

The Effectiveness of Electronic Word of Mouth on Consumers' Perceptions of Adopting Products/Services

A Literature Review

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Abstract: The objective of this paper is to identify factors that influence the effectiveness of electronic word of mouth (eWOM) message on the consumers' perception of adopting products/services offered through self-service technology and brick-and-mortar channels. We draw on "social communication framework" and "Grounded Theory Literature Review Method" to systematically review the factors investigated in the extant eWOM literature to synthesize the effectiveness of eWOM message on consumers' perception of adopting products/services. This enabled us to identify several gaps in the body of knowledge in the eWOM literature that provide direction for future research to ameliorate the gaps.

1 INTRODUCTION

Consumers increasingly use online media channels (e.g., online discussion forums, consumer review sites, weblogs, social network sites) to share and use electronic word of mouth (eWOM) about products/services (Cheung and Thadani, 2012). eWOM is considered a powerful marketing force. For example, Facebook is selling user endorsement of products/services and Google is planning to do the same in the near future (Miller and Goel, 2013). The effectiveness of eWOM on consumers' perceptions of adopting products/services has been studied extensively in recent years (Cheung and Thadani, 2012; Wu and Gaytan, 2013). However, the scope of the published studies in this area is fragmented (Cheung and Thadani, 2012), making it difficult to draw systematic conclusions about the effectiveness of eWOM. As will be shown in this paper, researchers have identified 173 constructs within three contexts (i.e., self-service technology (SST), brick-and-mortar, and unknown) and three stages of the adoption process (i.e., pre-usage, initial use, and repeated use) to investigate the effectiveness of eWOM on the consumers' perception of adopting products/services.

Adoption of products/services by consumers involves a process that occurs over time and consists

of three stages, with actions and decisions occurring at each stage (Rogers, 2003). Pre-usage stage of adoption process begins with awareness that leads to mental evaluation of the products/services, which in turn may lead to consumers' initial use of the products/services (Looney et al., 2008). Initial use consists of trial that may lead to consumers' repeated use of the products/services (Looney et al., 2008).

This paper presents a systematic review of the extant eWOM literature to synthesize the factors that shape the effectiveness of eWOM on the consumers' perception of adopting products/services, across three stages of adoption process. Our findings identify critical knowledge gaps in need of future investigation. To save space, we use eWOM to represent "eWOM message" and adoption process to represent three stages of "pre-usage, initial-use, and repeated-use".

This paper is organized as follows. First, we present a theoretical framework for synthesizing the extant literature on eWOM. Next, based on the five steps of "Grounded Theory Literature Review Method", (Wolfswinkel et al., 2013), we define our methodology for analyses of the extant eWOM literature. Section 4 provides a comprehensive summary of our findings and a classification of the factors that shape the effectiveness of eWOM on the consumers' perception of adopting products/services

offered through both SSTs and brick-and-mortar channels. We conclude by discussing the implications of our findings for further theoretical and empirical investigations.

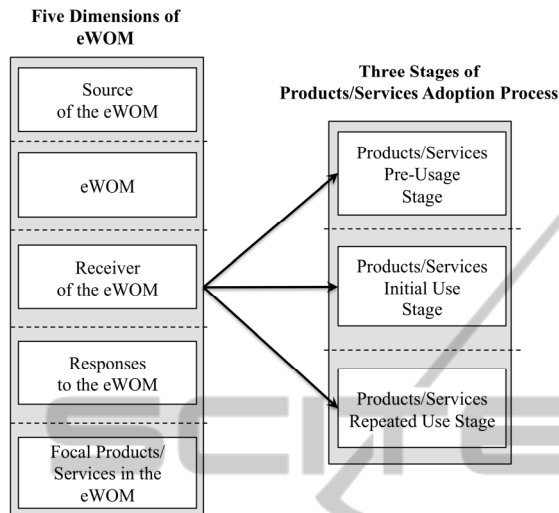


Figure 1: Our Conceptual Framework.

2 THEORETICAL FOUNDATION

eWOM is considered as a prominent form of social influence that affects the consumers' perceptions of products/services adoption process (Bock et al., 2012). Social influence is the extent to which members of a social network influence one another's perceptions. This influence is exerted through messages (signals) that help to form perception of the value of a product/service, at each stage of the adoption process (Montazemi and Qahri Saremi, 2013). eWOM, as a form of social influence, is consumer-generated product/service evaluations posted on the company or a third party websites (Mudambi and Schuff, 2010). The rise of online media channels during the last two decades has offered fertile ground for eWOM to become an important means of influencing consumers' perception of pertinent product/services offered

through self-service technologies (SSTs) and/or brick-and-mortar companies (Van Hove and Lievens, 2007).

We draw on social communication framework (Hovland, 1948) as the theoretical underpinning to guide our literature analysis. Social communication is defined as "the process by which an individual (the communicator) transmits stimuli to modify the behavior of other individuals (receivers)" (Hovland, 1948, p. 371). The eWOM, as a form of online social communication media, comprises five major dimensions that are depicted in Figure 1: (1) the eWOM communicator (source) who transmits the eWOM, (2) the eWOM as a form of social communication content (stimulus) transmitted by the source, (3) the consumer who receives and responds to the eWOM (receiver), (4) the responses made to the eWOM by the receiver, and (5) the focal products/services in the eWOM. We systematically analyze eWOM literature to identify the factors representing each of the five dimensions of eWOM, presented next.

3 METHODOLOGY

We adopted the "Grounded Theory Literature Review Method" (Wolfswinkel et al., 2013), to review the extant eWOM literature. This method enabled us to perform a thorough and theoretically relevant analysis of the eWOM literature. The "Grounded Theory Literature Review Method" is implemented in five steps, depicted in Figure 2. Step 1 (called "Define") consists of: defining the inclusion/exclusion criteria, determining the pertinent databases of the published studies for search, and determining the appropriate search terms. In step 2 (called "Search"), the actual search for the published studies is performed using the keywords and the pertinent databases determined in the step 1. In step 3 (called "Select"), we refine the retrieved studies from step 2 using the inclusion/exclusion criteria that were determined in

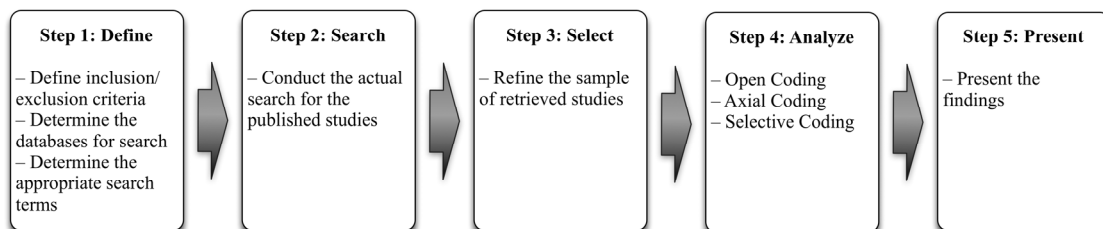


Figure 2: Grounded Theory Literature Review Method (Adapted from Wolfswinkel et al., 2013).

step 1. Next, in step 4 (called “Analyze”), we synthesize the refined sample of pertinent studies using Grounded Theory techniques. In step 5 (called “Present”), we present the findings and insights gleaned from the synthesis of the pertinent studies in step 4. Detailed description of the five steps in support of our syntheses of extant literature on eWOM is presented next.

3.1 Steps 1 – 3: Define, Search, and Select

To identify journal and conference papers that investigated the effectiveness of eWOM on the consumers' perception of products/services adoption process, we searched a number of electronic databases such as AIS, ACM, ScienceDirect, Palgrave Macmillan, Sage, EBSCOhost, JSTOR, Scholar's Portal, and Google Scholar.

We used search terms of "word-of-mouth", "electronic word-of-mouth", "WOM", "eWOM", "online reviews", and "online recommendations". To ensure that no major articles is ignored, we also searched the leading scholarly IS journals (i.e., MIS Quarterly, Information Systems Research, Journal of Management Information Systems, European Journal of Information Systems, Information Systems Journal, Journal of Strategic Information Systems, Journal of Association for Information Systems, and Information & Management), and four major scholarly Marketing journals (Journal of Marketing, Journal of Marketing Research, Journal of Consumer Research, and Journal of the Academy of Marketing Science). The search initially yielded 181 studies. The nature of empirical environment for these 181 studies can be categorized in terms of three contexts: SST, brick-and-mortar, and unknown. SST represents studies that were conducted within the context of products/services in an online environment (i.e., click-and-mortar and/or pure play). Brick-and-mortar studies assessed the effectiveness of eWOM on consumers' perception of adopting products/services in a traditional offline environment. Finally, the “unknown” context represents those investigations that did not report the nature of the environment for their study.

Not all the 181 studies were appropriate for inclusion in our analysis. Recognizing this, Wolfswinkel et al., (2013) recommend that researchers mark out the scope of their review by establishing criteria for inclusion. To that end, we included only peer-reviewed studies in which (1) eWOM was the main focus of investigation in the paper, and (2) the research was empirical. Applying

these two criteria to 181 papers resulted in 47 eWOM studies that we used in our analysis and can be obtained from:

http://profs.degroote.mcmaster.ca/ads/montazem/papers/WEBSIT_paper_suppliment.pdf

3.2 Step 4: Analyze

To analyze the selected 47 eWOM studies, constructs used in those studies were initially identified and coded. Next, we synthesized them into factors based on their conceptual similarity and map them on the five dimensions of eWOM, using three Grounded Theory techniques: (1) *open coding*, (2) *axial coding*, and (3) *selective coding*, which are explained next.

We used *open coding* technique, through which constructs, their stage (i.e., pre-usage, initial use, and repeated use), and context (i.e., SST, brick-and-mortar, and unknown) of each study were coded. We coded constructs based on their instrument measures used in the eWOM study, rather than on the author's label because the labels that authors applied to their constructs can vary (Montazemi et al., 2012, Montazemi and Qahri Saremi, 2013). The outcome was 173 constructs used in the 47 eWOM studies. Next, we applied *axial coding* technique, to synthesize these 173 constructs based on their conceptual similarities that resulted in 30 factors. *Selective coding* technique was used to map these 30 factors on the five dimensions of eWOM, depicted in Figure 3. Next, we present our findings.

4 RESULTS (STEP 5: PRESENT)

Due to the space limitation, definitions and references for each factor are not reported in the Tables 1 to 5 that appear in this section. These details can be obtained from:

http://profs.degroote.mcmaster.ca/ads/montazem/papers/WEBSIT_paper_suppliment.pdf

4.1 Factors Representing the Response to eWOM

We identified twelve factors that represent the “response” dimension of effectiveness of eWOM, depicted in Table 1.

Six of these factors (i.e., adoption of eWOM, purchase/use intention, perceived helpfulness of eWOM, attitude towards the product/service, trust in the vendor, and perceived credibility of eWOM) have been studied across the three stages of the

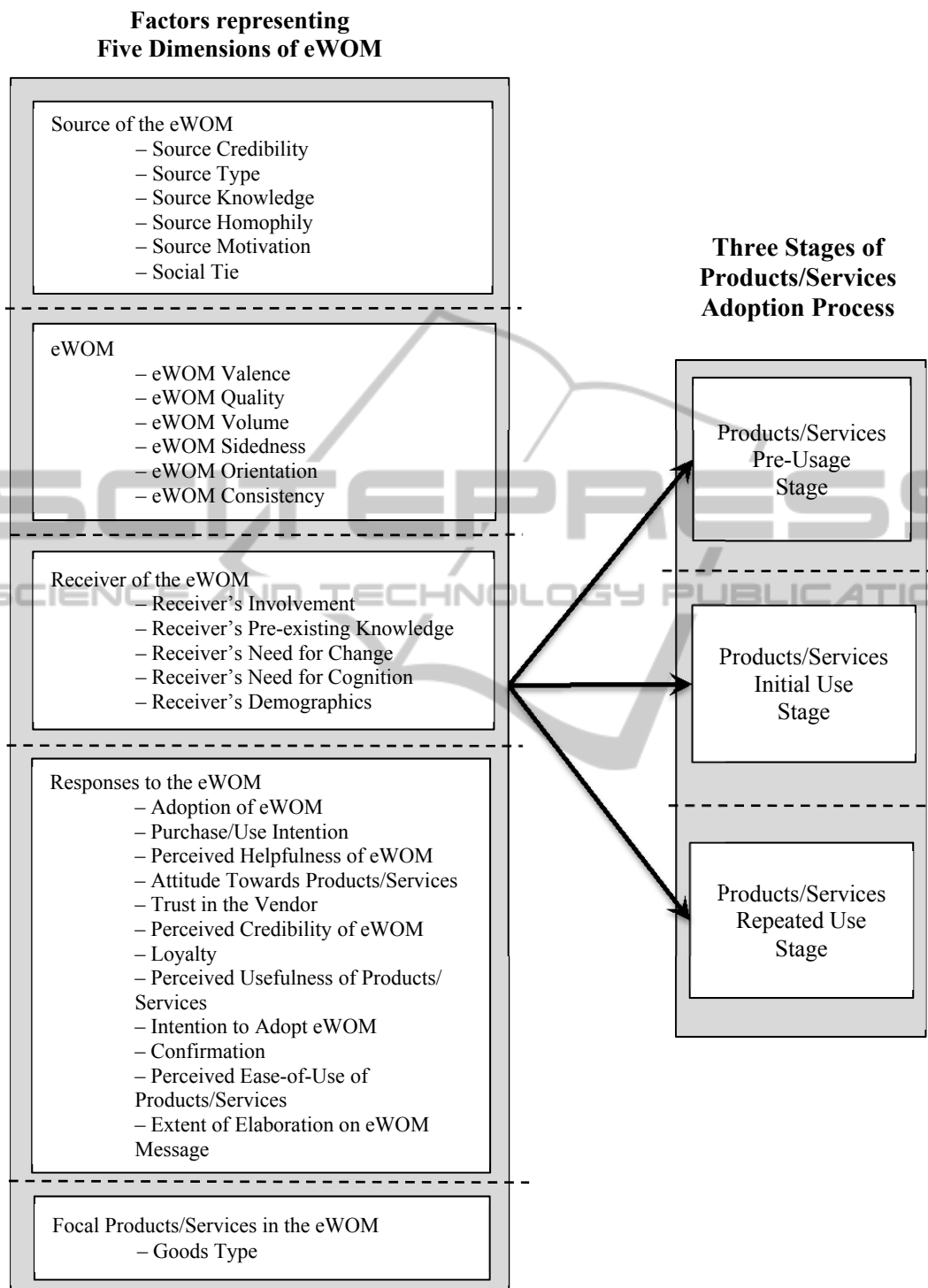


Figure 3: The 30 Factors representing Five Dimensions of eWOM in the proposed Conceptual Framework.

adoption process, in the SST context. However, there are gaps in the body of knowledge in the eWOM literature for the SST context in regard to the remaining 6 factors. For instance, effectiveness of

eWOM on consumers' trust in vendor, which is an important factor in forming consumers' perception of SST adoption (Bock et al., 2012), differ significantly across stages of adoption process.

Table 1: Number, stage, and the context of the eWOM studies investigating each factor representing response to eWOM.

Factors Representing response	Context	P*	I*	R*
Adoption of eWOM	SST*	1	1	3
	B&M*	2		2
	NA*	4		1
Purchase/ Use intention	SST	7	2	2
	B&M	2		
	NA			
Perceived Helpfulness of eWOM	SST	2	3	4
	B&M			1
	NA	1		
Attitude towards the product/service	SST	1	2	2
	B&M	2		
	NA	1		1
Trust in the Vendor	SST	3	3	3
	B&M			
	NA			
Perceived Credibility of eWOM	SST	3	2	3
	B&M			
	NA			1
Loyalty	SST			
	B&M	1		1
	NA	2		1
Perceived Usefulness of the product/service	SST		1	1
	B&M	1		
	NA			
Intention to Adopt eWOM	SST		2	
	B&M			1
	NA			
Confirmation	SST			
	B&M			1
	NA			1
Perceived Ease of Use of the product/service	SST			1
	B&M			
	NA			
Extent of Elaboration on eWOM Message	SST			
	B&M			
	NA	1		

* Note:
 SST: Self-Service Technology Context
 B&M: Bricks-and-Mortar Context
 NA: Context Unknown
 P: Pre-usage Stage
 I: Initial-use Stage
 R: Repeated-use Stage

Nonetheless, there is a gap in the literature whether the same pattern exists for other factors of consumers' perception such as consumers' perceived ease-of-use and perceived usefulness of an SST. Furthermore, as indicated in Table 1, none of the twelve factors have been studied across the three stages of the adoption process, in the bricks-and-mortar context. For instance, although we know that

effectiveness of eWOM on consumers' trust in vendor differs significantly across stages of adoption process, in the SST context, we do not know if the same pattern exists for the effectiveness of eWOM on consumers' trust in vendor in the bricks-and-mortar context. Such a fragmented scope of studies in the eWOM literature makes it infeasible to draw systematic conclusions about the effectiveness of eWOM on consumers' perception of adopting products/services.

4.2 Factors Representing the eWOM Message

We identified six factors representing the eWOM that have been investigated in the eWOM studies, depicted in Table 2. One of these factors, eWOM valence, has been studied across the three stages of SST adoption process. However, there are gaps in the body of knowledge in regard to all of the six factors across the three stages of bricks-and-mortar adoption process. For instance, the literature shows that the effect of eWOM valence on consumers' perceived usefulness of an SST differs significantly

Table 2: Number, stage, and the context of the eWOM studies investigating each factor representing eWOM message.

Factors Representing eWOM Message	Context	P*	I*	R*
eWOM Valence	SST*	4	2	5
	B&M*	4		1
	NA*	3		1
eWOM Quality	SST	5		1
	B&M			1
	NA	2		2
eWOM Volume	SST	5	1	
	B&M			
	NA			
eWOM Sidedness	SST			
	B&M	1		
	NA			1
eWOM Orientation	SST	1		
	B&M			
	NA	1		
eWOM Consistency	SST			
	B&M			
	NA			1

* Note:
 SST: Self-Service Technology Context
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across different stages of SST adoption process (Vermeulen and Seegers, 2009). Nonetheless, there is a gap in the literature whether the same pattern exists for the bricks-and-mortar context.

4.3 Factors Representing the Source of the eWOM

We identified six factors representing the source of eWOM, depicted in Table 3. None of these factors have been studied across the three stages of adoption process in the SST and bricks-and-mortar contexts. This represents gaps in the body of knowledge in the eWOM literature as to how these six factors affect the effectiveness of eWOM on consumers' perception of adopting products/services. As a case in point, consumers read eWOM about the products/services from a vast and geographically dispersed group of strangers through blogs, online consumer review platforms, shopping bot sites, and social networking sites (Cheung and Thadani, 2012). This has the potential to raise consumers' concern about the credibility of the source of eWOM. In such an uncertain situation, high degree of consumers'

Table 3: Number, stage, and the context of the eWOM studies investigating each factor, representing source of the eWOM.

Factors Representing source of the eWOM	Context	P*	I*	R*
Source Credibility	SST*	2		1
	B&M*			1
	NA*	3		2
Source Type	SST	3	2	
	B&M	1		
	NA	1		
Source knowledge	SST			
	B&M	1		3
	NA			1
Source Homophily	SST			
	B&M	1		1
	NA			
Source Motivation	SST			
	B&M			1
	NA			1
Social Tie	SST			
	B&M	1		
	NA			
* Note: SST: Self-Service Technology Context B&M: Bricks-and-Mortar Context NA: Context Unknown P: Pre-usage Stage I: Initial-use Stage R: Repeated-use Stage				

experience with the products/services is expected to have a significant positive effect on consumers' perception of adopting products/services. However, eWOM literature is silent on this issue within the context of SST and bricks-and-mortar.

4.4 Factors Representing the Receiver of the eWOM

We identified five factors representing the receiver of the eWOM, depicted in Table 4. None of them have been studied across the three stages of adoption process. This represents a gap in the body of knowledge in the eWOM literature as to how these five factors affect the effectiveness of eWOM on consumers' perception of adopting products/services. For example, the eWOM literature provides support for the importance of consumers' pre-existing knowledge, need for cognition, and need for change on the effectiveness of eWOM on the consumers' perception of adopting products/services. Nonetheless, there is a gap in the eWOM literature whether these factors have the same effects across the three stages of the adoption process. Considering the significance of the stage of the adoption process in consumers' perceptions of

Table 4: Number, stage, and the context of the eWOM studies investigating each factor, representing receiver of the eWOM.

Factors Representing receiver of the eWOM	Context	P*	I*	R*
Receiver's Involvement	SST*	3		1
	B&M*			
	NA*	1		2
Receiver's Pre-existing Knowledge	SST	1		2
	B&M	1		1
	NA	1		2
Receiver's Need for Change	SST			
	B&M			
	NA	1		
Receiver's Need for Cognition	SST		1	
	B&M			
	NA			
Receiver's Demographics	SST			1
	B&M			
	NA			
* Note: SST: Self-Service Technology Context B&M: Bricks-and-Mortar Context NA: Context Unknown P: Pre-usage Stage I: Initial-use Stage R: Repeated-use Stage				

adopting products/services, such a lack of knowledge represents a gap in the eWOM literature.

4.5 Factors Representing the Focal Product/Service in the eWOM

A key determinant of eWOM effectiveness on consumers' perception of adopting products/services is the nature of the product/service (i.e., goods type) under consideration, as indicated in Table 5. According to Nelson (Nelson, 1970), *search goods* are the products/service for which consumers have the ability to obtain information on their quality prior to adoption, while *experience goods* are products/services that require sampling or adoption to evaluate their quality. Examples of search goods include cameras and natural supplement pills (Mudambi and Schuff, 2010). Examples of experience goods include music (Bhattacharjee et al., 2006) and wine (Mudambi and Schuff, 2010). Although the eWOM literature indicates that goods type influences the effectiveness of eWOM on the consumers' perception of adopting products/services in the SST context (indicated in Table 5), we do not know if the same pattern exists in the context of bricks-and-mortar. Considering the importance of the goods type in consumers' perceptions of adopting products/services, such a lack of knowledge represents a gap in the eWOM literature.

Table 5: Number, stage, and the context of the eWOM studies investigating each factor, representing focal product/service in the eWOM.

Factors Representing the focal product/service in the eWOM	Context	P*	I*	R*
Goods Type	SST*	2	2	1
	B&M*			
	NA*	1		1
* Note: SST: Self-Service Technology Context B&M: Bricks-and-Mortar Context NA: Context Unknown P: Pre-usage Stage I: Initial-use Stage R: Repeated-use Stage				

5 DISCUSSION

This paper tackles the question of how eWOM affects consumers' perceptions of adopting the products/services through a literature review based

on a new theoretical framework. To that end, we drew on grounded theory literature review method and social communication framework to identify and systematically review 47 pertinent eWOM empirical studies. We have synthesized 30 conceptually distinct factors representing the five dimensions of the eWOM. Based on our findings, we identified numerous important gaps in the body of knowledge in the eWOM literature, which are in need of attention in the future research. We find that despite more than a decade of research, the extant eWOM literature remains largely fragmented. Researchers have chosen to study factors of their individual interest and there is little systematic integration among them. As a result, we observe findings that are inconsistent or even contradictory. One example is how the relationship between consumers' prior knowledge of the product/service and the effectiveness of the eWOM on the consumers' perceptions of adopting the product/service is conceived. On the one hand, Chatterjee (2001), Chakravarty et al. (2010), and Fan and Miao (2012) identify a negative relationship between the consumer's prior knowledge of the product/service and the effectiveness of eWOM on the consumer's perceptions of adopting the product/service. On the other hand, Park and Lee (2009), Park and Kim (2008), and Cheung et al. (2009) show a positive relationship between the two factors. Such a contradictory findings point to possible missing moderators such as need for cognition and need for change. Prior studies (e.g., Gupta and Harris, 2010, Wood and Swait, 2002) have shown that consumers with different levels of need for cognition and need for change, ceteris paribus, behave in systematically different fashions regarding their motivation to seek and process information about the products/services. Furthermore, scholars (e.g., Sussman and Siegal, 2003) have identified the moderating effect of consumer's motivation to seek and process a message about a product/service on the relationship between the consumers' prior knowledge of the product/service and the effectiveness of the message on the consumers' perceptions of adopting the product/service. Notwithstanding their importance on the effectiveness of eWOM message, the literature is silent on the moderating effects of consumers' need for cognition and need for change in all three stages of the products/services adoption process.

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