Why the Online Customer Reviews Are Inconsistent? Textual Review vs. Scoring Review

Wooseok Jang, Jieun Kim, and Yongtae Park*

Abstract. As the number of digital customers in online market grows, online customer review has become one of the indispensable information sources for customer feedback. However, the credibility of online customer review is often problematic due to the inconsistency between textual evaluation (review content) and scoring evaluation (review rating). Then, the question arises: why do such discrepancies in customer reviews arise? The primary purpose of this study is to explore the source of discrepancies between quantitative and qualitative aspects of customer review. To that end, this study hypothesizes that the discrepancy is caused by two kinds of uncertainties: reference uncertainty and heterogeneity uncertainty. First, reference uncertainty occurs if reviewers are influenced by previous reviews, especially positive ones. Second, heterogeneity uncertainty occurs when reviewers have divergent backgrounds and experiences. In order to test the plausibility of hypothesis, the discrepancy between textual review contents and rating scores is comparably measured and analyzed. In doing that, since review contents are unstructured text data, the sentiment analysis is applied to extract sentiment score from textual data. By taking the hotel service as an exemplary case, the process of theoretical and empirical analysis is elucidated.

Keywords: online customer review, textual review, scoring review, discrepancy, sentiment analysis.

Wooseok Jang · Jieun Kim · Yongtae Park
Department of Industrial Engineering, Seoul National University,
1 Gwanak-ro, Gwanak-gu, Seoul, 151-744, Republic of Korea
e-mail: {woosuk0219, hsns1234, parkyt1}@snu.ac.kr

^{*} Corresponding author.