Computers in Human Behavior 45 (2015) 273–280

Contents lists available at ScienceDirect

Computers in Human Behavior

journal homepage: www.elsevier.com/locate/comphumbeh

Research Report

Information dissemination via electronic word-of-mouth: Good news travels fast, bad news travels faster!

Jacob Hornik [a,*], Rinat Shaanan Satchi [a,b,1], Ludovica Cesareo [c,2], Alberto Pastore [c,3]

[a] Recanati Business School, Tel-Aviv University, Israel
[b] The Open University of Israel, Raanana, Israel
[c] Sapienza University of Rome, Via del Castro Laurenziano, 9, 00161 Rome, Italy

ARTICLE INFO

Article history:
Available online 6 January 2015

Keywords:
Negative word-of mouth (WOM)
Secondary information
Online diffusion of information
Electronic word-of-mouth (eWOM)

ABSTRACT

The purpose of this research is to investigate negativity bias in secondary electronic word-of-mouth (eWOM). Two experiments, one laboratory and one field, were conducted to study actual dissemination behavior. The results demonstrate a strong tendency toward the negative in the dissemination of secondary commercial information. In line with Dynamic Social Impact Theory, our findings show that consumers disseminate online negative content to more recipients, for a longer period of time and in more elaborated and assimilated manner than they do positive information. The research is important from both a theoretical and managerial perspective. In the former, it enriches existing literature on eWOM by providing insight into theoretical dimensions of the negativity theory not examined before (duration, role of valence, elaboration, and assimilation). Findings provide managerial insights into designing more effective WOM and publicity campaigns.

1. Introduction

Online word-of-mouth (WOM) has become a common topic of research in the area of computer-mediated communication, particularly in the context of consumer-to-consumer interactions. Powered by tools such as email, weblogs, bulletin boards, chat rooms, and instant messenger clients, online WOM communication has helped give rise to different types of online communications as reflected by a leading consultancy firm, Booz & Co. (2012) which has advised, "Make your customer an advocate: shift marketing efforts from sending messages to facilitating conversations with and between consumers."

Consumers share commercial experiences and product evaluations on a wide assortment of commercial issues through product review websites, discussion forums, electronic newsgroups, instant messaging, Personal Digital Assistants, blogs and virtual communities (Fang, 2014; Lovett, Peres, and Shachar, 2013; Punj, 2013). The information that is being exchanged online is of unprecedented scale and detail (Libai, Muller, & Peres, 2013; Lovett et al., 2013), containing both primary and secondary WOM (SWOM). While *primary* information is first-hand material originating from consumers' direct experiences, secondary information is transmitted by consumers' experiences they have *heard* about from others. The origin of *secondary* WOM can be traced back to advertisements, commercial editorials or former WOM episodes, either primary or secondary.

Understanding *secondary* WOM and the biases related to it is crucial since it is estimated to comprise more than 70% of commercial *electronic WOM* (eWOM) (Meiners, Schwarting, & Seeberger, 2010) for products, brands and other marketing events. The predominant research focus has been on the transmission and dissemination of primary information, leaving a gap of research on secondary WOM (De Angelis, Bonezzi, Rucker, Peluso, & Costabile, 2012; Yang, Hu, Winer, Assael, and Chen, 2012). The current paper represents a first step in filling this void. Its overall goal is to provide a better understanding of the *dynamics* of commercial messages online, or, *how* consumers transmit electronic WOM (eWOM) about products and companies.

One of the core dimensions of WOM is its valence: WOM communication can be either positive or negative (e.g. Vázquez-Casielles, Suárez-Álvarez, & Del Río-Lanza, 2013). While *positive WOM* (PWOM) is thought to originate from satisfactory experiences, *negative WOM* (NWOM) is thought to be a result of many motives and needs commonly identified as 'negativity bias'

* Corresponding author. Tel.: +972 3 5490589.
E-mail addresses: Hornik@post.tau.ac.il (J. Hornik), satchi@nonstop.net.il (R. Shaanan Satchi), ludovica.cesareo@uniroma1.it (L. Cesareo), alberto.pastore@uniroma1.it (A. Pastore).
[1] Tel.: +972 3 6438937.
[2] Tel.: +39 0649766264.
[3] Tel.: +39 0649766441.

http://dx.doi.org/10.1016/j.chb.2014.11.008
0747-5632/

(e.g. De Angelis et al., 2012). Studying actual positive versus negative secondary commercial WOM transmissions in a computer mediated environment, a phenomenon hardly addressed in the literature, allows a better understanding of the consumers' role in the dissemination of commercial information. Furthermore, it can assist companies in deciding how to encourage the dissemination of positive commercial information and to improve their understanding and actions regarding management of negative commercial information.

From a theoretical perspective, our research aims at extending knowledge about electronic WOM, and it is consistent with the call by marketing researchers (e.g. Chen, Wang, & Xie, 2011; East, Hammond, & Lomax, 2008; Godes et al., 2005; Goldenberg, Libai, & Muller, 2001) for a broader look at its dynamics, measures, and valence. To this end, we contend that the dissemination of SWOM very closely simulates what is known as *rumor* (Kimmel, 2013). Just as rumors include negative and positive valences and biases, in both content and effects, so does SWOM. Therefore, in this research we use Dynamic Social Impact Theory (DSIT) and the associated rumor diffusion model as the conceptual framework. This framework provides an opportunity to study several dimensions of SWOM, not previously investigated, to uncover the patterns of SWOM transmission, specifically, number, length of transmitted messages, number of recipients, dissemination duration, and patterns of reaction and information believability.

2. Conceptual background

Despite the large amount of research on WOM and social contagion in marketing and other disciplines, little is known about the dynamics of WOM transmission behaviors. Indeed, De Matos and Rossi (2008) in their meta-analyses of 127 studies of WOM in marketing show that most WOM studies investigated: (1) WOM outcomes in terms of satisfaction and loyalty; (2) WOM *valence* (whether the information is "good" or "bad"); (3) WOM and product types; (4) Customer experience from WOM; (5) Customer commitment effect on WOM. Very few attempts were made to study the *dynamics* of WOM which have obvious significant theoretical and practical implications.

2.1. The evolution of word-of-mouth communication: from traditional WOM to eWOM

The significance of WOM in marketing theory and practice is undisputed. Today's digitally driven, easily accessible, interconnected virtual and technological world is giving it new significances. Others' opinions and recommendations still constitute one of the most effective, persuasive and convincing means of shaping consumer preferences and purchasing behaviors, yet the characteristics (in terms of accessibility, popularity, growth and influence) and pervasiveness of the online medium exponentially multiply the power of WOM (Riegner, 2007). Traditional WOM has therefore been joined by electronic WOM (eWOM), also known as Internet WOM (iWOM) or online WOM (oWOM). There is no doubt: WOM, in its new diffusion in the digital context, is experiencing a renaissance (Meiners et al., 2010).

2.2. Negativity bias

Although there is contrasting evidence, it appears that both academia and managers seem to believe that negative WOM is more potent and impacting than positive WOM (East et al., 2008). Already back in 1967, Arndt found out that NWOM had twice the impact of PWOM (Arndt, 1967). More recently, Assael (2004) stated, "Negative word of mouth is more influential than positive word of mouth" (p. 211). Previous research on the topic has discovered that negative information is more surprising and therefore might draw more attention (Xia & Bechwati, 2008), might spread faster (Libai et al., 2013), is more influential and trusted (Chen et al., 2011) and might have much greater impact compared to positive information (Donavan, Mowen, & Chakraborty, 1999; Taylor, 1991). Moreover, it is thought provoking (Ahluwalia & Shiv, 1997) and, as social psychology research has suggested, is perceived as more diagnostic and impacting judgment formation (Reeder & Coovert, 1986; Rozin & Royzman, 2001; Ybarra, 2002). All of the above create valence asymmetries synthesized as 'negativity bias' meaning consumers' propensity to disseminate bad more than good commercial information. In primary WOM consumers show a clear tendency to transmit positive information about their own experiences (e.g., Keller, 2007). They do so primarily because of their desire to associate themselves with positive aspects (Wojnicki & Godes, 2008), for self-presentation and self-enhancement (e.g., Schau & Gilly, 2003; Ceema & Kaikati, 2010; Zhang, Feick, & Mittal, 2014). Contrary to the dominance of a positivity bias in primary WOM, we show evidence for the dominance of a negativity bias in SWOM.

2.3. Rumors and Dynamic Social Impact Theory

Previous research has associated the concept of WOM communication about products, brands and services to that of *rumors* (Westrbrook, 1987). A rumor can be defined as "unverified information statements in circulation arising in contexts of ambiguity, which function primarily to help people make sense and manage risk" (DiFonzo et al. 2013, p. 379). Rumors can therefore be assimilated with WOM transmissions since both involve multiple actors and target, have multi-directional flows of influence and follow an iterative and assimilative process that develops over time.

To study information and rumor diffusion and frame the phenomena, researchers have applied Dynamic Social Impact Theory (DSIT). DSIT (Latané & Bourgeois, 2001) is a formal theory of social influence that uses a dynamical systems approach to explain the motives, emotions, beliefs, and behaviors that emerge among individuals trying to influence each other. In their recent review of DSIT, DiFonzo et al. (2013) show that in social sciences, rumor diffusion is a close cousin to several other social cognitive and influence phenomena, including social contagion and product information dissemination. In this paper we extend DSIT to understand the dynamics of SWOM.

2.4. Rumor diffusion and the propensity towards the negative

Research in communication during the last several decades using DSIT shows that news stories are passed on to secondary audiences by a process of rumor diffusion. In passing such information along, people seem to believe more negative than positive information. Stories with high negative news value spread *quickly* and to *many people*. Along the chain of transmission the *quality* of the information might also be changing (Rozin & Royzman, 2001). Therefore, in the retelling process consumers tend to exaggerate bad information in a way that might lead to distortions (DiFonzo et al., 2013). In other words, rumors might snowball: after receiving especially negative information, people may tend to "perseverate, mull it over, talk about it endlessly and explore in fantasy all possible consequences" (Allport & Postman, 1947, p. 154) adopting negative reactions to negative information.

Finally, three distinctive patterns of dynamic change almost always take place in rumor diffusion. They are embodied in the well-established DSIT concepts of *leveling, sharpening,* and *assimilation* (Allport & Postman, 1947; DiFonzo & Bordia, 2007). *Leveling* refers to the fact that the message grows shorter and more concise