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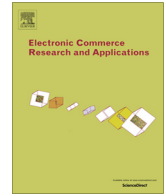
E-WOM from e-commerce websites and social media: Which will consumers adopt?

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ABSTRACT

The influence of user generated content on e-commerce websites and social media has been addressed in both practical and theoretical fields. Since most previous studies focus on either *electronic word of mouth* (eWOM) from e-commerce websites (EC-eWOM) or social media (SM-eWOM), little is known about the adoption process when consumers are presented EC-eWOM and SM-eWOM simultaneously. We focus on this problem by considering their adoption as an interactive process. It clarifies the mechanism of consumer's adoption for those from the perspective of cognitive cost theory. A conceptual model is proposed about the relationship between the adoptions of the two types of eWOM. The empirical analysis shows that EC-eWOM's usefulness and credibility positively influence the adoption of EC-eWOM, but negatively influence that of SM-eWOM. EC-eWOM adoption negatively impacts SM-eWOM adoption, and mediates the relationship between usefulness, credibility and SM-eWOM adoption. The moderating effects of consumers' cognitive level and degree of involvement are also discussed. This paper further explains the adoption of the two types of eWOM based on the cognitive cost theory and enriches the theoretical research about eWOM in the context of social commerce. Implications for practice, as well as suggestions for future research, are also discussed.

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1. Introduction

Over the past decade, Internet technology has considerably altered people's lifestyle. In terms of online shopping, e-commerce has experienced rapid development, and online shopping has become a popular method for purchasing goods. In 2013, Amazon's sales reached US$74.4 billion, while Taobao.com, the biggest C2C website in China, exceeded US$179.2 billion. In terms of sharing content online, social media use has increased in recent years and become one of the most important platforms of communication. For example, the average number of active users per month on Twitter and Facebook has reached 0.27 and 1.28 billion, respectively. In China, Weixin, the most popular social media platform, has attracted around 0.5 billion users since its launch in 2011.

With the emergence of Web 2.0, *user generated content* (UGC) on networks are increasing. As an important form of *electronic word-of-mouth* (eWOM), online reviews provided by e-commerce websites (referred to as EC-eWOM hereafter) have played an important role in helping consumers make decisions (Cheung and Thadani, 2012; Davis and Khazanchi, 2008; Duan et al., 2008). According to a survey, 91% of participants said they use online reviews, blogs and other forms of UGC before purchasing a new product or service, and 46% of participants indicated that these comments influenced their decision (Cheung and Thadani, 2012). Online reviews can reduce the risks perceived by consumers (Cheung et al., 2009b; Park and Kim, 2009) and improve their degree of satisfaction (Liang et al., 2007), as well as their efficiency in making decisions (Cheung et al., 2009a). It has been proved that the volume of online reviews is significantly related to sales. The volumes of both positive and negative reviews impact the consumer's decisions (Chatterjee, 2001; Cheung et al., 2009a; Kamins and Assael, 1987; Berger et al., 2010), while negative reviews have a greater impact than positive reviews (Park and Lee, 2009a,b; Herr et al., 1991).

Meanwhile, *eWOM in social media* (referred to as SM-eWOM hereafter) has taken on a greater role in promoting online shopping nowadays, especially with the emergence of social commerce. These days, shoppers are turning to social media to share their thoughts about the quality of goods or services they purchased, or about their shopping experience. This form of SM-eWOM includes consumer's posts on Twitter, Facebook, Weibo and so on, as well as comments on others' posts. SM-eWOM impacts consumers from the aspects of impression-management, emotion

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regulation, information acquisition, social bonding, and persuasion (Berger, 2014). According to a report from the China Internet Network Information Center (CNNIC) in 2012, 43.1% of users experience consumption impulses when they receive recommendations from friends on social media, 38.3% of users will refer to SM-eWOM before making shopping decisions, and 37.2% of users will like to share their comments with friends on social media. Social media has been used to figure out user preferences, and has attracted attention from enterprises as a marketing tool.

In the research of Cheung and Thadani (2012), *information adoption* is defined as a process in which people purposefully engage in using information. In this paper, eWOM adoption means that consumers agree with the content of eWOM and intend to make purchases based on it.

Currently, the quality of EC-eWOM varies greatly. When consumers visit e-commerce websites, they usually know little about the authors of the EC-eWOM (Cheung and Thadani, 2012). So not all EC-eWOM have an equal impact on consumers. Consumers need to decide whether or not to adopt EC-eWOM based on their own judgment. When consumers cannot make shopping decisions based on EC-eWOM, they need to refer to alternative types of information, such as SM-eWOM. Despite SM-eWOM currently being less efficient than EC-eWOM, Internet companies have started noticing its increasing impact and worked towards improving its usability. For example, Sogou (www.sogou.com provides a function to search information on social media 'weixin.qq.com'. Sogou also provides open API for programmers to develop more applications to fully utilize social media content. Another example is from Xiaomi. (www.mi.com). Xiaomi, one of the leading tech firms in China, manufactures the popular Redmi and Mi smartphones. The company attracts many young users and they share content about Xiaomi's products on social media. In return, Xiaomi provides links to this content for consumers to easily access more information about its products (e.g., www.linkedin.com/company/xiaomi-technology). This makes both sharing and browsing comments about Xiaomi's products convenient.

Specifically, this research focuses on the following scenario. People browse for goods on e-commerce website, and consumer's comments about the goods are available directly on the site, including links to social media, such as Twitter. At first, consumers use EC-eWOM. If they can't make shopping decisions based on EC-eWOM, they turn to SM-eWOM. In reality, this sequence could be reversed, meaning consumers use SM-eWOM first, and then EC-eWOM. However, this scenario is not the focus of this paper and could be studied in another research.

Regarding EC-eWOM and SM-eWOM, there's lots of research demonstrating the individual impact each has on consumer decisions. However, little is known about the consumers' decisions when they are simultaneously facing both types of eWOM. To our knowledge, this is one of the first studies focusing on how consumers choose between EC-eWOM and SM-eWOM. In addition, previous studies have revealed that the cognitive level and involvement of consumers moderates the impact of eWOM (Cheung et al., 2009b; Park and Kim, 2009; Gupta and Harris, 2010). This research will also verify the moderating effects of these factors on the adoption of the two kinds of eWOM.

This research addresses the following questions: (1) which kind of eWOM will be chosen by consumers when they are facing EC-eWOM and SM-eWOM simultaneously? And (2) how does the cognitive level and involvement of consumers moderate the adoption process for the types of eWOM?

Overall, this research clarifies the mechanism of consumer's adoption of EC-eWOM and SM-eWOM from the perspective of cognitive cost theory. The contributions include the following three aspects: Firstly, it introduces a research model that analyzes the impacts of multiple channels of eWOM on consumers' decisions.

Attitudes towards EC-eWOM and SM-eWOM are not separated but interact with each other. Second, the findings show that the EC-eWOM adoption is not the end of consumers' information gathering, but instead, a mediating variable that may affect SM-eWOM adoption. Third, the results demonstrate the influence of cognitive cost on consumers' utilization of online information from different channels. The research also provides practical implications regarding the management of eWOM on different types of online platforms in the age of social commerce.

The remainder of the paper is organized as follows. Section 2 is a review about the related literatures. Section 3 proposes the research model and hypotheses. Empirical analysis is presented in Section 4. Conclusions and research limitations are outlined in Section 5.

2. Literature

2.1. Electronic word of mouth

Word of mouth (WOM) has been acknowledged for many years as a major influence on what people know, feel and do (Buttle, 1998). It has been described as an informal communication directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers (Berger, 2014). EWOM is comments about a product or service provided by customers via networks (Hennig-Thurau et al., 2003). It has a direct impact on consumers' trust and purchasing behavior (Dellarocas et al., 2007; Duan et al., 2008). It can overcome the limitations of traditional WOM, so therefore has been widely analyzed in the field of e-commerce, information systems and marketing.

With the development of Web 2.0, social media has become more and more popular. According to a report by CNNIC, as of June 2014, there were 275-million microbloggers in China. The contents on social media have become an important information source to help consumers make decisions. Consumers increasingly use comments posted on Facebook, Twitter, etc., to valuate products and services prior to making a purchase (Yan et al., 2014a). Carleen (2009) pointed out that many patients use social media to discuss medical services and their doctors in order to optimize treatments. Social media content can also influence destination attractiveness in consumers' early travel decision-making stage (Shu and Scott, 2014). The companies can use social media as an additional customer service and communication tool to gain insight into consumers' needs, wants, concerns and behaviors in order to serve them better (He et al., 2013).

2.2. Elaboration likelihood model

The *elaboration likelihood model* (ELM) is an important information processing theory (Park and Lee, 2009a,b; Cheung et al., 2008; Chu and Kamal, 2008; Gupta and Harris, 2010; Lee et al., 2008; Petty and Cacioppo, 1986), which explains how individuals are influenced by the received messages in persuasive communication (Shih et al., 2013). The model defines two routes for processing: the central route and the peripheral route. The central route is used when the message receiver is able to understand the message without being distracted by any other superficial information. The central route emphasizes high relevance of the message to the individual. The greater the relevance and the more interest that the individual shows in the subject of the message, the higher the chances that they will think or elaborate on the message (Morris et al., 2005). The peripheral route occurs when the message receiver is unable or unwilling to engage in much thought about the message. The message receiver decides whether to agree with