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A Unified Model for the Adoption of Electronic Word of Mouth on Social Network Sites: Facebook as the Exemplar

Navid Aghakhani, Jahangir Karimi, and Mohammad Salehan

ABSTRACT: Electronic word of mouth (eWOM) has gained increased attention from both practitioners and academia. Its importance lies in its simplicity and yet its profound impact on customers' attitudes toward specific brands or goods, and thus affecting customers' loyalty and purchase behaviors. Although social network services (SNSs) have emerged as a new platform for eWOM communication, less attention has been paid in the literature to eWOM adoption on SNSs. Using the elaboration likelihood model (ELM) and the affect-as-information theory, this study identifies factors that affect eWOM adoption on Facebook. We identify product-related information in a review, source credibility, peer image building, and tie strength as theoretically important variables in our study, and we examine their effect on cognitive and affective attitudes. We find that eWOM types (explicit vs. implicit) moderate the effects of cognitive and affective attitude on eWOM adoption. We further find that the effect of cognitive attitude on eWOM adoption is higher when the eWOM is explicit, while the effect of affective attitude is higher when the eWOM is implicit. For information systems (IS) researchers, this study advances the eWOM adoption literature by highlighting the role of eWOM types in the eWOM adoption process and integrating the ELM and affect-as-information theories to explore the antecedents of eWOM adoption. For IS practice, this study also provides new insights for online retailers and social media marketers about the antecedents of eWOM adoption.

KEY WORDS AND PHRASES: Affective attitude, cognitive attitude, electronic word of mouth, eWOM, eWOM adoption, eWOM types, Facebook, social network sites.

Advances in information technology in general, and the emergence of Web 2.0 in particular, have opened new avenues of research through which scholars can study the effect of eWOM on consumers' product and service judgments [41, 69] and sales [56, 76]. The term "eWOM" has been defined as "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 institutions via the Internet" [40, p. 39]. Most previous studies on the adoption of eWOM were done on conventional platforms for eWOM communication, such as online consumer review websites [5, 16, 48, 50, 70], blogs [21, 77], and online shopping sites [38, 49, 68]. However, the emergence of social networking services (SNSs) has brought significant attention from the commercial marketplace, with global advertisement spending on SNSs predicted to exceed \$35 billion in 2017, and has opened a new channel for generating and disseminating eWOM [53]. Among existing SNSs, Facebook is currently the most popular [28], accounting for 50 percent of all social referrals and 64 percent of social revenue [23]. Facebook

is thus generally considered to be the platform of choice for generating, spreading, and encountering eWOM [22].

While considerable attention has been paid to communication and eWOM adoption on conventional eWOM platforms, less attention has been paid to eWOM adoption on Facebook. This study is motivated by two research gaps in prior studies. First, past eWOM adoption studies on both Facebook [22, 30] and conventional eWOM platforms [14, 16] considered only eWOM generated through written text. However, Facebook users can establish connections with entities (e.g., brands' fan pages) to share content and express their social identities. This phenomenon has enabled a new form of eWOM communication on Facebook where nontextual information about products/services in a Facebook user's profile, such as "Likes" and "Check-ins," also has the potential to influence the decision making of the user's peers [46, 59, 67]. In this study, we use the term "implicit eWOM" to refer to eWOM that is delivered through nontextual cues such as the "Like" and "Check-in" buttons, and we use the term "explicit eWOM" to refer to eWOM proliferated through written text. While Facebook provides a forum for communication of both explicit and implicit eWOM, the role of eWOM types (i.e., explicit vs. implicit) in eWOM adoption studies is still unexplored. Second, most prior studies, especially on online consumer review platforms (e.g., [6, 14, 16]), examine the eWOM adoption process through the lens of informational influences and the effect of the online review content on consumers' cognitive attitude. However, recent studies have considered the role of affective attitude and relational influences in the explicit eWOM adoption process, arguing that consumers may rely on affect in their decision-making process because it may encompass important information [30, 73, 83]. Despite this progress, to date little is known about whether the combination of cognitive and affective attitudes can explain both explicit and implicit eWOM adoption.

Reflecting on these research gaps, this study aims to address the following research questions: (1) How do cognitive and affective attitudes play a role in the eWOM adoption process? (2) What are the important factors that impact cognitive and affective attitudes in the eWOM adoption process? (3) Do eWOM types moderate the impact of cognitive and affective attitudes on eWOM adoption? To address these questions, we propose a unified eWOM adoption model that brings the notion of eWOM types into the picture and considers the eWOM adoption process through the lens of cognitive and affective attitudes and their informational and social-interpersonal antecedents. To explore the drivers of cognitive and affective attitudes, we consider eWOM through the theoretical lens of the elaboration likelihood model (ELM) [72] and affect-as-information theory [31, 32]. We then identify the factors that have a direct impact on cognitive and affective attitudes by investigating the role of product-related information in a review, source credibility, peer image building, and tie strength in our research model. Next, we investigate whether eWOM types moderate the effects of cognitive and affective attitudes on eWOM adoption. This study, therefore, contributes to the existing eWOM adoption literature in several ways. First, it distinguishes between the explicit and implicit eWOM by suggesting that it is essential to consider the role of eWOM types in the eWOM adoption process. Second, it integrates ELM and the affect-as-information theory to explore

how the combination of affective and cognitive attitudes explain eWOM adoption process. Third, by empirically examining the moderating impact of eWOM types on the effects of cognitive and affective attitudes on eWOM adoption, this work contributes to the extant literature in eWOM adoption process.

Theoretical Foundation

The eWOM adoption process has been an important research topic both in information systems (IS) and marketing literature. A substantial number of previous studies have focused on the eWOM adoption process on online consumer review platforms (e.g., [6, 14, 15, 16, 47, 66]). These prior studies have examined how the factors related to an eWOM text (e.g., review quality) or to a reviewer (e.g., reviewer credibility) affect consumers' cognitive attitude toward an eWOM, and how consumers' cognitive attitude toward an eWOM, in turn, affects eWOM adoption. In other words, these previous studies have focused merely on the informational influences of an eWOM through the lens of rational and cognitive processing of the content of an eWOM and the reviewer's profile information. But, the emergence of SNSs, particularly Facebook, has opened a new context for eWOM communication in that the emotional and interpersonal relationships between members are the primary drivers of Facebook use [13, 22, 61], and are therefore inseparable components of eWOM adoption on Facebook [7, 30]. Although the eWOM adoption process may vary in different contexts [16], less attention has been paid in the literature to the eWOM adoption process on Facebook.

This study is motivated by two important contextual differences between Facebook and the conventional eWOM communication platforms. First, prior eWOM communication studies have considered online reviews (eWOM generated in a written text format) as the main form of eWOM [14, 15, 16, 22, 30]. On Facebook, users can explicitly state their opinions about products or services in a written text format, for example, by publishing a review in the form of status update, by posting comments, or by using Facebook's direct message mechanism. However, Facebook users can also show their interest in products and services by using nontextual means, such as using the Like or Check-in buttons to share specific information about a brand on their profiles (such as promotions, new products, etc.). Although the main goal of the information provided in a user's profile is to present the users' preferences [58], it can also have the effect of a recommendation for other members [26]. For instance, location-based services such as Facebook's Check-in button allow users to share information on their timeline about places they have visited. A user's timeline thus shows his or her consumption behavior and interest in certain products and services, and this information has the potential to influence the decision making of other SNS users [46, 59, 67]. It is now a common practice for social advertising on Facebook to include social cues (i.e., Facebook Friends' association with a brand) alongside ads to increase response rates [3, 7]. In addition, businesses also seek to persuade consumers to Like or share their brands on Facebook, as this action

can affect other users' decision-making process. A 2012 report shows that almost 90 percent of Facebook users have Liked at least one brand on Facebook, and 69 percent have Liked a brand because a friend in their network had also liked it [74]. Thus, these prior studies support the notion that Facebook as a forum for eWOM communication encompasses two types of eWOM, explicit eWOM (i.e., eWOM delivered through written text format) and implicit eWOM (i.e., eWOM delivered through nontextual cues such as Likes and Check-ins).

Second, recent studies have highlighted the role of affective attitude and relational influences in the eWOM communication process where interpersonal relationships between members are the focal part of the platform [30, 83]. This notion is specifically true in the case of Facebook, where sharing information is the primary activity and the focal point for social interaction [61], and the exposure to shared information on Facebook may trigger affective responses [30, 57]. Consistent with this perspective, prior studies have examined explicit eWOM adoption through the lens of both cognitive and affective attitudes [30, 83]. Since Facebook encompasses both explicit and implicit eWOM, and considering the notion that implicit eWOM influences Facebook members through perceived interpersonal relationships between members [3, 7], it is important to examine explicit and implicit eWOM adoption through both the cognitive and affective attitudes perspectives.

Reflecting on these two contextual differences between Facebook and the conventional eWOM communication platforms, we include the notion of eWOM types in eWOM adoption studies and consider cognitive and affective attitudes as two important paths of eWOM adoption on Facebook. Further, we examine the suitability of the ELM and the affect-as-information theories for exploring the drivers of cognitive and affective attitudes, respectively. Integrating these two theories is considered useful for understanding the eWOM adoption process on Facebook because heuristic processing of attributes of an eWOM (e.g., information about the source of an eWOM) can enter both cognitive- and affect-based interpretations, and may be triggered by the perceived interpersonal relationships between Facebook members [14, 16, 30, 51]. For instance, prior studies have shown that the feeling of a Facebook member about an eWOM affects eWOM adoption [30, 51], and this feeling can be triggered by interpersonal relationships between members [30]. By the same token and consistent with prior ELM studies (e.g., [14, 16]), interpersonal relationships between Facebook members can be perceived as part of heuristic factors related to the eWOM, which influence cognitive attitude and, in turn, affect eWOM adoption. Thus, in this study, we consider interpersonal relationship factors as the main antecedents of the affective attitude as well as peripheral cues of the ELM.

Elaboration Likelihood Model

The ELM explains that cognitive attitude change among people can be triggered by two routes of influence, the central route and the peripheral route. The primary difference between these routes lies in the amount of

thoughtful information processing that is required of the individual subject [10]. The *central route* requires an individual to think critically about the issues involved in the argument of a message and to inspect the relative facts and relevance of the message before making a conversant judgment about the message. Therefore, processing a message through the central route demands a high cognitive effort. Perception changes that arise from the central route are more stable and long-lasting, as they are based on careful consideration of message cues and are therefore more predictive of long-term behavior. Conversely, the *peripheral route* involves the processing of heuristic cues [2, 10, 72]; it merely requires an individual's association with positive and negative cues in the message argument. Therefore, processing a message through the peripheral route entails less cognitive effort, and alterations caused by peripheral route influences are less persistent and predictive of long-term behavior. Despite the distinctions between these two routes, in practice, people typically evaluate a message through a modest level employing both routes [87].

The suitability of the ELM for understanding how people process messages that are intended to be persuasive has been examined previously in IS research. Bhattacharjee and Sanford [10] used the ELM to examine the influence processes for information technology acceptance. Sussman and Siegal [87] employed the ELM in a nonexperimental setting to study knowledge adoption via electronic mail by consultants at a public accounting firm. Angst and Agarwal [2] used the theoretical lens of the ELM to study the adoption of electronic health records in an experimental setting. The ELM has also been used in past studies as the theoretical lens for eWOM communication and elaboration. For example, the ELM has been used in studies on the effect of negative online consumer reviews on consumers' product attitudes [49], the effect of eWOM on consumers' choice of product [38], perceived blogger credibility and the impact of eWOM argument quality on brand attitudes [38], and the credibility of eWOM in online consumer review websites [14].

Based on these prior studies, we believe the ELM provides an appropriate theoretical lens to understand the drivers of cognitive attitude change in the context of eWOM adoption on Facebook. *Cognitive attitude* has been defined as the degree to which an individual develops beliefs relating to the attitude object [83]. The notion of the attitude object varies based on the context of the study. For instance, past studies have examined perceived usefulness in the context of the adoption of information technology [1, 25] and trust in the context of the online marketplace [35, 71]. In the context of online consumer reviews, perceived credibility of online reviews has been examined as the main driver of the adoption of eWOM [6, 14, 16]. In the context of adoption of eWOM on Facebook, however, we believe it is necessary to consider the differences between Facebook and online consumer review sites in conceptualizing the attitude construct. This perspective is also important in the sense that Facebook's major role is hedonic, meaning that people tend to use Facebook for the purpose of social presence in the form of online interpersonal interactions and relationships [44, 61]. This perspective is also consistent with the study by Shih, Lai, and Cheng [83], wherein they

examined the drivers of eWOM intention in an online forum. They argued that, because the social interaction among members was one of the most important and integral aspects of the forum, the cognitive attitude construct reflected whether members believed that the use of the online forum to access online reviews was wise, beneficial, and valuable. Consequently, we adopt the same conceptualization of the cognitive attitude in this study, and we define cognitive attitude as the degree to which Facebook users believe that accessing online reviews through Facebook is wise, beneficial, and valuable.

Building on the ELM, we consider the central and peripheral routes as the antecedents of cognitive attitude. In this study, we consider product-related information in a review as the factor that relates to the central route of the ELM. *Product-related information in a review* is defined as the degree to which an eWOM posted on Facebook is based on the product or service. Because source credibility is considered the most important heuristic driver of eWOM adoption in online consumer review platforms [6, 14, 16], it is considered as one of the factors related to the peripheral route of eWOM adoption. *Source credibility* is defined as the degree to which a recipient of eWOM on Facebook believes the sender of the eWOM (his or her friend) has knowledge, trustworthiness, credibility, and expertise regarding the product or service. In addition, tie strength and peer image building are considered as social relationship variables and part of the peripheral route of eWOM adoption in our model. They have also been examined in prior studies of eWOM communication via SNSs [12, 22, 39, 57, 59, 88]. *Tie strength* is defined as the degree to which a Facebook user believes that his or her friends are close to him or her. *Peer image building* is defined as the degree to which a Facebook user believes that his or her peer uses Facebook to shape an impression of him- or herself.

Affect-As-Information Theory

Per the affect-as-information theory, a person's affective attitude can impact his or her assessment of the consequences of potential actions and decisions [94]. Depending on the individual's personality and the type of judgment being used, the person's emotional attitude can lead to doubt or confidence in his or her evaluation of a target object. People also use their emotional attitude as a shortcut for evaluating a target in terms of social behavior. This process is very common when quick judgment or heuristic processing is required [31]. Prior studies in the areas of management and marketing have investigated the role of affective attitude in consumers' decision-making processes. For instance, the affect-as-information theory has been used to investigate the impact of employees' affect and mood on their judgments and decision making in an organizational setting [32]. It has also been used to examine the impact of a website's atmosphere on users' approach toward the website [29]. Although affective issues are often overlooked within the IS field [92], recent studies have begun to incorporate affect in their conceptual framework. This is especially true in the context of eWOM adoption, where the role of affective cues embodied in a review's text has been examined as a driver of the perceived helpfulness of online reviews [79, 92] The

affect-as-information theory has also been used to understand the role of the emotional status of senders and receivers of eWOM in the eWOM adoption process [85]. In a similar vein, in the context of SNSs, Fang [30] found that the affective attitude of Facebook users when reading eWOM can positively influence eWOM adoption on Facebook.

Prior studies indicate that the *arousal* dimension of the affective attitude has a strong influence on information processing by individuals [24, 89]. Arousal reflects the degree to which an individual is excited and stimulated. If someone is aroused, then he or she is likely to make a more positive judgment of the target task or object. Arousal can impact individuals' perception of an issue and can drive them to give a prompt response [86]. The study by Fang [30] shows that the level of affect (arousal) resulting from reading online reviews is one of the drivers of eWOM adoption on Facebook. In addition to reading online reviews (explicit eWOM), Facebook users are often exposed to information about brands and products via their friends' Likes and Check-ins (i.e., implicit eWOM), and those Likes and Check-ins may influence consumers' decision-making process [46, 59, 67]. Thus, in line with the affect-as-information theory, the arousal triggered by exploring Likes and Check-ins can serve as a source of information for implicit eWOM adoption. Given that Facebook contains both explicit and implicit eWOM, the *affective attitude* is conceptualized as the degree of arousal resulting from exposure to product information through friends' explicit and implicit eWOM. Since prior studies have also highlighted the role of social relationship variables as the driver of affective attitude [30, 83], in our research model,¹ tie strength and peer image building are also included as the drivers of affective attitude (see Figure 1).

Hypotheses Development

The effect of content of online reviews on the eWOM adoption has been examined in prior studies in online consumer review platforms [36, 75, 81]. Schindler and Bickart [81] found that the number of product-descriptive statements in a review was associated with review usefulness. In a similar vein, Qiu, Pang, and Lim [75] found that product-related information in a review enabled consumers to obtain information about characteristics of products and thus helped with their purchase decisions. Conversely, reviews containing non-product-related information revealed little information about products, and consumers found those reviews to be less diagnostic and less credible. Since the review text plays an important role in the formation of individuals' attitude toward eWOM in online consumer review platforms, and about the notion that explicit eWOM adoption on Facebook is highly associated with the cognitive path, one would expect that product-related information in a review has a positive impact on the degree to which an individual develops attitudes about eWOM adoption on Facebook. Thus, we propose the following:

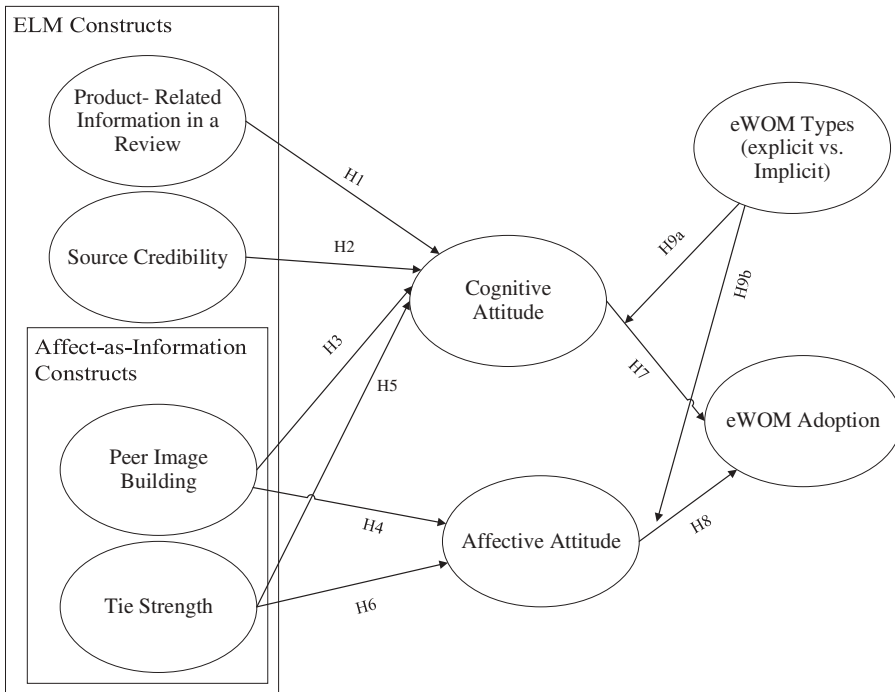


Figure 1. Research Model

Hypothesis 1: *Product-related information in a review has a positive effect on the cognitive attitude.*

Online reviews with high source credibility tend to support eWOM acceptance [14, 16]. Prior studies based on reviews collected from Amazon have found that source credibility has a positive impact on the helpfulness of online reviews. Forman, Ghose, and Wiesenfeld [33] reported, for example, that revealing the identity of a reviewer had a positive impact on the helpfulness of reviews. More recent studies [6, 47] have demonstrated that platform-based signals of source credibility, such as the top reviewer badge on Amazon, have a positive impact on a review's perceived helpfulness.

Despite the fact that source credibility in online consumer review websites is only considered as a "virtual credential" for the eWOM source [16], it is still an important indicator of information credibility [90]. On Facebook, however, because of the rich social interactions and interpersonal relationships among members, the perception of a member's credibility is more likely to be formed based on that member's interactions with other members, than on virtual credentials [22]. Facebook friends encompass both close ties, such as immediate family, relatives, and friends who meet face-to-face on a regular basis, and more distant acquaintances who may only interact through virtual channels. Becoming friends on Facebook allows users to have access to each other's personal information and content notifications, such as status updates, comments, photographs, visited

places, promotions, graduations, and so forth. Thus, Facebook enables users to maintain social relationships and to establish trust, which may extend to other contacts as well [22]. It has been found that the eWOM provided by friends is perceived as more credible than that from anonymous or personally unknown sources, because these contacts are embedded in the consumers' personal network [22]. On Facebook, therefore, people may consider recommendations from friends or classmates as more credible [20]. This makes SNSs a vital source of product information for consumers that greatly enables the communication of eWOM. Therefore, it is no wonder that marketers have invested substantial resources in setting up brand profiles on SNSs to engage consumers with their brand and to spread positive eWOM through SNS members [43]. Thus, because of the importance of source credibility in explicit eWOM adoption, we propose the following:

Hypothesis 2: *Source credibility has a positive effect on the cognitive attitude.*

Social identity and relationships among users have been identified as the focus of SNSs, particularly Facebook [88]. As social image is an asset that Facebook users can use to maintain and enhance their status within their network [59], some users seek to increase their social identity and present an ideal picture of themselves rather than the reality [12]. Image building is thus used by people who aim to publish content that matches the ideal image of themselves that they wish to create [44]. Presenting an idyllic image of oneself on Facebook can be done by various means. It can happen either explicitly through posting status updates or implicitly using Check-ins or Likes [46]. Luarn, Yang, and Chiu [59] state that Facebook users share their location information as an indirect way of enhancing their self-presentation and social image, so that they appear more appealing to others in the social network. Thus, it is less likely that people will recommend a product that they believe will damage their social image [59].

We believe that the effect of peer image building on eWOM adoption on Facebook can be explained based on Facebook users' underlying inferences about the motives of the friend who posted the eWOM. The perception of eWOM readers of reviewers' motives for recommending a product or service can be classified as either internal (i.e., self-serving reasons) or external (i.e., product-related reasons) [50]. If it is perceived that the reviewers' motives are related to a product (external), consumers will perceive the review as helpful. On the other hand, if the inferred motives are self-serving (internal), consumers will discount the review [82]. Accordingly, one may recommend a product or service for internal reasons (i.e., image building) or external reasons (i.e., product related). A qualitative study by Svensson [88] shows that eWOM can be ineffective if it is perceived to be communicated for internal reasons. If the eWOM is "too good" and thus perceived only to communicate the desired personality of the sender, this reduces the sender's credibility; consequently, it makes the message less reliable and may even cause it to be rejected. Therefore, image-building behavior of a Facebook member reduces the member's credibility among his or her peers on Facebook and makes the member's eWOM recommendation less likely to be accepted. The formation of consumers' cognitive attitude about the suitability of Facebook for accessing eWOM may thus be formed in part based on their peers' image-building behavior. In addition, prior studies have also shown that the

social attractiveness of individuals makes them more persuasive in general [64]. On Facebook, this stimulates the receivers' arousal and makes them more excited to review the eWOM [30]. Consistent with these findings, we believe that the image-building behavior of an individual on Facebook leads other members to be less excited about checking their Likes or Check-ins. Thus, peer image building on Facebook influences eWOM adoption by having a negative effect on the receivers' cognitive and affective attitudes. Therefore, we propose the following:

Hypothesis 3: *Peer image building has a negative effect on the cognitive attitude.*

Hypothesis 4: *Peer image building has a negative effect on the affective attitude.*

In offline settings, the degree of overlap between the network of friends of two individuals is associated with the strength of their ties to one another [37]. In that sense, social ties can be classified as either strong or weak. Strong ties constitute stronger and closer relationships that are within an individual's personal network [11]. People have a wide range of social networks among which to search for information, and this includes both strong ties, such as family members and close friends, and weak ties, such as acquaintances. However, dynamic information seeking and product referral are more likely to happen among relationships with strong ties [11].

Like the offline environment, in online settings such as an SNS, there exist varying degrees of social relationships among members, and these can also be classified as either strong or weak [11, 22]. The perceived tie strength established via an SNS motivates consumers to communicate with one another and to disseminate product-related information [22]. Although both strong and weak ties contribute to the propagation of eWOM on SNSs, weak ties exert a wider impact by extending consumers' personal network to external communities. On the other hand, strong ties have a more important impact at the individual and small group level; therefore, like the offline environment, information-seeking and referral behavior is more likely to happen among those with strong ties [22, 68]. In fact, consumers trust online information posted by friends with whom they perceive a strong social relationship more than information posted by those with whom they perceive a weak social relationship [68]. Thus, Facebook members may perceive Facebook as a valuable platform for accessing eWOM because they can access it from close ties. In addition, the emotions triggered by reading Facebook posts from users with strong ties are higher compared to posts from those with weak ties [57]. Consequently, it can be expected that Facebook members' level of excitement derived from checking eWOM posted by close ties is higher compared to weak ties. Therefore, we propose the following:

Hypothesis 5: *Tie strength has a positive effect on the cognitive attitude.*

Hypothesis 6: *Tie strength has a positive effect on affective attitude.*

Prior studies on information systems reported that cognitive attitude is the main driver for the adoption of information technology [2, 10]. Cognitive attitude is also examined in eWOM adoption studies of online consumer review platforms. These prior studies conceptualized the cognitive attitude in terms of consumers' belief about the credibility of eWOM, and found that the perceived credibility of eWOM is positively associated with eWOM adoption. Cognitive attitude is also conceptualized as the degree to which consumers perceive the use of a specific platform for eWOM to be beneficial by [54, 83]. This specific perspective is also relevant to Facebook, where the main goal of the platform is to maintain social relationships among its users. If a Facebook user believes that using Facebook to access eWOM is valuable, he or she is more likely to adopt the eWOM. Therefore, we proposed the following hypothesis:

Hypothesis 7: *Cognitive attitude has a positive effect on eWOM adoption.*

In addition to cognitive attitude, consumers' adoption of eWOM can be examined through the lens of their affective attitude change [30, 91]. The affective attitude might prompt judgmental responses that are faster and more consistent across individuals [83]. For instance, studies in marketing and advertising maintain that consumers' affective attitude toward advertisements affects the consumers' behavioral intention to adopt the ads [27, 42, 54, 60, 84]. On Facebook, we can also consider implicit eWOM (i.e., information shared about a product through Likes and Check-ins) as a source of advertisement for a product; thus, consumers' adoption of implicit eWOM can be examined through changes in their affective attitude. In addition, a study by Fang [30] showed that the level of arousal (affective attitude) derived from reading explicit eWOM affects eWOM adoption. Therefore, by considering the notion that Facebook encompasses both explicit and implicit eWOM, we argue that the consumers' arousal derived through exposure to eWOM on Facebook affects their behavioral intention to adopt the eWOM:

Hypothesis 8: *Affective attitude has a positive effect on eWOM adoption.*

The ELM specifies that consumers use a combination of central and peripheral factors in processing information [10, 72]. Prior studies have maintained that central factors (i.e., factors related to the review text) have a stronger influence in changing consumers' attitude because of the higher amount of cognitive effort required to process information embodied by the review text [6, 10]. On the other hand, affective attitude change happens quickly and through peripheral cues such as social and emotional responses toward the reviewer [30, 91].

Reflecting on the cognitive and affective attitudes and their central and peripheral antecedents, if an eWOM is explicit (i.e., delivered through a written text), it is more plausible to consider Facebook as an eWOM communication platform that is contextually like the conventional eWOM communication platforms. However, unlike these platforms, social and interpersonal relationship related factors on Facebook can be considered as the main peripheral cues in eWOM adoption process. Therefore, it is more

likely that the cognitive attitude has a greater influence on the eWOM adoption process than the affective attitude because the cognitive attitude is associated with the perception of Facebook users of the usefulness of Facebook to access online reviews. Conversely, product and brand information shared through consumers' Likes and Check-ins (i.e., implicit eWOM) can be considered a type of advertisement for those products and brands, and numerous studies have identified the affective attitude of consumers toward advertisements as the main driver for adoption of such ads [27, 42, 54, 60, 84]. This is mainly because consumers are more likely to exhibit judgmental consensus in affective responses to ads than in their reason-based assessments of the same ads [80]. Since the eWOM available on Facebook includes a combination of both explicit and implicit eWOM, we believe the eWOM type (explicit vs. implicit) moderates the effect of the cognitive and affective attitude on eWOM adoption. The effect of cognitive attitude on eWOM adoption is higher if the eWOM is explicit and the effect of affective attitude on eWOM adoption is higher if eWOM is implicit. Therefore, we propose the following:

***Hypothesis 9a:** The effect of cognitive attitude on eWOM adoption is higher for explicit eWOM.*

***Hypothesis 9b:** The effect of affective attitude on eWOM adoption is higher for implicit eWOM.*

Research Methodology

Measurement of Constructs

The measurement items used in this study are shown in Table 1. These items were adopted from the previous literature, with some alterations made to fit the context of this study. The instrument was pilot tested with a sample comprising two professors, two Ph.D. students, and 50 university students with appropriate knowledge and experience of using SNSs to assess the face and content validity of the measures. The purpose of the pilot study was threefold: (1) to assess the internal and external validity of the scale items; (2) to estimate potential participation rates for the study; and (3) to provide insight into blind spots and oversights that must be addressed to execute the research plan.

The central route of the ELM in our model consists of the product-related information in a review (PRI). PRI is defined as the degree to which an eWOM posted on Facebook is based on the product or service. The items for measuring this construct were adapted from [75]. The source credibility (SC) represents the peripheral route of the ELM in our model. It is defined as the eWOM recipients' perception of the sender's credibility. The items to measure this construct were adapted from multiple previous studies [10, 14, 16]. The cognitive attitude (COGA) reflects the attitude of a person about using Facebook to access online reviews. The items used to measure this

construct were adapted from [83]. The construct eWOM adoption (EA) is defined as the degree to which an individual on Facebook perceives that a friend's post on Facebook about a product/service was informative for the individual's purchase decision-making process. The items to measure this construct were adapted from [16]. Peer image building (PIB) is defined as the degree to which someone perceives that a friend uses Facebook to build his or her social image. The items for measuring this construct were adapted from [59]. Tie strength (TS) reflects an individual's degree of closeness with, and perceived importance of, a Facebook friend. The items to measure this construct were adapted from [22]. Affective attitude (AFFA) reflects the individual's feelings about sharing products and brand information through Facebook. The items used to measure this construct were adapted from [30]. The eWOM types were measured by a binary variable, where "0" represents explicit eWOM and "1" represents implicit eWOM.

Table 1. Measurement Items

Construct	Items	Reference
Product-related information in a review (PRI)	PRI₁ . The content of his or her review was based on the product/service. PRI₂ . His or her review reflects the characteristics of the product/service.	[75]
Source credibility (SC)	SC₁ . He or she was knowledgeable about the product/service. SC₂ . He or she was trustworthy. SC₃ . He or she was credible. SC₄ . He or she appears to be an expert on the product/service.	[10, 14, 16]
Cognitive attitude (COGA)	COGA₁ . Using Facebook to access reviews about products/services is wise. COGA₂ . Using Facebook to access reviews about products/services is beneficial. COGA₃ . Using Facebook to access reviews about products/services is valuable.	[83]
eWOM adoption (EA)	EA₁ . The information shared through my friend's post on Facebook contributed to my knowledge of the product/service. EA₂ . My friend's post on Facebook about the product/service made it easier for me to make a purchase decision (e.g., to purchase or not to purchase). EA₃ . My friend's post on Facebook about the product/service has enhanced my effectiveness in making a purchase decision. EA₄ . My friend's post on Facebook about the product/service motivated me to make a purchase decision.	[16]
Peer image building (PIB)	PIB₁ . He or she uses Facebook to shape an impression of himself or herself. PIB₂ . He or she uses Facebook to build image of himself or herself	[59]
Tie strength (TS)	TS₁ . He or she is important to me. TS₂ . He or she is close to me. TS₃ . I contact him or her frequently.	[22]
Affective attitude (AFFA)	When I see friends share information about products/services on Facebook: AFFA₁ . I'm excited. AFFA₂ . I'm frenzied. AFFA₃ . I'm wide awake.	[30]

Data Collection

We used a survey to collect data from students at two large public universities in the western United States. Prior studies have shown that college students are good representatives for empirical studies on SNSs and constitute the majority of Facebook users [22, 52, 62]. Empirical data for testing of the hypotheses were collected from business major undergraduate students in October 2016. The students were enrolled in business core classes in both universities. They were solicited to participate in the study in exchange for receiving extra course credit through web-based class announcements. We began by providing the students with a brief description of the survey, without revealing our hypotheses. In the first section, we asked questions about the student's demographic information. Information about their cognitive and affective attitudes was also collected in this section. In the next section, we asked students to recall a friend who had engaged in eWOM communication within the past month, and then we asked the respondents to select one of the following to describe his or her friend's eWOM activity: (1) he or she posted a review of a product/service on his or her Facebook page; or (2) he or she shared product/service information by "Liking" a Facebook page related to the product/service or by "Checking-in" at the business. Then we asked participants to answer questions pertaining to the product-related information in a review, the friend's credibility, tie strength, and image building, as well as participants' eWOM adoption.

Sample Profile

In all, a total of 202 usable questionnaires were collected. Of the respondents, 45 percent were female and 55 percent were male. Most of the respondents (50 percent) were within the age range of 18–21 years, followed by 30 percent within the ages of 22–25 years, and 20 percent over the age of 25. Most of the respondents in our sample had between 200 and 300 friends on Facebook.

Data Analysis

We used partial least squares (SmartPLS version 3.0) to test the measurement model and the structural model. PLS analysis was chosen over other analytical techniques for two reasons. First, it simultaneously tests both the measurement model and the structural model. Second, it is more appropriate for analyzing moderating effects because traditional techniques cannot account for measurement error in exogenous constructs [17, 18, 19].

Measurement Model Analysis

To focus on the psychometric properties of the measurement model, we examined the composite reliability, convergent validity, and discriminant

validity of the constructs. Convergent validity can be assessed by examining the measurement's model loadings. Table 4 shows the cross loadings. These loadings, once deemed consistent with the underlying construct, were used to assess the internal consistency and average variance extracted (AVE). Convergent and discriminant validity were found to be adequate for constructs modeled using two or more reflective indicators when: (1) all the constructs' AVE values were above 0.5; and (2) item loadings exceeded 0.70 and loaded more highly on the constructs they were intended to measure [17, 18]. Table 2 shows the composite reliability, average variance extracted, and Cronbach's alpha. The composite reliability values for the constructs were above the recommended benchmark of 0.7 [8, 17, 18]. All the constructs' AVE values were above the recommended level of 0.5 [17, 18]. Therefore, we found the measurement model's convergent validity to be satisfactory. Table 3 shows that the square root of the AVE value for each construct exceeded the correlation between that construct and the other constructs [17, 18, 34], thus providing evidence of the discriminant validity

Common Method Bias

Because survey methodologies may be subject to common method bias (CMB), we ran a PLS test for CMB using the common factor approach

Table 2. Reliability and Convergent Validity

	Average variance extracted (AVE)	Composite reliability	Cronbach's alpha
EA	0.712	0.907	0.862
AFFA	0.829	0.936	0.897
COGA	0.932	0.976	0.964
PIB	0.94	0.969	0.936
PRA	0.874	0.932	0.862
SC	0.802	0.942	0.917
TS	0.888	0.96	0.937

Table 3. Discriminant Validity

	EA	AFFA	COGA	PIB	PRI	SC	TS
EA	0.844						
AFFA	0.284	0.911					
COGA	0.388	0.403	0.966				
PIB	-0.329	-0.343	-0.344	0.969			
PRI	0.591	0.162	0.46	-0.197	0.935		
SC	0.527	0.346	0.608	-0.258	0.554	0.896	
TS	0.346	0.18	0.234	-0.008	0.333	0.44	0.942

Note: Diagonal values are square roots of AVEs.

Table 4. Cross Loadings.

	AFFA	COGA	PIB	TS	EA	SC	PRI
AFFA ₁	0.902	0.372	-0.325	0.17	0.303	0.339	0.173
AFFA ₂	0.927	0.357	-0.326	0.172	0.227	0.29	0.096
AFFA ₃	0.903	0.372	-0.283	0.149	0.241	0.312	0.173
COGA ₁	0.408	0.959	-0.328	0.232	0.344	0.584	0.417
COGA ₂	0.38	0.968	-0.321	0.229	0.362	0.588	0.453
COGA ₃	0.381	0.969	-0.346	0.218	0.415	0.589	0.461
PIB ₁	-0.346	-0.339	0.971	-0.027	-0.312	-0.246	-0.213
PIB ₂	-0.318	-0.327	0.968	0.012	-0.328	-0.256	-0.168
TS ₁	0.177	0.238	-0.004	0.941	0.269	0.428	0.333
TS ₂	0.213	0.219	-0.018	0.966	0.342	0.425	0.297
TS ₃	0.104	0.201	0	0.92	0.382	0.385	0.313
EA ₁	0.227	0.355	-0.36	0.253	0.81	0.471	0.669
EA ₂	0.242	0.419	-0.341	0.31	0.918	0.525	0.583
EA ₃	0.269	0.335	-0.257	0.343	0.91	0.482	0.467
EA ₄	0.224	0.16	-0.122	0.258	0.721	0.263	0.226
SC ₁	0.292	0.607	-0.252	0.382	0.526	0.892	0.54
SC ₂	0.321	0.537	-0.205	0.45	0.45	0.931	0.51
SC ₃	0.296	0.522	-0.212	0.414	0.441	0.92	0.498
SC ₄	0.332	0.501	-0.254	0.328	0.463	0.836	0.428
PRI ₁	0.118	0.323	-0.175	0.276	0.507	0.445	0.906
PRI ₂	0.174	0.503	-0.192	0.337	0.587	0.57	0.962

described by Liang et al. [55]. We created a common method construct that included all the items associated with it; we then modeled each of the 30 indicators as a single-indicator construct and created paths between them and the common method construct as well as the theoretical constructs. Table 5 shows the analysis of common method bias. The results showed that loadings on the theoretical constructs were both high and highly significant. Loadings on the common method construct were low and, in almost all cases, nonsignificant. This indicates that CMB is not a problem in this research [55].

Nonresponse Bias

To test for potential nonresponse bias, following the technique used in prior research (e.g., [45, 63], we divided the sample in two halves to compare the demographics of the questionnaires turned in early with those turned in later. We found that the two subsamples have similar demographic distributions. The demographic distributions of the subsamples are also like the population of Facebook users based on the self-reported information from their profile [93].

Table 5. Common Method Bias

Indicators	Theoretical construct loading	T- statistic	P-value	Common method factor loading	T- statistic	P-value
AFFA ₁	0.861	25.553	$p < 0.01$	0.053	1.158	$p > 0.05$
AFFA ₂	0.954	46.329	$p < 0.01$	-0.043	1.314	$p > 0.05$
AFFA ₃	0.917	36.941	$p < 0.01$	-0.008	0.191	$p > 0.05$
COGA ₁	0.973	45.263	$p < 0.01$	-0.017	0.707	$p > 0.05$
COGA ₂	0.976	54.003	$p < 0.01$	-0.011	0.425	$p > 0.05$
COGA ₃	0.948	50.232	$p < 0.01$	0.027	1.206	$p > 0.05$
EA ₁	0.681	8.5	$p < 0.01$	0.161	1.876	$p > 0.05$
EA ₂	0.828	16.811	$p < 0.01$	0.107	1.825	$p > 0.05$
EA ₃	0.938	28.29	$p < 0.01$	-0.028	0.618	$p > 0.05$
EA ₄	0.939	10.789	$p < 0.01$	-0.272	2.782	$p < 0.01$
PIB ₁	0.966	90.527	$p < 0.01$	-0.008	0.456	$p > 0.05$
PIB ₂	0.973	96.396	$p < 0.01$	0.008	0.456	$p > 0.05$
PRI ₁	1.025	41.234	$p < 0.01$	-0.126	3.431	$p < 0.01$
PRI ₂	0.85	23.153	$p < 0.01$	0.126	3.431	$p < 0.01$
SC ₁	0.736	11.682	$p < 0.01$	0.168	2.628	$p < 0.01$
SC ₂	0.992	19.627	$p < 0.01$	-0.064	1.101	$p > 0.05$
SC ₃	1.024	19.192	$p < 0.01$	-0.112	1.686	$p > 0.05$
SC ₄	0.818	9.969	$p < 0.01$	0.019	0.202	$p > 0.05$
TS ₁	0.93	39.519	$p < 0.01$	0.005	0.149	$p > 0.05$
TS ₂	0.96	56.015	$p < 0.01$	0.007	0.23	$p > 0.05$
TS ₃	0.939	43.716	$p < 0.01$	-0.012	0.322	$p > 0.05$

Structural Model

Unlike covariance-based structural equation modeling (SEM), PLS does not provide summary statistics to allow for assessment of the overall “fit” of the model. However, the variance explained by the path model (R^2) of the endogenous construct—eWOM adoption, and the sign and significance of the path coefficients—is typically used to assess model fit. A bootstrapping approach was used to produce 500 random samples of the original sample size from the data set by sampling through replacement. This was necessary to obtain estimates of the standard errors for use in testing the statistical significance of the path coefficients. This approach provides valid estimates of the significance of the path coefficients in the PLS models [65]. A summary of the empirical testing and validation of the theorized casual links is given in Figure 2. The product-related information in a review, source credibility, peer image building, and tie strength were found to explain 42.6 percent of the variance in cognitive attitude. The image building and tie strength explained 14.9 percent of the variance in affective attitude. The cognitive attitude and affective attitude, in turn, explained 36.9 percent of the variance in eWOM adoption. As we predicted, the effect of the product-related information in a review on cognitive attitude was significant ($\beta = 0.167$, $P < 0.05$), supporting H1. The effect of source credibility on cognitive attitude

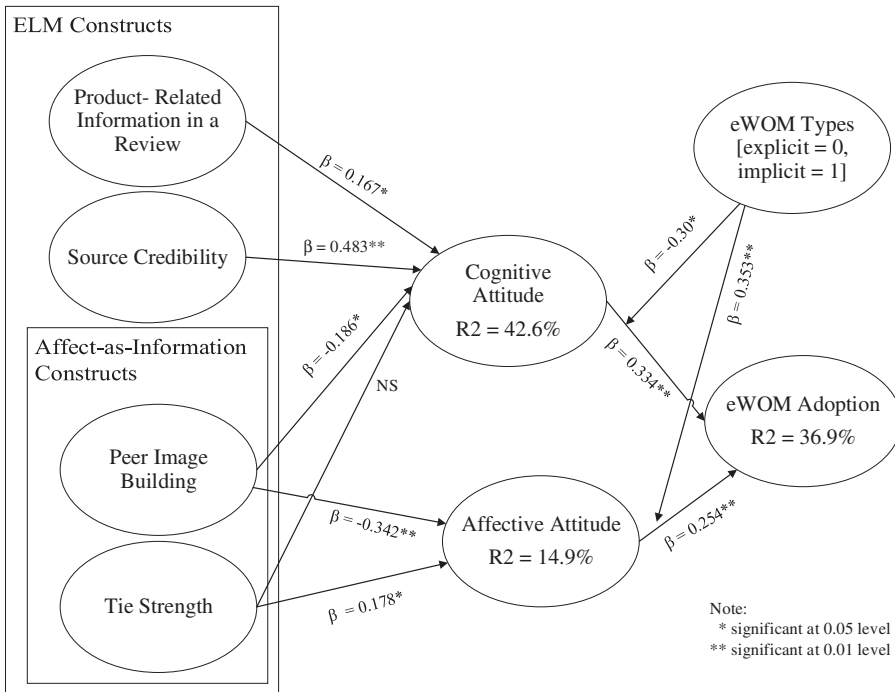


Figure 2. Empirical results

was also significant ($\beta = 0.483$, $P < 0.01$), supporting H2. We found that peer image building had a negative effect on the cognitive attitude ($\beta = -0.186$, $P < 0.01$) and affective attitude ($\beta = -0.342$, $P < 0.01$), supporting H3 and H4, respectively. The effect of tie strength on cognitive attitude (H5) was not significant; however, the effect of tie strength on the affective attitude was significant ($\beta = 0.178$, $P < 0.05$), supporting H6. As we predicted, the effect of cognitive attitude on the eWOM adoption was significant ($\beta = 0.334$, $P < 0.01$), supporting H7. The effect of affective attitude on eWOM adoption was also significant ($\beta = 0.254$, $P < 0.01$), supporting H8. Consistent with H9a and H9b, the eWOM type was found to moderate the effect of cognitive attitude and affective attitude on eWOM adoption. We also found that, for explicit eWOM, cognitive attitude had a higher effect on the eWOM adoption ($\beta = -0.30$, $P < 0.01$) and, for implicit eWOM, affective attitude had a higher effect on the eWOM adoption ($\beta = 0.353$, $P < 0.01$).

Discussion

The main purpose of this study is to move beyond the conventional definition of eWOM as a form of reviews delivered through written text (i.e., explicit eWOM) by highlighting the notion that nontextual information such as Likes and Check-ins on Facebook can be considered a new type of

eWOM (i.e., implicit eWOM). Against this background, we consider Facebook as an eWOM communication platform that encompasses both explicit and implicit eWOM, and by building on the ELM and the affect-as-information theory, we develop a unified theoretical model that examines the role of eWOM types in the eWOM adoption process on Facebook.

The findings of this study are threefold. First, as with studies of eWOM adoption in online consumer review platforms and based on the theoretical lens of the ELM, we find support for the positive effect of cognitive attitude on eWOM adoption. In addition, based on the affect-as-information theory, we examined the explanatory power of the affective path in eWOM adoption by finding support for the positive effect of affective attitude on eWOM adoption. Reflecting on affective attitude, this study confirms the findings of Fang [30] concerning the effects of the arousal dimension of affective attitude on eWOM adoption, and it extends the notion of arousal to the emotional outcome of exposure to both explicit and implicit eWOM. Second, regarding the role of eWOM types in the eWOM adoption process, we find that eWOM types moderate the effect of cognitive and affective attitudes on eWOM adoption. Our results show that when the eWOM is explicit, as it is in online consumer review platforms, the cognitive attitude has a higher effect on eWOM adoption. However, if the eWOM is implicit, the affective attitude has a higher effect on eWOM adoption. Third, regarding the drivers of cognitive and affective attitude, our results confirm the importance of review text (i.e., the ELM's central cue) as one of the antecedents of cognitive attitude. Our results show that when it comes to explicit eWOM, Facebook users pay attention to product-related information in the explicit eWOM, and the higher elaboration of those attributes resulted in a higher cognitive attitude. In addition, our results support prior eWOM adoption studies that highlight source credibility as the most important peripheral factor for explicit eWOM adoption. Our model considered the social-interpersonal relationships among Facebook members and examined the effects of tie strength and peer image building on the users' cognitive and affective attitudes. We did not find support for a positive effect of tie strength on the cognitive attitude. One possible explanation for this result might be the finding from prior studies that consumers accept eWOM from their close ties because they perceive them as a credible source of eWOM. Thus, tie strength may have an indirect effect on cognitive attitude by influencing perceived source credibility. We further checked this path in our structural model and found that tie strength had a positive effect on source credibility ($\beta = 0.44$, $P < 0.01$). However, we also found a positive effect of tie strength on the affective attitude, providing support for the role of tie strength as one of the drivers of affective attitude. Our results also highlight the role of image building as a less-studied personal condition that motivates eWOM behavior in SNSs, by providing empirical support for the negative effect of image building on eWOM adoption through a negative influence on both the cognitive and affective attitudes.

Implications

Theoretical Implications

This study makes important theoretical contributions to the extant body of literature on eWOM communication. A substantial number of prior eWOM studies have focused on the eWOM adoption process through the lens of informational influences of an eWOM and the effect of cognitive attitude on eWOM adoption (e.g., [6, 14, 16, 47]). By building upon information-processing theories, such as ELM, these studies have examined how the content of online reviews and the heuristic cues associated with the reviewer affect eWOM credibility. Against this background, some studies (e.g., [30, 83, 91]) have also stated that when the interpersonal and social relationships between members are supported by a platform, relational influences of an eWOM are the vital antecedents of eWOM adoption. Thus, examining eWOM adoption through both cognitive and affective perspectives is deemed important [30]. We draw on this to study eWOM adoption on Facebook since the members of social interactions and interpersonal relationships are the main objectives, and sharing information is considered the main social interaction activity [22, 30, 61]. Our study contributes to this line of work in two different ways. First, in contrast to the study by Fang [30], where the antecedents of cognitive and affective attitudes are separated, our study shows that integrating ELM and affect-as-information provides a new insight on how the social-interpersonal variables affect both cognitive and affective attitudes. Consistent with affect-as-information theory, the affective-based inferences are associated the experience of feeling [29, 32, 73, 85]. Therefore, when a Facebook member is exposed to an eWOM, the affective-based inferences are associated with the heuristic “How do I feel about the eWOM?” [30, 83, 91]. Thus, the interpersonal relationships of the recipient of the eWOM with the source of the eWOM can trigger different emotional responses to this question, leading him or her either to adopt or not adopt the eWOM. In a similar vein, tie strength and peer image building (i.e., the interpersonal relationship factors) are the ELM’s peripheral cues that drive eWOM adoption behavior through low cognitive processing. Second, our study shows that the conceptualization of cognitive attitude is inseparable from the perception of consumers about the eWOM communication platform. In other words, when the social interaction between members are an integral part of the platform [54, 83], the perception of consumers about whether using a platform to access the eWOM is beneficial or not is a more contextually relevant cognitive attitude construct than eWOM credibility, which is extensively examined in the prior studies [14, 16, 30]. Thus, this study provides an additional empirical evidence for considering the purpose of the platform in the conceptualization of the cognitive attitude.

This study also takes the extra step of bringing the notion of eWOM types (explicit vs. implicit) into the eWOM adoption literature. While prior studies on online consumer review platforms and social networking services considered eWOM as a form textual information about products and services

(i.e., explicit eWOM) [14, 16, 30, 83], the nontextual cues on Facebook such as Likes and Check-ins (i.e., implicit eWOM) have the potential to influence consumers' decision-making process [3, 7, 46, 59]. Against this background, the integration of ELM and affect-as-information theory is useful to understand the role of eWOM types in the eWOM adoption process. Our study extends the conceptualization of the affective attitude proposed by Fang [30] by considering affective attitude as the exposure of Facebook users to both explicit and implicit eWOM. This conceptualization of the affective attitude construct further highlights the moderating role of eWOM types on the effect of cognitive and affective attitudes on eWOM adoption. In other words, when eWOM is explicit, as it is in conventional eWOM communication platforms, cognitive attitude is more influential in the eWOM adoption process than affective attitude. However, when eWOM is implicit, Facebook users are more inclined to be influenced by their affective attitude toward an eWOM that is triggered merely by the interpersonal relationship between members.

Practical Implications

The results of this study offer two important practical contributions. First, our results show that, as with online consumer review platforms, the content of Facebook reviews plays an important role in consumers' decision-making process. Given Facebook's role as a platform where the main purpose is hedonic rather than for communication of eWOM, the perception of Facebook users about Facebook's suitability for accessing online reviews is particularly important for eWOM adoption from this platform. Our results show that when it comes to explicit eWOM, Facebook does not differ significantly from online consumer review platforms, and the extent to which eWOM elaborates on the attributes of a product positively influences Facebook users' perception of the suitability of Facebook for accessing online reviews. This finding may have important implications for the current practice of social advertisement in online shopping platforms. Many online shopping platforms allow buyers to share their purchase information on an SNS immediately after their purchase. For instance, Figure 3 shows an



Figure 3. Social Advertising on AmazonSource: www.ewebmarketing.com.au/blog/7-ways-to-improve-your-thank-you-page/.

example of an Amazon purchase, where the buyer can share information about his or her purchase through various channels, including Facebook. The content and metadata for this purchase are prefilled with generic content. Because our result shows that the product-related information in a review is positively associated with eWOM adoption, our suggestion for online retailers and shopping platforms would be to persuade Facebook users to modify the content of such purchase information based on the attributes of the product that they like best.

Second, our results show that the affective attitude of consumers toward eWOM on Facebook is one of the drivers of eWOM adoption on Facebook and that the affective attitude has a higher effect on eWOM adoption when the eWOM is implicit. In addition, our results show that tie strength and peer image building are two social-interpersonal relationship variables that influence affective attitude. These findings have important implications for the practice of sponsored story advertising on Facebook. Such sponsored ads are commonly accompanied by social cues such as businesses/products or brands that other Facebook friends have either Checked-in or Liked. A prior study using a randomized field experiment showed that the presence of close ties as a social signal increased the likelihood of response to such advertisements [7]. While our study confirms this finding, the notion of image-building behavior among Facebook users demands further attention for the practice of sponsored advertisement. While further investigation would be needed to quantify the measure of image building, we believe that one possible approach to mitigate the negative effect of image building on eWOM adoption is to consider Facebook users' past Likes, Check-ins, and other socioeconomic signals before including them as a social component of a sponsored advertisement. For instance, if a Facebook user's new brand page Like deviates from his or her past Likes concerning the same product or service type, this new Like can be excluded from the sponsored advertisement. Alternatively, if multiple Facebook friends have Liked the same product/brand page, because of the positive effect of several social cues on the likelihood of response to an advertisement [7], these Facebook members can be included in the advertisement but not as the main social cue.

Limitations and Future Research

One of the major limitations of this study is the use of university students as the sample respondents, which may raise questions about the generalizability of the results. Although previous studies have shown that students well represent the population for empirical studies on SNSs, and that they are known to constitute the majority of Facebook users [22, 52], our findings should be generalized only with caution. Our sample also lacks cultural and language diversity, which may limit its general application to other cultures. As the vehicle for a textual message, language has a significant effect on the perception of the receiver; hence, the adoption of eWOM may differ across diverse languages. Also, a study by Chu and Choi [20] showed that differences in culture influence the acceptance of

eWOM. People from collectivist cultures engage in greater levels of information-seeking and information-giving behaviors on SNSs than their individualistic counterparts. Moreover, there are differences between collectivist and individualistic societies in terms of network structure. People from collectivist cultures have stronger ties on SNSs, while people from individualistic cultures tend to have weaker ties. Finally, people from collectivist cultures have higher levels of trust in their SNS contacts, and they are thus more likely to be influenced by eWOM than their individualistic counterparts. Hence, in the future, comparative studies on other social networking services in different cultures would be fruitful. Furthermore, we use self-reported data in this study, which is subject to social desirability response bias [4]. To address this bias, it may be useful for future research to analyze textual information collected from SNSs and to look at how different characteristics of the text, such as readability and descriptiveness, influence its acceptance. Future research could also conduct experiments to investigate the acceptance of eWOM. Previous research has shown that computer-mediated communication (CMC) can effectively transfer emotions. Moreover, the emotions contained in a message transferred through CMC significantly influence how the message is processed and interpreted by its recipient [9, 78]. Hence, future research might consider the effect of message sentiment on the acceptance of explicit eWOM. In addition, because of the negative impact of an individual's image-building behavior on eWOM adoption, quantifying this construct based on individuals' past social behavior would be fruitful for social media marketers.

Conclusions

Although online consumer review websites are the major platform for eWOM communication, the emergence of SNSs has created a new avenue for both consumers and marketers to review and share brand/product-related information. To that end, this study highlights the differences between SNSs and conventional platforms for eWOM communication. We argue that while explicit eWOM is common across all platforms for eWOM communication, implicit eWOM is only salient on SNSs. This study draws on the ELM and the affect-as-information theory to understand the drivers of cognitive and affective attitudes, thus contributing to prior eWOM adoption studies by providing empirical evidence of the benefits of integrating these two theories to explore the eWOM adoption process in the presence of both explicit and implicit eWOM. Our results show that product-related information in a review positively affects the cognitive attitude. In addition, we find that source credibility also has a positive effect on the cognitive attitude. Furthermore, our study considers tie strength and peer image as two social-interpersonal relationship variables that influence both cognitive and affective attitude. Our results show that image building has a negative effect on both the cognitive and affective attitudes and that tie

strength influences eWOM adoption by having a positive effect on the affective attitude; however, we did not find support for the positive effect of tie strength on the cognitive attitude. Our study shows that the eWOM types moderate the effect of cognitive and affective attitudes on the adoption of eWOM. The effect of cognitive attitude on eWOM adoption is higher when eWOM is explicit. Conversely, the effect of affective attitude on eWOM adoption is higher when eWOM is implicit. The results of this study contribute to the extant body of eWOM adoption literature by including eWOM types in our theoretical model of eWOM adoption and by investigating its moderating impact on the effects of cognitive and affective attitudes on eWOM adoption.

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NOTE

1. Please note that we consider social-interpersonal relationship factors (i.e., tie strength and peer image building) as the main antecedents of the affective attitude and part of peripheral cues of the ELM. Since product-related information in a review and source credibility are not categorized as social-interpersonal relationship factors, we do not consider their effects on the affective attitude in the research model.

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