

## ABSTRACT

Bibit is one of the largest financial applications in Indonesia. The Bibit application has become a popular choice for users to invest due to the convenience of its features. Users can download and provide reviews for the Bibit application through Google Play. The application of sentiment analysis to these reviews aims to classify user sentiments and provide a general overview that can assist the company in evaluating its services. This study aims to conduct a sentiment analysis of customer reviews for the Bibit application using the Support Vector Machine (SVM) algorithm optimized with Particle Swarm Optimization (PSO). The dataset used in this study consists of 2299 reviews collected from Google Play between January and October 2024. The best SVM model was selected based on the highest F1-Score during the search for the hyperparameter C using PSO, which was then compared with the results from the grid search method. The results of this study shows that the best performance was achieved by the SVM-PSO model, with a cost (C) value of 36.33278 and a Gamma value of 0.000537634. This model yielded accuracy of 84.35%, recall of 80.34%, precision of 92.80%, and F1-score of 86,41%.

**Keyword:** Bibit, Sentiment Analysis, Support Vector Machine, Particle Swarm Optimization, SVM-PSO, Classification