

SENTIMENT ANALYSIS USING NAÏVE BAYES CLASSIFIER ALGORITHM ON COMPASS SHOE PRODUCTS

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ABSTRACT

This study analyzes customer sentiment toward Compass shoes on Tokopedia using the Multinomial Naïve Bayes algorithm. A total of 1,521 product reviews were collected through web scraping and processed through several stages, including data cleaning, normalization, and sentiment labelling. The developed model achieved an accuracy of 92.31%, with strong precision and recall scores for both negative (0.88 and 0.98) and positive (0.98 and 0.86) sentiments. The use of Term Frequency-Inverse Document Frequency (TF-IDF) for feature extraction and Synthetic Minority Over-sampling Technique (SMOTE) for class balancing proved to be effective. Sentiment distribution was further clarified through visualizations such as word clouds for positive and negative reviews and a confidence score table. The findings of this study can be utilized to improve product quality and customer service by leveraging consumer feedback identified through sentiment analysis.