ANALISIS SENTIMEN PENGGUNA ANDROID TERHADAP APLIKASI INDOMARET POINKU MENGGUNAKAN METODE *MAXIMUM ENTROPY*

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ABSTRAK

Indomaret Poinku merupakan program membership dengan menggunakan aplikasi *mobile* yang dimana *customer* dapat menukarkan poin dan *stamp*. Penelitian ini bertujuan untuk menganalisis sentimen pengguna aplikasi Indomaret Poinku di Android guna memberikan wawasan tentang kepuasan, masalah, dan area peningkatan yang perlu dilakukan oleh pengembang. Data dikumpulkan dari 6,435 ulasan pengguna di Google Play Store. Hasil penelitian Berdasarkan data ulasan pengguna aplikasi Indomaret Poinku dari Januari hingga Juni 2023, terdapat variasi jumlah ulasan dan *rating* bintang dengan puncak tertinggi pada bulan Februari dan Maret yang dipengaruhi oleh campaign Indomaret. Proses klasifikasi ulasan melalui preprocessing data, pembobotan kata menggunakan TF-Idf, dan *K-Fold Cross Validation* menunjukkan bahwa klasifikasi tanpa pembobotan TF-Idf memberikan hasil akurasi yang lebih baik dengan akurasi rata rata dari 5 iterasi adalah 91,6%, dengan rata-rata *precision* sebesar 0.923, rata-rata *recall* sebesar 0.949, dan rata-rata *F1-Score* sebesar 0.936. Analisis asosiasi teks mengungkap bahwa ulasan positif mencerminkan kelebihan aplikasi, sementara ulasan negatif menyoroti masalah penggunaan. Mayoritas ulasan memuji layanan dan promosi, namun juga menyoroti masalah teknis dan kesulitan penggunaan yang perlu diperbaiki. Rekomendasi untuk meningkatkan kualitas aplikasi meliputi optimalisasi program *membership*, peningkatan layanan pelanggan, perbaikan teknis aplikasi, dan implementasi fitur saran pengguna berdasarkan ulasan positif, serta perbaikan kinerja aplikasi, proses verifikasi, dan manajemen pembaruan aplikasi berdasarkan ulasan negatif.

Kata Kunci: Analisis Sentimen, Klasifikasi, *K-Fold Cross Validation*, TF-IDF, *Maximum Entropy*

ANALYSIS OF ANDROID USER SENTIMENT TOWARDS THE INDOMARET POINKU APPLICATION USING THE MAXIMUM ENTROPY METHOD

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ABSTRACT

Indomaret Poinku is a membership program using a mobile application where customers can exchange points and stamps. This research aims to analyze the sentiment of users of the Indomaret Poinku application on Android to provide insight into satisfaction, problems and areas of improvement that need to be made by the developer. Data collected from 6,435 user reviews on the Google Play Store. Research results Based on data from user reviews of the Indomaret Poinku application from January to June 2023, there are variations in the number of reviews and star ratings with the highest peaks in February and March which are influenced by the Indomaret campaign. Although the majority of reviews provide positive ratings, there are a significant number of negative reviews related to technical issues and app usage. The review classification process through data preprocessing, word weighting using TF-Idf, and K-Fold Cross Validation shows that classification without TF-Idf weighting provides better accuracy results with the average accuracy of 5 iterations being 91.6%, with an average of The average precision is 0.923, the average recall is 0.949, and the average F1-Score is 0.936. Text association analysis revealed that positive reviews reflected app advantages, while negative reviews highlighted usage issues. The majority of reviews praise the service and promotions, but also highlight technical issues and usage difficulties that need to be fixed. Recommendations for improving application quality include optimizing the membership program, improving customer service, improving application technical aspects, and implementing a user suggestion feature based on positive reviews, as well as improving application performance, verification processes, and application update management based on negative reviews.

Keywords: Sentiment Analysis, Classification, K-Cross Validation, TF-IDF, Maximum Entropy