

**Title:** A Hybrid Classification Algorithm for Sentiment Analysis of UM's Facebook Group

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## **ABSTRACT**

Sentiment analysis is an ongoing research area in the field of text mining. People posts their review in the form of unstructured data, so opinion extraction provides the overall opinion of reviews, so it does the best job for the customer, people, organization, etc. The main aim of this paper is to find out if the hand-picked approaches (Naïve Bayes Classifier, Locally Weighted Naïve Bayes and decision Table) will generate output with good accuracy. Specifically, the researchers will try to hybrid these machine learning methods for sentiment analysis out of the comments of different posts of UM's Facebook group as their testing area.

It is shown that the proposed study for sentiment analysis somehow had its superiority. Regarding the algorithm used, the hybrid algorithm was better than one algorithm used. Furthermore, along the way of testing's, the researchers found out that using hybrid algorithm instead of single algorithm plays or results better or technically there was a difference to the previous algorithm. In accuracy also, they found out that hybrid algorithm outperforms single Naïve Bayes classifier.

**Keywords:** Sentiment analysis, Sentiment classification, Sentiment polarity