

## ***ABSTRACT***

Increasing trade in the beauty industry in Indonesia, which encourages sales of beauty products, creates intense competition. According to the Ministry of Industry's records, this growth increased by 6.35% in 2017 and 7.33% in 2018. One of the most popular beauty products in Indonesia is sunscreen. According to research, the average annual growth of the sunscreen market in Indonesia in 2018 was 10% and will increase by 14% in the future. The intense competition requires companies to further improve their performance in meeting consumer needs.

Online Customer Review is a feature that has attracted a lot of attention from academics and the public as one of the most influential factors in determining customer satisfaction. One site that provides reviews of various beauty products is FemaleDaily.com. However, the company itself sometimes has difficulty in sorting and categorizing reviews to find out whether the product is of good quality and meets consumer needs. In this study, the assessment of a product based on the review given is a rating. So the purpose of this study is to predict and determine ratings based on reviews given by users of 3 popular products on the FemaleDaily.com site, namely Emina, Wardah and Biore products.

To support the system built, a method is needed to solve these problems. In this study the researchers used the Naïve Bayes and Random Forest methods. From the test results, the best rating prediction accuracy is obtained when using the Naïve Bayes method with an accuracy rate of 61%

*Keywords: Customer Satisfaction, Text Mining, Rating Prediction, Beauty products*