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LISTENING TO THE VOICES OF PLATFORM X USERS ABOUT ECONOMIC VIEWPOINTS BEHIND IBU KOTA NUSANTARA'S DEVELOPMENT



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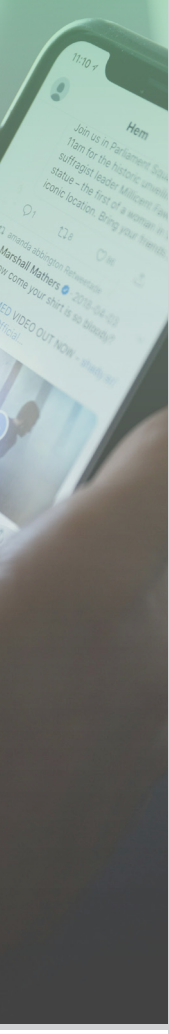
INTRODUCTION

Since the Dutch East Indies era, the center of Indonesia's government has been located in Jakarta, formerly known as Batavia. The idea of moving the capital out of Java was first exposed in mid-2019, when former President Joko Widodo announced the plan. Some of the considerations that emerged were initiated by the fact that there was centralized development on the island of Java. This inequality of development can be examined economically by reviewing data from the Badan Pusat Statistik regarding the contribution of each region to the national GDP as of the fourth quarter of 2018 where Java Island alone was recorded to contribute more than half, which amounted to 58.48%. This figure will be very different from the contribution of Sumatra (21.58%), Kalimantan (8.2%), Sulawesi (6.22%), Bali and Nusa Tenggara (3.05%), and Maluku and Papua (2.47%). Not only that, the idea of moving the capital city also arises due to unrest over various things on Java Island, such as population density that tends to be concentrated on Java Island, the heavy ecological burden in Jakarta, to the clean water crisis and deteriorating air quality (FISIP UI, 2020).

A review of the plan to relocate the capital city was carried out until finally the government began the process of forming the Ibu Kota Nusantara Law at the end of 2021. This formation process was marked by the sending of a presidential letter, draft of the Ibu Kota Nusantara Law, to the House of Representatives on September 29, 2021. The agreement on the name of the capital city and the ratification of the law was passed immediately, on January 18, 2022. Since then, the construction of the Ibu Kota Nusantara has begun based on the IKN Law to achieve three visions, namely realizing a symbol of national identity, developing a world city of sustainability, and driving the economy of the future. As detailed in the IKN law, there are five stages of IKN development during the period 2022-2045, with the initial stages of development that have been passed in the period 2022 to 2024. As a national strategic project, the development of the Ibu Kota Nusantara not only aims to create a new center of government but also is expected to be a catalyst for future economic growth. The early stages of development, scheduled to be completed by the end of this year, provide an important moment to evaluate the extent to which this vision has begun to be realized. This assessment can serve as a review point to delve deeper into the economic impacts of IKN development, both in the local and national contexts.

Strategic projects such as the development of the Ibu Kota Nusantara (IKN) raised various public responses, reflecting people's right to voice their opinions and concerns regarding national development. This phenomenon illustrates the diverse perceptions of the community-both supportive and critical. These perceptions reflect socio-economic dynamics that need to be managed wisely so that the development process can run according to mutual expectations. Therefore, in-depth research is needed not only to assess the direct impact of IKN development, but also to understand public expectations.





The relocation of the national capital is part of the nation's interests in an effort to meet global competition. However, behind this idea, there is a debate emerging in the community, between those who support and those who oppose (Toun, 2018). Each group has a different point of view, creating a dynamic public discussion phenomenon. Social media, especially the X platform (previously known as Twitter), became one of the main platforms to accommodate and facilitate this discussion. As a social media that allows both personal and open interactions, X is often used to discuss various topics, ranging from politics, economy, social, culture, to law. The discussions that take place on this platform show the collective attention of the community to national strategic issues (Andriani, 2018) such as the development of IKN, while also reflecting the diversity of opinions that arise in society.

This research aims to answer the main question regarding the planning of IKN development and its realization from an economic perspective through public responses to the relocation and construction of the new capital city. The focus is on understanding the topics frequently discussed by X social media users related to the development of the new capital city, including public sentiment and opinion towards its potential economic impact. The topics discussed by social media users can provide an overview of the issues that are of primary concern, both in terms of economic opportunities and challenges associated with the development of the new capital city.

In addition, sentiment analysis of public opinion can help understand public response. Previous study utilizes social media data to assess public perceptions of the issue of moving the capital city (Arsi and Waluyo, 2021). This research focused on the discourse of relocating the capital city, while this research is an update by examining public responses during the ongoing IKN development stage, with an emphasis on economic aspects. Through this analytical method, the research aims to explore the public's views on the development of IKN from an economic perspective, as well as to provide insights into public expectations and sentiments.



RESEARCH METHODS

Desk Study

Desk study is a method to collect and analyze information from various secondary sources (Fieldstat, n.d.). To obtain information on how the planning for the development of the Ibu Kota Nusantara from an economic perspective, especially regarding the budget and funding strategy, researchers used the desk study method by reviewing reports related to development planning and the laws that regulate it. This method was also used to find factual justification for phenomena or discussions that emerged in social media discussions related to the topic at hand. The main sources of researchers in conducting desk studies are the Ibu Kota Nusantara Law (2022), the Cetak Biru Kota Cerdas Nusantara (OIKN, 2023), and online articles and news.

Natural Language Processing

Natural Language Processing or NLP is a method of analyzing text using computational approaches to understand, analyze, and process language automatically like humans (Liddy, 2001). The stages of this method begin with data collection sourced from social media X and then enter the data cleaning stage to eliminate duplication, spam, or irrelevant tweets. Then, the next stage is text processing, which is the stage to manipulate text data into a form that can be understood and interpreted by machines. Some of the steps taken in this section are

removing certain character components in the tweet, breaking the text into words (tokenization), removing stopwords, processing slang words, and performing the process of decomposing words into their basic form (stemming).

The results of text processing then enter stages to obtain findings. The first is by doing topic modeling. Topic modeling is a technique that uses various algorithms to uncover, discover, and annotate thematic structures in a collection of documents. The type of topic modeling that will be used is Latent Dirichlet Allocation (LDA), which is a topic modeling method that uses a bag of words approach to identify topic distribution in documents (Kherwa and Bansal, 2018). This method will result in the formation of topics discussed in documents or collections of text.

Sentiment analysis is the next method to categorize tweets based on their sentiment. Sentiment analysis is an automated process for extracting, processing, and understanding unstructured text data with the aim of identifying sentiment in a statement or opinion (Brahimi et al., 2019). The algorithm used to analyze public sentiment is IndoBERT, which is a transformer-based model developed following the concept of BERT fully trained as a masked language model using the Huggingface framework (Koto et al., 2020). The model is trained to process Indonesian text. As an additional analysis, the results will be visualized using Word Cloud and network graph to illustrate the distribution of dominant words and the relationship between topics and sentiments present in the data.

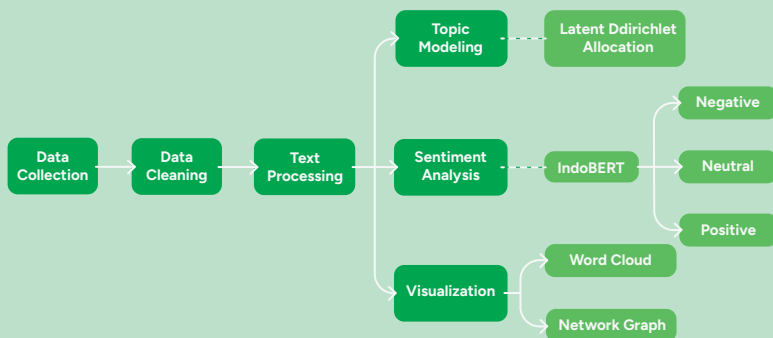
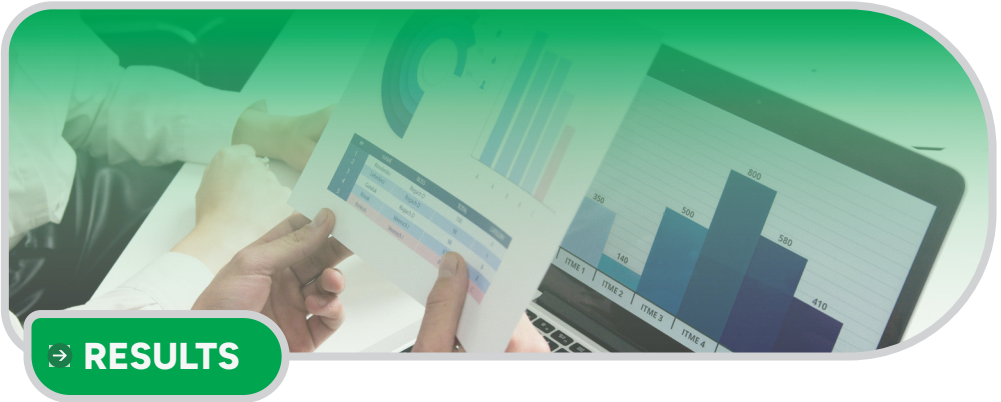


Figure 1. Natural Language Processing Workflow

Data collection was conducted to analyze public responses to the development of the Ibu Kota Nusantara (IKN) in an economic context. The main data source came from social media X (formerly Twitter), which provides a platform to voice public opinion in real-time. The data acquisition process was conducted by utilizing web scraping techniques to obtain tweets related to relevant topics. The keywords used include "IKN" as the main keyword, as well as a number of additional keywords such as "ekonomi", "investasi," "dana," "APBN," and "utang". The keywords selection aims to ensure that the data collected is truly relevant to the theme of IKN development and its impact on the economy.

To maintain the focus of the research, data collection is limited to a certain time span, namely from August to October 2024. This time span was chosen because this period coincides with the final stage of the first phase of the development of the Ibu Kota Nusantara (IKN). In addition, the selection of this time span was also based on practical considerations regarding the amount of data collected. This number provides sufficient representation to allow the analysis process to be carried out efficiently and effectively. The results of the scraping process produced a total of 1,607 tweets after cleaning.





RESULTS

In this section, researchers want to discuss the findings which are divided into two parts, namely the discussion of the funding strategy of Ibu Kota Nusantara and the response of platform X users.

Ibu Kota Nusantara's Funding Strategy

In this section, a more in-depth review using a desk study produces findings regarding the funding strategy for the Ibu Kota Nusantara. Funding is one of the main keys that will support the development process of the New Capital City. Otorita Ibu Kota Nusantara issued the Cetak Biru Kota Cerdas Nusantara which became a reference document in the future development of IKN and provided an overview, reference and strategic guidance for stakeholders and the community (OIKN, 2023). The review of the document resulted in an answer to the question on how the IKN development strategy from an economic perspective. IKN has a financial management strategy designed to support sustainable development. One of the main priorities is to strengthen funding for infrastructure and public services. Along with development and urbanization, IKN seeks to create investment opportunities in infrastructure and essential services such as transportation, water supply, and waste management. IKN adopts innovative approaches in sourcing funding and allocating resources efficiently to meet these needs.

To maximize the economic potential of the nation's capital, development also focuses on creating an attractive ecosystem for investment and business. This includes developing a supportive legal framework, a competitive tax system, and an efficient regulatory environment. IKN offers various incentives for businesses, such as tax breaks and subsidies, to encourage investment and economic growth. Finally, effective budget management is a key focus for IKN to ensure financial stability. This management includes efforts to increase revenue, optimize expenditure, and use public resources in an efficient and transparent manner. These measures, which include implementing quality financial management systems and enhancing efficient tax collection efforts, contribute to achieving sustainable development and financial stability in the long run.

The development of IKN is one of the strategic priority projects listed in the 2020-2024 Rencana Pembangunan Jangka Menengah Nasional (RPJMN). The nominal indication of IKN funding needs listed is IDR 466 trillion. The funding is sourced from various schemes according to appendix II of the IKN Law which is summarized in Table 1.

Scheme	Details
<i>Anggaran Pendapatan dan Belanja Negara (APBN) or National State Budget</i>	It was carried out through budget allocation and/or financing
<i>Kerja Sama Pemerintah dan Badan Usaha (KPBU) or The State and Private Cooperation</i>	It is a form of cooperation between the government and private parties to finance, build, and operate
Wholly or partially owned by the state	It involves SOEs and the private sector, including: a) SOEs through investments that can cooperate with the private sector; b) SOEs through assignments from the Government in accordance with regulations; c) pure private sector through investments with incentives in accordance with regulations.

International Funding	It accommodates the provision of funds from bilateral/multilateral institutions that can be through grants and/or bailouts.
Other funding	Creative forms of financing such as crowdfunding and philanthropic funds.

Table 1. Funding schemes Ibu Kota Nusantara

According to Juri Ardiantoro, Deputy IV of the Presidential Chief of Staff (KSP), the development of the Ibu Kota Nusantara (IKN) in East Kalimantan is estimated to require a total budget of Rp 466 trillion. In the financing scheme, the budget coming from the state budget is only around Rp 89.4 trillion, which covers a small part of the total funding needs. The largest part of the IKN development financing will actually come from the government and business entity cooperation scheme, which is estimated to contribute IDR 253.4 trillion. In addition, contributions from the private sector are also expected to reach the same figure, namely IDR 253.4 trillion. Other sources of funding come from SOEs and others, which are estimated to contribute IDR 123.2 trillion (ikn.id, 2021). The main challenge in planning IKN funding is to organize the distribution of funding sources efficiently, given the heavy reliance on private sector participation and Public Private Partnership (PPP) schemes to support the smooth running of the project.



The review of public response to the IKN development journey from an economic perspective was carried out on the tweet data from the data collection which was then subjected to sentiment analysis. As part of this analysis, researchers also recorded a timeline of tweets that reflected changes in the level of public attention to the development of IKN in Figure 2.

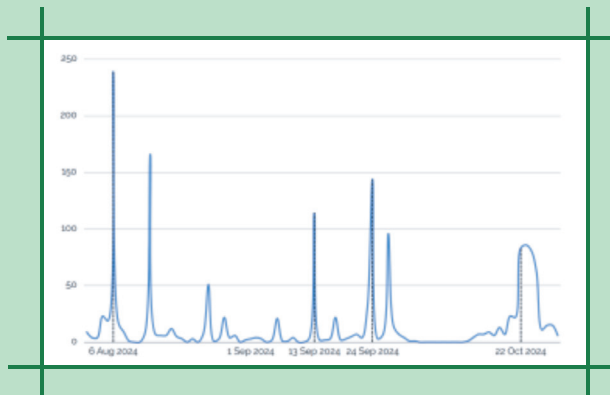


Figure 2. Timeline of Tweets Frequency

On August 6, 2024, there was a significant spike in the number of tweets reaching 239, which was triggered by an announcement regarding the budget overrun for the 79th Indonesian Independence Day at IKN. A similar spike was recorded on August 13, 2024, with discussions still related to the same issue. Then, on September 13, 2024, the number of tweets jumped again to 114, many of which discussed the event when Former Indonesian President, Joko Widodo, had his office at IKN. Another significant spike was recorded on September 24, 2024, which coincided with news of the first foreign investor to invest in IKN. During the period October 22-25, 2024, the number of tweets also experienced a sustained increase, which was related to the transition period after the inauguration of the President and Vice President for the 2024-2029 period. This data provides a snapshot of how the public

response to IKN's development evolves over time and how certain events affect the level of public engagement, reflecting increased public awareness or concern.

After all the tweets entered the text processing stage, the entire text entered various stages of Natural Language Processing to extract interesting findings about public responses.

Popular Topics on Platform X

In order to analyze the public response to the development of IKN, this research uses topic modeling techniques to identify and understand the main topics discussed on the X platform. This topic modeling method requires determining the number of topics of interest. In this study, the researcher chose to identify three main topics that are frequently discussed. The selection of this number was based on an evaluation of several different topic count options, and the results showed that three topics were the most effective in producing a clear and representative segmentation. The discussions that emerged in the identified topics showed significant links to various funding issues, ranging from the management and use of funds, funding sources, to community concerns regarding the potential pitfalls that could arise from the development project. Based on the analysis, researchers were able to identify three main topics.

— Economy and Development

This topic highlights the economic and development aspects related to development of IKN. The focus includes discussions on economic growth, the use of public funds such as the state budget (APBN), and the impact on development in regions such as East Kalimantan, including the involvement of investors in supporting economic growth. Some of the keywords that often appear are *dana* (funding), *pertumbuhan ekonomi* (economy growth), and *pemerataan ekonomi* (economy equality).

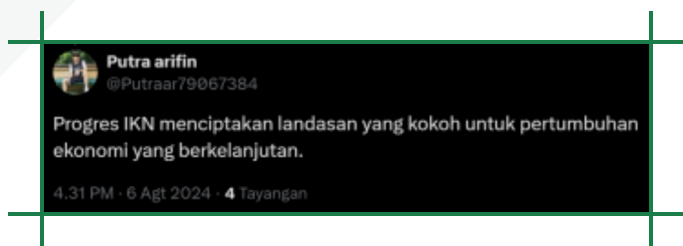


Figure 3. Representative tweets for Economy and Development Topics

— Public Finance and the Political Dimension

This topic focuses on issues related to public finance and politics, including debates on the management of the state budget, the country's debt burden, and how public money is used in development. There is also a strong political dimension with the emergence of figures such as Jokowi and Prabowo, which may be related to development policies. Some keywords related to this topic are *uang rakyat* (people's money), *utang* (debt), APBN, Jokowi, Prabowo, and *presiden* (president).

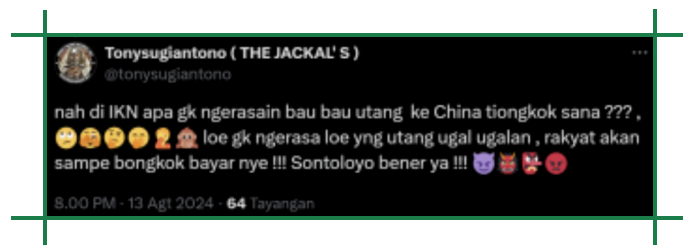


Figure 4. Representative tweet for Public Finance and Political Dimension

Investment and Investor Engagement

This topic highlights investment in IKN, both from local and foreign sources. There was also discussion on the involvement of foreign investors, their influence on major projects in IKN, and how these investments affect local communities. Issues related to the state budget also arise, especially in the context of how these funds are used in investment and development projects. The keywords are *investasi* (investment), *investor asing* (foreign investors), *proyek* (project), and *masuk* (enter) appeared frequently and strongly associated with this topic.

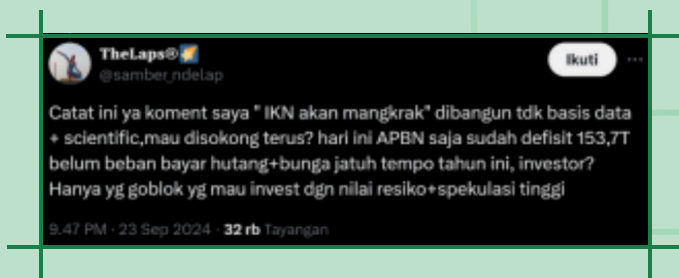
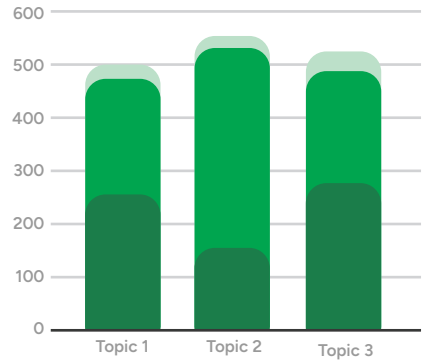
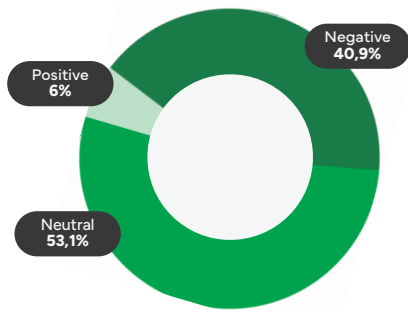


Figure 6. Representative tweets for Investment and Investor Engagement Topics

Platform X User Sentiment

Sentiment analysis using the IndoBERT algorithm categorizes tweets into 3 sentiment groups, namely negative, neutral, and positive sentiments. Of the 1,607 tweets, most tweets were classified as tweets with neutral sentiment, more precisely with a proportion of 53.1%. The second largest proportion is the proportion of negative sentiment with a percentage of 40.9%. Only a small proportion of tweets were classified as tweets with positive sentiment, which amounted to 6% only. In addition, from Figure 7, it is found that the topic “Public Finance and Political Dimension” is dominated by neutral sentiment while the topics “Economy and Development” and “Investment and Investor Engagement” are dominated by negative sentiment. The proportion of positive sentiment across all three topics remains in the minority.



— Positive Sentiment

The positive reactions that emerged among X users on this topic consisted of praise and support. People praised that the construction phase of the nation's capital remains productive and progressing. There are some people who feel that this long-term development program is well-realized. There were also various forms of prayers and hopes that this development would not only continue, but also attract support from investors and private parties to fund the project. Such hopes include optimism that with sufficient funding streams and a skilled workforce, IKN will be a successful project in the long run.



On the other hand, there is also an element of satire in the positive sentiments found. Although the tweets conveyed praise, there were shades of satire that criticized some aspects of the IKN development, especially related to the financing of the project which was considered to be accumulating debt. This criticism highlights the IKN's funding source, which is taken from the State Budget (APBN), as well as concerns over the sustainability of the risky development. This satire reflects doubts or concerns about the long-term impact of the realization of this megaproject, which may add to the burden on the country's economy.



Coach Adam Velcro 🇮🇩 🇲🇾
@AdamVelcro

Terima kasih pak @Jokowi karena Anda:

1. Hutang Negara sudah mencapai > 8000 Trilyun
2. IKN Belum jadi trus Ibukota Indonesia skr dimana?
3. Debt Trap di depan mata a.k.a Woosh
4. Anak2 dan Mantu Anda sdh pada sukses skr
5. Silahkan lanjut ges.....

🤔 🤔

Figure 9. Representative Tweets of Positive Sentiment in the form of Satire

Neutral Sentiment

Many of the tweets and reports emphasized the factual aspects of the IKN project. The public and media are trying to provide a clear picture of the latest developments, both in terms of the physical construction and the policies taken by the government. This information includes not only the achievements that have been made, but also the challenges and obstacles faced. For example, news about the first foreign investors coming in. In this positive sentiment, there are efforts from various parties, both mass media and ordinary people, to share relevant facts about projects and/or policies that are being implemented, especially related to the development of the Ibu Kota Nusantara (IKN). This

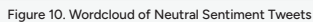


Figure 11. Tweets Representative of Neutral Sentiment

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 Negative Sentiment

The negative sentiment towards the development of the Ibu Kota Nusantara (IKN) reflects a variety of concerns raised among the public. One of the main criticisms of the IKN project is the view that the funds allocated for the construction of the new city are a waste of budget and at the expense of people's welfare. Many feel that the funds used to build IKN would be better focused on sectors that directly impact on people's welfare, such as education, health and poverty alleviation.

Concerns about the sustainability of the project were also discussed on Platform X. Many doubted whether the project could be realized as planned. People are worried that the project will experience setbacks or even stall, especially since it requires a very large flow of funds in its realization. One factor that adds to the uncertainty is the lack of participation from foreign investors. In many tweets and public discussions, it was mentioned that if the project is unable to attract foreign investors or the private sector, then the government will face great difficulties in financing the continued development.



- Figure 12. Word Cloud of Negative Sentiment Tweets



Heran masih ada aja yg suka sm jkw, ga sadar apa utang negara makin banyak dan ntu ikn aja mangkrak 😞

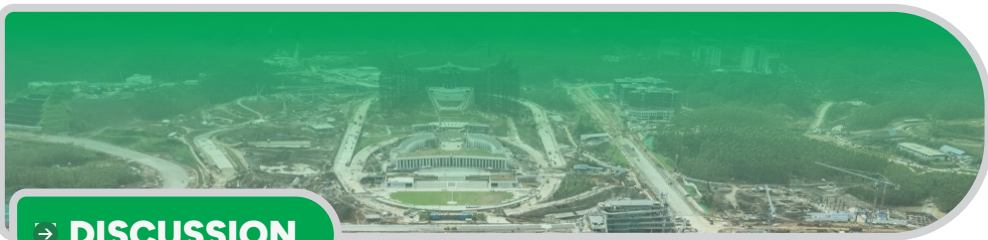
11.27 AM · 23 Okt 2024 · 15 Tayangan

Figure 13. Tweets Representative of Negative Sentiment

Tweets with negative sentiments also indicate dissatisfaction with transparency and accountability in the implementation of the IKN project. Some see the IKN development as a form of political ambition that prioritizes image over prioritizing the needs of the community. This view is further exacerbated by the assumption that the IKN project only benefits the elite and has no real impact on the welfare of the people as a whole. The project is also seen as a distraction from more pressing socio-economic issues, such as the country's ballooning debt and widespread social inequality.

In addition, there is criticism about the budget deficit that is expected to increase as a result of this project, which could come at the expense of allocating funds to other areas in need. Concerns about the financial risks if investors pull out have also been raised, suggesting that reliance on investors without long-term commitments could cause great harm to the country and society, making the project unrealistic and a potential burden to the economy.



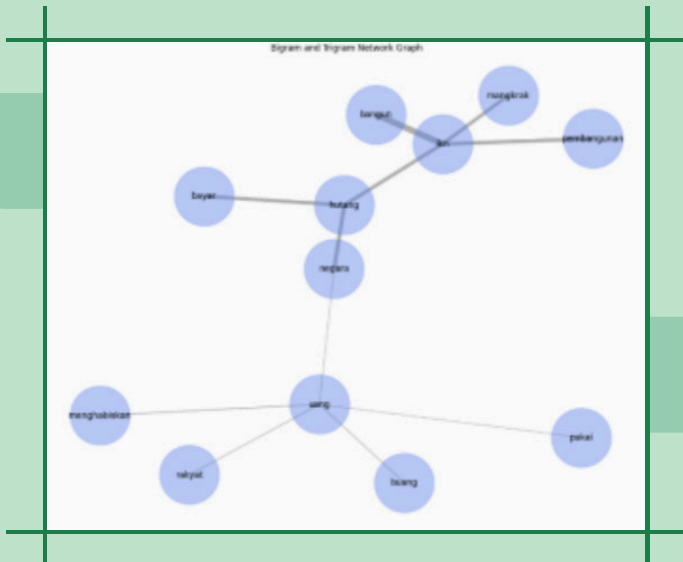


➔ DISCUSSION

Researchers are interested in taking a deeper look at the findings discussed in the previous section. There are some interesting terms that are often talked about by the public, especially in negative sentiment. Furthermore, researchers created a network graph in Figure 11 that maps the relationship between words in tweets on negative sentiment. There are 3 sets of words that interest the researcher to be further examined factually. The first is “Buang Uang Rakyat”. It has been repeatedly stated in the discussion in the previous section that the public feels that the project of building and moving the New Capital City consumes a very large budget. When viewed from the data on the proportion of funding sources for the IKN project, around 20% of the initial IKN development budget came from the State Budget or APBN (ikn.id, 2021).

The second term is “IKN Mangkrak”. The public has expressed concern over the sustainability of the IKN development project. Data shows that the amount of non-APBN state-owned and private investment for the Ibu Kota Nusantara has only reached Rp58.4 trillion (Kompas, 2024). This figure is still very small when compared to the total investment target for the end of 2024, which is Rp100 trillion. Several tweets discussed the investors that are targeted to come in so that they can support the funding of IKN, which relies on investment. Not only that, people are also anxious when they find out that the budget allocation for the development of the Archipelago's Capital City has shrunk in 2025, at Rp143.1 billion. This is not comparable to the total initial budget listed in the RPJMN, which is Rp466 Trillion. However, the Minister of Finance, Sri Mulyani Indrawati, has explained that the allocation can change according to the needs proposed by the Minister of Defense, Prabowo Subianto, as the situation develops in the current year (Sutardi, D, 2024).

"Utang Negara" is also a common combination of words in discussions among X platform users. The Ministry of Finance has reported that Indonesia's total debt due in 2025 is IDR 800.33 trillion. This figure will accumulate to a value of IDR3,748.24 trillion due to Indonesia during the period 2025-2029 (Mubarak, F, 2024). The public suggests, advises, evaluates, and even criticizes that the country's mounting debt needs to be addressed. Many of them do not agree with the Indonesian government continuing the construction of IKN and are expected to focus on paying off this debt.





CONCLUSION

The development of the Ibu Kota Nusantara (IKN) is designed with a comprehensive funding strategy to ensure financial sustainability and stability. Based on the Cetak Biru Kota Cerdas Nusantara, the government adopts various funding schemes, including the State Budget (APBN), Public Private Partnership (PPP), as well as international and creative funding. This strategy is supported by efforts to create a competitive investment ecosystem through fiscal incentives, a supportive legal framework, and regulatory efficiency.

While these measures promise potential sustainability, a key challenge is to ensure efficient and transparent sharing of financial resources, especially given the significant reliance on the private sector. On the other hand, funding is also focused on infrastructure priorities and public services that support urbanization and investment.

An analysis of public responses on platform X shows that the construction of IKN is the subject of intense discussion in the community. Most of the criticism focuses on concerns over national economic stability and the government's prioritization of public funds. Some people feel that the budget would be better allocated to other more pressing needs. However, there was also support and hope that reflected optimism about IKN's potential as a progressive new economic center. Doubts about the sustainability of the project, especially in terms of funding and management, remain a major issue. Therefore, the government needs to conduct a thorough evaluation of the ongoing development process and devise appropriate strategies to ensure success in the next phase.



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➔ ABOUT CfDS

Center for Digital Society (CfDS) is the research center established by the Faculty of Social and Political Sciences, Universitas Gadjah Mada. The institution is created under the concern over the contemporary dynamics of socio-political condition of the world that is accentuated by the impeccable influence of information technology. The phenomenon triggers the new patterns and complexities in the society, and thus requires new approaches in managing such complexities.

CfDS pledged to delve more on the study of contemporary digital society, including related issues surrounding the topic; such as the issues of smart city and urban development. The emphasis is then put on the utilization of technology to shape the society in becoming digitalized, as well as to bring solvency to social issues.

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