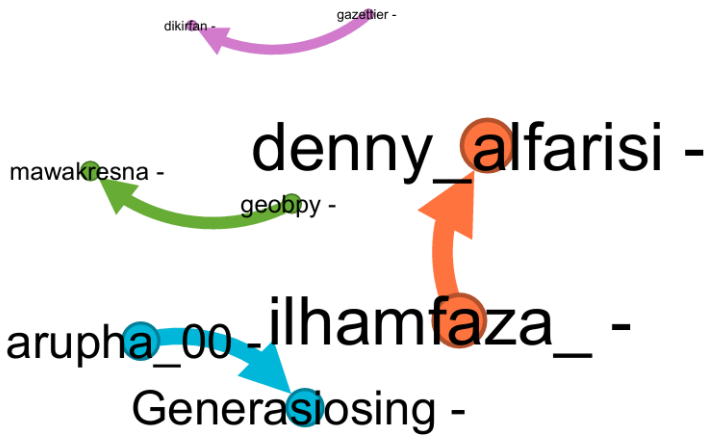
The data collection technique is carried out by *scrapping* data using *API X*. The *data scrapping* process is conducted with the keywords *data leak*, *Kominfo data leak*, *PDN data leak*, and *data leak in Indonesia*. The data collected consist of individual responses from accounts on social media *X* that contain the specified keywords within the observation period of July 2024 – May 2025. The data processed in this study include only content in the form of original posts expressing opinions or statements related to the keywords, excluding simple re-uploads or reposted content.

After *scrapping*, the data are coded and analyzed for sentiment, categorizing content as negative or positive. Once the coding stage is complete, the data are processed using *Python* and *Gephi*. The processed data are then analyzed based on the principles of the *digital discourse analysis* method. The data analysis technique used in this study is descriptive analysis, as the aim is to produce an overview of interaction patterns represented by discourse connections.

The limitations of this study include the focus solely on social media *X* without observing interactions on other platforms, and the data portrait is limited to the period from July 2024 to May 2025.

RESULTS AND DISCUSSION

This research focuses on the topic of digital conversations on platform X related to the Kominfo data leak that occurred in July 2024. The data set obtained through data scraping, including comments, replies, and retweets, then processed using the Python programming language through Google Collab and Gephi, provided results that described the discussion sentiment cluster and the discussion pattern formed as well as the actors involved in the discussion on the topic of Kominfo data leak in X. Through the processing of the data set using Gephi, 8 actors (nodes) were formed which formed 4 relationships in it (edges).



Source: Gephi, 2025.

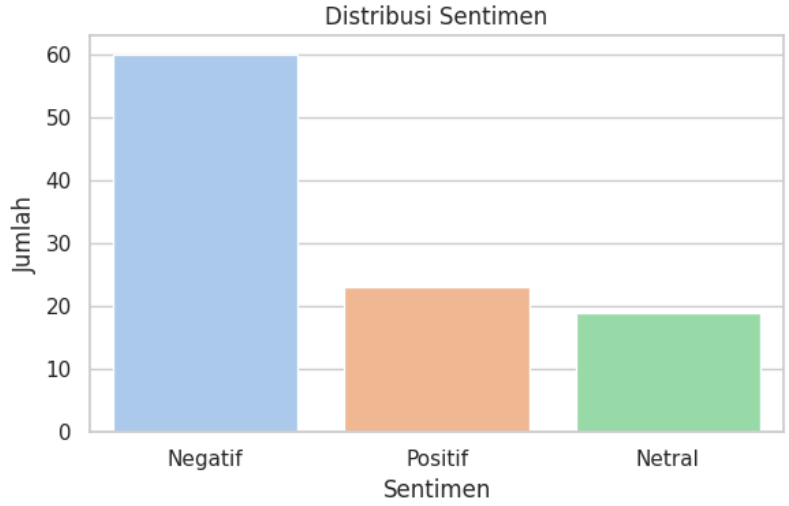
Figure 1. Visualization of the relationship network on Gephi uses the keywords "Kominfo Data Leak", "PDN Data Leak", and "Data Leak in Indonesia" on social media X.

Other results through sentiment analysis from 102 data sets processed using machine learning, the results were obtained that 60% of the public gave negative sentiment to Kominfo in overcoming data leaks that repeatedly occurred. There are 5 posts that get the most reactions.

Source: Phyton, 2025.

	full_text	retweet_count	reply_count	total_reactions	sentimen
2	Banyak sodara2 kita yang bunuh diri Rumah Tangga Hancur jadi Maling dipecat gara2 Judi Online Ternyata 10 Pegawai Komdigi (sebelumnya Menkominfo) selama ini memelihara 1000 situs Judi Online dapat 8 5jt per situs Total Rp 8 5Miliar BAJINGAN kau @kemkominfo ! https://t.co/Mr3mVncrxg	10386	1680	12066	Negatif
23	DAPAT INFO Dari hasil penangkapan 16 karyawan Komdigi terindikasi kuat Menkominfo sebelumnya terlibat dalam perlindungan terhadap 1000 situs judi online. Sudah nyaut dari pengakuan beberapa tersangka yang ditangkap	4554	363	4917	Negatif
0	Rekap Kominfo bulan Juni: 1) Memberantas judi online lewat SMS 2) Ancam blokir X 3) Pusat Data Nasional mati 2 hari 4) Ucapan selamat ulang tahun. https://t.co/4J5E6UR0UN	4233	423	4656	Negatif
3	Saking ngga bergunanya Kominfo-Komdigi beserta orang-orang di dalamnya yang malah jadi ikutan urusan judol rakyat harus memerangi judol dengan caranya sendiri. Bubarkan ajalah itu kementerian	3662	37	3699	Negatif
13	Contoh yg cukup sempurna ttg birokrat yg tidak kompeten. Birokrat yg tidak kompeten ini sama bahayanya dg korupsi. Dampaknya amat fatal bagi kemajuan bangsa ini. Total anggaran Kominfo x BSSN Rp 15 triliun. Yg kita dapat kinerja yg spt ini. MCMCMC https://t.co/f6ibtUZEyF	2467	364	2831	Negatif

Figure 2. Top 5 uploads with the most responses.



Source: Phyton Sentiment Analysis, 2025

Figure 3. Sentiment Analysis

Based on the results of the relationship pattern analysis using Gephi, there is one interaction relationship between 2 social actors that is more intense than the others, namely between @ilhamfaza_ and @denny_alfarisi accounts. If observed from the discussion contained in the content, the content was created in May 2024 when the PDN data leak case attributed to Kominfo had not yet occurred, but this post again received mixed reactions from user X after the data leak case occurred. The upload contains a submission of action to Kominfo related to the follow-up of the blocking of a site which is responded to with another post in the form of a reply to the content of a story about a similar experience. This has received mixed reactions from the public because the public considers that it is easier for Kominfo to block sites that are not indicated to have committed violations than to deal with data leaks that occur repeatedly. In 3 relationship patterns formed by 6 other social actors, it is discussed related to the capacity and competence of Kominfo's performance in overcoming data leaks and overcoming related issues.

This post received mixed reactions from other users because of the similarity of views and feelings in expressing opinions that have an emotional element in expressing opinions on social media. These results are supported by research conducted by Xia and Hafner (2021) That one of the strategies to increase engagement in social media is to use a focus on visually appealing content and reference to personal emotions. In building interaction in the digital era, there are cognitive factors that encourage individuals to be able to choose content and groups in interacting (Sharma et al., 2024).

Although Kominfo has tried to provide a statement regarding the handling of data leaks, in the digital era, people demand real results and transparency regarding their data protection. The strategy carried out by Kominfo through social media plays an important role in shaping public perception. Initiatives from Kominfo such as providing comments, direct messages, and interactive features in responding to public comments can be an effective way to overcome public doubts about Kominfo (Susanti et al., 2023). In addition to communication transparency, based on research that has been conducted by Wang et al. (2021), inconsistency and lack of harmony in message patterns in dealing with crises will affect public perception in assessing the government's credibility, so it is important to have clear communication between related parties so that information can be well received by the public. The role of cognition and public expectations is that Kominfo can provide clear solutions in being responsible for their data protection.

Looking at the results of sentiment analysis which is dominated by negative sentiment by 60%, this result can be strengthened by previous research by Lerouge et al. (2023) which revealed that the form of messages given through government social media in handling crises has an influence in improving people's feelings when facing a crisis, where a solutive, clear, and easy-to-understand message influences a positive mood to the community. The importance of implementing flexible strategies, prioritizing openness, building trust, and reducing misinformation will be more effective in implementing communication strategies on social media (Shahbazi & Bunker, 2024). So it can be seen that the high percentage of negative sentiment is influenced by disappointment and the unfulfilled public expectations of Kominfo in overcoming data leaks. There is distrust expressed by users through comments that support expressions with a negative context to the performance of Kominfo. The preferences of discussions that take place on social media are generally based on the basic needs and goals that the individual has (Sengul, 2025).

When reviewed through the review of Situational Crisis Communication Theory (SCCT), good crisis communication aims to reduce public anxiety through the right time and way to restore public trust in an agency or organization in dealing with crisis situations and prevent unconducive situations from spreading (Hinsberg & Lamanna, 2024). SCCT is applied by

doing *deny, diminish, rebuild,* and *bolstering* to reduce the response of rebuttals by the public with the aim of increasing organizational perception, and reducing negative emotions (Coombs, 2022). In the review of data leak cases experienced by Kominfo, it is important to choose the right strategy based on the specific nature of the crisis and its potential impact on related parties (Tian & Yang, 2022).

Through the high negative sentiment given through uploads on X, in general, users still do not see any diminished action from Kominfo to reduce the risk of crisis that occurs, even though Kominfo has provided an official statement regarding the crisis that occurred. However, Kominfo did not deny confirming the data leak that occurred and gave a statement that it would improve the community's data security system. From the results of the study, it can be seen that the public gave a counter response to the situation because they saw that Kominfo had not bolstered which showed the attribution of positive actions to protect its image and performance in accordance with the statement of performance improvement in the seriousness of personal data protection. Nairn & Matthews (2024) stating that comments given on social media reveal one of the main factors in digital communication, namely the attitude given when a crisis occurs and the extent of the appropriate use of media in communicating attitudes in crisis situations. This is in line with the results of previous research where in attitude, humans use cognition that mediates social norms and ideologies to achieve goals and feelings involved in encouraging how individuals argue and shaping the perception of arguments (Ross & Bhatia, 2025).

Although Kominfo did not carry out a strategy to refute the data leak that occurred, the crisis response strategies provided were ineffective because they were not comprehensively conveyed aimed at solutional actions. Compensation, apologies, and ingratiation strategies should be carried out with transparency to rebuild public trust (Rahmawati et al., 2024). The existence of good coordination and representation of appropriate actions in actively dealing with crises by involving other related organizations such as small organizations in the community can be one of the strategies in building trust with the public (Noor et al., 2024). In addition, trust after the crisis has occurred can also be built by conducting and receiving continuous evaluations from the public on the input of effective strategies to deal with the crisis (Diviani et al., 2024).

In providing responses on social media related to data leaks, Kominfo must also pay attention to elements in digital discourse. Punctuation used in digital discussions aims to emphasize the intent or meaning of the message to be conveyed (Androutsopoulos, 2023). As emphasized by users who have expressed their opinions through posts on X, they emphasized the demand for Kominfo to improve the seriousness in handling data leaks.

The importance of using social media such as X in shaping discourse and pivotal role is key in influencing public perception and digital conversations

(Nurdinaningsih et al., 2024). New media shows a strong effect and increases digital interaction through conversations on social media (Agatha et al., 2023). So that in responding to digital discussions, the high negative perception is dominated by the existence of the main factors that trigger the formation of public discussion patterns, in this case the disappointment of data leaks that repeatedly occur but there is still no accountability and solutions that are solutive and effective from Kominfo.

CONCLUSION

The results of this study provide an analysis of digital discourse through sentiment analysis, the patterns of digital discussion relationships formed, the tendencies in community responses, and a theoretical review using the *situational communication crisis theory* (*SCCT*) model. From the 102 datasets processed, 60% of users expressed negative sentiment toward *Kominfo* regarding its handling of data leaks, generally presenting counterarguments, criticizing its performance, and expressing dissatisfaction. These response tendencies are also influenced by psychological factors, beliefs, and past experiences, which shape patterns of interaction in digital communication. While *Kominfo* implemented a crisis communication strategy by issuing an official statement and acknowledging the crisis, public perception remained largely unsatisfied due to the absence of concrete, effective, and solution-oriented measures. Future research is suggested to deepen the analysis of digital discourse on data leak topics through other *CMC* communication theories and to develop more detailed crisis communication strategies tailored to the specific nature of the crises addressed.

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