

## ABSTRACT

### **ANALYSIS OF PUBLIC OPINION SENTIMENT ON YOUTUBE COMMENTS TO G20 SUMMIT CONFERENCE USING SUPPORT VECTOR MACHINE ALGORITHM**

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*YouTube is a web-based social media where users can send, view and express various points of view, ideas and creativity in videos and upload videos without time limits. The content that was popular among the public was regarding the implementation of the G20 Summit in Bali on the Presidential Secretariat Youtube channel. Public opinion in the form of comments contained in the YouTube video content contains sentiments at the G20 Summit due to the large number of responses to the G20 Summit from the Indonesian population. Based on public comments which have pros and cons, this sentiment analysis research was carried out with the aim of ascertaining the views of individuals or society regarding the G20 Summit through YouTube social media comments using the Support Vector Machine method by looking at opinions that can be classified as positive and negative points of view. Data is taken from YouTube comments using API v3 which is then processed into clean data at the pre-processing stage that is ready for use. After that, the data is visualized in the form of percentages of two sentiment classes, namely positive and negative, and displays an evaluation of the model performance of 4 SVM kernels in the positive and negative classes. The results of the analysis using plot diagram visualization from 2 classes contained 16.8% positive comments and 83.2% negative comments. The visualization shows that the majority of YouTube comments contain negative comments. Then test the performance of the method with experiments using Kernel SVM (SVC), the linear kernel shows the best model performance with accuracy results of 93% in the 80:20 and 70:30 scenario testing and the Rbf kernel in the 70:30 and 75:25 scenario testing which reaches the value 93%. The two kernels in each scenario can classify public opinion sentiment on YouTube comments regarding the implementation of the G20 Summit.*

**Keywords:** *Sentiment Analysis, Youtube, G20 Summit, Support Vector Machine*