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Understanding Trust in Online Reviews

Research in Progress

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ABSTRACT

During the last decades, the emergence of social media platforms has shaped the way people make decisions and search for information. These platforms have made it easy for individuals to write reviews and find information about any product/service anytime anywhere. Since consumers in these online environments might share their experiences without knowing each other, readers cannot verify whether reviewers are telling the truth or what motivated them to write such comments, so trusting these reviews is difficult and complex. Therefore, the objective of this work-in-progress research is to conceptualize online review trust and propose a model of online review trust antecedents. This work reviews related literature about trust and online reviews through the lens of the uncertainty reduction theory (URT) and outlines a survey-design approach to empirically validate the proposed model using structural equation modeling. Finally, anticipated contributions are discussed.

Keywords: online review trust, uncertainty reduction theory, eWOM, reviewer self-disclosure.

INTRODUCTION

The rise of social media platforms has handed customers unprecedented power in the online marketplace. They gave customers freedom of expression through writing reviews and using electronic word of mouth (eWOM). Recently, there has been an exponential growth in the number of reviewers and reviews, where the cumulative reviews on Yelp alone has reached to 155 million in 2018 (Smith, 2018). Consumers use online reviews to communicate opinions, share experiences, or make purchase decisions (Ruiz-Mafe, Chatzipanagiotou, and Curras-Perez, 2018). This has also made marketers vigilant about their reputation and their online review scores. Consequently, marketers utilize these reviews to better understand their consumers, improve their products/services, or increase their sales (Li, Wu, and Mai, 2018).

While online customer reviews have the potential to benefit consumers and marketers, such reviews are user-generated and are based on users' perceptions. They are not always verifiable or trustworthy.

Additionally, it is difficult to check whether these reviews are written by real customers or by someone with ulterior motives (to make the company look good or bad). A company may also delete or filter unwanted reviews to avoid bad reputation (Zhuang, Cui, and Peng, 2018) or to provide high quality reviews. For instance, in Booking.com's guest review guidelines, some rules indicate the following: *"Booking.com property partners should not post on behalf of guests or offer incentives in exchange for reviews. Attempts to bring down the rating of a competitor by submitting a negative review will not be tolerated."*

Most of the research in online reviews have focused on analyzing the impacts of these reviews on consumers and businesses (Ruiz-Mafe et al., 2018; Sahoo, Dellarocas, and Srinivasan, 2018). Yet, little research has looked at what makes a review trustworthy by potential customers. Thus, this research-in-progress proposes a theoretical model to identify perceived review trust antecedents and understand what makes a review trustworthy by potential review readers.

The rest of this research-in-progress is organized as follows: the related literature and theoretical background are discussed followed by the proposed model. The proposed research methodology is outlined and, finally, the potential contributions are expounded.

LITERATURE REVIEW

eWOM and Online Reviews

eWOM is defined by (Hennig-Thurau, Gwinner, Walsh, and Gremler, 2004, p.39) as *"any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet."* While, online reviews are consumer-to-consumer (C2C) communication channels (Jones and Leonard, 2008) holding informational and social components (Racherla, Mandviwalla, and Connolly, 2012). One advantage of eWOM over face-to-face WOM is that data cannot be gathered with the same precision and unobtrusiveness (De Bruyn & Lilien, 2008). Despite that, customers may still hesitate to engage in the online environment due to its uncertainty.

URT and Anonymity in eWOM

According to URT, members in a communication channel, especially in the initial phases of interactions, try to reduce uncertainty about each other's behavior through the exchange of background information (Furner et al., 2013). Berger and Calabrese, (1975), suggested that when strangers meet and communicate, their major concern becomes to reduce uncertainty or to increase the predictability of both behaviors in the interaction. A major form of uncertainty in online environments is the anonymity of the source (Hilverda, Kuttuschreuter, and Giebels, 2017). While in WOM the source is identifiable to the receiver, in eWOM people read a review written by someone unknown to them. Furner, Racherla, and Zhu, (2012) mentioned that in online environments, social components can help reduce risk and uncertainty about reviews.

In order to reduce uncertainty about reviews, consumers look for any disclosed social cues about the identity of reviewers to assess background similarity or dissimilarity (Racherla et al., 2012). As suggested by the self-categorization theory (SCT) (Turner, Hogg, Oakes, Reicher, and Wetherell, 1987), salient identities are essential in explaining behaviors as such identities are associated with values and attributes that influence evaluation and action. For example, Forman et al., (2008) examined the role of reviewer identity information disclosure on sales, the authors found that identity-relevant information about reviewers influences community members' judgment of products and reviews and that the disclosed demographic information about reviewers encouraged identity granting behavior from consumers who categorized themselves as similar to each other. This perceived similarity reinforced readers' trust in the reviewers' reviews (Racherla et al., 2012). However, no known studies investigated the relationship between reviewer identity disclosure and review trust.

Trust in Online Reviews

An outcome of uncertainty reduction is greater trust. Exploring trust in social exchanges, Blau (1964) concluded that trust has three distinct beliefs: integrity, benevolence, and ability. Hovland et al. (1953) defined trustworthiness as "the degree of confidence in the communicator's intent to communicate the assertions he considers most valid.

The trust concept has been extended from towards a person or organization to be towards data that is provided by a person or organization. In a study to understand what drives travelers to use online reviews in travel planning, (Ukpabi and Karjaluoto, 2018) found that trust was the variable that predicted the attitude of travelers more than any other variables. On the other hand, (Fileri, 2016) used a grounded

theory approach to assess how consumers evaluate trustworthy and untrustworthy online reviews. Results showed that consumers mainly use cues related to review content, review writing style, review extremity, and valence (i.e. the positive or negative evaluation of a product.) to assess trustworthiness of reviews. Participants have also asserted that not all lengthy reviews are truthful, but they must contain factual, detailed, and relevant information. Kim, Ferrin, and Rao, (2008) also suggested that information quality is a key element of customers' trust in online environments.

Furthermore, (Furner et al., 2013) conducted a 2X2 simulation-based experiment to study trust in online product reviews based on cultural and review characteristics. Although the goal was to study trust in product reviews, no definition was provided for trust in product reviews and no measurements were developed to measure it and its affecting factors. Moreover, Chari, Christodoulides, Presi, Wenholt, and Casaletto, (2016) developed a conceptual framework of consumer trust concerning user-generated brand recommendations (UGBR) and provided a clear definition of trust in UGBR. However, it was tailored only to Facebook as a platform and trusting Facebook friends was the only factor that influenced trust of UGBR moderated by ad-skepticism.

Besides individual reviews, online review platforms now adopt explicit overall rating techniques by aggregating individual reviews' ratings. This technique reflects aggregation of public opinion and is easier to process as it requires less cognitive effort (Kailer, Mandl, and Schill, 2014). However, there are no known studies that explored the relationship between the perceived public opinion and trust in online reviews.

RESEARCH MODEL

We propose a theoretical model (see Figure 1) to examine the impact of perceived integrity, benevolence, review quality, agreement with public opinion, and reviewer self-disclosure on perceived trust in online reviews.

Perceived Integrity (PI)

In the context of trust, integrity refers to "keeping the promise" (McKnight, Choudhury, & Kacmar, 2002). However, in the context of security, integrity refers to "protecting the data against any improper or unauthorized data modifications" (Bacic, 1990). In this study, we define perceived review integrity as "the extent to which the review is perceived to be objective, not fake or manipulated and is perceived to be true". Although every e-commerce platform has some rules to ensure the authenticity of every review posted by customers, review manipulations can still take place and, therefore, affects review trust (Hu, Liu, and Sambamurthy, 2011). Previous research has shown support for the relationship between trust and integrity (Chari et al., 2016; McKnight et al., 2002). Thus, it is hypothesized:

H1: *The higher the perceived integrity of a review, the higher the perceived review trust.*

Perceived Benevolence (PB)

In the context of trust, benevolence refers to the degree at which a trustee wants to do good to the trustor aside from any profitable motives (Mayer, Davis, and Schoorman, 1995). Following this definition, we define perceived benevolence in the context of online reviews as “the extent to which the review is intended for the benefit of other users and is provided without any harmful judgement or profitable motives”. Previous studies have shown support for the relationship between benevolence and trust (Chari et al., 2016; Poon, 2013). Thus, it is

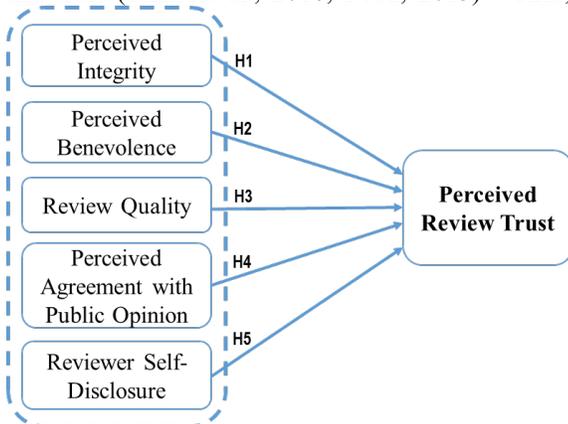


Figure 1. Proposed Research Model

hypothesized:

H2: *The higher the perceived benevolence of a review, the higher the perceived review trust.*

Review Quality (RQ)

Previous studies have supported the relationship between review quality and trust (Furner et al. 2013; Racherla et al. 2012). McKinney, Yoon, and Zahedi, (2002) measured the quality of argument (information) in eWOM by the information content, accuracy, and timeliness. As pointed by (Racherla et al., 2012, p. 96), “*A product review is essentially an argument made by a reviewer to either encourage or dissuade consumers from buying a particular product or service. The manner in which the reviewer argues for or against the product increases the credibility and trust perceptions. Therefore, reviews with better argument quality tend to be more trustworthy than reviews with weak argument quality.*” Accordingly, in this study, we define review quality as “the extent to which the review is with high argument quality”. Given the extant literature, it is hypothesized:

H3: *The higher the review quality, the greater the perceived review trust.*

Perceived Agreement with Public Opinion (APO)

Online review readers can compare individual reviews with the overall public opinion of a product/service within the same website and/or across different websites to identify differences. Schuckert et al., (2016) empirically studied whether there could be an evidence to suspicious online ratings based on 41,572 ratings on TripAdvisor. The authors described suspicious ratings as the low quality reviews that do not offer useful information to readers. They discovered that there exists a gap (i.e. the difference between the overall rating and the average of the specific ratings of every review post) between individual and overall reviews. Also with the “helpful” and/or the “like” feature of reviews, perceived public opinion of a review can be measured by the number of “helpful votes” and/or “likes” that a review receives. As with online review trust, there are no known studies that have empirically tested the relationship between the public opinion and review trust. We define perceived agreement with the public opinion as “the extent to which the review agrees with or is supported by public opinion” and hypothesize that:

H4: *Perceived agreement with public opinion will positively affect perceived review trust.*

Reviewer Self-Disclosure (RSD)

Online reviewers are considered anonymous subjects who might have aliases, or use unknown identities. Moreover, the information disclosed about reviewers and the potential means of interactions are somehow controlled (Racherla et al., 2012). Hence, any available information about their identity and their social cues is highly important to review readers. Accordingly, based on URT, we assume that in the context of online reviews, the amount of identity-relevant information disclosed about reviewers helps reducing uncertainty and anonymity of reviewers, hence, affecting perceived review trust. Beyond the general identity information such as the real/nick name, photo, nationality, or a certified community member, reviewers may also reveal their social roles such as students, parents, senior citizens etc., as well as the situation such as traveling for honeymoon, family gathering, birthday party etc.

In this study, we define RSD as “the extent to which reviewers disclose information about their identity as well as their social role and experience with using a product/service.” Previous research has shown that members with shared identities who feel similar expose more efficient and effective behavior (Simpson and Siguaw, 2008). This perceived similarity or homophily also affects trust of WOM (Brown and Reingen, 1987). Thus, it is hypothesized that:

H5: *The more information disclosed by a reviewer, the higher the perceived review trust.*

Perceived Review Trust

We define trust in online reviews as the degree of users' confidence to accept vulnerability under uncertainty regarding the reviews shared and presented online.

RESEARCH METHODOLOGY

The proposed model will be empirically validated through a mixed-method approach using Google reviews. We chose Google reviews because according to recent statistics 63.6 % of consumers said that Google was their first platform to search for reviews followed by Yelp and TripAdvisor (ReviewTracker, 2018). Another reason is that Google combines reviews from multiple platforms. Participants will be online review users of different ages and genders who will be recruited through a market research firm. Prior to data collection, research ethics approval will be obtained and a pilot study involving a sample size of 30 subjects will be conducted followed by a survey-design approach. The results from the pilot study will be used to assess the appropriate number of reviews participants can evaluate during the main study and to refine the measurement scales used, as well as to resolve any possible method biases or problems with the survey design.

Partial Least Squares (PLS) as a structural equation modeling (SEM) technique will be used to validate the proposed model. Survey questionnaires will be designed based on construct measurements discussed in the model and previously validated measurement scales. Perceived review trust will be measured by the scale provided by (Ohanian, 1990), perceived integrity and benevolence will be adapted from (Bhattacharjee, 2002). Review quality will be measured following (Racherla et al., 2012), and measurement of perceived agreement of public opinion will be adapted from (Schuckert et al., 2016). Finally, we will adapt the dimensions of reviewers self-disclosure as used in (Forman et al., 2008; Schrammel, Köffel, and Tscheligi, 2009).

We will also collect qualitative data through open-ended questions at the end of the survey to ask participants some questions such as whether they trust all the reviews they read. If not, how do they judge the review trustworthiness? What criteria they think is most important, etc. Responses will be analyzed using content analysis techniques to enhance the robustness of results and strengthen the findings through triangulation. This study will also control for the effect of participants' gender, age, level of education and decision making style. Following the rule suggested by (Chin, 1997) the sample size will be a minimum of 150, targeting 200 to allow for possible spoiled surveys.

POTENTIAL CONTRIBUTIONS

This study once completed will have theoretical and practical contributions. First, we have conceptualized the "online review trust" concept and developed a model to identify and empirically verify factors that affect online review trust. Second, this research-in-progress can

potentially assist online review platform providers in understanding what develops trust in online reviews, thus, paying more attention to what can leverage the perception of trust to review readers. It can help these providers by suggesting guidelines for review platform policy and design. The research findings will also provide guidelines for consumers to assess the trustworthiness of reviews.

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