

ABSTRACT

SENTIMENT ANALYSIS OF VTUBER HOLOLIVE INDONESIA AS A DIGITAL ENTERTAINMENT TREND USING NAÏVE BAYES AND SUPPORT VECTOR MACHINE

By

Frederick Rianto Putra

21102241

Virtual YouTubers (VTubers) have become a digital entertainment industry with strong cultural and economic significance, one of which is represented by Hololive Indonesia (HoloID). However, behind the rapid growth and massive fan interaction, there is often a sharp polarization of public opinion, making a measurable understanding of audience sentiment crucial for image management and content strategy. This study aims to analyze public sentiment towards HoloID on social media (YouTube and Twitter) and evaluate and compare the performance of Naïve Bayes and Support Vector Machine (SVM) algorithms in the classification task. Data was obtained through crawling and scraping, followed by pre-processing for data cleaning and customization. The labeling process is semi-automated using SenticNet, classifying sentiments into positive and negative. Neutral sentiments were removed from the final dataset to focus the analysis on the two main opinion poles. The dataset was split 80% for training data and 20% for test data, and evaluated with 10-fold cross-validation. The evaluation results show that the accuracy of the Naïve Bayes model without SMOTE is 0.8022, and with SMOTE is 0.7997. Meanwhile, the accuracy of the SVM model without SMOTE reached 0.8980, and with SMOTE 0.8926. The 10-fold cross-validation average shows the highest accuracy for SVM without SMOTE (0.9040), making it the best model in this study.

Keywords: Sentiment Analysis, Naïve Bayes, Support Vector Machine