A Research Review on Effect of eWOM

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A Research Review on Effect of eWOM

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Abstract: With the development of the electronic commerce, the electronic word-of-mouth (eWOM) has become important reference information of the consumer shopping. EWOM has attracted considerable interest from researchers in the past decade. There are plenty of academics who looked into what factors play the important roles in effect of eWOM. In this paper, a research review is conducted and an integrated framework is proposed on effects of eWOM. The effects of eWOM are influenced by the characteristics, communicators, and other factors. The characteristics of eWOM include the source, the volume and the valence. The communicators of eWOM refer to the sender, the receiver and the relationship between them. In addition, dispersion and consistency, persistence and observability, anonymity and deception, and community engagement are related factors for effect of eWOM.

Keywords: E-commerce, Word-of-mouth, eWOM, Literature review

1. INTRODUCTION

The Internet has transformed the way we search for information, how we interact with each other and, more importantly, the way we shop. Consequently, traditional word-of-mouth (WOM) behavior now has an electronic element resulting in a substantial research stream—electronic WOM (eWOM). EWOM is available to customers in different types of online consumer reviews, which can be used to help them determine eWOM credibility and make purchasing decisions when they shopping online. EWOM has attracted considerable interest from researchers in the past decade. There are many researchers who studied and discussed eWOM from different aspects, the most studied works focus on the effect of eWOM, how eWOM affect customers' acceptance of eWOM and purchasing decisions. However, results reported by different papers are different or even contradictory. Although the extant research has helped us to develop a good understanding of a number of the issues pertaining to eWOM, several research and managerial questions remain.

This paper collected and summarized the literatures on the effect of the eWOM, distinguished the basic research context and framework. The purpose of this paper is threefold. The first is to conduct a systematic review of eWOM studies published in the past decade and identify the key characteristics and effect of eWOM. Here, we conduct the analysis around a conceptual framework adapted from reviews of eWOM. The second is to examine the current state of eWOM research. The third is to pose and discuss critical research questions within this framework to provide advice for future research in this ever-evolving domain.

2. EWOM RESEARCH BACKGROUND

Word-of-mouth is defined as oral, person-to-person communication between a receiver and a communicator, whom the receiver perceives as non-commercial, regarding a brand, product, or service [1]. This definition tries to define the research boundary of word-of-mouth study, and put emphasis that word-of-mouth is oral and non-commercial.

The Internet has enabled new forms of communication platforms that further empower both providers and consumers, allowing a vehicle for the sharing of information and opinions both from business to consumer, and from consumer to consumer. EWOM refers to 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 institution.

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via the Internet \[^2\]. It can be exchanged through a variety of means such as e-mail, instant messaging, homepages, blogs, forums, online communities, newsgroups, chat rooms, review sites and social network sites \[^3\]. EWOM could be transmitted via different websites and it could also be called online word-of-mouth, product reviews or consumer recommendations.

Existing literatures about the effect of eWOM could be classified into two kinds. One is based on the view of consumers, which study on how eWOM influences consumers’ attitude and purchase behavior. The other is based on the view of corporates, which focus on how eWOM influences corporates’ reputation, revenue and customer equity.

The eWOM is one of important information source for consumers’ purchase decision. Product feedback, product reviews and discussion, several forms of online consumers’ word-of-mouth, can effectively compensate for the perceived risk of consumers and information asymmetries. More and more consumers rely on the eWOM to search for information before they make purchasing decisions \[^4\].

It is suggested that the eWOM, such as content included in online customer forums, may have greater empathy and relevance, and may generate more empathy compared with marketer-generated web content \[^5\]. Huabl G. and Murray K. B. (2006) also shown that the eWOM is more credible than any other internet commercial information \[^6\].

3. EFFECT OF EWOM

In this paper, we propose an integrated framework for effect of eWOM as shown in Figure 1. The effects of eWOM are influenced by the characteristics, communicators, and other factors. The characteristics of eWOM include the source, the volume and the valence. The communicators of eWOM refer to the sender, the receiver and the relationship between them. In addition, dispersion and consistency, persistence and observability, anonymity and deception, and community engagement are related factors for effect of eWOM.

3.1 Characteristics of eWOM

The eWOM takes place in a more complex computer-mediated context, whereas traditional WOM typically happens in a face-to-face/one-on-one context. With traditional WOM, participants are in close proximity, and these conversations are often private in nature. On the other hand, participants engage in communication with a network of people with eWOM in online communities where conversations are more visible. To truly understand the dynamics of eWOM, we first flesh out how and why eWOM differs from traditional WOM. Our analysis identifies three major characteristics that define the unique nature of eWOM.

3.1.1 Volume

Given the multi-directional nature of the Internet, eWOM's volume and range are unprecedented \[^7\]. The volume of online reviews reflects the extent of the "hot" or "popular" of the goods or services in the consumer market. The more WOMs a good has, the more interests and concerns of potential consumers have. That is to say, the eWOM has awareness effect on customers’ behavior. As Liu (2006) notes, "the greater the volume of WOM, the more likely a consumer will be able to hear about a product. Not surprisingly, greater awareness tends to generate greater sales" \[^8\]. Further, eWOM conversations are asynchronous and are able to reach a vast

\[\text{Figure 1. A framework for effect of eWOM}\]
number of people in a short period of time. In other words, both communicators and consumers have considerably more options available for spreading and consuming opinions, respectively, than would be possible with traditional WOM, leading to greater awareness [9]. Although the results of many studies echo this finding, there are also examples of studies finding that volume itself is insufficient [10].

3.1.2 Source

Characteristics of information source are important factors to determine the persuasiveness of eWOM. According to the attribution theory, the perception of information source determines whether the eWOM is persuasive or not and how large it is. Existing literatures mainly focus on the expertise and trustworthiness of information source. And some scholars use source credibility to measure information source's expertise and trustworthiness. Gilly et al. (1998) found that source expertise proved more salient in predicting WOM influence[11]. Bansal &Voyer (2001) proved that the higher the professional level of sources, the more likely to be consulted by receivers, and the greater the impact on receiver [12].

Above researches are made in physical environment, in which the source's expertise can be judged from his (her) experience, knowledge, identity. However, in an online environment, where social cues such as gender, age, social and professional status are not rich, it is difficult to determine whether the information source's expertise, trustworthiness. Therefore, existing (offline) theory may be inappropriate to describe eWOM and its influence on evaluation and purchase. Brown & Lee (2007) made an exploratory study aiming at eWOM, and their findings provide some important theoretical distinctions between online and offline conceptualizations of tie strength, homophily and source credibility. They found that in online environment, credibility lies closer to the offline environment but carries some unique attributes due to the nature of environment and consumers seems to evaluate the credibility of EWOM information in relationship to the website it is sourced from, as well as the individual contributor of that information. On the basis of redefining the definition of source credibility and homophily, Broderick & Lee proposed a concept model of eWOM effects, which yet has not been testified [13].

3.1.3 Valence

This term refers to the positive or negative rating assigned by consumers (typically on 1–5 or 1–7 Likert scales) when they review products. With traditional WOM, the main source of valence in the message is based on the interaction between individuals. The valence of WOM may be positive, neutral or negative. Many previous studies have indicated that negative WOM exert much stronger influence than positive WOM. This could be because a negative message reduces possibilities that the information is posted by marketers. Although much research effort has been expended, the relationship between WOM’s valence and sales remains unclear. One stream of research suggested that NWOM (negative WOM) can be more powerful than PWOM (positive WOM)[14,15], yet other research found that PWOM increases the revenues and run-time of movies far more than NWOM reduces it [16]. The information provided by the sender has the possibility to be misinterpreted, whereas in eWOM with an assigned numerical rating, there is less issue with interpreting the valence of a sender's opinion [14]. The findings on the effects of valence have been equivocal at best. Some studies (Li and Hitt 2008) revealed a positive relationship between valence and product sales and the external influence propensity of online reviews [17]. Chevalier and Mayzlin (2006) found evidence of confirmatory bias that drives consumers to look for affirmative evidence supporting an already-made product choice [18]. On the other hand, studies also proposed evidence for negativity bias (Cui, Lui, and Guo 2012), suggesting that when consumers are neutral, negative reviews tend to be more salient than positive reviews [19].

The relationship between WOM valence and sales is likely to depend on pre-WOM purchase probability (East, Hammond, and Lomax 2008), which in turn may depend upon the volume and valence of previous WOM, the number of competing alternatives, the size of consumers’ consideration sets, and consumer-based brand equity [20]. Berger, Sorensen, and Rasmussen (2010) showed that NWOM has a positive impact on brands with
low levels of awareness\textsuperscript{[21]}. While awareness may not be a key driver of purchase across all product categories, researchers may wish to identify the drivers of pre-WOM purchase likelihood as this may go some way to identifying under which circumstances PWOM or NWOM may have a greater impact on sales.

3.2 Communicator of eWOM

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\textsuperscript{[22]}. 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.

3.2.1 Sender

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 Sender. Source credibility includes two major dimensions: expertise and trustworthiness\textsuperscript{[23,24]}. Table 1 summarizes the factors associated with the Sender.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Definitions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness (Similarity; Familiarity; Likability)</td>
<td>Attractiveness encompasses similarly, familiarity and likability and reflects the extent to which the receiver identifies with the source. Similarity-Resemblance between the source and receiver Familiarity-The knowledge of the source through exposure or past association whereby a level of comfort with the source is established for the receiver Likeability-Affection for the source as a result of physical appearance, behaviour, or other personal traits</td>
<td>Kiecker &amp; Cowles 2001</td>
</tr>
<tr>
<td>Disclosure of identity</td>
<td>The disclosure of one’s identity to others</td>
<td>Forman, Ghose &amp; Wiesenfeld 2008; Hu, Liu &amp; Zhang 2008</td>
</tr>
<tr>
<td>Shared geographical location</td>
<td>Members of the online community who are from the same geographic region</td>
<td>Forman, Ghose &amp; Wiesenfeld 2008</td>
</tr>
<tr>
<td>Social tie</td>
<td>The level of intensity of a social relationship between two individuals. (Steffes &amp; Burgee 2009)</td>
<td>Steffes &amp; Burgee 2009</td>
</tr>
<tr>
<td>Homophily</td>
<td>The degree to which pairs of individuals are similar in age, gender, education, and social status (Steffes &amp; Burgee 2009).</td>
<td>Steffes &amp; Burgee 2009</td>
</tr>
</tbody>
</table>

3.2.2 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, 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\textsuperscript{[24]}. In the eWOM literature, consumers' characteristics, such as consumer involvement and prior knowledge, also play an important moderating role in determining purchase intention\textsuperscript{[25]}. Wood (1982) has pointed out that
the highly specialized consumer perceived risk is relatively low, and therefore not vulnerable to the impact of external information, and they stick to their guns more easily than those who are not specialized [26]. Gilly et al. (1998) found that the expertise of receivers had a direct negative impact on word-of-mouth [27]. And Banal and Voyer (2000) also found that recipient's expertise had negative impact on word-of-mouth [28]. Researchers further investigated other factors related to personal characteristics, such as gender, consumer skepticism, perceived homophily, and cognitive personalization. Characteristics of receivers, such as their prior knowledge, their propensity to trust and other factors will also influence the effect of eWOM. In addition, there are other factors which will mediate the effect of eWOM, such as demographics of receivers, self-efficacy of receivers, and the extent of reliance on the internet. Table 2 provides a summary of factors associated with the receiver.

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

### 3.2.3 Relationship between sender and receiver

All word-of-mouth communication takes place within a social relationship that may be categorized according to the closeness of the relationship between receiver and the source. Information from strong ties tends to be perceived to be reliable, disinterested and helpful due to frequency and perceived importance of social contact among strong-tie individuals and which have been verified in offline environment by prior study. However, this was not supported in online environment. Some researches indicated that tie strength was not related to adoption behavior. This was an interesting result, implicating that all connections in electronic environments are equal in their effectiveness and persuasiveness.

Customers trust eWOM more if it is from close relatives or friends. However, in online communities, customers sometimes trust eWOM even if it is from strangers. The findings show that trust can also be based upon rapport. Rapport is the perceived level of similarity between eWOM readers and senders. Rapport is an affective bond that a person feels toward another person, which arises from shared preferences, tastes, and lifestyles [29]. Rapport affects interpersonal communication and customer trust.

Thus, another important construct is the similarity of two individuals, often termed homophily. Homophily refers to the degree to which individuals are congruent on certain attributes, such as age, gender, education or lifestyle. Brown and Reingen (1987) suggest that homophenous sources of information will be perceived as
more credible than heterogeneous ones, which should result in greater influence\(^{[30]}\).

Besides what have been stated before, receivers’ propensity to trust also mediates the impact of eWOM. Receivers with different growth experiences, personality types, and cultural backgrounds vary in their propensity to trust. For the same eWOM, some receivers consider it is more credible, while others think it less credible, which is dependent on their Propensity to trust.

### 3.3 Other factors

Existing literature also mentions other factors:

1. **Dispersion and consistency**

   A related phenomenon affecting the outcome of eWOM is platform dispersion. Godes and Mayzlin (2004) define platform dispersion as “the extent to which product-related conversations are taking place across a broad range of communities”\(^{[31]}\). Bone (1995) suggested that when two or more of the information expressed the same opinion, the effect of word-of-mouth is greater than only one statement.

2. **Persistence and observability**

   The literature generally agrees that available conversations and ratings impact the WOM in the future. Persistence and observability means that existing eWOM influences the future eWOM significantly. Thus, eWOM is endogenous. It not only influences consumer purchase behavior, but also the outcome of consumer purchases.

3. **Anonymity and deception**

   Self-interested behavior of the part of sellers may reduce both the credibility and the informativeness of eWOM; i.e., when vendors obtain high payoffs by manipulating online opinions (Resnick et al. 2000)\(^{[32]}\). As eWOM becomes more mainstream and pervasive, now it is time to focus on quality rather than quantity (Mudambi and Schuff 2010)\(^{[33]}\). Recently, firms have developed reputation mechanisms that chronicle not only vendor quality but also the reputations of review providers.

4. **Community engagement**

   Consumer engagement is the key to sustainable competitive advantage, profitability, and gaining consumer loyalty (Blazevic et al. 2013)\(^{[34]}\). The eWOM platforms provide forums for consumers to discuss products/services and vent their frustrations but more importantly, to learn from other customers how to better use products/services.

### 4. DISCUSSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The main objective of the present study is to provide a systematic review of the existing literature on effect of eWOM. Research on eWOM’s effectiveness 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 propose a framework for our literature analysis. We synthesize the findings of our literature analysis and derive a conceptual framework for the study of the impact of eWOM at the individual level. The conceptual framework is comprised of several major elements: characteristics and communicator, and other peripheral factors. Factors related to these elements are identified and classified. The proposed conceptual framework is summarized in Figure 1. This framework provides the basis for future research as it integrates most relevant factors of the major elements of eWOM.

Some limitations should be noted. 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...
The research with EWOM is still emerging. A meta-analysis is strongly recommended in the future, so as to improve the understanding on the relative impacts of the elements on the responses of eWOM's effect. To conclude, this literature analysis provides an overview of the current status of result in the domain of eWOM communication research. Furthermore, we present a conceptual framework and identify the key variables of each of the elements. We believe that this study stimulates future research on effect of eWOM by drawing attention to the variables and linkages that need further investigation.

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