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ACADEMIC WEEKLY DIGEST

YOUR WEEKLY DIGEST OF KEY RESEARCH FINDINGS



PREDICTING RESTAURANT SURVIVAL USING CUSTOMER- GENERATED CONTENT

Business failure prediction or survival analysis can assist corporate organizations in better understanding their performance and improving decision making. [Gang Li](#) and colleagues investigate the effect of customer-generated content (i.e., online reviews) in predicting restaurant survival. By employing the machine learning-based conditional survival forest model, empirical results show that compared with overall review sentiment, aspect-based sentiment for various factors can improve the prediction performance of restaurant survival.

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RESTAURANT SURVIVAL PREDICTION USING CUSTOMER-GENERATED CONTENT: AN ASPECT-BASED SENTIMENT ANALYSIS OF ONLINE REVIEWS

Prof Gang Li

Restaurant failure and survival are inherently complex, which can be attributed to numerous factors. Multiple dimensions of social media data covering myriad factors can inform restaurants' survival. Customers also assign varying weights to different aspects of restaurant attributes, such as service, ambience, price, and taste. Based on restaurant online review data from Yelp in New York and Las Vegas, this study aims to investigate the role of aspect-based sentiment in restaurant survival prediction and compare its predictive power with conventional overall sentiment analysis in terms of prediction performance. This research also aims to identify optimal features of online reviews for predicting restaurant survival, thus offering meaningful implications for restaurants to thrive in today's market.

This study presents an initial attempt in adopting aspect-based sentiment analysis (ABSA) of online reviews to predict restaurant survival using the machine learning-based conditional survival forest model. The results show that aspect-based review sentiment significantly outperforms models with overall review sentiment and models without sentiment. Sentiment related to a restaurant's location and tastiness of food is essential for prediction restaurant survival. Furthermore, tastiness sentiment is an important aspect for chain restaurant survival prediction, while service, location, and price sentiment appear to be especially impactful for independent restaurants. Findings yield useful practical implications. Restaurant investors and owners can better understand their businesses' circumstances based on ABSA of UGC.

Sentiment related to a restaurant's location and tastiness of food is essential for prediction restaurant survival

Li, H., B.X.B. Yu, G. Li and H. Gao (2023). Restaurant survival prediction using customer-generated content: An aspect-based sentiment analysis of online reviews. *Tourism*

Management

Link: bit.ly/4028Rnn