

ANALISIS SENTIMEN MASYARAKAT TERHADAP KEBIJAKAN GUBERNUR JAWA BARAT DI SOSIAL MEDIA MENGGUNAKAN ALGORITMA LONG SHORT-TERM MEMORY

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ABSTRAK

Penelitian ini menelaah analisis sentimen masyarakat terhadap kebijakan Gubernur Jawa Barat yang terekam di media sosial, seperti Twitter, Instagram, dan TikTok, dengan menggunakan algoritma Long Short-Term Memory (LSTM). Permasalahan utama muncul karena opini publik bersifat dinamis dan tersebar di berbagai platform, sehingga metode konvensional seperti survei tatap muka kurang efektif dalam menangkap persepsi masyarakat secara cepat dan komprehensif. Dataset penelitian diperoleh melalui proses scrapping dan mencakup komentar dalam bahasa Indonesia yang kemudian diproses melalui tahapan Knowledge Discovery in Databases (KDD), meliputi pemilihan data, preprocessing, transformasi, pelabelan, dan pembobotan kata menggunakan Word Embedding. Model LSTM dilatih untuk mengklasifikasikan sentimen menjadi kategori positif, negatif, dan netral, serta dianalisis performanya menggunakan metrik akurasi, precision, recall, dan F1-score. Hasil penelitian menunjukkan bahwa model mampu mengklasifikasikan sentimen secara akurat dan memberikan gambaran distribusi opini masyarakat terhadap berbagai kebijakan gubernur. Temuan ini diharapkan dapat menjadi dasar pengembangan sistem pemantauan opini publik berbasis kecerdasan buatan yang mendukung pengambilan keputusan pemerintah daerah secara lebih responsif dan tepat sasaran.

Kata kunci: Analisis Sentimen, LSTM, Kebijakan Gubernur Jawa Barat, Media Sosial

Public Sentiment Analysis on the Policies of the Governor of West Java on Social Media Using Long Short-Term Memory (LSTM) Algorithm

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ABSTRACT

This study examines public sentiment toward the policies of the Governor of West Java as expressed on social media platforms, including Twitter, Instagram, and TikTok, using the Long Short-Term Memory (LSTM) algorithm. The main challenge arises from the dynamic and dispersed nature of public opinions across multiple platforms, making conventional survey methods less effective in capturing real-time and comprehensive perceptions. The research dataset was collected through data scraping and consists of Indonesian-language comments, which were processed using the Knowledge Discovery in Databases (KDD) framework, including data selection, preprocessing, transformation, labeling, and word embedding. The LSTM model was trained to classify sentiments into positive, negative, and neutral categories and evaluated using accuracy, precision, recall, and F1-score metrics. The results indicate that the model can accurately classify sentiments and provide insights into the distribution of public opinion regarding various gubernatorial policies. These findings are expected to serve as a basis for developing an AI-based public opinion monitoring system that supports more responsive and targeted decision-making by regional governments.

Keywords: Sentiment Analysis, LSTM, West Java Governor Policies, Social Media