

## Analyzing Semantic Feature Using Multiple Information Sources for Reviews Summarization

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**Abstract :** Nowadays, tourism has become a part of life. Before reserving hotels, customers need some information, which the most important source is online reviews, about hotels to help them make decisions. Due to the dramatic growing of online reviews, it is impossible for tourists to read all reviews manually. Therefore, designing an automatic review analysis system, which summarizes reviews, is necessary for them. The main purpose of the system is to understand the opinion of reviews, which may be positive or negative. In other words, the system would analyze whether the customers who visited the hotel like it or not. Using sentiment analysis methods will help the system achieve the purpose. In sentiment analysis methods, the targets of opinion (here they are called the feature) should be recognized to clarify the polarity of the opinion because polarity of the opinion may be ambiguous. Hence, the study proposes an unsupervised method using Part-Of-Speech pattern and multi-lexicons sentiment analysis to summarize all reviews. We expect this method can help customers search what they want information as well as make decisions efficiently.

**Keywords :** text mining, sentiment analysis, product feature extraction, multi-lexicons

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