



Analysis of Fine Dining Restaurant Reviews for Perception of Customers' Restaurant Service Quality

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Abstract

The purpose of this study is to model the perception of customers' service quality in fine dining restaurants (FDRs) and to determine customer sentiments towards the service quality. I analyzed 22,104 reviews of 25 restaurants on TripAdvisor through Aspect-Based Sentiment Analysis (ABSA). In terms of n-gram language models, the classification performance of sentiment polarity was tested with Support Vector Machine (SVM), Naive Bayes (NB), C4.5, and Gradient Boosted Trees (GBT). I compared the performance of the model with Cohen's kappa, accuracy, precision, recall, and F-measure results. I found five topic models service, experience, surprise, taste, and food kind by using latent Dirichlet allocation (LDA). In sentiment classification, SVM achieved the best results in bigram with 74.5% average F-measure, 94.4% accuracy, and 49.2% kappa results. This study contributes to the elements related to the perception of service quality in FDRs with psychological quality proposed by the surprise topic. This is one of the few studies conducted with ABSA on the perception of service quality in FDRs, and it is the first study examining the issue in terms of n-gram language models.

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