

Adoption of Implicit eWOM in Facebook: An Affect-as-Information Theory Perspective

Full papers

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Abstract

Electronic word of mouth (eWOM) has gained inescapable attention among both practitioners and academia. Its importance lies in its simplicity yet profound impact on customers' attitude toward specific brands or goods, and consequently affecting customer loyalty and intention to purchase. Although Social Network Services have emerged as platforms to spread eWOM, less attention has been paid towards implicit eWOM which is displayed by liking pages of products or through check-in feature of Facebook. Using the theoretical lens of affect-as-information theory, this study shows affective attitude of users toward implicit eWOM influences acceptance of eWOM. We also study how tie strength, image building, and involvement with Facebook collectively determine affective attitude. The implications for theory and practice are discussed as well as limitations and future research directions.

Keywords (Required)

Electronic word of mouth, EWOM, social networking services, implicit.

Introduction

The emergence of online consumer review websites opens a new avenue of research for scholars to study the effect of eWOM (electronic word of mouth) on consumers' product and service judgement (Lee and Youn 2009). eWOM is 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"(Hennig-Thurau et al. 2004). Most of the previous studies on adoption of eWOM have been done on the conventional platforms of eWOM such as online consumer review websites (Awad and Ragowsky 2008; Cheung et al. 2009; Lee and Lee 2009; Lee and Youn 2009; Park et al. 2007), blogs (Chu and Kamal 2008; Riegner 2007), and online shopping sites (Gupta and Harris 2010; Lee et al. 2008; Pan and Chiou 2011). However, few studies investigate the adoption of eWOM in SNSs (Social Networking Services) (Chu and Kim 2011; Fang 2014; Luarn et al. 2015). The collaborative and social characteristics of SNS enable users to show a high level of social presence (Kaplan and Haenlein 2010). The desire to establish and maintain social relationships also enables eWOM behavior among SNS users. By sharing useful product and brand-related information, users can help their SNS connections with their purchase-related decisions (Chu and Choi 2011). The increasing use of SNS can also facilitate close relationships among organizations and consumers as a component of an integrated marketing communication (IMC) system (Mangold and Faulds 2009). As a result, SNS as a platform for online branding and advertising have undergone tremendous growth, and global advertising spending on SNS is predicted to exceed \$35 billion in 2015(LePage 2015). Among existing SNS, Facebook is the most popular one, and it has attracted various corporations to open their own fan pages to advertise their brands. A recent report shows that Facebook is the top social commerce website worldwide (eMarketer.com 2014). Facebook also accounts

for 50% of total social referrals and 64% of the total social revenue (Cooper 2015). As such, Facebook is mainly considered as a platform of choice for generating, spreading, and engaging in eWOM activities (Chu and Kim 2011).

Facebook differs from the conventional eWOM platforms in three important ways. First, consumers use online retailer websites, forums and blogs for opinion seeking and opinion giving purposes (Lee and Lee 2009; Sun et al. 2006). In other words, the focus of these platforms is merely on eWOM itself. However, interpersonal connections among the users and social presence are the major drivers of people joining SNS (Fang 2014). Second, the content of eWOM in Facebook is pushed toward users by appearing on their wall or newsfeed. The eWOM messaging on Facebook profile pages is not anonymous but linked to the profile owner and observable by Facebook friends (Chu and Kim 2011; Fang 2014; Luarn et al. 2015). Third, eWOM on Facebook can propagate through two distinct mechanisms. Users can explicitly express their opinions about the products or services in a written text format. For instance, users may publish eWOM reviews by updating their status, by posting comments, or by using the direct message mechanism implemented on Facebook.

Past eWOM communication studies both on Facebook (Chu and Kim 2011; Fang 2014) and the other conventional eWOM platforms (Cheung et al. 2012; Cheung et al. 2009) look into the eWOM generated through written text format. In Facebook, however, users can show their interest in products and services in other ways such as using either “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 (Liu 2007), it can have recommendation effects on the other members (Ebermann et al. 2011). For instance, location based services such as Facebook “Check-in” allows the users to share information about the places they have visited and appears on their news feed. A user’s timelines shows his/her consumption behavior and interest toward certain products and services. This has a potential to influence the decision making of other SNS users (Keenan and Shiri 2009; Luarn et al. 2015; Okazaki 2009). Consequently, businesses try to persuade consumers to like or share their brands on Facebook as it can affect other users’ decision making process. A 2012 report shows that almost 90% of Facebook users have “Liked” at least one brand on Facebook and 69% have “Liked” a brand because a friend in their network had liked it (PurelyBranded.com 2012).

In this study, we use the term explicit eWOM to refer to eWOM proliferated through the written text format. We also use the term implicit eWOM to refer to eWOM that shows users’ preferences in other ways such as “Like” and “Check-in”. To the best of our knowledge, despite the potential impact of the implicit eWOM, its adoption is largely overlooked by past studies. Past studies on eWOM adoption look into the adoption process through the cold and cognitive based reasoning perspective (Fang 2014). These studies aim to explain the adoption process by using theoretical lens of dual process theories and elaboration likelihood model (ELM) (Cheung et al. 2012; Cheung et al. 2009). The core reason behind using those theories is the fact that people adopt eWOM by evaluating both its central argument as well as the heuristic cues about its source (Cheung et al. 2012; Cheung et al. 2009). In Facebook, however, cognitive based theories alone do not provide essential intuition about eWOM adoption (Fang 2014; Yang et al. 2013). In other words, because the adoption of implicit eWOM is not associated with rational processing of the argument embodied in the review text, the cold and cognitive based theories, such as ELM, are not suitable to address this problem. This study fills this gap by adapting the theoretical lens of affect-as-information theory (Forgas and George 2001; Clore and Tamir 2002; Forgas and George 2001; Zadra and Clore 2011) and taking into account the role of social relationship variables to explain the adoption of implicit eWOM. To this end, this study aims to address the following question:

RQ: What are the antecedents of the adoption of eWOM in Facebook?

The remainder of this paper is structured as follows. The next section discusses the suitability of affect-as-information as theoretical promise of this study. In the hypotheses section, the research model and the related hypotheses are presented. In the research methodology section, we discuss about the data collection, measurements, and report the data analysis results. Next, we discuss our empirical findings in the discussion section. The theoretical and practical implications of this study are discussed in the contribution section. Finally, the limitations of this research are stated in the limitation section.

Theoretical foundation

The role of emotions in adoption of Information Technology has been studied by past research (e.g., Wang et al. 2016; Kim and Lennon 2013; Beaudry and Pinsonneault 2010). For instance, discrete emotions such as excitement, happiness, anger, and anxiety were recognized as the driver of IT use (Beaudry and Pinsonneault 2010). Emotions also play an important role in stimulating consumers' shopping behavior in online retailers' website {Pappas, 2016 #4}. These findings suggest that humans' affective state can influence the way people perceive their surroundings. The affective state can impact humans' assessment regarding the consequences of potential actions and decisions (Zadra and Clore 2011). Based on the affect-as-information theory, emotion is the foundation of target evaluation. Evaluators ask themselves "how they feel" about the target and use it as a method to make a decision (Clore and Tamir 2002). Pleasant and unpleasant feelings can easily trigger positive and negative attitude about the target in mind. Depending on the personality and the type of judgment, the emotional state can lead to doubt or confidence in evaluation of target object. According to the affect-as-information theory, people utilize their emotional state as a shortcut for evaluating the target in terms of social behavior. This process is very common when quick judgment or heuristic processing are required (Forgas 1995).

Arousal and valence are considered as two dimensions of affective experience (Storbeck and Clore 2008). The former provides information about urgency and importance while the latter provides information about the value of target object. Based on the affect-as-information theory, if someone is aroused or pleased then he/she is inclined to have more positive judgments regarding the target task or object. In this study we focus on the arousal dimension. Because, arousal can impact human's perception about an issue, necessity of showing prompts responses, importance, and relevance of an occasion. The source of arousal, which can be either relevant or irrelevant to the object of judgment, highly impacts behaviors of a respondent (Storbeck and Clore 2008).

Affect-as-information theory has been utilized to investigate the impact of affect and mood of employees' on their judgments and decision making in organizational setting (Forgas and George 2001). It has also been used to justify the impact of website's atmosphere on users' approach toward the website (Eroglu et al. 2003). Because most of the eWOM studies revolve around explicit eWOM, few previous studies have used the affect-as-information theory as their theoretical lens. However, theory has great explanatory power when it comes to investigating the role of implicit eWOM. Affect-as-information theory was utilized in eWOM context. In an study by Söderlund and Rosengren (2007) the impact of negative and positive eWOM from current customers on potential customers was investigated. The study indicates that emotional status of both senders and receivers have a high impact on the eWOM influence process. Another study by Fang (2014), discussed the importance of considering affective aspects in eWOM setting. It shows that arousal as a dimension of affect can highly impact adoption of eWOM among SNS users and affective stimuli and arousal can enhance the receivers' perception regarding the relevance, urgency, and importance of an event or object. Consistent with (Fang 2014) study we focus on arousal dimension of affect-as-information theory.

Hypothesis Development

Most previous eWOM studies use elaboration likelihood model as their theoretical lens (Cheung et al. 2012; Cheung et al. 2009). According to ELM, both central and peripheral cues of eWOM impact the attitude of the consumers about a review. Thus, the adoption of eWOM in those studies is associated with the cold and reason-based arguments that can change the cognitive attitude of the consumers and influence eWOM adoption. While cognitive attitude is associated with the elaboration of explicit eWOM, affective attitude is associated with the emotions triggered by interpersonal relationship (Fang 2014). According to affect-as-information theory, the triggered emotions can provide valuable evaluative information and derive behavioral intention. A study of eWOM on online forums shows that users' emotional attitude regarding the use of online forums derives eWOM intentions among the forum members (Shih et al. 2013). In the context of SNS, the level of emotions resulted from reading online reviews is one of the drivers of eWOM adoption in Facebook (Fang 2014). In addition to reading online reviews (explicit eWOM), Facebook users are often exposed to information about brands and products via their friends' "Like" and "Check-in". Thus in line with affect-as-information theory, the emotions

triggered by exploring those “Likes” and “Check-ins” can influence the behavioral intention to adopt implicit eWOM. Therefore, we put forth the following hypothesis:

H₁: Affective attitude has a positive impact on adoption of implicit eWOM.

In offline settings, the degree of overlap between two individual’s friendship network is associated with the strength of their ties to one another (Granovetter 1973). 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 (Brown and Reingen 1987). People have a wide range of social networks to search for information which includes both strong ties, such as family members and close friends, and weak ties such as acquaintances. However, dynamic information-seeking and product referral is more likely to happen among strong ties (Brown and Reingen 1987).

Similar to the offline environment, in online settings such as SNS, the degree of social relationships vary between members, and it can also be classified as either strong or weak (Chu and Kim 2011). The perceived tie strength based on both strong and weak ties established via SNS motivates consumers to communicate with one another and disseminate product-related information (Chu and Kim 2011). Although both strong and weak ties contribute to propagation of eWOM in SNS, past studies show that weak ties exert an impact by extending consumers’ personal network to external communities. On the other hand, strong ties utilize a more important impact at the individual and small group level; therefore, similar to the offline environment, information-seeking and referral behavior is more likely to happen among strong ties (Chu and Kim 2011). In fact, consumers trust the online discussions of information posted by their online friends who are perceived to have a strong social relationship with more than the information posted by those who are perceived to have a weak social relationship with each other (Pan and Chiou 2011). Thus, we suggest the following hypothesis:

H₂: Tie strength has a positive impact on affective attitude toward implicit eWOM.

According to the attribution theory (Folkes 1988), the consumers’ decision to use product reviews is based on their underlying inference about reviewers’ intentions for posting the review (Sen and Lerman 2007). Readers’ perception about the reviewers’ intentions in recommending a product or service can be classified as either internal (self-serving reasons) or external (product-related reasons) (Lee and Youn 2009). If the derived reviewers’ intentions are related to product (external), consumers perceive the review as helpful. On the other hand, if the inferred intentions are self-serving (internal), consumers will discount the review (Sen and Lerman 2007).

While attribution theory (Folkes 1988) is mainly examined in the context of online consumer review websites, it can also provide the explanatory power on the adoption of implicit eWOM in SNSs. In Facebook, social identity and relationships of users has been identified as the main focus of SNS, particularly Facebook (Svensson 2011). Facebook users often tend to increase their social identity and present an ideal picture of themselves rather than the reality (Casteleyn et al. 2009). Image building is used by people who intend to control published content to match the ideal image they have created. Social image is a vital asset that Facebook users can use to maintain and enhance their status within their network. Presenting an idyllic image of oneself on Facebook can happen through various channels. It can happen either explicitly through posting status updates or implicitly by checking into places and liking Facebook pages (Keenan and Shiri 2009). Past studies show that Facebook users share their location information as an indirect (i.e., implicit) way to enhance their self-presentation and conduct image building so that they appear more appealing to others in the social network. Thus, it is less likely that people recommend a product that damage their social image either explicitly or implicitly.

In line with attribution theory (Folkes 1988), consumers may attribute the emotions internally (i.e., to reviewer’s personal dispositions) or externally (i.e., to the reviewed product). Thus, promoting a product and brand on Facebook to build a social image would be considered as internal reasoning and Facebook users would discount that type of eWOM. Moreover, eWOM can fall short if it is perceived to be communicated for intended reasons (Svensson 2011). If eWOM is “too good” and perceived to communicate the desired personality of the sender, it reduces the credibility of the sender and consequently makes the message less reliable or even cause it to get rejected. Consistently, it is plausible to argue that Facebook users are also less excited to check the implicit eWOM delivered through either “Like” or “Check-in” from the friends who are perceived to use Facebook for image building. Thus, we put forth the following hypothesis:

H₃: Image building has a negative impact on affective attitude toward implicit eWOM.

The level of social presence in Facebook is not only determined by the functional capability of Facebook but also the amount of time and energy spent by Facebook users (Shen et al. 2014). level of consumers' engagement with the medium moderates the affective characteristics of the medium on the consumers' arousal (Shen et al. 2014). Because social presence and intrinsic motivation are the drivers of Facebook use (Kaplan and Haenlein 2010), it is likely that Facebook users are affected by their perceived social relationship with other members. For instance, people who are more engaged with Facebook might have a better understanding of the members who use Facebook to build their social image. Therefore, the negative impact of the social tie might be more salient for them. Similarly, it is more likely for highly engaged users to get excited by the close friends' posts and be engaged in commenting, liking, or browsing their posts. Therefore, we posit that:

H₄: The effect of tie strength on affective attitude toward implicit eWOM is moderated by engagement. The effect will be stronger for highly engaged users than less engaged users.

H₅: The effect of image building on affective attitude toward implicit eWOM is moderated by engagement. The effect will be stronger for highly engaged users than less engaged users.

Research Methodology

Measurement of constructs

The scales used in this study were adapted from previous literature. Image building defined as the degree to which someone perceives his/her friends use Facebook to build social image. Image building is measured by two items adapted from (Luarn et al. 2015). Tie Strength reflects the degree of closeness and importance of members in Facebook and is measured by three items (Chu and Kim 2011). Affective attitude reflects the feeling of individuals through sharing product and brand's information through Facebook "Check-in" and "Like" and it is measured by four items (Fang 2014). Implicit eWOM adoption reflects the degree to which someone believes brand and product information shared through friends' "Check-in" and "Like" persuades him/her to try the product (Fang 2014). Engagement is defined as degree to which Facebook holds user's attention and attracts him/her to it for intrinsic reward (Webster and Ahuja 2006). Table 1 shows the measurement of our constructs.

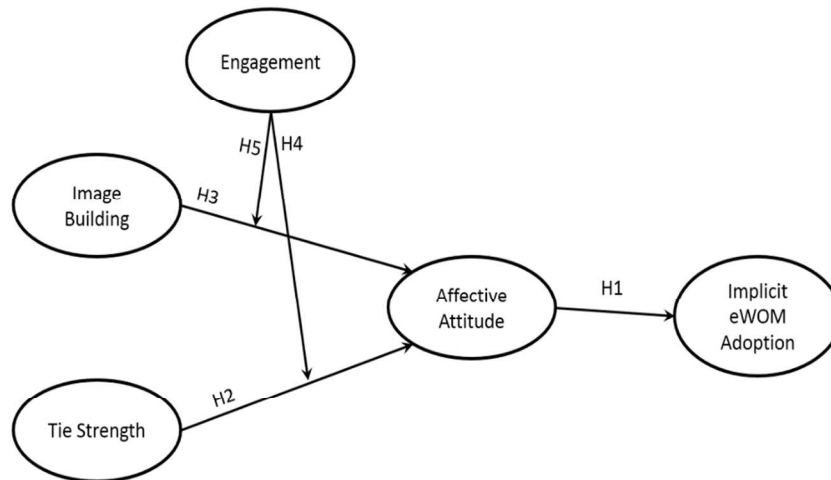


Figure 1: Research Model

Data collection

We used survey to collect data from students of two large public universities in the west region of the United States. The instrument was pilot-tested with a sample of 50 university students with appropriate knowledge and experience of using SNS to assess the face and content validity of 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 needed to execute the research plan. Empirical data for hypothesis testing were collected from business major undergraduate students. Students received extra credit for their participation. A total of 226 responses were collected. After removing incomplete answers, we ended up with a sample of 211 data points, indicating a usable sample rate of 93%.

Construct	Items	Reference
Image Building	He/she uses Facebook to shape the impression of himself/herself He/she uses Facebook to build image of himself/herself	(Luarn et al. 2015)
Tie Strength	He/she is important to me He/she is close to me I contact him/her frequently	(Chu and Kim 2011)
Engagement	The product/service was exciting The product/service was relevant to me The product/service interests me a lot The product/service was important to me	(Webster and Ahuja 2006)
Affective Attitude	When I see friends share information about products /services on Facebook by using “Like” or “Check-in” I’m excited I’m frenzied I’m wide awake I am bored	(Fang 2014)
Implicit eWOM adoption	I want to try the product/ service that my friend “Check-in” or “Like” I consider the product/ service that my friend “Check-in” or “Like” The information provided about the product/service through my friend’s “Check-in” or “Like” persuade me to try the product. The information provided through my friend’s “Check-in” or “Like” increases my awareness about the product/service.	(Fang 2014)

Table 1: Measurement items

Data Analysis and Results

We use partial least squares (SmartPLS version 2.0.M3) 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 (Chin 1998a; Chin 1998b; Chin et al. 2003). SmartPLS reports composite reliability (CR) and average variance extracted (AVE) for content validity and discriminant validity.

Measurement Model Analysis

In order to focus on the psychometric properties of the measurement model, this study examined the composite reliability, convergent validity, and discriminant validity of the constructs. Convergent validity can be assessed by examination of the measurement model loadings. The loadings, once deemed consistent with the underlying construct, were used to assess internal consistency and average variance extracted (AVE). Convergent and discriminant validity is adequate for constructs modeled using two or more reflective indicators when: (1) all the constructs’ AVE values are above 0.5, and (2) item loadings exceed 0.70 and load more highly on the constructs they are intended to measure (Chin 1998a; Chin 1998b). Table 2 shows composite reliability, average variance extracted, and Cronbach’s alpha. The composite reliability of the constructs were above the recommended benchmark of 0.7 (Barclay et al. 1995; Chin 1998a; Chin 1998b). All of the constructs’ AVE values were above the recommended level of 0.5 (Chin 1998a; Chin 1998b). Therefore, we found the measurement model’s convergent validity to be

satisfactory. Table 2 shows the square root of the AVE value for each construct exceeds the correlation between that construct and other constructs (Chin 1998a; Chin 1998b; Fornell and Larcker 1981), thus providing evidence for discriminant validity.

	Cronbach's Alpha	Composite Reliability	AVE	Engagement	Image Building	Tie Strength	Affective Attitude	Implicit eWOM Adoption
Engagement	0.951	0.962	0.836	0.914				
Image Building	0.949	0.975	0.951	-0.524	0.975			
Tie Strength	0.957	0.972	0.921	0.579	-0.497	0.960		
Affective Attitude	0.926	0.948	0.820	0.792	-0.587	0.584	0.906	
Implicit eWOM Adoption	0.936	0.954	0.839	0.695	-0.462	0.694	0.678	0.916

Table 2: Reliability, Convergent Validity and Discriminate Validity

Results

The analysis shows that affective attitude toward implicit eWOM significantly influences adoption of *implicit* eWOM ($b=0.674$, $p\text{-value}<0.05$) thus H1 is supported. Tie strength has a significant positive impact on affective attitude toward implicit eWOM ($b= 0.288$, $p\text{-value} < 0.05$). Hence, H2 is supported. Image building is significantly related to affective attitude toward implicit eWOM ($b=-0.153$, $p\text{-value}<0.05$) thus providing support for H3. Our results also support the moderating role of engagement on the effects of tie strength and image building on affective attitude thus supporting H4 and H5. Overall, the model explains 74.7% of variance in the affective attitude toward implicit eWOM and 46.8% of variance in implicit eWOM adoption.

Discussion

Although online consumer review websites are the major platform of eWOM communication, emergence of SNS has opened a new avenue both for consumers and marketers to review and share brand/product related information. To this end, this study highlights the differences between SNS and the conventional platform of eWOM communication. In particular, we argue that while the explicit eWOM (i.e. the eWOM delivered through review text) is common across all the platforms of eWOM communication, the implicit eWOM is only salient on SNS. Past studies show that the information available in the profile of users of SNS such as products/services they “Like” or the places that they “Checked-in” may influence the decision making of the peers in the SNS (Luarn et al. 2015). Thus, the implicit eWOM adoption term that is used in this study reflects the eWOM via “Like” or “Check-in” mechanisms on Facebook. By adapting the theoretical lens of affect-as-information theory (Forgas, 2001; Clore and Tamir 2002; Forgas and George 2001; Zadra and Clore 2011), our results show that the social relationship variables play an important role in adoption of implicit eWOM by impacting the affective attitude of individuals toward implicit eWOM. Our results indicate that using Facebook for image building has a negative impact on receivers’ affective attitude toward implicit eWOM. The eWOM delivered through close ties has a positive impact on the affective attitude of individuals about eWOM. Our results also show that impact of tie strength and image building on affective attitude toward implicit eWOM is higher for highly engaged individuals.

Contributions

The results of this study have important contributions for both theory and practice. In terms of theoretical contribution, our study highlights the role of affect-as-information theory (Clore and Tamir 2002) in explaining adoption of implicit eWOM. Past eWOM studies use the cold and reasoned based theories such as dual process theories and elaboration likelihood model to examine adoption of eWOM (Cheung et al. 2012; Cheung et al. 2009). This is because the focus of those studies was only on the eWOM delivered through online reviews and how the central and peripheral cues eWOM are processed through cognitive based reasoning. However, the implicit eWOM on Facebook is not associated with the textual reviews, therefore, the reason based theories are not suitable to explain the implicit eWOM adoption. Consistent with affect-as-information theory, our study shows that social tie strength influences the affective attitude

of individuals about the implicit eWOM and consequently impact the adoption of eWOM. This study provides an evidence for importance of affect-as-information theory for explaining implicit eWOM adoption.

In terms of practical contribution, our results show that businesses should realize that importance of social relationship among the Facebook members. Based on our finding, Facebook users' discount the eWOM delivered through the peers that use Facebook for building a social image. On the other hand, Facebook members are more excited to check the posts by their close ties and are more likely to accept the implicit eWOM propagated through them. Thus, companies should tailor their social media marketing strategy to find the influential nodes in the SNS.

Limitations

One of the major limitations of this study is the generalizability of the results due to the use of university student samples. While previous studies have shown that students are a good representative of the population in empirical studies on SNS, and they constitute the major percentage of Facebook users (Chu and Kim 2011; Mangold and Faulds 2009), the generalizability of our findings should be applied with caution. Our sample also lacks cultural and language diversity, which may limit its generalizability to other cultures. Language, as the vehicle for the message, has a significant effect on the perception of the receiver. Hence, adoption of implicit eWOM may be different across diverse languages.

References

- Awad, N.F., and Ragowsky, A. 2008. "Establishing Trust in Electronic Commerce through Online Word of Mouth: An Examination across Genders," *Journal of Management Information Systems* (24:4), pp. 101-121.
- Barclay, D., Higgins, C., and Thompson, R. 1995. "The Partial Least Squares (Pls) Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration," *Technology studies* (2:2), pp. 285-309.
- Beaudry, A., and Pinsonneault, A. 2010. "The other Side of Acceptance: Studying the Direct and Indirect Effects of Emotions on Information Technology Use," *MIS quarterly* (34:4), pp.689-710.
- Brown, J.J., and Reingen, P.H. 1987. "Social Ties and Word-of-Mouth Referral Behavior," *Journal of Consumer research*, pp. 350-362.
- Casteleyn, J., Mottart, A., and Rutten, K. 2009. "How to Use Data from Facebook in Your Market Research," *International Journal of Market Research* (51:4), pp. 439-447.
- Cheung, C.M.-Y., Sia, C.-L., and Kuan, K.K. 2012. "Is This Review Believable? A Study of Factors Affecting the Credibility of Online Consumer Reviews from an Elm Perspective," *Journal of the Association for Information Systems* (13:8), p. 618.
- Cheung, M.Y., Luo, C., Sia, C.L., and Chen, H. 2009. "Credibility of Electronic Word-of-Mouth: Informational and Normative Determinants of on-Line Consumer Recommendations," *International Journal of Electronic Commerce* (13:4), pp. 9-38.
- Chin, W.W. 1998a. "Commentary: Issues and Opinion on Structural Equation Modeling." JSTOR.
- Chin, W.W. 1998b. "The Partial Least Squares Approach to Structural Equation Modeling," *Modern methods for business research* (29:2), pp. 295-336.
- Chin, W.W., Marcolin, B.L., and Newsted, P.R. 2003. "A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and an Electronic-Mail Emotion/Adoption Study," *Information systems research* (14:2), pp. 189-217.
- Chu, S.-C., and Choi, S.M. 2011. "Electronic Word-of-Mouth in Social Networking Sites: A Cross-Cultural Study of the United States and China," *Journal of Global Marketing* (24:3), pp. 263-281.
- Chu, S.-C., and Kamal, S. 2008. "The Effect of Perceived Blogger Credibility and Argument Quality on Message Elaboration and Brand Attitudes: An Exploratory Study," *Journal of Interactive Advertising* (8:2), pp. 26-37.
- Chu, S.-C., and Kim, Y. 2011. "Determinants of Consumer Engagement in Electronic Word-of-Mouth (Ewom) in Social Networking Sites," *International Journal of Advertising* (30:1), pp. 47-75.
- Clore, G.L., and Tamir, M. 2002. "Affect as Embodied Information," *Psychological Inquiry* (13:1), pp. 37-45.
- Cooper, S. 2015. "Facebook Is Leading the Way in Social Commerce."

- Ebermann, J., Stanoevska-Slabeva, K., and Wozniak, T. 2011. "Influential Factors of Recommendation Behaviour in Social Network Sites-an Empirical Analysis," *ECIS*.
- eMarketer.com. 2014. "Facebook Is No. 1 for Social Commerce."
- Eroglu, S.A., Machleit, K.A., and Davis, L.M. 2003. "Empirical Testing of a Model of Online Store Atmospherics and Shopper Responses," *Psychology & Marketing* (20:2), pp. 139-150.
- Fang, Y.-H. 2014. "Beyond the Credibility of Electronic Word of Mouth: Exploring Ewom Adoption on Social Networking Sites from Affective and Curiosity Perspectives," *International Journal of Electronic Commerce* (18:3), pp. 67-102.
- Folkes, V.S. 1988. "Recent Attribution Research in Consumer Behavior: A Review and New Directions," *Journal of Consumer research*, pp. 548-565.
- Forgas, J.P. 1995. "Mood and Judgment: The Affect Infusion Model (Aim)," *Psychological bulletin* (117:1), p. 39.
- Forgas, J.P., and George, J.M. 2001. "Affective Influences on Judgments and Behavior in Organizations: An Information Processing Perspective," *Organizational behavior and human decision processes* (86:1), pp. 3-34.
- Fornell, C., and Larcker, D.F. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of marketing research*, pp. 39-50.
- Granovetter, M.S. 1973. "The Strength of Weak Ties," *American journal of sociology*, pp. 1360-1380.
- Gupta, P., and Harris, J. 2010. "How E-Wom Recommendations Influence Product Consideration and Quality of Choice: A Motivation to Process Information Perspective," *Journal of Business Research* (63:9), pp. 1041-1049.
- Hennig-Thurau, T., Gwinner, K.P., Walsh, G., and Gremler, D.D. 2004. "Electronic Word-of-Mouth Via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?," *Journal of Interactive Marketing* (18:1), pp. 38-52.
- Kaplan, A.M., and Haenlein, M. 2010. "Users of the World, Unite! The Challenges and Opportunities of Social Media," *Business Horizons* (53:1), pp. 59-68.
- Keenan, A., and Shiri, A. 2009. "Sociability and Social Interaction on Social Networking Websites," *Library Review* (58:6), pp. 438-450.
- Kim, J., and Lennon, S. J. 2013. "Effects of Reputation and Website Quality on Online Consumers' Emotion, Perceived Risk and Purchase Intention: Based on the Stimulus-Organism-Response Model," *Journal of Research in Interactive Marketing*, 7(1), pp.33-56.
- Lee, J., and Lee, J.-N. 2009. "Understanding the Product Information Inference Process in Electronic Word-of-Mouth: An Objectivity-Subjectivity Dichotomy Perspective," *Information & Management* (46:5), pp. 302-311.
- Lee, J., Park, D.-H., and Han, I. 2008. "The Effect of Negative Online Consumer Reviews on Product Attitude: An Information Processing View," *Electronic commerce research and applications* (7:3), pp. 341-352.
- Lee, M., and Youn, S. 2009. "Electronic Word of Mouth (Ewom) How Ewom Platforms Influence Consumer Product Judgement," *International Journal of Advertising* (28:3), pp. 473-499.
- LePage, E. 2015. "A Long List of Social Media Advertising Stats," in: *hootsuite*.
- Liu, H. 2007. "Social Network Profiles as Taste Performances," *Journal of Computer-Mediated Communication* (13:1), pp. 252-275.
- Luarn, P., Yang, J.-C., and Chiu, Y.-P. 2015. "Why People Check in to Social Network Sites," *International Journal of Electronic Commerce* (19:4), pp. 21-46.
- Mangold, W.G., and Faulds, D.J. 2009. "Social Media: The New Hybrid Element of the Promotion Mix," *Business horizons* (52:4), pp. 357-365.
- Okazaki, S. 2009. "Social Influence Model and Electronic Word of Mouth: Pc Versus Mobile Internet," *International Journal of Advertising* (28:3), pp. 439-472.
- Pan, L.-Y., and Chiou, J.-S. 2011. "How Much Can You Trust Online Information? Cues for Perceived Trustworthiness of Consumer-Generated Online Information," *Journal of Interactive Marketing* (25:2), pp. 67-74.
- Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Chrissikopoulos, V. 2016. "Explaining online shopping behavior with fsQCA: The role of cognitive and affective perceptions," *Journal of Business Research*, (69:2), pp. 794-803.

- Park, D.-H., Lee, J., and Han, I. 2007. "The Effect of on-Line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement," *International Journal of Electronic Commerce* (11:4), pp. 125-148.
- PurelyBranded.com. 2012. "Why People 'Like' and 'Unlike' Brands on Facebook."
- Riegner, C. 2007. "Word of Mouth on the Web: The Impact of Web 2.0 on Consumer Purchase Decisions," *Journal of advertising research* (47:4), pp. 436-447.
- Sen, S., and Lerman, D. 2007. "Why Are You Telling Me This? An Examination into Negative Consumer Reviews on the Web," *Journal of Interactive Marketing* (21:4), pp. 76-94.
- Shen, Y., Chan, H., and Hung, I. 2014. "Let the Comments Fly: The Effects of Flying Commentary Presentation on Consumer Judgment,"
- Shih, H.-p., Lai, K.-h., and Cheng, T. 2013. "Informational and Relational Influences on Electronic Word of Mouth: An Empirical Study of an Online Consumer Discussion Forum," *International Journal of Electronic Commerce* (17:4), pp. 137-166.
- Söderlund, M., and Rosengren, S. 2007. "Receiving Word-of-Mouth from the Service Customer: An Emotion-Based Effectiveness Assessment," *Journal of retailing and consumer services* (14:2), pp. 123-136.
- Storbeck, J., and Clore, G.L. 2008. "Affective Arousal as Information: How Affective Arousal Influences Judgments, Learning, and Memory," *Social and Personality Psychology Compass* (2:5), pp. 1824-1843.
- Sun, T., Youn, S., Wu, G., and Kuntaraporn, M. 2006. "Online Word-of-Mouth (or Mouse): An Exploration of Its Antecedents and Consequences," *Journal of Computer-Mediated Communication* (11:4), pp. 1104-1127.
- Svensson, A. 2011. "Facebook—the Social Newspaper That Never Sleeps—a Study of Facebook Ewom's Persuasiveness on the Receivers,"
- Wang, W., Qiu, L., Kim, D., and Benbasat, I. 2016. "Effects of Rational and Social Appeals of Online Recommendation Agents on Cognition-and Affect-based Trust," *Decision Support Systems*.
- Webster, J., and Ahuja, J.S. 2006. "Enhancing the Design of Web Navigation Systems: The Influence of User Disorientation on Engagement and Performance," *MIS quarterly*, pp. 661-678.
- Yang, C.C., Tang, X., Dai, Q., Yang, H., and Jiang, L. 2013. "Identifying Implicit and Explicit Relationships through User Activities in Social Media," *International Journal of Electronic Commerce* (18:2), pp. 73-96.
- Zadra, J.R., and Clore, G.L. 2011. "Emotion and Perception: The Role of Affective Information," *Wiley interdisciplinary reviews: cognitive science* (2:6), pp. 676-685.