ABSTRACT

IMPLEMENTATION OF NAIVE BAYES IN E-COMMERCE FOR FASHION RECOMMENDATIONS

The rapid development of e-commerce has driven the need for recommendation systems that can enhance user experience. This study aims to develop a web-based fashion product recommendation system using the Naive Bayes algorithm. The dataset used was compiled from a combination of user transaction attributes, product preferences, and survey-based behavioral features, then processed into a training-ready format. The system was evaluated using a confusion matrix and achieved an accuracy of 85%, with a precision of 81.8%, recall of 90.0%, and an F1-score of 85.7%. These results demonstrate that the Naive Bayes algorithm is effective for implementing personalized recommendation systems in the fashion domain. The system is expected to help users find suitable products while enhancing marketing efficiency in e-commerce platforms.

Keywords *: E-commerce, Naive Bayes, Recommendation System, Machine Learning, Fashion.*