ABSTRACT

Badan Usaha Milik Negara (BUMN) are one of the three main economic players in the country, alongside cooperatives and private enterprises, aiming to realize a prosperous society in various fields. One of the BUMN, PT Pegadaian, operates in the financial sector. According to the directorate regulation of PT Pegadaian Number 122 of 2020, to enhance the quality and maturity level of information technology (IT), *evaluation* and monitoring mechanisms based on the international standard ISO/IEC 25010:2011 for System & Software Quality Models are required in managing IT quality. Therefore, PT Pegadaian is currently undergoing a transformation process to expand its business model that was originally only feasible through offline means, making it possible to be done online. To support this Pegadaian transformation process, an application named "Pegadaian Digital" has been developed, containing PT Pegadaian's core businesses, such as buying and selling gold savings, pawn booking, and gold price reviews. To assist digital transformation process, sentiment analysis research is conducted based on various aspects to identify aspects in the application that need to be improved and maintained. The study focuses on user reviews from *Google Play Store*, utilizing the KDD process and *Support vector machine* algorithm. The aspects used in this research are *Learnability*, *Efficiency*, *Error*s, and *Satisfaction*, each aspect labelled as positive, negatif, and neutral (not exist). The testing in this research is divided into two scenarios, focusing on the model with default parameter and parameter with hyperparameter tuning. Subsequently, the model is evaluated with accuracy, precision, recall, F1-score, and K-Fold Cross Validation. The *evaluation* results show that the scenario with a split data ratio of 80:20 using SVM with basic or default parameters gets the best performance results based on an accuracy value of 86%, recall 80%, f1-score 82%, precision 84%, and model did not overfitting.

Keywords: *Google Play Store Reviews, Pegadaian Digital, ABSA (Aspect Based Sentiment Analysis), Support Vector Machine, Hyperparameter tuning*