Komparasi CRISP-DM dan SEMMA Sebagai Metode Data Mining Dalam Klasifikasi Analisis Sentimen Twitter Terhadap Ibu Kota Nusantara (Comparison of CRISP-DM and SEMMA as Data Mining Methods in Classification of Twitter Sentiment Analysis of the Indonesian Capital)

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ABSTRACT

The Indonesian government has set the development of the Indonesian Capital City (IKN) as an effort to overcome Jakarta's problems. The program has raised various public opinions, both positive and negative. Social media, especially Twitter, is a potential source of data in analyzing public sentiment towards this policy. This study aims to identify the advantages and disadvantages of each method when applied to Twitter sentiment analysis. This study used two data mining approaches, namely CRISP-DM and SEMMA, each of which showed almost equivalent performance. The results of the CRISP-DM method showed slightly better performance compared to the SEMMA method in sentiment analysis towards the Indonesian Capital City (IKN). The CRISP-DM and SEMMA methods can be used in sentiment analysis towards the development of IKN, each with a different approach. CRISP-DM tends to provide balanced classification results between positive and negative sentiment, but the process is more complex and time-consuming. In contrast, SEMMA is more practical and faster, especially in data processing. This study shows that CRISP-DM is suitable for business goal-oriented analysis, while SEMMA is more suitable for technical analysis that requires efficiency, so it can be a reference for similar studies in the future.

Key Words: Sentiment Analysis, Indonesian Capital, CRISP-DM, SEMMA