Posting reviews on OTAs: Motives, rewards and effort

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ABSTRACT

High-quality reviews are crucial for users and websites. Many online travel agencies (OTAs) offer online incentives to encourage high-quality reviews. However, the effect of these incentive programs on users' posting effort remains unclear. Our analyses of a dataset collected from a leading OTA present the following: (1) users with more digest reviews tend to exert more effort when posting subsequent reviews; (2) an increasing number of digest reviews for a hotel induces subsequent users to exert additional posting effort; (3) the marginal effect of an additional digest review on posting effort is decreasing; (4) users with high expertise tend to exert extra posting effort when in a fierce competition. This study concludes by presenting theoretical and managerial implications for both research and practice.

1. Introduction

Online reviews are a kind of electronic word-of-mouth (eWOM) and a popular source of information for consumers in decision-making contexts (Kwok, Xie, & Richards, 2017; Xiang & Gretzel, 2010). In tourism, consumers are unable to judge value and cost prior to purchase; thus, eWOM plays a key role in reducing information asymmetry and guiding consumer decisions (Fang, Ye, Kucukusta, & Law, 2016; Gu & Ye, 2014; Phillips, Zigan, Silva, & Schegg, 2015; Zhao, Wang, Guo, & Law, 2015). For example, positive eWOM induced by high ratings or positive comments promotes online bookings (Ye, Law, & Gu, 2009), whereas negative eWOM does the opposite (Cheng & Loi, 2014).

Online reviews are a public good that individuals need not exert any effort to enjoy the contributions of others (Chen, Harper, Konstan, & Li, 2010; Goes, Guo, & Lin, 2016). To encourage user-generated content (UGC), OTAs deploy incentive programs awarding various badges based on user activities. For example, a digest review badge is attached to a high-quality review which requires additional posting effort (e.g., the number of words and photos in a review should meet certain criteria) and is displayed on top of the review pages. The official recognition and wide audience of digest reviews make it a powerful motivator that induces user effort.

Recent studies found consistent evidence from UGC platforms that incentive programs motivate users to participate in sites and voluntarily contribute new content (Hamari, 2017; Liu, Schuckert, & Law, 2018). To illustrate, Liu et al. (2018) conducted an empirical analysis of TripAdvisor users and found that users at lower status (badge rank) are more eager for quick promotion. Hamari (2017) found that badges place participants in a gamified condition and increase their engagement intention. Relevant studies mainly focused on how users exert effort to earn badges (Goes et al., 2016), whereas how earned badges affect users' future effort remains unclear. Nevertheless, the latter issue is even more important because websites aim to maintain the continuous involvement of users instead of allowing them to lose interest in earning badges after having accumulated enough. Therefore, this study sets out to investigate whether and how earned badges affect users' future effort in posting reviews and aims to address the following research questions.

First, the digest review is a scarce resource that stands for expertise and differs from the general review analyzed in previous studies (Gao, Li, Liu, & Fang, 2018; Gu & Ye, 2014). Moreover, digest reviews can be read by a large online audience, thus users with more digest reviews are expected to be more popular with a larger online audience. Therefore, our concern is whether earned badges of digest reviews can induce users' future posting effort. Second, the research contexts of previous studies are noncompetitive in that badges can be earned automatically by performing specific activities (Goes et al., 2016; Liu et al., 2018). This study aims to investigate how users react in peer competition, whereby the achievement of a badge (digest review) reduces the probability of others to make achievements. Third, previous literature has confirmed that a competitive environment may produce differences in behavior as participants adapt their behaviors to different

environments (Gneezy, Niederle, & Rustichini, 2003). If users with more badges believe (albeit incorrectly) that they are more skillful at gaining new badges than others, then they are expected to exert greater effort than users with fewer badges in a competitive environment. Therefore, we investigate whether users with different lines of expertise react differently to competitiveness in an environment.

This study aims to address the above research questions and offer practical suggestions for OTA operators to improve their online incentive programs. The paper continues with an overview of the relevant literature and theories and then followed by research hypotheses. In the next section, research context, data collection, variables, and econometric models are explained. The results and findings are then presented and discussed, including an analysis of their theoretical and managerial implications. The paper concludes with certain limitations of this study and directions for future research.

2. Literature review

We draw on two important and burgeoning streams of research in the literature, namely, WOM and online incentives. First, digest review is eWOM, thereby prompting us to analyze the motives of contributing high-quality content under a WOM theoretical framework and social exchange theory. Second, digest review is also an online incentive. Hence, we review literature that is relevant to online incentives and user effort.

2.1. Motivation to contribute WOM

Lovett, Peres, and Shachar (2013) summarized previous studies and developed a WOM theoretical framework that consumers are motivated to produce WOM through three major drivers: social, functional, and emotional. We apply this framework to understand consumers' motivation in contributing high-quality content.

First, Luo, Gu, Zhang, and Phang (2017) and Lovett et al. (2013) suggested that the social driver relates to the desire of sending signals to others regarding one's expertise and status. Consumers use WOM to enhance their perceived expertise and are thus likely to engage in WOM communication for products or services that allow them to differentiate themselves and elevate their reputation among peers (Berger & Heath, 2007; Cheema & Kaikati, 2010). Therefore, the social driver is salient in explaining consumers' motivation to contribute high-quality content given that badges of digest reviews reflect their expertise level and can enhance their online reputation and status. Second, the functional driver is associated with the need to obtain and supply information (Mudambi & Schuff, 2010). Reducing information asymmetry is the fundamental function of WOM (Ba & Pavlou, 2002). Among the overwhelming online reviews, this high-quality content, such as digest reviews, plays a key role during this process. Therefore, consumers are likely motivated to generate high-quality content in high-involvement product markets with superfluous reviews. Third, the emotional driver is the need to share positive or negative feelings (Berger & Milkman, 2012; Peters & Kashima, 2007). This driver is important when service failure or certain online situations occur and is influenced by the popularity of the producer.

The importance of online media in practice also raises significant academic attention on eWOM, such as product reviews (Goes, Lin, & Au Yeung, 2014) and travel reviews (Schuckert, Liu, & Law, 2015; Yen & Tang, 2015). The advent of OTAs (e.g., Expedia) and travel review sites (e.g., TripAdvisor) provides a unique platform for travelers to obtain information from peers and post reviews on their purchases (Elliot, Li, & Choi, 2013). As social exchange theory suggests, individuals reciprocate (e.g., provide informational or emotional supports to others) with others when they derive benefits (e.g., collect useful information from peers) from them (Zhang, Gupta, Gupta, & Zhao, 2014). For example, the identified motives include information exchange (Schmallegger & Carson, 2008), social benefits (Yoo, Sanders, & Moon,

2013), economic incentives (Yoo et al., 2013), and persuasion (Chen & Kirmani, 2015).

2.2. Online incentives and user effort

Online reviews are valuable resource for OTAs to attract new users and maintain current ones (Liu & Park, 2015). The *quantity* and *quality* of reviews are important in the development of a website (Liu, Schuckert, & Law, 2016). However, online reviews are public goods that users can use for free (Chen et al., 2010). Therefore, encouraging users to contribute is a challenge for UGC websites.

To encourage users to contribute more reviews (*quantity*), OTAs usually deploy incentive hierarchies, which comprise progressively more challenging goals and increasingly higher statuses. Recent studies have confirmed the positive effect of incentive hierarchies on user effort (e.g., Goes et al., 2016; Liu et al., 2016). In these incentive programs, users can promote their badge ranks by posting more reviews and attain higher statuses once all previous ranks have been reached (Schuckert, Liu, & Law, 2016). Once obtained, the badge ranks are displayed on users' public profiles. A higher status represents greater glory, recognition, and expertise among peers (Anderson, Hildreth, & Howland, 2015; Sailer, Hense, Mayr, & Mandl, 2017), thereby motivating users to make continuous contributions. To demonstrate, Goes et al. (2016) observed that these glory-based incentives motivate users to contribute more before the statuses are obtained, after which their contribution effort drops significantly. Liu et al. (2016) indicated that the cumulative effect of badge ranks is temporary and decreases with time. Cavusoglu, Li, and Huang (2015) provided empirical evidence of the positive effect of badges on users' voluntary participation. Anderson, Huttenlocher, Kleinberg, and Leskovec (2013) also confirmed the positive effect of badges and noted that incentivizing users to increase their activity naturally raises how the incentives affect the quality of their contributions.

Encouraging users to contribute high-quality reviews (*quality*) generally prompts the adoption of two incentives, namely, helpful vote and digest review. Helpful vote is a recognition from peers (Baek, Ahn, & Choi, 2012; Fang et al., 2016), whereas digest review is a recognition from the official website. Kwok and Xie (2016) found that manager response, user status, and other user characteristics can affect the number of helpful votes a review receives. Sharing one's experience with others online is largely a public good because of its positive externality (Chen et al., 2010; Goes et al., 2016). The natural key to resolving this public good problem is to increase the rewards for contributors, thereby allowing them to internalize certain benefits of their contributions. Hence, being recognized as a valuable and high-quality source of information by peers or the official website provides an intrinsic motivation for users to exert effort.

3. Hypothesis development

3.1. Popularity effect and user effort

Unlike other badges, which are automatically awarded after a series of user activities (e.g., TripAdvisor has six badge ranks, and each rank requires a minimum number of reviews), badges for digest reviews are officially bestowed. The official recognition of digest reviews is a powerful motivator to encourage high-quality content and signals a status of connoisseurship.

Goes et al. (2014) utilized the number of trust badges received from peers to measure users' popularity and found that users tend to post more reviews as they become more popular in a community, and called it the popularity effect. The majority of online contributions are produced by a small number of active users (Kuk, 2006). An important motivation for these active users is increasing popularity in a community, given that popularity is directly related to one's perceived status and self-fulfillment within a community (Goes et al., 2016; Roberts,