

ABSTRAK

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Judul : Perbandingan Model Analisis Sentimen Menggunakan
*Machine Learning Method Terhadap Ulasan Pembeli Pada
Seller Bosca Living (Studi Kasus: Bosca Living)*

Bosca Living, star *seller* di Shopee dan Tokopedia, menghadapi tantangan analisis sentimen pelanggan. Penelitian ini mengevaluasi model dan metode untuk memperkuat respons terhadap tanggapan pelanggan. Pada penelitian sebelumnya, teknik ekstraksi fitur *Term Frequency-Inverse Document Frequency (TF-IDF)* telah diuji. Model-*machine learning* seperti *Random Forest* dan *Decision Tree* telah digunakan, namun perbandingan lebih mendalam diperlukan sesuai penilaian Bosca Living. Penelitian ini mengusulkan perbandingan model melalui tahap *pre-processing*, ekstraksi fitur, dan penentuan parameter dengan *GridSearchCV*. Model *machine* seperti *Random Forest* dan *Decision Tree* dievaluasi dengan *StratifiedKfold* mengurangi risiko *overfitting*. Hasil penelitian memberikan wawasan mendalam, membimbing Bosca Living meningkatkan respons terhadap umpan balik pelanggan. Pendekatan ini diharapkan mengoptimalkan strategi bisnis, mendukung perbaikan berkelanjutan, dan responsif terhadap dinamika pasar serta kebutuhan pelanggan yang berkembang.

Kata Kunci: Bosca Living, Analisis sentimen pelanggan, Model-*machine learning*, Ekstraksi fitur, Respons terhadap umpan balik pelanggan

ABSTRACT

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Title : *Comparison of Sentiment Analysis Models Using Machine Learning Methods on Customer Reviews for Bosca Living Seller (Case Study: Bosca Living)*

Bosca Living, a star seller on Shopee and Tokopedia, faces the challenge of customer sentiment analysis. This research evaluates models and methods to strengthen responses to customer feedback. In previous studies, the Term Frequency-Inverse Document Frequency (TF-IDF) feature extraction technique was tested. Machine learning models such as Random Forest and Decision Tree were employed, but a more comprehensive comparison was deemed necessary based on Bosca Living's assessment. This research proposes a model comparison through preprocessing, feature extraction, and parameter determination stages using GridSearchCV. Machine learning models like Random Forest and Decision Tree are evaluated with StratifiedKfold to reduce the risk of overfitting. The results of the research provide deep insights, guiding Bosca Living in improving responses to customer feedback. This approach is expected to optimize business strategies, support continuous improvement, and be responsive to market dynamics and evolving customer needs.

Keywords:

Bosca Living, Customer Sentiment Analysis, Machine Learning Models, Feature Extraction, Customer Feedback Response