

## Abstract

Circulating beauty products that are sold on the internet by various kinds of producers both foreign and domestic. But still the quality of the cosmetics sold by each manufacturer is doubtful, in order to know whether the product is good to use then the manufacturer needs to get reviews / reviews from consumers who use the product. For that manufacturers find it easier to find products that are relevant to health then we need a system to classify these product reviews including categories relevant or irrelevant to the health aspect. On This final project uses machine learning on sentiment classification using Random Forest, Support Vector Machine (SVM), and K-Nearest Neighbor(KNN) to find the highest accuracy and F1-score of the three The algorithm uses feature extraction, namely chi-square with feature selection using Selected K Best for the process preprocessing. In this study, analysis of the results has been obtained that the SVM algorithm with the Linear kernel gets the best accuracy value of 67.10%.

**Keywords:** Comparison, Sentiment Analysis, KNN, Random Forest, SVM, chi-square, Selected K-Best, Female Daily, Sanity