

## ABSTRACT

### CYBERBULLYING DETECTION ON YOUTUBE COMMENTS WITH THE NAÏVE BAYES METHOD

By

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Technological developments and the popularity of the internet, especially on the YouTube platform, have brought about a significant impact on Indonesian society. There was, however, growth in internet usage. The rapid growth also brings negative impacts, especially in the form of cyberbullying. This research aims to apply the Naive Bayes method in detecting cyberbullying in YouTube comments, focusing on the Food Vlogger Magdalenaf account. Data collected from videos "Clarification (Part 1)" was uploaded on April 5, 2023, through a comment crawled process from 05 April 2023 to November 11, 2023, resulted in 2,351 comment data out of a total of 2,900 comment..

This research compared three labeling scenarios: manual and automatic using Vader Lexicon and the combination of the two. Evaluation was carried out based on metrics of accuracy, precision, recall, and F1-score. The results show that the first scenario (Manual Labeling Data) has an accuracy of around 66%, especially excelling in recognizing cyberbullying sentiments. The second scenario (Automatic Labeling Data) has the highest accuracy at 86%, especially in recognizing cyberbullying sentiments. A third scenario (Fusion Labeling Data) provided a good balance between both sentiment categories with 80% accuracy.

This research concluded that the Naive Bayes method is effective in identifying cyberbullying on YouTube comments. The manual labeling scenario showed

superiority in recognizing cyberbullying sentiments, while automatically labeling and merging both provided high accuracy and balance between the two sentiment categories.

**Keywords:** *Information Technology, Cyberbullying, YouTube, Sentiment Analysis, Naïve Bayes Method.*

