## ABSTRACT

As the development of information technology is accelerating, it will encourage changes in human behaviour, which results in all activities needing to use technology. So that it affects various aspects of life and makes several companies carry out digital transformation, one of which is PT. Pegadaian. The form of transformation from PT. Pegadaian is the launch of the Pegadaian Digital application. The application aims to facilitate the community and improve the service of the products owned by PT. Pegadaian. Based on monitoring as of 20 October 2022, the Pegadaian Digital application received 3,5 points on a scale of 5. This score is a small score because it contains many negative reviews. Therefore, it is necessary to analyse the application review section so that the rating increases. The method that can be used to analyse it is by using aspect-based sentiment analysis. With aspects that refer to the experience felt by users, namely aspects of learnability, efficiency, error, and satisfaction. When doing sentiment analysis, an optimal algorithm is needed, one of which is Naïve Bayes. This algorithm was chosen because it is known as a simple but efficient algorithm when processing large amounts of data. This research uses two test scenarios, with the first scenario using different ratios and basic parameters and the second scenario using the addition of smoothing parameters. The result of this research is that the model with a ratio of 80:20 and the addition of smoothing is the best model for sentiment analysis because it produces the best performance value, with an accuracy value of 92%, precision of 80%, recall of 70% and f1-score of 73%.

**Keyword:** Pegadaian Digital, Aspect-Based Sentiment Analysis, Naïve Bayes, User Review