

The Effectiveness of Electronic Word-of-Mouth Communication: A Literature Analysis

Christy M.K. Cheung

Hong Kong Baptist University, Hong Kong
ccheung@hkbu.edu.hk

Dimple R. Thadani

City University of Hong Kong, Hong Kong
dimplet@student.cityu.edu.hk

Abstract

Electronic word-of-mouth (eWOM) communication has been one of the most exciting research areas of inquiry. There is an emerging attention on the effectiveness of eWOM communication. The scope of published studies on the impact of eWOM communication is rather broad and the studies appear relatively fragmented and inconclusive. In this study, we focused on the individual-level eWOM research. We conducted a systematic review of eWOM research and identified key factors that are specific to the context of eWOM communication. We believe that this literature analysis not only provides us with an overview of the current status of knowledge within the domain of eWOM communication, but also serves as a salient guideline for future research directions.

Keywords: Electronic Word of Mouth, Literature Analysis, Research Framework, Social Communication, Web 2.0, e-Marketing

1 Introduction

Traditional word-of-mouth (WOM), which was originally defined as an oral form of interpersonal non-commercial communication among acquaintances (Arndt, 1967), has evolved into a new form of communication, namely electronic word-of-mouth (eWOM) communication. eWOM communication refers to any positive or negative statement made by potential, actual, and former customers about a product or a company via the Internet (Hennig-Thurau et.al., 2004). The advances of the Internet offer a fertile ground for electronic word-of-mouth (eWOM) communication. More and more consumers use Web 2.0 tools (e.g., online discussion forums, consumer review sites, weblogs, social network sites, etc.) to exchange product information (Lee, Park and Han, 2008). For instance, the number of online consumer reviews has reached 116 million and it is still on the rise (eMarketer, February 2009). Meanwhile, 83 percent of Internet shoppers

reported that their purchasing decisions are based on online product evaluations and reviews (Opinion Research Corporation, July 2008).

eWOM has undoubtedly been a powerful marketing force. In recent years, we witnessed an emerging literature focusing on the effectiveness of eWOM communication (Davis and Khazanchi, 2008; Chevalier and Mayzlin, 2006). However, the scope of published studies on the impact of eWOM communication is rather broad, and the studies appear relatively fragmented and inconclusive. Researchers have adopted various research approaches to investigate the eWOM phenomenon. Indeed, studies on the impact of eWOM communication can be classified into two levels: Market-level analysis and Individual-level analysis (Lee and Lee, 2009). At the market-level analysis, researchers focused on market-level parameters (e.g., product sales). This line of studies used objective panel data (e.g., the rate and the valence of consumer reviews) extracted from the websites to examine the impact of eWOM messages on product sales (Chevalier and Mayzlin, 2006; Clemons, Gao, and Hitt, 2006; Dellarocas, Zhang, and Awad, 2007; Duan, Gu, and Whinston, 2008). At the individual-level analysis, researchers postulated eWOM as a process of personal influence, in which communications between a communicator (sender) and a receiver can change the receiver's attitude and purchasing decision (Kiecker and Cowles, 2001; Park and Kim, 2008; Park and Lee, 2008, Cheung, Lee, and Thadani, 2009).

In this study, we focus on the individual-level eWOM research. We build on the social communication literature and conduct a systematic review of eWOM communication studies. We attempt to identify key factors related to eWOM communication, and propose a conceptual framework that enhances our understanding of the underlying drivers of eWOM communications. The paper is structured as follows. First, we define eWOM communication and compare the concept with the traditional WOM communication. Second, we describe the research procedures. Third, we present a quantitative summary of prior eWOM communication research. Finally, we propose a conceptual framework for future research into the impact of eWOM communication.

2 Electronic Word-of-Mouth Communication

Interpersonal communication has received great attention in social psychology. This line of studies has consistently demonstrated how personal influence affects individuals to make choices. The power of interpersonal influence through word-of-mouth communication has been well recognized in the consumer literature (Arndt, 1967; King and Summers, 1970; Herr, Kardes, and Kim, 1991). The consumer influence through word-of-mouth communication is further accelerated with the advent of the Internet.

eWOM communication refers to any positive or negative statement made by potential, actual, and former customers about a product or a company via the Internet (Hennig-Thurau et al., 2004). eWOM communication can take place in various settings. Consumers can post their opinions, comments and reviews of products on weblogs (e.g. xanga.com), discussion forums (e.g. zapak.com), review websites (e.g. Epinions.com), e-bulletin board systems, newsgroup, social networking sites (e.g. facebook.com). While eWOM communication has some characteristics in common with traditional WOM communication, it is different from traditional WOM in several dimensions. These dimensions attribute to the uniqueness of eWOM communication. First, unlike traditional WOM, eWOM communications possess unprecedented scalability and speed

of diffusion. As with WOM, sharing of information is between small groups of individuals in synchronous mode (Avery, Resnick, and Zeckhauser, 1999; Li & Hitt 2008, Dellarocas 2003; Steffes and Burgee, 2009). However, eWOM communications involve multi-way exchanges of information in asynchronous mode (Hung and Li, 2007). The use of various electronic technologies such as online discussion forum, electronic bulletin board, newsgroups, blogs, review sites and social networking sites facilitate the information exchange among communicators (Goldsmith, 2006). Second, opposite to traditional WOM, eWOM communications are more persistence and accessible. Most of the text-based information presented on the Internet is archived and thus would be made available for an indefinite period of time (Herr, Kardes and Kim, 1991; Hennig-Thurau et. al., 2004; Sen, 2008; Park and Lee, 2009; Hung and Li; 2007; Lee, Park, and Hen, 2008). Third, eWOM communications are more measurable than traditional WOM (Lee, Park and Hen, 2008; Park and Kim, 2008). The presentation format, quantity and persistence of eWOM communications have made them more observable. Word-of-mouth information available online is far more voluminous in quantity compared to information obtained from traditional contacts in the offline world (Chatterjee, 2001). Lastly, traditional WOM emanates from a sender who is known to the receiver of the information, thereby the credibility of the communicator and the message is known to the receiver. On the contrary, the electronic nature of eWOM in most applications eliminates the receiver's ability to judge the credibility of the sender and his or her message.

3 Literature Search

Before the synthesis of findings in various studies could be done, relevant studies should first be identified. This research study involved collecting academic and peer reviewed journal articles that address impacts of electronic word-of-mouth (eWOM). We used two methods to identify relevant papers. First, we conducted a systematic electronic search using a number of index databases including Academic Search Premier (EBSCO), ABI/INFORM Global (ProQuest), Social Science Citation Index (SSCI), Science Citation Index (SCI), PsycINFO, CSA Illumina, Education Resources Center (ERIC), and Emerald. The research team did the search based on keywords included "electronic word-of-mouth", "ewom", "online reviews", "online recommendations", "marketing buzz", and "online consumer reviews". Second, we reviewed eight journals (including five IS and Electronic Commerce specific Journals and three Marketing Journals) manually to ensure that no major eWOM articles were ignored. These IS journals were, *MIS Quarterly*, *Information Systems Research*, *Journal of Management Information Systems*, *Journal of Association of Information Systems*, and *International Journal of Electronic Commerce*. We then extended our search to the marketing journals including *Journal of Marketing*, *Journal of Marketing Research*, and *Journal of Consumer Research*.

The searches on electronic word-of-mouth (eWOM) and related topics produced 390 articles in total. Following the guidelines of the conventional systematic review methodology, which is strongly recommended in writing sound IS literature reviews (Webster and Watson, 2002), inclusion and exclusion criteria were applied to the 390 studies by three independent researchers. These were done to ensure that the sample of articles used for analysis was appropriate for the current research. The inclusion criteria included the following: (1) publication was academic and peer reviewed in nature; (2)

eWOM is the main focus of investigation in the paper; (3) researchers had a defined sample; (4) publication that addressed impacts of electronic word-of-mouth (eWOM); (5) publication dealt with investigation of eWOM in business-to-consumer settings. The exclusion criteria were applied to: (1) papers with an entirely conceptual or theoretical background and no research design; (2) publication dealt with investigation of eWOM in the form of recommendation agent (system agent); Three hundred and sixty five articles were excluded from the analysis because they failed to meet the criteria stipulated given the design of the current research.

To conclude, after reviewing and screening each article in order to eliminate the articles that were not pertinent to the current focus. A total of 25 articles published between 2001 and 2009 that adopted the individual-level analysis to examine the impact of eWOM communication were identified. All the qualified articles were numbered and coded independently by three coders. Relevant and usable information about the effect of interest were identified. Relevant constructs in these articles were classified under the four elements of social communication (Hovland, 1948) - *communicator*, *stimulus*, *receiver* and *response*. Subsequent discussions among the coders identified and resolved disagreement about the categorization. The inter-judge reliability between the coders calculated by the percentage agreement statistics. The inter-judge reliability of the coding are over 95%.

4 Review of Study Findings

According to the traditional communication theories, there are four major elements in social communication, including the *communicator* (sender), the *stimulus* (message), the *receiver*, and the *response* (Hovland, 1948).

- The *communicator* refers to the person who transmits the communication.
- The *stimulus* refers to the message transmitted by the communicator.
- The *receiver* is the individual who responds to the communication.
- The *response* is made to the communication by the communicatee.

eWOM represents a new form of communication between a receiver and a sender. In this study, we classify prior studies based on the four elements of social communication. Figure 1 depicts our conceptual framework.

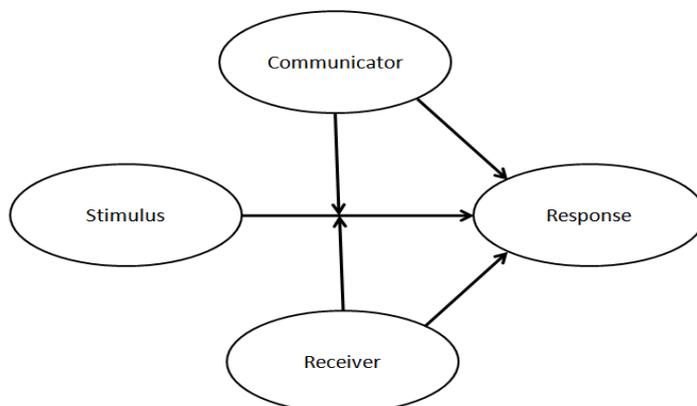


Figure 1: The High Level Nomological Network for Impact of eWOM Communication

4.1 Response

The *response* is made to the communication by the communicatee. In the traditional WOM literature, WOM communication is considered as a type of social influence that affects consumers' belief, attitude, and purchase intention (Arndt, 1967; Hanna and Wozniak, 2001). In the eWOM communication studies, factors related to a receiver's psychological state, such as purchase intention, attitude, information adoption, and trust, are the most commonly investigated outcomes (responses) of eWOM communication. The finding is summarize in Table 1. Among all the outcome variables, purchase intention is the most frequently studied eWOM response.

Constructs	Definitions	Authors
Attitude	Reviewer's overall evaluation of person, objects and issues (Pretty & Cacioppo 1984; 1983)	Doh & Hwang 2009; Lee, Park & Han 2008; Lee & Youn 2009
Information adoption	A process in which people purposefully engage in using information (Cheung et al, 2008).	Cheung, Lee & Rabjohn 2008; Cheung, Luo, Sia & Chen 2009; Forman, Ghose & Wiesenfeld 2008; Zhang & Watts 2008; Lee & Youn 2009
Trust	General belief of the truthfulness of the message.	Awad & Ragowsky 2008; Sen 2008; Sen & Lerman 2007
Purchase intention	The Willingness to purchase a product in the future	Bickart & Schindler 2001; Doh & Hwang 2009; Huang, Lurie & Mitra 2009; Park & Lee 2009; Park & Kim 2008; Park & Lee 2008; Sher & Lee 2009; Xia & Bechwati 2008; Park, Lee & Han 2007; Lee & Lee 2009
Awareness	The consciousness that a product exists	Davis & Khazanch 2008
Loyalty	The tendency of customers to stay with a certain business, store, brand, product over another when seeking to meet particular needs.	Gauri, Bhatnagar & Rao 2008; Litvin, Goldsmit & Pan 2008;
Choice	Products that a consumer chooses to purchase at the e-commerce websites	Huang & Chen, 2006
Usefulness	The extent to which an individual perceives a website to be useful in performing stopping tasks (Kumar & Benbasat 2006).	Kumar & Benbasat 2006
Social presence	The extent to which a psychological connection is formed between a website and its visitors (Kumar & Benbasat 2006).	Kumar & Benbasat 2006
Helpfulness	The perception of review being helpful to readers.	Sen 2008; Sen & Lerman 2007
Preference of information source	Consumers' hierarchical prioritization of the usage of information that originates from different sources for the purpose of purchase decision making.	Steffes & Burgee 2009

Table 1: Factors associated with the response

4.2 Communicator

The *communicator* refers to the person who transmits the communication. Traditional WOM is mostly emanates from a sender (source) who is known to the receiver of the information, thereby the credibility of the communicator and the message is known to the receiver. In the traditional WOM literature, marketing scholars have demonstrated

that personal source of information has a strong impact on consumer preferences and choices (Arndt, 1967; Herr, Kardes, and Kim, 1991). In contrast, eWOM is not restricted to strong social tie groups (e.g., family and friends). Any consumer can reach and exchange product information with a vast and geographically dispersed group of strangers. This could raise receivers' concern about the credibility of the reviews. Understanding the determinants of source credibility in online interpersonal settings is needed to guide marketing strategies and tactics for the new social media. It is also reflected in our literature analysis, source credibility is the most frequently investigated factor associated with the communicator. Source credibility includes two major dimensions: Expertise and trustworthiness (Hu, Liu, and Zhang, 2008; Sussman and Siegal, 2003). Table 2 summarizes the factors associated with the communicator.

Constructs	Definitions	Authors
Source Credibility		Cheung, Luo, Sia & Chen 2009; Hu, Liu & Zhang 2008; Zhang & Watts 2008
- Expertise	Message source's perceived ability (Expertise) or motivation to provide accurate and truthful information (Trustworthiness) (Kelman & Hovland 1953)	Boush & Kahle 2001; Cheung, Lee & Rabjohn 2008; Huang & Chen 2006; Kiecker & Cowles 2001; Park & Kim 2008
- Trustworthiness		Cheung, Lee & Rabjohn 2008; Huang & Chen 2006; Kiecker & Cowles 2001
Attractiveness (Similarity, Familiarity, Likability)	<p>Attractiveness encompasses similarity, familiarity and likability and reflects the extent to which the receiver identifies with the source.</p> <p>Similarity - Resemblance between the source and receiver</p> <p>Familiarity – The knowledge of the source through exposure or past association whereby a level of comfort with the source is established for the receiver</p> <p>Likeability – Affection for the source as a result of physical appearance, behaviour, or other personal traits (talents, personality, etc.)</p>	Kiecker & Cowles 2001
Disclosure of identity	The disclosure of one's identity to others	Forman, Ghose & Wiesenfeld 2008; Hu, Liu & Zhang 2008
Shared geographical location	Members of the online community who are from the same geographic region	Forman, Ghose & Wiesenfeld 2008
Social tie	The level of intensity of a social relationship between two individuals. (Steffes & Burgee 2009)	Steffes & Burgee 2009
Homophily	The degree to which pairs of individuals are similar in age, gender, education, and social status (Steffes & Burgee 2009).	Steffes & Burgee 2009

Table 2: Factors associated with the communicator

4.3 Stimulus

The *stimulus* refers to the message transmitted by the communicator. The valence (positive, negative, or neutral), volume (the quantity of the information), and rating of

WOM communication, have been receiving a lot of attention in recent investigations. Particularly, researchers focused on the impact of extremely positive and extremely negative WOM (Harrison-Walker, 2001; Halstead, 2002; Heitmann, Lehmann, and Herrmann, 2007). Because of the nature of traditional WOM communication, most of these studies examined the impact of WOM messages by manipulating WOM messages in an experimental setting. Some recent eWOM studies also adopted this approach in examining the impact of eWOM valence on consumers' purchasing intention (Cheung, Lee, and Thadani, 2009; Zhang, Craciuna, and Shin, 2010). Since eWOM communications are more measurable and observable comparing with the traditional WOM communications (Lee, Park, and Hen, 2008; Park and Kim, 2008), some researchers (Chevalier and Mayzlin, 2006; Dellarocas, Zhang, and Awad 2007; Duan, Gu, and Whinston, 2008) conducted an empirical investigation of panel data. They extracted eWOM messages directly from websites and used these panel data to examine the impact of eWOM messages on product sales. Table 3 summarizes the factors related to the stimulus.

Constructs	Definitions	Authors
Argument quality - Relevance -Timeliness -Accuracy -Comprehensiveness	<p>Argument quality refers to the persuasive strength of arguments embedded in an informational message (Bhattacharjee and Sanford 2006)</p> <p>Relevance refers to the extent to which the messages are applicable and useful for decision making.</p> <p>Timeliness concerns whether the messages are current, timely, and up-to-date.</p> <p>Accuracy concerns reliability of the messages/arguments. It also represents user's perception that the information is correct (Wixom and Todd, 2005)</p> <p>Comprehensiveness of messages refers to their completeness</p>	Cheung, Lee & Rabjohn, 2008; Lee, Park & Han 2008; Sher & Lee 2009; Zhang & Watts 2008; Park, Lee & Han 2007
Disconfirming information	Information content in messages that is inconsistent with one's previously held understandings and beliefs.	Zhang & Watts 2008
eWOM review credibility	The perceived ability or motivation for an eWOM review to provide accurate and truthful information.	Cheung, Luo, Sia & Chen 2009; Doh & Hwang 2009
Argument strength	The extent to which the message receiver views the argument as convincing or valid in supporting its position.	Cheung, Luo, Sia & Chen 2009
Recommendation framing (Valence)	The valence of eWOM message and whether it is positive or negative. (Liu 2006)	Cheung, Luo, Sia & Chen 2009; Chevalier & Mayzlin 2006; Clemons & Gao 2008; Clemons, Gao & Hitt 2006; Dellarocas, Zhang & Awad 2007; Gauri, Bhatnagar & Rao 2008; Hu, Liu & Zhang 2008; Huang & Chen 2006; Lee, Park & Han 2008; Liu 2006; Park & Lee 2009; Sen 2008; Sen & Lerman

		2007; Xia & Bechwati 2008; Lee & Youn, 2009
Recommendation sidedness	The extent to which message arguments recognize and attempt to refute opposing viewpoints (Stiff & Mongeau 2003).	Cheung, Luo, Sia & Chen 2009; Doh & Hwang 2009; Sen 2008
Recommendation consistency	The extent to which the current eWOM recommendation is consistent with other contributors' experiences concerning the same product or service evaluation (Zhang & Watts 2003)	Cheung, Luo, Sia & Chen 2009; Clemons, Gao & Hitt 2006
Recommendation rating	The overall rating given by other readers on an eWOM recommendation current review	Cheung, Luo, Sia & Chen 2009; Chevalier & Mayzlin 2006; Duan, Gu & Whinston 2008; Lee and Lee 2009
Length of review	Total number of type characters in a piece of review	Chevalier & Mayzlin 2006; Sen 2008
Number of review	Total number of posted reviews	Chevalier & Mayzlin 2006; Davis & Khazanchi 2008; Dellarocas, Zhang & Awad 2007; Duan, Gu & Whinston 2008; Gauri, Bhatnaga & Rao 2008; Lee, Park & Han 2008; Liu 2006; Park & Kim 2008; Sher & Lee 2009; Park, Lee & Han 2007
Review Type	Different orientation of a review	Park & Kim 2008; Riegner 2007; Xia & Bechwati 2008
Visual cues	Any image (a form of communication) posted by a reviewer and directed at other consumers when evaluating the characteristics of a particular good or service.	Davis & Khazanchi 2008
Dispersion	The degree to which arguments/messages vary from one another.	Dellarocas, Zhang & Awad 2007

Table 3: Factors associated with the stimulus

4.4 Receiver

The *receiver* is the individual who responds to the communication. The actual impact of the information received may vary person to person. The same content can engender very different responses in different recipients (Chaiken and Eagly, 1976), depending on the recipients' perceptions, experience, and sources. This has led researchers to gain interest in the information adoption process to understand the extent of informational influence to people's minds. In the information adoption literature, Sussman and Siegal (2003) found that the receivers' experience and knowledge moderates both the central (the nature of arguments in the message) and peripheral (the subject matter of the message) influences on information adoption in computer-mediated communication contexts. In the eWOM literature, consumers' characteristics, such as consumer involvement and prior knowledge, also play an important moderating role in determining purchase intention (Doh and Hwang, 2009). Researchers further investigated other factors related to personal characteristics, such as gender, consumer scepticism, perceived homophily, and cognitive personalization. Table 4 provides a summary of factors associated with the receiver.

Constructs	Definitions	Authors
Confirmation with prior belief	The level of confirmation/disconfirmation between the received information and their prior beliefs relating to the reviewed product/service through various direct/indirect experience	Cheung, Luo, Sia & Chen 2009;
Prior Knowledge	Prior knowledge of the review topic and the platform (e.g. discussion forum)	Cheung, Luo, Sia & Chen 2009; Doh & Hwang 2009
Involvement	The degree of psychological identification and affective, emotional ties the consumer has with a stimulus or stimuli	Cheung, Luo, Sia & Chen 2009; Doh & Hwang 2009; Lee, Park & Han 2008; Park, Lee & Han 2007
Focused search	The extent to which members have specific information needs in mind during their active search for on-topic information.	Zhang & Watts 2008
Gender	Genders of the reviewers (Male/Female)	Dellarocas, Zhang & Awad 2007
Consumer skepticism	The tendency toward disbelief (Obermiller & Spangenberg 1998)	Sher & Lee 2009; Lee & Youn 2009
Social tie	The level of intensity of a social relationship between two individuals	Steffes & Ragowsky 2008
Homophily	The degree to which pairs of individuals are similar in age, gender, education, and social status.	Steffes & Ragowsky 2008
Cognitive personalization - Affect intensity	The tendency toward disbelief (Obermiller & Spangenberg 1998)	Xia & Bechwati 2008

Table 4: Factors associated with the receiver

4.5 Interrelationships between the Four Elements

As discussed before, purchase intention is the most widely studied outcome variables of eWOM communication. We further analyze the literature based on that focused on purchase intention as the outcome variable of eWOM communication. Among 25 studies, 10 studies examined purchase intention as the outcome variable of eWOM communication. 9 out of the 10 studies focused on the impact of stimuli on consumer's purchasing intention. Most researchers used an experimental research design to investigate how different characteristics (the valence, volume, and quality) of eWOM messages affect purchase intention. For example, Park and Lee (2008) examined how the direction eWOM messages (positive vs. negative) and website's reputation contribute to the eWOM effect. Some researchers further included the characteristics of both communicators and receivers in their investigation. Park and Kim (2008) found that the type of reviews on purchase intention is stronger for experts than for novices while the effect of the number of reviews on purchase intention is stronger for novices and experts. So far, there is no existing study simultaneously examining the impacts of all the three elements (communicator, stimuli, and receiver) on purchase intention.

Authors (Year)	Communicator	Stimuli	Receiver	Research Method	Theoretical Background	Findings
Bickart and Schindler (2001)	NIL	Type of review sites (consumer-generated – e.g. Internet forums or bulletin boards, marketer-generated online information– e.g. corporate website)	NIL	Experiment	NIL	Consumers who gathered information from online discussions reported greater interest in the product topic than did those consumers who acquired information from the marketer-generated sources.
Doh and Hwang (2009)	NIL	The ratio of messages (positive-negative)	Involvement Prior knowledge	Experiment	NIL	More positive sets showed higher scores. Involvement and prior knowledge partially moderated the relationship between the ratio of messages and the eWOM effect.
Huang, Lurie, and Mitra (2009)	NIL	Presence of consumer feedback	NIL	Archival data	Information theory,	The presence of product reviews from other consumers enhances consumer search and purchase behavior for experience than for search goods.
Lee and Lee (2009)	NIL	eWOM Rating	NIL	Survey	Objectivity-Subjectivity dichotomy	For quality goods, as eWOM average (rate) increases, the impact of quality on consumer purchase intention decreases For preference goods, as eWOM average (rate) increases, the impact of quality on consumer purchase intention increases For quality goods, as eWOM variance increases, the impact of quality on consumer purchase intention increases For preference goods, as eWOM variances increases, the impact of quality on consumer purchase intention does not change
Park and Lee (2009)	NIL	Valence (Positive vs. Negative)	NIL	Experiment	NIL	eWOM effect is greater for negative eWOM than for positive eWOM. The impact of negative eWOM on the eWOM effect is greater for experience goods than for search goods.
Park and Kim (2008)	NIL	Valence Volume Message Type	Expertise	Experiment	Cognitive fit theory ELM	Type of reviews on purchase intention is stronger for experts than for novices while the effect of the number of reviews on purchase intention is stronger for novices and

						experts.
Park and Lee (2008)	NIL	Volume Message Type	Involvement	Experiment	ELM	Low involvement consumers focused on perceived popularity (volume) High involvement consumers focused on perceived informativeness (message type)
Park, Lee and Han (2007).	NIL	Quality Volume	Involvement	Experiment	ELM	The quality of reviews has a positive effect on purchase intention Consumer's purchasing intention increases along with the number of reviews Low involvement consumers are affected by review quantity rather than quality High involvement consumers are affected by both review quantity rather than quality
Sher and Lee (2009)	NIL	Quality Volume	Consumer skepticism	Experiment	ELM	Purchasing intention of consumers with high skepticism is not influenced by argument quality and quantity of online reviews Purchasing intention of consumers with low skepticism is more influenced by argument quantity than quality of online reviews
Xia and Bechwati (2008)	NIL	Valence Message Type	Cognitive personalization	Experiment	NIL	The effect of cognitive personalization on purchase intention is moderated by valence

Table 5: Summary of the Studies on Purchase Intention

5 Discussion

The main objective of the present study is to provide a systematic review of the existing literature on eWOM communication. Research on eWOM communication is rather broad and fragmented. According to Lee and Lee (2009), there are two main levels of analysis: Market-level analysis and individual-level analysis. In this study, we focus on the individual-level analysis and adopt the social communication literature as the framework for our literature analysis. Through a rigorous search of several mainstream IS and Marketing journals, as well as key electronic databases, we identified 25 papers using the individual-level analysis in the investigation of the impact of eWOM communication.

We synthesize the findings of our literature analysis and derive a conceptual framework for the study of the impact of eWOM communication at the individual level. The conceptual framework is drawn on the social communication literature and is comprised of four major elements: Communicator, Stimulus, Receiver, and Response. Factors related to these four elements are identified and classified. The proposed conceptual framework is summarized in Figure 2. This framework provides the basis for future

research as it integrates all relevant factors of the four major elements of eWOM communication.

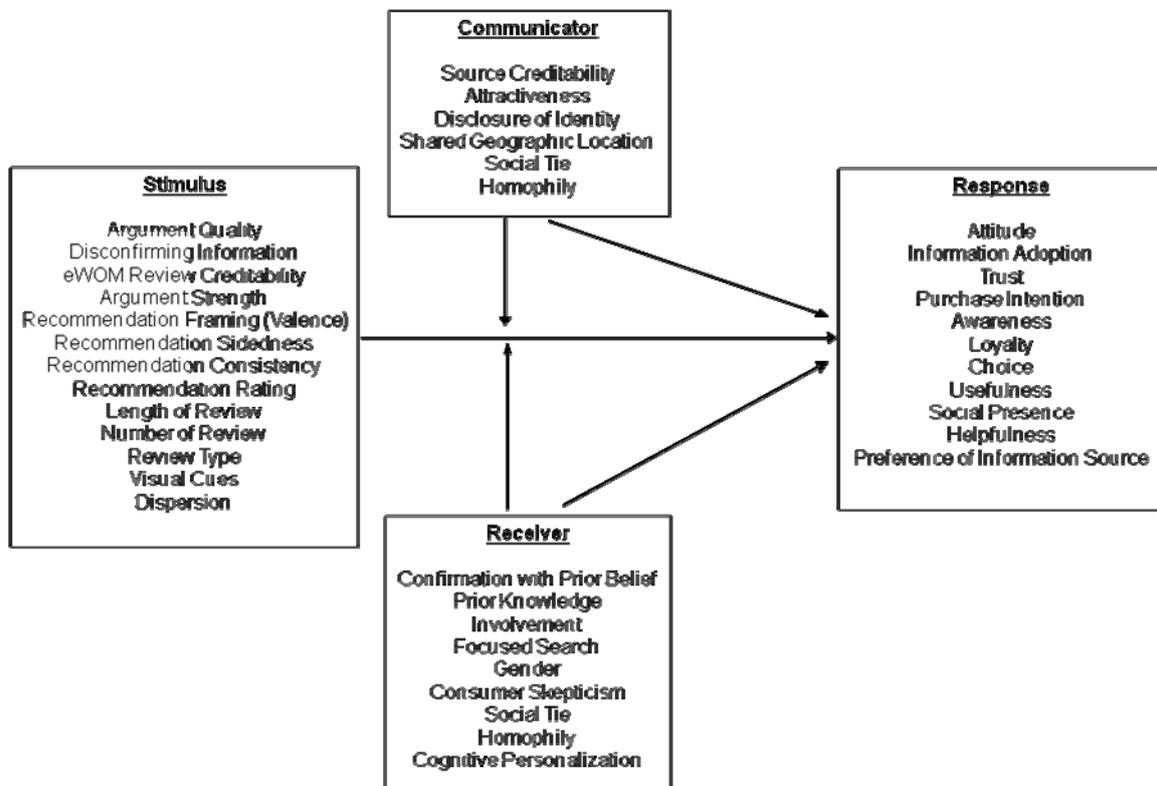


Figure 2: The Research Framework for Examining the Impact of eWOM Communication

Some limitations should be noted. The results and analysis of this study were limited to the pool of journals that satisfied our selection criteria. For instance, the scope did not include market-level studies. From our preliminary review, a significant amount of studies focused on company strategies, eWOM messages, and product sales. These studies adopted a very different theoretical research approach in examining the eWOM phenomenon. We believe that there exists some other levels in eWOM studies, such as product class, industry, strategy, and else. Future studies should expand the literature analysis and classified prior studies based on their level of analysis.

This line of research is still emerging. Because of a limited number of empirical studies, we were not able to perform a quantitative meta-analysis. A meta-analysis is strongly recommended in the future, so as to improve our understanding on the relative impacts of the three elements (Communicator, Receiver, and Stimulus) on the responses of eWOM communication,

To conclude, this literature analysis provides an overview of the current status of knowledge in the domain of eWOM communication research. Furthermore, we present a conceptual framework and identify the key variables of each of the four elements. We believe that this study stimulates future research on eWOM communication by drawing attention to the variables and linkages that need further investigation.

Acknowledgment

The authors acknowledge with gratitude the generous support of the Hong Kong Baptist University for the project (FRG/07-08/II-78) without which the timely production of the current report/publication would not have been feasible.

References

- Andreassen, T. W. & Streukens, S. (2009). Service innovation and electronic word-of-mouth: is it worth listening to? *Managing Service Quality*, 19(3), 249-265.
- Arndt, J. (1967). Role of Product-Related Conversations in the Diffusion of a New Product. *Journal of Marketing Research*, 4, 291-295.
- Avery, C., Resnick, P. & Zeckhauser, R. (1999). The market for evaluations. *American Economic Review*, 89(3), 564-584.
- Awad, N. F. & Ragowsky, A. (2008). Establishing Trust in Electronic Commerce Through Online Word of Mouth: An Examination Across Genders. *Journal of Management Information Systems*, 24(4), 101-121.
- Bickart, B. & Schindler, R. (2001). Internet Forums as Influential Sources of Consumer Information. *Journal of Interactive Marketing*, 15, 31-40.
- Boush, D. M. & Kahle, L. (2001). Evaluating Negative Information in Online Consumer Discussions: From Qualitative Analysis to Signal Detection. *Journal of Euro - Marketing*, 11(2), 89.
- Chaiken, S. & Eagly, A. H. (1976). Communication modality as a determinant of message persuasiveness and message comprehensibility. *Journal of Personality and Social Psychology*, 34, 606-614.
- Chatterjee, P. (2001). Online Reviews: Do Consumers Use Them? *Advances in Consumer Research*, 28, 129-133.
- Cheung, C. M. K., Lee, M. K. O. & Rabjohn, N. (2008). The impact of electronic word-of-mouth. *Internet Research*, 18(3), 229.
- Cheung, C. M. K., Lee, M. K. O., & Thadani, D. R. (2009). The Impact of Positive Electronic Word-of-Mouth on Consumer Online Purchasing Decision. In M. D. Lytras, E. Damiani, J. M. Carroll, R. D. Tennyson, D. Avison, A. Naeve, A. Dale, P. Lefrere, F. Tan, J. Sipior & G. Vossen (Eds.), *Lecture Notes in Computer Science (Lecture Notes in Artificial Intelligence)* (Vol. 5736, pp. 501-510): Springer-Verlag Berlin Heidelberg.
- Cheung, M., Luo, C., Sia, C. & Chen, H. (2009). Credibility of Electronic Word-of-Mouth: Informational and Normative Determinants of On-line Consumer Recommendations. *International Journal of Electronic Commerce*, 13(4), 9.
- Chevalier, J. A. & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, 43(3), 9.

- Clemons, E. & Gao, G. (2008). Consumer informedness and diverse consumer purchasing behaviors: Traditional mass-market, trading down, and trading out into the long tail. *Electronic Commerce Research and Applications*, 7(1), 3.
- Clemons, E. K., Gao, G. & Hitt, L. M. (2006). When Online Reviews Meet Hyperdifferentiation: A Study of the Craft Beer Industry. *Journal of Management Information Systems*, 23(2), 149.
- Davis, A. & Khazanchi, D. (2008). An Empirical Study of Online Word of Mouth as a Predictor for Multi-product Category e-Commerce Sales. *Electronic Markets*, 18(2), 130.
- Dellarocas, C. (2003). The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. *Management Science*, 49(10), 1407- 1424.
- Dellarocas, C., Zhang, X. & Awad, N. (2007). Exploring the value of online product reviews in forecasting sales: The case of motion pictures. *Journal of Interactive Marketing*, 21(4), 23.
- Doh, S. J. & Hwang, J. S. (2009). How Consumers Evaluate eWOM (Electronic Word-of-Mouth) Messages. *Cyberpsychology & Behavior*, 12(2), 193-197.
- Duan, W., Gu, B. & Whinston, A. (2008). Do online reviews matter? - An empirical investigation of panel data. *Decision Support Systems*, 45(4), 1007.
- eMarketer. (February, 2009). Can User-Generated Content Change Your World? Retrieved on 21st February 2010, from <http://www.emarketer.com/Article.aspx?R=1006888>
- Forman, C., Ghose, A. & Wiesenfeld, B. (2008). Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets. *Information Systems Research*, 19(3), 291.
- Gauri, D., Bhatnagar, A. & Rao, R. (2008). Role of Word of Mouth in Online Store Loyalty. *Association for Computing Machinery. Communications of the ACM*, 51(3), 89.
- Goldsmith, R. E. (Ed.) (2006) *Encyclopedia of E-Commerce, E-Government and Mobile Commerce*. Idea Group Publishing.
- Halstead, D. (2002). Negative word of mouth: Substitute for or supplement to consumer complaints? *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 15, 1-12.
- Hanna, N. & Wozniak, R. (2001). *Consumer Behavior, an Applied Approach*. Englewood Cliffs, NJ: Prentice-Hall.
- Harrison-Walker, L. J. (2001). The measurement of word-of-mouth communication and an investigation of service quality and customer commitment as potential Antecedents. *Journal of Service Research*, 4(1), 60-75.
- Heitmann, M., Lehmann, D. R. & Herrmann, A. (2007). Choice goal attainment and decision and consumption satisfaction. *Journal of Marketing Research*, 44, 234-250.

- Hennig-Thurau, T., Gwinner, K. P., Walsh, G. & Gremler, D. D. (2004). Electronic Word-of-Mouth Via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet? *Journal of Interactive Marketing*, 18, 38-52.
- Herr, P. M., Kardes, F. R. & Kim, J. (1991). The effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnostics perspective. *Journal of Consumer Research*, 17(4), 454-462.
- Hovland, C. I. (1948). Social Communication. *Proceedings of the American Philosophical Society*, 92(5), 371-375.
- Hu, N., Liu, L. & Zhang, J. (2008). Do online reviews affect product sales? The role of reviewer characteristics and temporal effects. *Information Technology and Management*, 9(3), 201.
- Huang, J.-H. & Chen, Y.-F. (2006). Herding in online product choice. *Psychology & Marketing*, 23(5), 413.
- Huang, P., Lurie, N. & Mitra, S. (2009). Searching for Experience on the Web: An Empirical Examination of Consumer Behavior for Search and Experience Goods. *Journal of Marketing*, 73(2), 55.
- Hung, K. H. & Li, S. Y. (2007). The Influence of eWOM on Virtual Consumer Communities: Social Capital, Consumer Learning, and Behavioral Outcomes. *Journal of Advertising Research*, 47(4), 485.
- Kiecker, P. & Cowles, D. (2001). Interpersonal Communication and Personal Influence on the Internet: A Framework for Examining Online Word-of-Mouth. *Internet Applications in Euromarketing*, 11(2), 71-88.
- King, C. W. & Summers, J. O. (1970). Overlap of Opinion Leadership across consumer product categories. *Journal of Marketing Research*, 7, 43-50.
- Kumar, N. & Benbasat, I. (2006). Research Note: The Influence of Recommendations and Consumer Reviews on Evaluations of Websites. *Information Systems Research*, 17, 425 - 439.
- Lee, J. & Lee, J.-N. (2009). Understanding the product information inference process in electronic word-of-mouth: An objectivity-subjectivity dichotomy perspective. *Information & Management* 46(5), 302.
- Lee, J., Park, D.-H. & Han, I. (2008). The effect of negative online consumer reviews on product attitude: An information processing view. *Electronic Commerce Research and Applications*, 7(3), 341.
- Lee, M. & Youn, S. (2009). Electronic word of mouth (eWOM): How eWOM platforms influence consumer product judgement. *International Journal of Advertising* 28(3), 473.
- Li, X. & Hitt, L. (2008). Self-Selection and Information Role of Online Product Reviews. *Information Systems Research*, 19(4), 456.
- Litvin, S. W., Goldsmith, R. E. & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, 29, 458-468.

- Liu, Y. (2006). Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue. *Journal of Marketing*, 70(3), 74 - 89.
- New Opinion Research Corporation (2010). Online Consumer Reviews Significantly Impact Consumer Purchasing Decisions. Retrieved on 21st February, 2010. http://www.opinionresearch.com/fileSave%5COnline_Feedback_PR_Final_6202008.pdf
- Park, C. & Lee, T. (2009). Information direction, website reputation and eWOM effect: A moderating role of product type. *Journal of Business Research*, 62(1), 61.
- Park, D.H. & Kim, S. (2008). The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews. *Electronic Commerce Research and Applications*, 7(4), 399.
- Park, D.H. & Lee, J. (2008). eWOM overload and its effect on consumer behavioral intention depending on consumer involvement. *Electronic Commerce Research and Applications*, 7(4), 386.
- Park, D.H., Lee, J. & Han, I. (2007). The Effect of On-Line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *International Journal of Electronic Commerce*, 11(4), 125-148.
- Riegner, C. (2007). Word of Mouth on the Web: The Impact of Web 2.0 on Consumer Purchase Decisions. *Journal of Advertising Research*, 47(4), 436.
- Sen, S. (2008). Determinants of Consumer Trust of Virtual Word-of-Mouth: An Observation Study from a Retail Website. *Journal of American Academy of Business*, Cambridge, 14(1), 30.
- Sen, S. & Lerman, D. (2007). Why are you telling me this? An examination into negative consumer reviews on the Web. *Journal of Interactive Marketing*, 21(4), 76.
- Sher, P. & Lee, S. (2009). Consumer Skepticism and Online Reviews: An Elaboration Likelihood Model Perspective. *Social Behavior and Personality*, 37(1), 137.
- Steffes, E. M. & Burgee, L. E. (2009). Social ties and online word of mouth. *Internet Research*, 19(1), 42.
- Sussman, S. W. & Siegal, W. S. (2003). Informational influence in organizations: an integrated approach to knowledge adoption. *Information Systems Research*, 14(1), 47-65.
- Webster, J. & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, 26(2), 13-23.
- Xia, L. & Bechwati, N. (2008). Word of Mouse: The Role of Cognitive Personalization in Online Consumer Reviews. *Journal of Interactive Marketing*, 9(1), 103.
- Zhang, W. & Watts, S. A. (2008). Capitalizing on Content: Information Adoption in Two Online communities. *Journal of the Association for Information Systems*, 9(2), 73-94.

Zhang, J. Q., Craciuna, G. & Shin, D. (2010). When does electronic word-of-mouth matter? A study of consumer product reviews. *Journal of Business Research*, In press.