Social Network Integration and User Content Generation: Evidence from Natural Experiments

Ni Huang, Yili Hong, and Gordon Burtch

Abstract

This study examines how social network integration (i.e., integration of online platforms with other social media services, for example, with Facebook or Twitter) can affect the characteristics of user-generated content (volume and linguistic features) in the context of online reviews. Building on the social presence theory, we propose a number of hypotheses on how social network integration affects review volume and linguistic features of review text. We consider two natural experiments at leading online review platforms (Yelp.com and TripAdvisor.com), wherein each implemented a social network integration with Facebook. Constructing a unique panel dataset of online reviews for a matched set of restaurants across the two review sites, we estimate a difference-in-differences (DID) model to assess the impact of social network integration. We find that integration with Facebook increased the production of user-generated content and positive emotion in review text, while simultaneously decreasing cognitive language, negative emotion, and expressions of disagreement (negations) in review text. Our findings demonstrate that social network integration works as a double-edged sword. On the one hand, integration provides benefits in terms of increased review quantity. On the other hand, these benefits appear to come at the cost of reduced review quality, given past research which has found that positive, emotional reviews are perceived by users to be less helpful. We discuss the implications of these results as they relate to the creation of sustainable online social platforms for user content generation.

Keywords: Social network integration, online reviews, natural experiment, difference-in-differences, text analytics