ANALISIS SENTIMEN ULASAN PRODUK PEMBERSIH WAJAH MENGGUNAKAN ALGORITMA *LOGISTIC REGRESSION* *Sentiment Analysis of Facial Wash Product Reviews Using the Logistic Regression Algorithm*

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ABSTRACT

User reviews on social media can provide insights into public opinions about a product, including facial wash products. The large volume of unstructured reviews makes manual analysis inefficient. Sentiment analysis can be applied to automatically classify public opinions into specific categories. This study aims to analyze public sentiment toward facial wash products on X using the Logistic Regression algorithm. The dataset used consists of 1,173 tweets, and the model training process was conducted using an 80:20 data split, followed by evaluation using K-Fold Cross Validation with k = 10, resulting in an average validation accuracy of 0.8540 with a standard deviation of ±1.6%, indicating stable and representative performance. The results show that the majority of public opinions are positive. The model achieved an accuracy of 85.11% and an AUC value of 0.8884, which is categorized as good. The recall value for the positive class reached 100%, while the negative class achieved 10.26%, indicating that the model performs better in detecting positive sentiment than negative sentiment.

Key words*: Sentiment Analysis, Facial Wash, X, Logistic Regression, Machine Learning.*