ABSTRACT

COMPARISON OF NAÏVE BAYES AND SUPPORT VECTOR MACHINE METHODS FOR SENTIMENT ANALYSIS OF THE HALLYU PHENOMENON

By Cheppi Garda Muhamad 21102163

In the midst of globalization, the development of information technology has been rapidly advancing and is hard to resist. One of the manifestations of this progress is seen in the rapid growth of social media, such as platform "X," which provides users with access to information from around the world, including in the cultural domain. The phenomenon of Hallyu has become a hot topic of discussion on platform "X," as it sparks diverse opinions among the public. This study was conducted using two different methods, Naïve Bayes and Support Vector Machine, to analyze public sentiment towards Hallyu and compare the performance of both methods. The dataset used in this study was obtained through data crawling in the form of tweets with keywords related to Hallyu, collected from January 1, 2018, to December 31, 2024. The dataset was classified into three categories: neutral with 2,855 data points, positive with 430 data points, and negative with 90 data points. Based on the experimental results, the Naïve Bayes method achieved an accuracy of 73.4%, while the Support Vector Machine method showed a higher accuracy of 86.6%. These findings suggest that the Support Vector Machine method performs better in sentiment analysis of Hallyu compared to Naïve Bayes.

Keywords: sentiment analysis, naïve bayes, support vector machine, hallyu