Analisis Sentimen Penggun Twitter Tagar Ibu Kota Baru Menggunakan Metode Lexicon Based (Sentiment Analysis of Twitter Users of the New Capital City Hashtag Using Lexicon Based Method), Dr. Adi Heru Utomo, S. Kom., M. Kom (Pembimbing I) dan Khafidurrohman Agustianto, S.Pd, M. Eng. (Pembimbing II).

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## **ABSTRACT**

Proposed relocation of the Indonesian capital to East Kalimantan by the government without involving the legislative branch of power. This caused controversy because it had an impact on state institutions. A survey was conducted in August 2019 to gather community responses to the relocation plan, with 39.8% of respondents opposed and 35.6% agreeing. This study aims to analyze public sentiment related to the relocation of the capital city. However, it is necessary to preprocess data such as case folding, emoji removal, filtering, word correction, translation from Indonesian to English, stopword removal, lemmatization, and tokenization. The Lexicon Based method is used to classify positive and negative sentiments based on opinions obtained from Twitter. The results showed that 18% of comments with positive sentiment, 39% of comments with negative sentiment, and 41% of comments with neutral sentiment out of a total of 295 comments analyzed. Data harvesting is done through a third-party website, Apify, due to Twitter's new policy regarding API usage. The Lexicon Based method has the advantages of ease and speed in terms of method application because it uses dictionaries that have been categorized based on sentiment. However, the downside is the limitation in context because lexical sources do not yet cover all languages. Through the Confusion Matrix, sentiment analysis accuracy reaches 0.502 with a precision of 0.59 for positive sentiment, 0.55 for negative sentiment, and 0.42 for neutral sentiment. The recall obtained was 0.22 for positive sentiment, 0.41 for negative sentiment, and 0.39 for neutral sentiment.

Keywords: Sentiment Analysis, Lexicon Based, Confusion Matrix, Waterfall