

## ABSTRAK

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Judul Laporan Skripsi : Perbandingan Akurasi dalam Analisis Sentimen berbasis RoBERTa dan Naive Bayes pada Topik Vaksin di Masa Pandemi  
Pembimbing : Drs. Achmad Kodar, MT.

*Pandemi Covid-19 tidak hanya menyebabkan perubahan besar dalam kehidupan sehari-hari tetapi juga memicu beragam pandangan mengenai vaksinasi. Dengan pentingnya memahami persepsi publik terhadap vaksinasi, media sosial, khususnya Twitter, menjadi sarana utama dalam menyuarakan berbagai opini. Penelitian ini bertujuan untuk mengevaluasi efektivitas beberapa model analisis sentimen, termasuk kombinasi RoBERTa-RoBERTa, RoBERTa-Naive Bayes, dan AFINN dengan RoBERTa dan Naive Bayes, dalam menginterpretasikan sentimen publik mengenai vaksin Covid-19. RoBERTa, sebagai model berbasis transformer, dikenal revolusioner dalam bidang pemrosesan bahasa alami (NLP), sementara Naive Bayes, dengan pendekatan tradisionalnya, tetap relevan dalam analisis teks. Data yang dianalisis adalah kumpulan tweet dalam Bahasa Inggris yang berkaitan dengan vaksinasi Covid-19. Penelitian ini menggunakan pendekatan kuantitatif, dengan fokus pada analisis komprehensif yang mencakup Precision, Recall, F1-Score, dan Accuracy untuk mengklasifikasikan sentimen positif, negatif, dan netral. Hasil penelitian menunjukkan variasi performa di antara model-model tersebut, dengan model AFINN-RoBERTa 10k menunjukkan performa terbaik. Temuan ini diharapkan memberikan pemahaman baru tentang aplikabilitas berbagai model NLP dalam konteks yang sangat relevan dan dinamis, serta berkontribusi pada pengembangan lebih lanjut di bidang analisis sentimen terkait isu kesehatan publik.*

**Kata Kunci:** Analisis Sentimen, RoBERTa, Naive Bayes, Vaksin Covid-19, NLP, Media Sosial, Twitter.

## ABSTRACT

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Title Thesis : Comparison of Accuracy in Sentiment Analysis based on RoBERTa and Naive Bayes on the Topic of Vaccines during the Pandemic.  
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*The Covid-19 pandemic has not only led to significant changes in everyday life but has also sparked a variety of viewpoints on vaccination. Understanding public perception of vaccination is crucial, with social media, particularly Twitter, serving as a primary platform for expressing these opinions. This research aims to evaluate the effectiveness of various sentiment analysis models, including combinations of RoBERTa-RoBERTa, RoBERTa-Naive Bayes, and AFINN with RoBERTa and Naive Bayes, in interpreting public sentiment on Covid-19 vaccination. RoBERTa, a transformer-based model, is renowned for its revolutionary impact in the field of natural language processing (NLP), while Naive Bayes remains relevant in text analysis with its more traditional approach. The data analyzed comprises English-language tweets related to Covid-19 vaccination. This study adopts a quantitative approach, focusing on comprehensive analysis including Precision, Recall, F1-Score, and Accuracy to classify positive, negative, and neutral sentiments. The findings show varying performance among these models, with the AFINN-RoBERTa 10k model exhibiting the highest performance. These findings are expected to provide new insights into the applicability of various NLP models in a highly relevant and dynamic context, and contribute to further development in the field of sentiment analysis related to public health issues.*

**Keywords:** Sentiment Analysis, RoBERTa, Naive Bayes, Covid-19 Vaccine, NLP, Social Media, Twitter.