

## Fuzzy Sentiment Analysis of Customer Product Reviews

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**Abstract :** As a result of the growth of the web, people are able to express their views and opinions. They can now post reviews of products at merchant sites and express their views on almost anything in internet forums, discussion groups, and blogs. Therefore, the number of product reviews has grown rapidly. The large numbers of reviews make it difficult for manufacturers or businesses to automatically classify them into different semantic orientations (positive, negative, and neutral). For sentiment classification, most existing methods utilize a list of opinion words whereas this paper proposes a fuzzy approach for evaluating sentiments expressed in customer product reviews, to predict the strength levels (e.g. very weak, weak, moderate, strong and very strong) of customer product reviews by combinations of adjective, adverb and verb. The proposed fuzzy approach has been tested on eight benchmark datasets and obtained 74% accuracy, which leads to help the organization with a more clear understanding of customer's behavior in support of business planning process.

**Keywords :** fuzzy logic, customer product review, sentiment analysis

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