

**ANALISIS TINGKAT KEPUASAN PELANGGAN TERHADAP MIE
PEDAS DI JEMBER DENGAN METODE NAÏVE BAYES (*Customer
Satisfaction Analysis of Spicy Noodle Restaurants in Jember Using the Naïve
Bayes Method*)**

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ABSTRACT

The growing competition among spicy noodle restaurants in Jember Regency encourages business owners to better understand customer satisfaction through Google Maps reviews. This study aims to analyze customer satisfaction using the Multinomial Naïve Bayes method. The data were collected through web scraping from reviews of Mie Gacoan, Wizzmie, Mie Teror, and Mie Sakera. Each review was labeled based on the aspects of food, price, service, environment, and general, as well as satisfaction levels consisting of Very Satisfied, Dissatisfied, and Moderately Satisfied. The data were then processed through preprocessing, TF-IDF weighting, and classification using a multi-stage approach. Stage 1 was used to detect the discussed aspects, while Stage 2 was used to determine the satisfaction level of each detected aspect. The results showed that the best model was obtained using Multinomial Naïve Bayes with SMOTE and a 70:30 data split ratio. The model achieved an average accuracy of 91.41% in Stage 1 and 85.44% in Stage 2, with a final accuracy of 78.08%, precision of 80.13%, recall of 78.08%, and an F1-score of 78.79%.

Keywords: Naïve Bayes, customer satisfaction, Google Maps, TF-IDF, multi-stage classification, web scraping.