ANALISIS SENTIMEN PADA ULASAN PRODUK MASKER DI *MARKETPLACE* SHOPEE MENGGUNAKAN *SUPPORT VECTOR MACHINE* DAN SELEKSI FITUR *CHI SQUARE*

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ABSTRAK

Masker menjadi hal wajib saat ingin keluar rumah yang membuat penjualan masker meningkat drastis. Namun dengan adanya pembatasan kegiatan tersebut membuat aktivitas jual beli secara konvesional menjadi terhambat. Oleh karena itu banyak masyarakat beralih dari berbelanja langsung menjadi berbelanja *online*. *Marketplace* Shopee merupakan salah satu *platform* belanja *online*. Penjualan masker di *marketplace* Shopee mengalami peningkatan yang sangat drastis yang membuat variasi penilaian ulasan produk yang berbeda-beda dari pembeli. Pada penelitian dilakukan analisis sentimen terhadap 2 kelas positif dan negatif bedasarkan *rating* ulasan. Algoritma klasifikasi yang digunakan adalah *Support Vector Machine* (SVM) dengan kernel *Radial Basis Function* (RBF) serta menerapkan seleksi fitur *Chi Square*. Tingkat performa yang didapat menggunakan seleksi fitur *Chi Square* dengan nilai taraf nyata (α) 0.3 menghasilkan nilai akurasi sebesar 91,32%, presisi sebesar 93,28%, *recall* sebesar 93,14% dan *f1-score* 93,21%. Dibanding dengan tingkat performa tanpa menggunakan seleksi fitur hanya menghasilkan nilai akurasi sebesar 90,75%, presisi sebesar 92,08%, *recall* sebesar 93,59% dan *f1-score* 92,83%.

Kata kunci: Masker, Analisis Sentimen, *Marketplace*, Shopee, Ulasan Produk, *Support Vector Machine, Chi Square*

SENTIMENT ANALYSIS OF MASK PRODUCT REVIEWS AT THE SHOPEE MARKETPLACE USING SUPPORT VECTOR MACHINE AND CHI SQUARE FEATURE SELECTION

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ABSTRACT

Masks are mandatory when you want to walk away from home, which makes mask sales increase drastically. However, with the limitation of these activities, conventional selling activities are hampered. Therefore, many people switch from direct shopping to online shopping. Shopee Marketplace is an online shopping platform. The sale of masks in the Shopee marketplace has experienced a very drastic increase which has made variations in the assessment of different product reviews from buyers. In this study, sentiment analysis is divided into 2 positive and negative classes based on the rating review. The classification algorithm used is a Support Vector Machine (SVM) with a Radial Basis Function (RBF) kernel and applies the Chi Square feature selection. The result of performance level using the Chi Square feature selection with a significance level value (α) of 0.3 obtained an accuracy of 91,32%, precision of 93,28%, recall of 93,14% and f1-score of 93,21%. Compared to the result of performance level without using feature selection, it only obtained an accuracy of 90.75%, precision of 92.08%, recall of 93.59% and f1-score of 92.83%.

Keywords: Mask, Sentiment Analysis, Marketplace, Shopee, Product Review, Support Vector Machine, Chi Square