

ABSTRACT

This study uses sentiment analysis to sort out relevant criteria and sub-criteria as part of MCDA in Indonesian waste management. Essential features from social media reviews are extracted using sentiment analysis and the AHP method is then used to group them according to similarities. This study builds a sentiment classification model for Indonesian waste management with ABSA and SVM. The best accuracy in the model is found for Waste Type (0.773), followed by Economy (0.754), Social (0.691), Activity (0.642) and Facility (0.632), with an average accuracy of 0.698. The priority list resulting from the MCDA-AHP analysis placed Activity first, followed by Facilities, Social, Economy and Waste Type.

In addition, at the sub-criteria level, the order follows Education, Inorganic, Benefits, Cuan or Profit and Initiative, with their highest weights. The findings from this study are two: a system for classifying opinions on waste management and a set of priority scores for waste management principles assigned by the public. From these findings, it appears that positive input gets more attention and represents the community's strongest preferences in waste management.

Keywords: *Sentiment Analysis, MCDA, AHP, Waste Management, SVM*