

ABSTRAK

ANALISIS PERBANDINGAN SENTIMEN PENGGUNA TWITTER TERHADAP CHATGPT MENGGUNAKAN *TEXT MINING* DENGAN METODE KLASIFIKASI

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ChatGPT menjadi topik pembicaraan yang mengundang banyak respon dari para pengguna twitter di Indonesia, baik itu positif, netral maupun negatif. Dari banyaknya respon ini maka dibutuhkan pengumpulan informasi untuk mengetahui sentimen pengguna twitter terhadap ChatGPT. Pada pengolahan data analisis sentimen digunakan *text mining* untuk proses mengekstraksi informasi yang bermanfaat serta wawasan dari teks yang tidak terstruktur atau tidak terformat dengan metode klasifikasi *support vector machine*, *naïve bayes classifier*, *logistic regression*, *random forest* dan *decision tree*. Pengujian dilakukan pada dataset sebanyak 1452 tweet dengan perbandingan 80:20. Berdasarkan hasil analisis menggunakan metode *support vector machine* mendapatkan nilai *accuracy* sebesar 61%, *precision* 78%, *recall* 61%, *f1-score* 54%, untuk *naïve bayes classifier* menghasilkan *accuracy* 59%, *precision* 78%, *recall* 59% dan *f1-score* 50%, untuk *logistic regression* menghasilkan *accuracy* 62%, *precision* 74%, *recall* 62%, *f1-score* 57%, untuk *random forest* menghasilkan *accuracy* 64%, *precision* 68%, *recall* 64%, *f1-score* 60%, dan untuk *decision tree* menghasilkan *accuracy* 63%, *precision* 64%, *recall* 63%, *f1-score* 60%. Sehingga dapat disimpulkan bahwa metode dengan akurasi terbaik untuk analisis sentimen terhadap ChatGPT adalah *random forest*.

Kata Kunci : ChatGPT, Analisis Sentimen, Text Mining, *Support Vector Machine*, *Naïve Bayes Classifier*, *Logistic Regression*, *Random Forest*, *Decision Tree*

ABSTRACT

COMPARATIVE ANALYSIS OF TWITTER USERS' SENTIMENT TOWARDS CHATGPT USING TEXT MINING WITH CLASSIFICATION METHOD

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ChatGPT has become a topic of significant discussion among Indonesian Twitter users, eliciting diverse responses ranging from positive to neutral and negative. In order to gauge the sentiment of users towards ChatGPT, data analysis was performed using text mining to extract valuable insights from unstructured or unformatted text. Support Vector Machine, Naïve Bayes Classifier, Logistic Regression, Random Forest, and Decision Tree were employed as classification methods. The dataset comprised 1452 tweets with an 80:20 training-testing data split. The results of the analysis using Support Vector Machine showed an accuracy of 61%, precision of 78%, recall of 61%, and f1-score of 54%. Naïve Bayes Classifier achieved an accuracy of 59%, precision of 78%, recall of 59%, and f1-score of 50%. Logistic Regression resulted in an accuracy of 62%, precision of 74%, recall of 62%, and f1-score of 57%. Random Forest demonstrated the highest accuracy at 64%, with precision of 68%, recall of 64%, and f1-score of 60%. Lastly, Decision Tree achieved an accuracy of 63%, precision of 64%, recall of 63%, and f1-score of 60%. Consequently, it can be concluded that Random Forest is the most effective method for sentiment analysis of ChatGPT.

Keyword: *ChatGPT, Sentiment Analysis, Text Mining, Support Vector Machine, Naïve Bayes Classifier, Logistic Regression, Random Forest, Decision Tree.*