Available online at www.sciencedirect.com

Journal of Applied Research and Technology

Journal of Applied Research and Technology 13 (2015) 359-363

www.jart.ccadet.unam.mx

Original

The impact of emotions on the helpfulness of movie reviews

R. Ullah[a], A. Zeb[a], W. Kim[a,b,*]

[a]*Graduate School of Culture Technology, KAIST, Yuseong-gu, Daejeon, South Korea*

[b]*Department of Business and Technology Management, KAIST, Yuseong-gu, Daejeon, South Korea*

Received 25 October 2014; accepted 17 February 2015

Abstract

Online customer reviews have become a significant source of product-related information for consumers. As a result of the growing number of customer reviews, determining which customer reviews are the most helpful is important in reducing information overload. The ways in which reviews can be helpful need to be identified. In this study, we examine the impact of emotional content in online customer reviews on the number of votes those customer reviews receive that indicate they were helpful. We find that content that is more emotional yields more votes. Furthermore, our findings suggest that reviews with positive emotional content have a positive effect on review helpfulness whereas reviews with negative emotional content have no effect on review helpfulness. This study contributes to an understanding of emotional content in word of mouth and has important implications for online retailers and consumers.

All Rights Reserved © 2015 Universidad Nacional Autónoma de México, Centro de Ciencias Aplicadas y Desarrollo Tecnológico. This is an open access item distributed under the Creative Commons CC License BY-NC-ND 4.0.

Keywords: Natural language processing; Online reviews; Review helpfulness; Word of mouth

1. Introduction

Online word of mouth (WOM), which has been reported as one of the most influential means of natural and informal communication among consumers, is defined as any statement made by a consumer about a product and made available to other consumers on the Internet (Hennig-Thurau et al., 2004). In theory, customers can benefit from having hundreds of online reviews from which to gain information; however, this high number of reviews can create information overload (Jones et al., 2004). Therefore, consumers need to be able to identify a smaller number of reviews that will be helpful, and various online web portals are trying to provide ways to do just that (Mudambi & Schuff, 2010).

Previous studies have examined the significance of online WOM, particularly consumer-generated product reviews. Studies have shown that product reviews have a significant effect on purchase decisions (Chen et al., 2008) and product sales, and was widely confirmed in previous studies (Duan et al., 2008; Chevalier & Mayzlin, 2006; Liu, 2006; Godes & Mayzlin, 2004). Prior research in the study of WOM has shown that volume and valence are the two important metrics (Neelamegham & Chintagunta, 1999), which may affect the number of votes a review receives to indicate its helpfulness (Mudambi & Schuff, 2010). Volume means the total amount of WOM while valence means the character of WOM content that is, whether it is positive or negative. Hence a wide range of research has focused on the effect of volume and valence on product sales. For example, WOM volume is reported as having a significant impact on product sales (Chevalier & Mayzlin, 2006; Chen et al., 2004; Godes & Mayzlin, 2004; Liu, 2006). While some studies have reported that WOM valence is a significant factor in product sales (Godes & Mayzlin, 2004; Chevalier & Mayzlin, 2006), others have found no significant relationship (Liu, 2006).

In particular, previous research considers the volume and valence of WOM without considering its contents, which is not sufficient for understanding WOM behavior (Rime et al., 1998). Only a handful of recent studies have analyzed the textual information embedded in online customer reviews in great detail. For example, Ghose and Ipeirotis (2010) and Ghose et al. (2012) have identified important text-based features such as lexical, semantic, grammatical and stylistic levels and have studied their impact on product sales and review helpfulness, while Rui et al. (2013) used machine-learning algorithms and found that negative WOM is associated with lower sales of movie sales, whereas positive tweets lead to higher movie sales.

However, we are unaware of any previous studies that examine the emotional content of reviews and its relationship to review helpfulness. Research has shown that emotions influence decision making (Raghunathan et al., 2006; Shiv et al., 2005).

---

*Corresponding author.
E-mail address: wonjoon.kim@kaist.edu (W. Kim).

1665-6423/All Rights Reserved © 2015 Universidad Nacional Autónoma de México, Centro de Ciencias Aplicadas y Desarrollo Tecnológico. This is an open access item distributed under the Creative Commons CC License BY-NC-ND 4.0.

Moreover, discrete emotions with the same valence affect information processing (Tiedens & Linton, 2001). In particular, we aim to understand why some reviews receive many votes indicating helpfulness (which include both "yes" and "no" votes) whereas others get only a few votes or none. As a result, in this paper, we study which emotional features of online reviews influence the number of votes saying they were helpful.

Thus, we add to the literature on online WOM by analyzing the emotional content of online movie reviews and its impact on the helpfulness of reviews using natural language processing (NLP) techniques that support the human natural linguistic aspects of WOM. In the first stage of our study, we examine the total emotional content and then follow up by looking at positive and negative emotional content and its impact on the helpfulness of reviews. We find that the emotional content of WOM is more influential than the other attributes. This finding distinguishes our approach from that of previous studies, which focus on extracting semantic characteristics from the text of the review and show how many votes indicating helpfulness the reviews received (Cao et al., 2011). In addition, if more helpful reviews can be identified earlier, then they can be acted on sooner by retailers, manufacturers, and third-party providers.

The remaining of the paper proceeds as follows. In the next section, we conduct a review of the literature. We then describe the data and research methodology. Finally, we discuss the results and conclude with some implications.

2. Literature Review

2.1. Motivation to Post Customer Reviews

Consumers write online reviews for various reasons. The most accepted motivation in the literature is that consumers engage in WOM when they are extremely satisfied or extremely dissatisfied (Anderson, 1998). The act of writing the review allows consumers to reduce their dissatisfaction, which is connected with negative emotions (Hennig-Thurau et al., 2004) such as tension and anxiety (Sundaram et al., 1998). Therefore, the involving focusing on negative WOM is sometimes referred to as dissonance reduction (Buttle, 1998). It has also been noted that consumers are involved to engage in negative WOM for reasons related to altruism, seeking vengeance, and seeking advice (Sundaram et al., 1998). In addition, consumers are motivated to engage in positive WOM when their expectations are met or exceeded (Sundaram et al., 1998).

Specifically, in the domain of online WOM, consumers are involved by an ambition for possible economic benefit, social interaction, the potential to enhance their own self-worth, and their concern for other consumers (Hennig-Thurau et al., 2004). By expressing themselves online, they can obtain various kinds of utility (Balasubramanian & Mahajan, 2001). As Dellarocas and Narayan (2006) noted, emotion is an important and common cause for WOM behavior among consumers, whether offline or online, and we find that the reasons for online and offline WOM are similar overall.

2.2. The Role of Emotions

Prior research has examined the relationship between consumer behavior and consumption-related emotions and suggested that emotions play a major role in consumer response (Richins, 1997). In general, emotion has a valence and can be divided into positive and negative emotions. Additionally, emotion enables the processes of communication through which elements of a private experience can be shared with social partners. For example, the surprise emotion has been shown to play a key role in the evocation of consumer WOM. Negative surprise can create negative WOM, while positive surprise can produce positive WOM (Derbaix & Vanhamme, 2003).

However, surprise is a non-valenced emotion that is caused when possibility about a product or service are not met, also known as schema discrepancy (Derbaix & Vanhamme, 2003). In schema discrepancy analysis, a second emotion follows, such as anger (negative) or joy (positive), which causes one to presume that negative or positive surprise was evoked (Hennig-Thurau et al., 2004; Anderson, 1998). Therefore, previous studies consistently emphasize the important role of emotions, especially in consumers' WOM behavior. However, no evidence directly regarding the impact of emotional content in reviews on their helpfulness has been presented.

2.3. Impact of Emotional Content on Votes Indicating Helpfulness

The increasing number of reviews available for various products has created information overload for consumers (Yin et al., 2011). Pinpointing which reviews are most helpful is critical in reducing this information overload. A review diagnosticity theory is defined as the piece of information that is helpful in making informed purchase decisions and is linked to the assumption of information diagnosticity, which includes the question of whether a certain text of information is helpful during the processes of decision-making (Yin et al., 2011). Within the basic model of review diagnosticity, researchers noted that product type, review depth, and the degree of review extremity affect the helpfulness of reviews (Mudambi & Schuff, 2010).

Previous research has shown that emotions play a positive role in decision making (Shiv et al., 2005) and emotions play a key role in driving online conversations (Berger & Milkman, 2012). However, little is known about the significance of emotions in online reviews specifically, how emotions influence consumer judgment in an online environment. Therefore, reviews with emotional content affect perceptions of its helpfulness. Thus, we propose:

H1: Reviews with emotional content will have more votes indicating that they were helpful.

2.4. Impact of Positive and Negative Emotional Content on Votes Indicating Helpfulness

A handful amount of recent studies have attempted to examine the text of reviews for their helpfulness. For example, the

Download English Version:

https://daneshyari.com/en/article/725202

Download Persian Version:

https://daneshyari.com/article/725202

Daneshyari.com