

SENTIMENT ANALYSIS OF CUSTOMER SATISFACTION LEVEL TOWARDS AZARINE HYDRASHOOTHE SUNSCREEN GEL SPF45 PA++++ PRODUCT BASED ON REVIEWS IN SOCIOLLA USING THE MULTINOMIAL NAÏVE BAYES METHOD

Maharani Yulianti

Data Science Study Program, Faculty of Science and Technology

University of Technology Yogyakarta

Jl. Ringroad Utara Jombor Sleman Yogyakarta

E-mail : maharaniyt@gmail.com

ABSTRACT

Azarine Cosmetic is a local brand that focuses on skin and body care, leveraging product sales through e-commerce platforms such as Sociolla. Sociolla is a sales platform that allows customers to share reviews and ratings that influence buyer perceptions and decisions. However, inconsistencies in reviews and ratings can cause bias, affect general perceptions, and confuse understanding of product quality and satisfaction. This study uses review data obtained through a Google Chrome extension. The process includes preprocessing, Exploratory Data Analysis (EDA), Term Frequency-Inverse Document Frequency (TF-IDF), modeling, model evaluation, and visualization using Python. The results of the model evaluation show that Multinomial Naïve Bayes works optimally in sentiment classification, with an accuracy of 0.91 on the test data and 0.90 on the training data. Precision on the test data is 0.91, and on the training data 0.88. Recall on the test data reaches 0.96, and on the training data 0.94. Customer sentiment shows that 69.8% are satisfied with the product, while 30.2% are dissatisfied.

Keywords: *Sentiment Analysis, Multinomial Naïve Bayes, Model Evaluation*