

Abstract

Entering the 4.0 era, it seems that the healthcare industry is the one most likely to benefit from the combination of physical, digital and biological systems. Digital health applications or telemedicine have experienced significant growth in recent years. In the current era, the development of telemedicine is accelerating, one of which is the Practo application. As the number of users using this app increases, it is important to get their opinions in order to improve the health services provided by the app. Therefore, sentiment analysis of the comments regarding the health services on the app is necessary to find out the users' opinions. By utilizing sentiment analysis, it is possible to use the sentiment analysis results obtained as a sample that corresponds to both positive and negative comments. In addition, it can be revealed that there is a mismatch between the ratings and comments given by users. This information has the benefit of being able to improve the Practo application and improve the health services provided to more effectively meet the needs and expectations of users. This research employs the Naïve Bayes approach for sentiment analysis, utilizing TF-IDF feature extraction. Naïve Bayes was chosen because it is known as an efficient classification algorithm but has a high level of accuracy. This approach involves utilizing the Bayes rule formula to calculate probabilities and make classifications. It is applicable for solving classification problems that involve either numeric or nominal feature data. Meanwhile, TF-IDF was chosen because it can associate each word in a document with a numerical value that reflects its level of relevance to the document. TF-IDF is used to measure the weighting of words as features in the summary. In this study, the best model achieved a performance with an f1-score of 85.50%

Keywords: Sentiment Analysis; Practo Application Review; Naïve Bayes; TF-IDF