



A social commerce investigation of the role of trust in a social networking site on purchase intentions



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ABSTRACT

Trust is a crucial issue in online shopping environments, but it is more important in social commerce platforms due to the salient role of peer-generated contents. This article investigates the relationship between trust in social commerce and purchase intentions and describes a mechanism to explain this relationship. We propose a main and two alternative models by drawing on three concepts: social commerce information seeking, familiarity with the platform, and social presence. The models clarify the mechanisms through which trust, familiarity, social presence, and social commerce information seeking influence behavioral intentions on social commerce platforms. Findings from a survey of Facebook users indicate that trust in a social networking site (SNS) increases information seeking which in turn increases familiarity with the platform and the sense of social presence. Moreover, familiarity and social presence increase purchases intentions. Findings indicate that the main model fits the data better than the alternative ones. Theoretical and managerial implications are discussed.

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1. Introduction

Social commerce is the application of Web 2.0 features, such as content generation tools, for the enhancement of users' interactions in e-commerce (Liang, Ho, Li, & Turban, 2011). The difference between social commerce (e.g. Starbucks Facebook and Toms' Twitter) and e-commerce (e.g. Alibaba) is that the former involves communities and conversation among members, while the latter mainly focus on individuals and one-to-one interactions to create value (Huang & Benyoucef, 2013). Web 2.0 technologies, as the basis of social media and social networking sites (SNSs, e.g. LinkedIn, Facebook, and Twitter), facilitates the acquisition of products through supporting users' interactions and contributions (Liang & Turban, 2011). According to the *Financial Times*, social commerce usage increased by >500% between 2007 and 2008 and social commerce firms are growing their venture capital financing substantially (Stephen & Toubia, 2010). Social commerce made positive changes internationally as well, as >300 social commerce Korean firms created sales of \$300–500 million in 2011 (Kim & Park, 2013). This growing popularity has led to the expansion of investments in social commerce for 88% of businesses (Huang & Benyoucef, 2013).

Several retailers (e.g. Armani Exchange, Toms', and Samsung) and service providers (e.g. insurance, airlines, and banks) successfully used social commerce to enhance their businesses. However, some firms failed in their social commerce strategies (e.g. Walmart) and there have been numerous complaints about trust, security, and privacy in information exchange (Liang & Turban, 2011; Kim & Pak, 2013). Trust – a belief in the reliability, truth, and ability of the exchange party – is recognized as one main reason customers refrain from electronic purchases (e.g. Gefen, 2000). However, given the context of social commerce, users are notified about a product on SNSs and may engage in purchases. Thus, trust in the SNS and embedded content provided by peers could increase the users' purchase intentions from an e-vendor. Recently Kim & Park (2013) indicated that *trust in social commerce firms* (e.g. Amazon.com) directly enhanced purchase and word-of-mouth intentions. However, few research papers in the context of social commerce, if any, indicate whether *trust in SNSs* influences users' purchase intentions from e-vendors? Moreover, if there is any relationship, which mechanism carries the effects of trust on purchase intentions?

Answering these questions and providing explanations for the relationship between trust and purchase intentions from an e-vendor on a SNS, a model is proposed based on three concepts: 1) social commerce information seeking (i.e. acquiring information from the information channels in a social commerce platform); 2) familiarity with a platform (i.e. comprehension of the platform's features and procedures); and 3) social presence (i.e. the sense of warmth and sociability within the

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platform). The channels of information exchange have evolved through the emergence of SNSs. Given the context of social commerce, users may seek information about a product through various channels, including peer recommendations, reviews and ratings, and forums and communities (Hajli & Sims, 2015). Despite this, Van Der Heide & Lim (2015) indicated that users familiar with SNSs more likely rely on peer-generated contents, which could motivate their purchase intentions on social commerce platforms. Moreover, information seeking, together with the social presence in SNSs – the feeling of ‘warmth’ and ‘being there’ – could increase users’ purchase intentions.

Taking different frameworks into consideration, we propose two alternative models. Using 201 Facebook users, we test the main model as well as the alternative models by taking advantage of two structural equation modeling methods (partial least square and covariance-based). The results of the model fit and model selection analyses indicated that the main model outperforms the alternative ones. This study highlights the importance of trust in social commerce and provides recommendations to managers.

2. Conceptual framework

2.1. Social commerce

Social commerce is now well-established in the marketing literature (e.g. Huang & Benyoucef, 2013); however, further clarifications could be helpful. Social commerce refers to “the delivery of e-commerce activities and transactions via the social media environment, mostly in social networks and by using Web 2.0 software. Thus, social commerce is a subset of e-commerce that involves using social media to assist in e-commerce transactions and activities” (Liang & Turban, 2011, p. 6). Similarly, Stephen & Toubia (2010) define social commerce as “forms of Internet-based social media that allow people to participate actively in the marketing and selling of products in online marketplaces and communities” (p. 215). Social media, such as Facebook, Twitter, and LinkedIn, provide people with a network connectivity which enables their participation in online marketing and sales activities.

In social commerce, a network of interactions among actors is the main source of value, while in e-commerce, the facilitation of connections among buyers and sellers is the basis for value co-creation (i.e. integration of resources among actors in a value network). In line with Vargo & Lusch (2016) recent modifications on fundamental premises of service dominant logic, resource (i.e. knowledge and information) integration in social commerce is executed among “multiple actors” (i.e. institutions, business, people, and organizations), rather than a dyadic co-creation among a customer and a firm in e-commerce platforms (Liang & Turban, 2011). Social commerce facilitates the exchange of operant resources (i.e. nonphysical, information, ideas, and knowledge) among multiple actors outside the market, leading to the integration of operand resources (i.e. physical, money, and products) between the buyer and the seller.

Social commerce consists of four layers from inner to outer, including individual (personal profile/activity), conversation (information exchange), community (support and connection), and commerce (purchase) (Huang & Benyoucef, 2013). Social commerce incorporates all layers to co-create value among multiple actors, while e-commerce only considers the inner layer (individual) and outer layer (commerce). For example, the main goal of Alibaba (www.alibaba.com) – the world’s largest e-commerce company – is commerce and interactions that are basically limited to one-one communications among buyers and sellers. In this context, there are few interactions/conversations among customers as well as communities, if any.

Two types of social commerce are found in the literature (Huang & Benyoucef, 2013). The first is inherently based on e-commerce websites, such as Amazon (www.amazon.com), equipped by Web 2.0 tools in order to enhance customers’ content generation and the interactivity among them. This type of social commerce limits interactions

among customers to posting comments on other customers’ reviews, which cannot be expanded further, such as adding other customers, sending private messages, or creating communities. The second category, which is the target of this study, is based on a Web 2.0 platform that incorporates e-commerce features, such as the Armani Exchange page in Facebook. These social commerce platforms, such as Facebook and Twitter, provide various channels of C2C and B2C connections and enable the co-creation of contents in multiple forms by both e-vendors and customers. E-vendors are able to create and co-create their pages with the help of users, upload pictures, videos, news, and promotions on their pages and all over the social commerce platform and interact with customers in various ways. Customers are also able to comment on, rate, react to, and share (pictures, videos, and news) an e-vendor or a product on the platform and interact with the e-vendor and other customers.

2.2. Trust

Trust is a key concept in interactions and important for companies in developing bonds with sellers (e.g. Gefen, Karahanna, & Straub, 2003b). Schurr & Ozanne (1985) define trust as one’s confidence on the exchange party’s capability and willingness to establish the business’ adherence to the relationship norms, and keeping promises. Ba & Pavlou (2002) posit that trust is an individual’s belief that an exchange will happen in a manner consistent with one’s confident expectations. Trust is viewed as a unidimensional or a multidimensional concept (Gefen, 2002). However, a better understating of trust benefits from the recognition of its dimensions. Cognitive and affective trusts are the major types of trust (Aiken & Boush, 2006). Cognitive trust is the customer’s belief in and willingness of dependency on an exchange partner’s ability and consistency. Affective trust is a customer’s belief about a firm’s level of care and concerns based on emotions (Kim & Park, 2013). Both cognitive and affective trusts contain dimensions of credibility (one’s belief that the exchange party is reliable) and benevolence (beliefs that the exchange partner is motivated by seeking joint gain; Aiken & Boush, 2006). In this article, trust is the sense of trusting beliefs, referring to the beliefs that “one can rely upon a promise made by another and that the other, in unforeseen circumstances, will act toward oneself with goodwill and in a benign fashion” (Suh & Han, 2003, p. 137). In online contexts, trust is based on beliefs in the trustworthiness of an exchange party and the characteristics of competence, integrity, and benevolence (McKnight, Choudhury, & Kacmar, 2002). Given the context of social commerce, uncertainty is usually higher due to the high level of user-generated contents and the lack of face-to-face interactions (Featherman & Hajli, 2015). Despite this, the enhancement of experience with exchange parties could reduce the uncertainty and increase tendencies for online commerce adoption through the increase in trust (Gefen & Straub, 2004).

The lack of face-to-face interactions could result in customers’ suspicion of truthfulness in online exchanges and the paucity of knowledge about the e-vendor could further heighten the adverse influence of risk in online shopping (Kaiser & Müller-Seitz, 2008). Kim & Park (2013) investigate the antecedents of trust and its direct effects on purchase intentions and word-of-mouth intentions on social commerce platforms. Seven social commerce characteristics are identified as the key antecedents of trust: reputation, size, information quality, transaction safety, communication, economic feasibility, and word-of-mouth referrals. It is noteworthy that trust in the website can be facilitated by customer reviews and experiences posted in forums and communities.

3. Hypothesis development

3.1. Purchase intention: the effects of trust

Purchase intentions in social commerce contexts refer to the customers’ intentions to engage in online purchases from e-vendors on

SNSs. Intentions are the determinants of behavior and defined as “the strength of one’s intentions to perform a specific behavior” (Fishbein & Ajzen, 1975, p.288).

Previous literature indicates that the purchase from an e-vendor depends on customer trust in the e-vendor (Gefen, Karahanna, & Straub, 2003a). We propose that trust in a SNS could increase customers’ purchase intentions. SNSs as social commerce platforms bring customers into contact with e-vendors and provide the facilities for the value exchange between the parties. On the SNS, customers encounter advertisements, pictures/videos/news, recommendations and Likes related to the e-vendors. However, trust in the SNS, as the platform, could determine the customer’s reliance on the credibility of the contents and of the e-vendors’ activities. In line with the categorization of trusting beliefs suggested by McKnight & Chervany (2001), there could be four trusting beliefs in SNSs: 1) competence or power of the SNS to fulfill a successful exchange or the provision of recovery if the failure occurs from the e-vendor side; 2) benevolence, indicating the goodwill of the SNS in doing good deeds to users, aside from an egocentric profit motive; 3) integrity, originated from the SNS’s ethical actions and fulfillment of promises; and 4) predictability, as the consistency of the SNS actions, enabling users to forecast future exchanges. These trusting beliefs enhance customer’s reliance on the user-generated contents, reduce the uncertainty of exchange outcomes, and prolong the duration of the relationship (Suh & Han, 2003). Despite this, if customers do not trust a platform but trust the e-vendor, they are less likely to engage in purchasing behavior with the e-vendors through the social commerce platform and may choose other ways to transact with them. Consumers decide if they will transact with an e-vendor on the platform by evaluating its benevolence and credibility. Credibility encompasses integrity and ability of the platform in providing the expected outcomes, which increases intentions to buy on the platform (Kaiser & Müller-Seitz, 2008). Kim and Park (2013) indicated that users who trust social commerce sites are more likely to spread positive worth-of-mouth and purchase on these platforms. Thus, we propose:

H1. Trust in a SNS increases customer’s purchase intentions from e-vendors.

3.2. Social commerce information seeking: the effects of trust

Information seeking is “a process of sense-making in which a person is forming a personal point of view” (Kuhlthau, 2004, p. 361). The person attempts to actively find meanings, fitting pre-existing knowledge, and making sense in accordance with presumptions. Social commerce information seeking is a customer’s endeavor to acquire information regarding a product/e-vendor from available resources on SNSs—such as reviews, ratings, and recommendations in online communities—to optimize purchase decisions. Information acquisition enhances customers’ knowledge of the product’s various aspects and assists throughout decision making and purchases (Turcotte, York, Irving, Scholl, & Pingree, 2015). Information seeking is characterized as a trade-off between the costs of the search for assessing the alternatives and the benefits perceived from making a better decision (Hauser & Wernerfelt, 1990). Technology contributes to both the reduction of searching costs and the enhancement of decision quality by using different information seeking channels. Social commerce information seeking is mainly conducted through three information channels (Hajli & Sims, 2015): (1) *Forums and communities* are places to share information and gain knowledge (Chen, Xu, & Whinston, 2011). Members of online communities participate in different group activities and support other members through their social interactions and communications in the platform; (2) *Ratings and reviews* are evaluations of a product, generated by peers, on the website of a company or a third party platform. Many retailers, such as Amazon.com or eBay.com encourage users to post a review about the products they purchase and share it with their peers. The

reviews have the potential to add value for other interested buyers (Heinonen, 2011). Aside from peer-generated reviews, rating/reviews offered by a third party, such comparison websites are another form of worth-of-mouth (Aiken & Boush, 2006); (3) *Reviews and recommendations* arise when individuals visit a product webpage, based on the assumption that the consumers are interested in a product and then endorse it to others (Piller & Walcher, 2006). Many online customers read recommendations that have been made and use them in their search processes. Customer reviews and recommendations are key features of current business to consumer websites (Piller & Walcher, 2006).

Previous studies identified institution-based trust (i.e., the Internet has regulatory protections for customers) and web experiences as the determinants of trusting beliefs (Gefen et al., 2003a, b; McKnight et al., 2002; McKnight & Chervany, 2001). We propose that trust in a platform is required for users to seek information about the product from the available sources. Hurtzum et al.’s (2002) research on trust and information seeking indicates that trust affects users’ information seeking behavior in relation to people, documents, and virtual agents. “Users’ willingness to engage with a website is strongly dependent on the extent to which the site succeeds in conveying accountability and trustworthiness” (Hertzum, Andersen, Andersen, & Hansen, 2002, p. 581). Accordingly, trust in a SNS motivates a customer to follow the involved contents (Turcotte et al., 2015) and the lack of trust precludes engaging in information exchange (Wang, Min, & Han, 2016).

McKnight & Chervany (2001) posit that if the trustors (customers) hold high trusting beliefs on a trustee (platform), they will be more willing to depend on the trustee. Trusting beliefs are the drivers of ‘trust-related behaviors’, such as information exchange (McKnight & Chervany, 2001). Depending on the product, trust involves some levels of risk that drive customers to seek information from other sources in order to inquire about the exchange party or the product (Swan & Nolan, 1985). “One’s trust in another is likely to shape the extent to which people will be forthcoming about their lack of knowledge” (Borgatti & Cross, 2003). Thus, once trust in a platform is established, customers seek information about the product through the available sources, including online communities, reviews, ratings, and comments to enhance their knowledge and assess the product. This attempt to acquire information is geared toward the appraisal of the vendors’ trustworthiness through the investigation of others’ experiences (Swan & Nolan, 1985). Thus, we propose:

H2. Trust in a SNS increases social commerce information seeking about a product.

3.3. Purchase intentions: the effects of social commerce information seeking

Social commerce information seeking enhances the individuals’ knowledge about a product through access to the pool of information. Accordingly, the increase in customers’ knowledge toward a product facilitates the decision making process and enhances purchase intentions (Chiou, Droge, & Hanvanich, 2002). Given the context of social commerce, user-generated contents, such as reviews, offer diagnostic value for consumers in their purchase decision processes and increases sales for e-vendors (Heinonen, 2011). Information seeking could enhance the individuals’ knowledge about the product and e-vendors as well as their skills in using the features of the platform (Choo, Detlor, & Turnbull, 2000). Previous research indicated that product reviews and multimedia texts—which offer the ability to interact with a product before it is bought—have a positive effect on customers’ purchasing behaviors (Maria & Finotto, 2008) and increase the intentions to buy (Maria & Finotto, 2008). However, online purchases are inherently risky and uncertain (Featherman & Hajli, 2015). “The amount and nature of the perceived risk will define consumers’ information needs, and consumers will seek out sources, types, and amounts of information that seem most likely to satisfy their particular information needs” (Cox,

1967, p. 607). Thus, Murray (1991) indicated that information seeking, as a risk handling strategy, increases purchase intentions. Thus, we propose:

H3. Social commerce information seeking increases intentions to purchase from an e-vendor.

3.4. Familiarity: the effects of social commerce information seeking

Previous research investigated the role of *familiarity with a brand or product* in users' perceptions, such as purchase intentions (Gefen, 2000; Laroche, Kim, & Zhou, 1996). However, the effect of *familiarity with the online platform* on customers' perceptions would benefit from further investigation (Lim & Van Der Heide, 2015). Familiarity is the "current and/or past use, or knowledge obtained by attending some form of instruction or through readings on the topic" (Liberatore & Titus, 1983, p. 964). Accordingly, familiarity with an online platform is the degree to which a consumer comprehends the website's procedures (Gefen et al., 2003b), such as familiarity with the search engines of a website and the interaction channels with peers.

Information seeking on websites deepens the users' understanding of contents and knowledge of the platform (Choo et al., 2000). This understanding along with the continuous engagement in channels of information seeking, such as communities/forums, enhances users' skills and expertise about the different aspects and tools of an online platform. For instance, users who actively seek information about a product in different channels, such as reviews and e-vendors' forums, become familiar with search tools, rating policies, contents of recommendations, and the purchasing process. Thus, we propose:

H4. Social commerce information seeking increases the customer's familiarity with the online platform.

3.5. Social presence: the effects of social commerce information seeking

Social presence is a key concept in social media and social commerce platforms. Social presence is the sense of warmth and sociability within a website. More specifically, social presence is "the extent to which a medium allows users to experience others as psychologically present" (Hassanein & Head, 2005, p. 31). Social presence theory posits that intimacy and immediacy enhance the warmth of the media and the presence is higher for interpersonal and synchronous communications than for mediated and asynchronous ones (Kaplan & Haenlein, 2010). A media is perceived as warm if it enables human interactions, sociability, and sensitivity (Hassanein & Head, 2005).

Recommendations and customer reviews enable e-vendors to create personal connections with their consumers, which is the foundation of social presence (Piller & Walcher, 2006). Different interactional tools in social commerce websites enhance the sense of social presence, such as pictures, comments, reviews, likes, and emoticons. Naylor, Lambertson, & West (2012) indicated that the Facebook Like button, as an indicator of 'mere virtual presence', enhances the customers' brand evaluations and purchase intentions. Recently Facebook took one step further and added reactions buttons (i.e. Love, Haha, Wow, Sad, and Angry), which visualize the emotional expressions toward the peer-generated contents. Users express their presence and genuine feeling about the contents and observe peers' animated/live reactions toward a product. The Facebook reactions buttons, the Twitter "Tweet" button, and the Plurck "Share" button are examples of social commerce features which enhance users' perception of social support and relationship quality (Liang et al., 2011). The navigation and information seeking on these platforms expose users to the embedded vibrant and ongoing contents, which could instigate/improve the feeling of warmth and social presence throughout the purchasing process. Thus we propose:

H5. Social commerce information seeking increases the perceptions of social presence.

3.6. Purchase intentions: the effects of familiarity

Previous research indicated that familiarity with a product/brand increases purchase intentions (e.g. Laroche et al., 1996). Thus, we argue that familiarity with a SNS could enhance purchase intentions from an e-vendor on the SNS. Online purchase intentions are a technical process, requiring specific steps such as searching for the appropriate product, finding other customers' reviews/comments on the product and e-vendor, selecting the product and e-vendor, providing the information, and placing the order. However, depending on the platform, these activities could be executed differently and become more complicated. Complexity in an online environment causes purchase avoidance, while familiarity with the platform enhances customers understanding of the shopping process and reduces the intricacy of the decisions (Gefen et al., 2003a). Recently, Van Der Heide & Lim (2015) indicated that users who are familiar with a platform are more likely to rely on generated contents by their peers for their online purchases than those who are unfamiliar. Accordingly, Martínez-López, Esteban-Millat, Cabal, & Gengler (2015) indicated that familiarity with a recommendation system enhances perceived ease of use, intentions to use a recommendation system, and purchase intentions. Thus we propose:

H6. Familiarity with the online platform increases intentions to purchase from e-vendors on that platform.

3.7. Purchase intentions: the effects of social presence

Gefen & Straub (2004) indicated that social presence enhances purchase intentions in online platforms through the elevation of integrity, predictability, ability, and benevolence. Other researchers indicated that social presence influences attitude toward use and e-loyalty through perceived usefulness, trust, and enjoyment (Hassanein & Head, 2005). Moreover, Cheung, Chiu, & Lee (2011) showed that social presence enhances the users' continued use of social media. Drawing on the advertising literature, Li et al. (2002) indicated that 3D advertising increases the viewer's sense of social presence, thus enhancing purchase intentions. Accordingly, the emoticons and novel features of SNSs (e.g. Facebook new buttons) could improve the sense of warmth in interactions and subsequently purchase intentions. Thus, we propose:

H7. Social presence increases intentions to purchase from e-vendors.

In proposing our model, we acknowledge that there are other plausible theoretical frameworks that should be tested. Therefore, following Burnham & Anderson (2004), we propose two alternative models in Appendix A. Based on the findings of previous studies in the area of trust, familiarity, and intentions to use/purchase (Gefen et al., 2003a; Martínez-López et al., 2015), the two alternative models are developed as follows: 1) it is plausible that information seeking increases familiarity and social presence and together they increase trust and subsequently purchase intentions. Alternative model 1 proposes a mechanism explaining the effect of social commerce information seeking on purchase intentions through familiarity, social presence, and trust; 2) it is plausible that trust enhances familiarity and social presence on a social commerce platform and these together increase social commerce information seeking and purchase intentions. Alternative model 2 incorporates familiarity and social presence as the outcomes of trust and social commerce information seeking as their consequence (Appendix A).

4. Research methodology

4.1. Sample and data collection

Social commerce platforms, such as Facebook, Twitter, and eBay, link users to e-vendors. However, these platforms differ based on aspects such as informational/interactional channels, privacy policies, quality/quantity of peer contents generation, economic feasibility, size, and reputation (Kim & Park, 2013). Narrowing down the context and reducing the effects of SNS choice, we used Facebook as the target platform, since it provides users with most content generation tools and it is the most popular SNS worldwide. The data analysis is carried out with 201 participants (55% women and 45% men), who were recruited among postgraduate and undergraduate students of a major public university. Only participants who were members of Facebook were selected.

The data were collected through an online survey and an offline survey for respondents who did not have access to the Internet at the time of study and to increase the response rate. The integration of both survey methods was also used in previous studies in online contexts (e.g. Kim & Park, 2013). Nevertheless, a statistical analysis was conducted to avoid any possible biases in the results. Following Dong, Evans, & Zou (2008), we examined the data gathered from each group (online and offline), using Box's M test. Results indicated the Box's M value of 120.70 was not significant ($p = 0.44$), indicating the equality of covariance matrices among the two groups of responses. Thus, there was no evidence that the two samples are significantly different. Thus, all 201 surveys were analyzed.

4.2. Measures

The survey uses a five-point Likert scale from 1 = strongly disagree to 5 = strongly agree to measure the constructs included in the model. A 4-item scale of trust was adapted from Gefen et al. (2003b), measuring the benevolence and credibility of Facebook. A social presence 4-item scale was adopted from Gefen & Straub (2004). Drawing on Hajli & Sims' (2015) measures of social commerce constructs, a 4-item scale of social commerce information seeking was developed to capture the information acquisition through the information channels, including rating/reviews, recommendations, communities, and forums. A Familiarity 3-item scale was adopted from Gefen (2000). Purchase intentions were measured with the 2-item scale of Gefen et al. (2003a). Since social commerce purchasing behavior is slightly different from e-commerce, items were adjusted based on the trust-related behaviors of McKnight et al. (2002) to capture intentions to engage in purchases from e-vendors on SNSs.

Given the context of social commerce through Facebook, the original items were slightly adjusted. The content and wording of all questions were checked and corrected by three marketing faculty familiar with social media and social commerce research as well as three doctoral students. Finally, the items were checked by three independent judges who did not have prior knowledge of the study aims. They gave an evaluation of the overall questionnaire and ensured content validity.

5. Analysis

We draw on two methods of structural equation modeling (SEM), namely partial least square (PLS) and covariance-based SEM (CB-SEM) to analyze the models. PLS is more suitable for a low-structured environment and theory development, while CB-SEM is recommended for theory confirmation (Hair, Sarstedt, Ringle, & Mena, 2012). Due to the exploratory nature of this study, we used PLS to run the main model and CB-SEM to compare it with the rival models.

5.1. Reliability and validity

Internal consistency was assessed by Cronbach alphas and composite reliability scores. In Appendix B, all Cronbach alphas and composite reliability values are higher than 0.70 (Naylor et al., 2012). Convergent validity was assessed through three steps. First, all item loadings were higher than 0.5. Second the composite reliabilities were higher than 0.70 (Naylor et al., 2012). Third, all AVE values exceeded 0.50, indicating that that the majority of the variance is accounted for by the constructs. In Table 1, the squares of the correlations among the constructs were lower than the corresponding AVEs, which indicates discriminant validity (Chin, 1998).

5.2. Common method bias and multicollinearity

In assessing common method bias, we followed Podsakoff, MacKenzie, Lee, & Podsakoff (2003). First, scales were carefully adapted and improved by the experts familiar with the research. Second, independent and dependent variables were separated in the questionnaire, using other items which are not relevant to this article. We statistically checked the common method biases. Unrotated exploratory factor analysis indicated five factors, explaining 67% of the total variance. This rejects the probability of one general factor (Chin, Thatcher, & Wright, 2012). Multicollinearity was assessed through 2 steps. First, all AVEs were higher than 0.50. Second, the variance inflation factors ranged from 1.11 to 1.68, far below the accepted cutoff of 5 (Hair et al., 2012).

6. Findings

The result of the CB-SEM analyses indicated that the model fits the data quite well: $\chi^2 = 144.12$; $df = 99$; SRMR = 0.059; CFI = 0.95; RMSEA = 0.055; TLI = 0.94; IFI = 0.96; $p = 0.00$. The analysis of R^2 ranging from 0.12 to 0.43, indicated that the model explains a considerable proportion of the variance in the endogenous variables (Hair et al., 2012). Moreover, Stone-Geisser's values of blindfolding analyses indicated that Q^2 ranged from 0.08 to 0.23. Following Hair et al. (2012) rule of thumb R^2 and Q^2 values indicate that the exogenous variables are moderate to powerful predictors of exogenous variables and the model has a high level of quality.

H1 postulates a positive relationship between trust and purchase intentions, which is supported ($\beta = 0.37$; $p < 0.001$). Consistent with H2, the results indicate a significant positive relationship between trust and social commerce information seeking ($\beta = 0.32$; $p < 0.001$). Social commerce information seeking is positively associated with purchase intentions, providing support for H3 ($\beta = 0.13$; $p < 0.01$). We found support for H4 and H5, as social commerce information seeking is positively associated with familiarity and social presence (respectively, $\beta = 0.39$; $p < 0.001$; $\beta = 0.24$; $p < 0.01$). Finally, H6 and H7 were also supported, as familiarity and social presence were positively associated with purchase intentions (respectively, $\beta = 0.18$; $p < 0.01$; $\beta = 0.24$; $p < 0.001$).

Table 1
Descriptive statistics and measurement validation.

Constructs	M	SD	AVE	R ²	1	2	3	4	5
1. Familiarity	3.85	0.98	0.65	0.41	0.80				
2. Social commerce info. seeking	3.25	0.99	0.59	0.21	0.36	0.76			
3. Purchase intention	3.42	0.97	0.60	0.43	0.48	0.36	0.77		
4. Social presence	2.95	0.95	0.65	0.1	0.14	0.23	0.38	0.80	
5. Trust	3.58	0.91	0.61	-	0.60	0.31	0.57	0.26	0.77

1) AVE = average variance extracted; M = Mean; SD = standard deviation.
2) Numbers on the diagonal (in boldface) are the square root of AVEs. Other numbers are correlations among the constructs.

Table 2
Mediation analyses.

Path	Path A ^a (X → M)	Path B (M → Y _X)	Path C' (X → Y _M)	Indirect effect ^b (95% confidence interval)			Sobel test ^c / Type
	B	B	B	Effect	Lower	Upper	
Trust → Info. Seeking → Familiarity	0.32***	0.20**	0.54***	0.061†	0.026	0.110	3.01**/partial
Trust → Info. Seeking → Social Presence	0.32***	0.18**	0.21**	0.05†	0.006	0.137	2.53*/partial
Trust → Info. Seeking → Purchase Intention	0.32***	0.20***	0.51***	0.15†	0.074	0.248	3.01**/partial
Info. Seeking → Familiarity → Purchase Intention	0.37***	0.40***	0.22**	0.15†	0.044	0.074	3.66***/partial
Info. Seeking → Social Presence → Purchase Intention	0.24**	0.31***	0.29***	0.08†	0.029	0.151	2.89***/partial

Note: 2000 bootstrap samples with 95% confidence level. * $p < 0.05$, $t = 1.96$; ** $p < 0.01$, $t = 2.56$; *** $p < 0.001$.

^a Path A = relationship between IV and mediator; Path B = relationship between mediator and DV, controlling for IV; Path C = direct effect of IV on DV, controlling for mediator.

^b Indirect effect of IV on DV, using bootstrapping technique. "†" indicates the significance of the indirect effect due to the absence of 0 in the confidence interval.

^c Demonstrates the statistics of Sobel test and full/partial mediation.

In order to provide more explanations for the indirect paths, we ran mediation analyses, using INDIRECT Macro for SPSS. In Table 2, social commerce information seeking partially mediates the relationship between trust and familiarity, and between trust and social presence. Moreover, familiarity and social presence are partial mediators of the relationship between social commerce information seeking and purchase intentions.

Appendix A indicates the results of the SEM analyses for the alternative models 1 and 2. All fit indices of the model provided in Fig. 1 are better than the alternative models presented in Appendix A. Moreover, we compared the three models, using Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) following Burnham & Anderson (2004). The results indicate that main model has the best fit to the data, relative to alternative models 1 and 2, since the AIC and BIC values are the lowest; Main model: AIC = 236.13, BIC = 388.08; alternative model 1: AIC = 277.53, BIC = 419.57; alternative model 2: AIC = 269.47, BIC = 418.12. (See Fig. 2.)

7. Discussion

This study contributes to the literature by investigating the role of trust in customer's intentions to purchase from e-vendors on social commerce platforms. In doing so, we propose a mechanism to explain the relationship between trust in a platform and purchase intentions. The mechanism encompasses three related constructs: social commerce information seeking, familiarity with the platform, and social presence. We used Facebook as the best known SNS and a fertile platform for social commerce to empirically test our model. We also validated our model by proposing two alternative ones and comparing their fits to the data. The results of the empirical study among Facebook users indicated that the main model presented in Fig. 1, fits the data better than the alternative ones.

In line with the first study question, trust in the SNS was found to be a key predictor of intentions to purchases from e-vendors in that platform. The explanatory mechanism was that trust in a SNS increases information seeking within the SNS through different channels, such as forums/communities, reviews and ratings, and

recommendations about a product. Subsequently, the information acquisition in the SNS increases intentions to purchase from e-vendors. However, this effect is carried indirectly through familiarity with the SNS and the sense of social presence perceived from the SNS environment. On one hand, the more people seek information in different informational channels in a SNS, the more they become familiar with the procedures and functionality of the SNS. On the other hand, the more users seek information, the more they feel the warmth and social presence of the platforms. Finally, users who are familiar with the platform and who feel a higher level of social presence have higher tendencies to engage in purchasing from e-vendors on that platform.

The results of the mediation analysis (Table 2) indicate that the effects of trust on familiarity and social presence are partly carried through social commerce information seeking. On one hand, trust in a social commerce site increases information seeking and thus familiarity with the platform, due to bettering one's knowledge of the platform. On the other hand, trust increases information acquisition through different channels, and the exposure to peer-generated contents enhances the feeling of social presence within the platform. Moreover, the effect of trust on purchase intentions is partially mediated by information seeking, indicating that trust increases the use of SNS information channels to obtain useful information for a purchase. In addition, active participation in information seeking increases the familiarity with the platform and the sense of social presence, which increases intentions to purchase.

8. Implications

Social commerce has greatly expanded during the last decade and its market has grown to \$30 billion in the U.S.A. (Zhou, Zhang, & Zimmermann, 2013). However, trust is one of the main reasons for purchasing hindrance and the firms' failures in social commerce strategies (Kim & Park, 2013). Despite this, trust issues become even more important in social commerce contexts due to the reliance on peer-generated contents in SNSs (Liang & Turban, 2011).

8.1. Research implication

In contrast to what our conceptual model suggests, most e-commerce articles show that the concepts such as familiarity, information exchange or social presence predict trust and its behavioral consequences. Indeed, McKnight et al. (2002) define institution based trust and general web experiences as antecedents to trusting beliefs, and Gefen et al. (2003a, b) view institution-based structural assurances and knowledge-based familiarity as antecedents of trust. However, this article shows that this process is not as straightforward in social commerce platforms as the previous literature has suggested. This research conceptualizes trust as the antecedent of social commerce

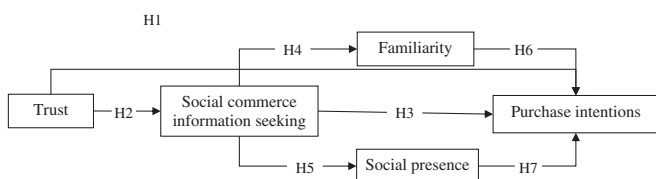


Fig. 1. Main conceptual model.

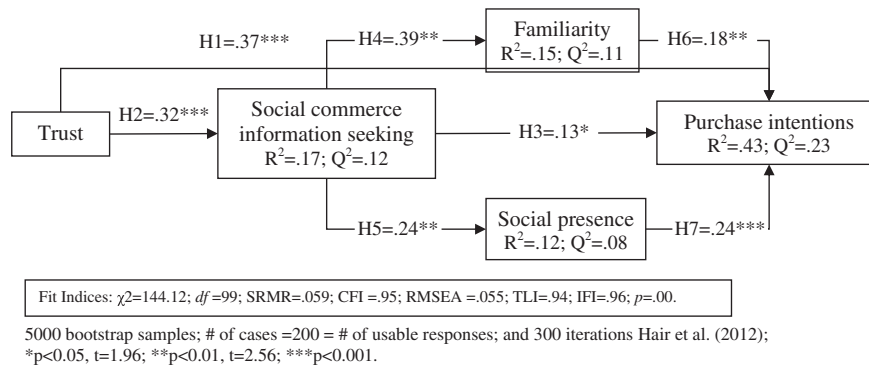


Fig. 2. Results of the path analysis.

information seeking, which directly affects purchase intentions, and partially mediates the effect of trust on purchase intentions through familiarity and social presence. These findings corroborate research which found that trust is required for engagement with a website and the lack of trust inhibits participation in information exchanges (Hurtzum et al., 2002; Turcotte et al., 2015; Wang et al., 2016). In line with Kim and Park (2013), the results of the main and alternative models indicate that trust directly increases purchase intentions. Furthermore, consistent with and in addition to the previous literature (e.g., Gefen et al., 2003a, b), the findings indicate that information seeking per se does not increase trust but it increases familiarity with the features of a platform and the perceived sense of social presence, which in turn influences trusting beliefs and intentions to purchase.

8.2. Managerial implications

Our findings have several managerial implications for firms and social commerce managers:

Trust is a critical issue in a social commerce contexts and specifically it plays an important role in increasing purchase intentions. The more customers trust the platform, the more they engage in the purchasing process. Social commerce and SNS designers are able to increase customers' trust by enhancing the characteristic of the platforms, including: reputation, size, information quality, transaction safety, communications, economic feasibility, and word-of-mouth-referrals (Kim & Park, 2013). However, trust is not the only factor and other elements are also important in increasing purchase intentions:

Social commerce information seeking. Customers look into different information channels within a social commerce platform to acquire information needed for their purchase decisions. Our findings indicate that the more customers seek information within a social commerce platform, the more they are likely to purchase. Thus, e-vendors are able to increase purchase intentions within their communities or forums by providing an easy access to the search engines, channels of information, information exchange processes, and enhancing trust in the embedded contents. User's participation in communities, forums, reviews and ratings, and recommendation systems should facilitate information seeking and interactions with peers. SNS firms are able to improve the integration of resources among peers and e-vendors by enhancing the information seeking process. Linking a search engine with the SNSs (e.g. Facebook, Twitter, and LinkedIn) could facilitate the search process. However, people who are familiar with the platform are more likely to rely on the embedded contents for their decisions (Van Der Heide & Lim, 2015).

Familiarity with the platform is a predictor of customer purchase intentions. Previous research indicated that unfamiliar users rely on their consensus heuristics rather than peer or system-generated contents for their purchases (Van Der Heide & Lim, 2015), including educational tabs, explanation/instructions for the features of the platform, and on-line chat with agents. E-vendors are able to equip their pages with pull-down menus, helpful tips about the new features of the page, FAQs, graphical instructions, speech-bubbles, and ensuring that the site is intuitive and easy to use.

Social Presence – the feeling of warmth and belongingness in social commerce platforms – increases customers' purchase intentions. Facebook has recently featured animated reactions and GIF buttons to enhance the expressions of feelings in the platform. Accordingly, adding visual indicators into pages/communities/forums may enhance social presence. In line with communication and social media research (e.g. Bente, Rüggenberg, Krämer, & Eschenburg, 2008), SNS firms could increase the feeling of social presence in the platform by providing users with their avatars. Users can design and name their avatars, interact with other avatars, and navigate into forums/communities, which enhances the feeling of 'being there'.

Findings from the alternative models indicate that those who use social media information to a greater extent (information seekers) tend to more likely engage in online relationships with e-vendors independently of their trust in that social media platform. Managers may want to identify information seekers through monitoring the activities of users and targeting them differently than other groups of consumers.

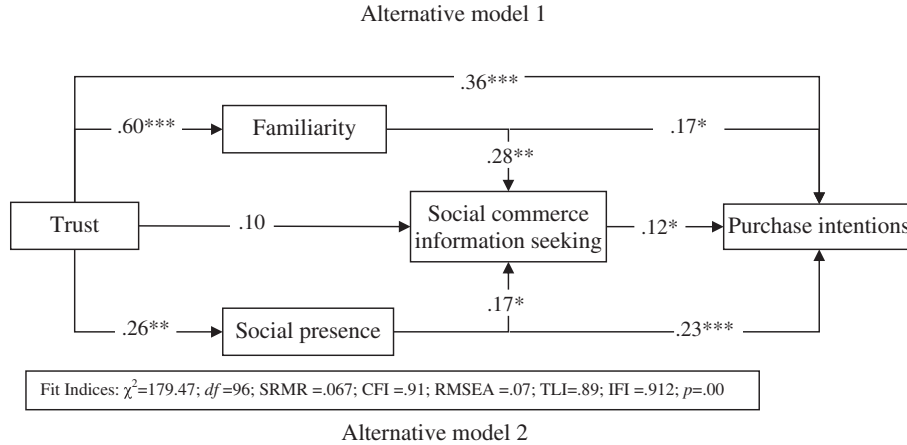
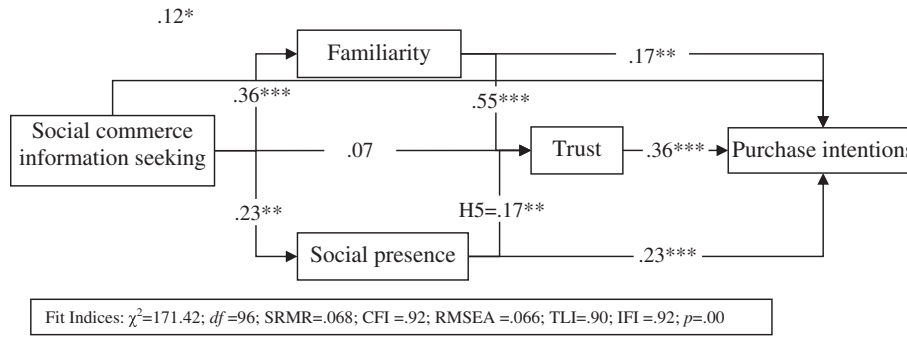
9. Limitations

This study contains some limitations and recommendations for future studies. First, the context is limited to Facebook as one of the best-known SNSs. However, future studies could test the main and alternative models with other SNSs, such as Twitter, LinkedIn, Instagram, Xing, and Google+. Furthermore, we relied on cross-sectional survey data to test our conceptual model. Future studies could draw on longitudinal studies and experimental research to capture the effect of trust and its consequences on purchase intentions. Moreover, future studies may test the effects of potential moderation on the relationships in the main model, such as tie strength, social media involvement, and habit.

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Appendix A



Appendix B. Measures

Items	Loadings
Trust (CA = 0.78; CR = 0.84)	
Promises made by Facebook are likely to be reliable.	0.84
I do not doubt the honesty of Facebook.	0.80
Based on my experience with Facebook, I know it is honest.	0.75
Based on my experience with Facebook, I know they care about users.	0.72
Purchase intentions (CA = 0.71; CR = 0.75)	
I am very likely to provide the online vendor with the information it needs to better serve my needs through Facebook.	0.66
I am happy to use my credit card to purchase from an online vendor through Facebook.	0.86
Familiarity (CA = 0.72; CR = 0.84)	
I am familiar with searching for materials in Facebook.	0.80
I am familiar with buying materials in Facebook.	0.88
I am familiar with inquiring about material ratings in Facebook.	0.72
Social commerce information seeking (CA = 0.74; CR = 0.81)	
I use online forums and communities for acquiring information about a product.	0.75
I usually use people ratings and reviews about products on the internet.	0.77
I usually use people's recommendations to buy a product on the internet.	0.77
I trust my friends on online forums and communities. *	
Social presence (CA = 0.83; CR = 0.88)	
There is a sense of human contact in Facebook.	0.83
There is a sense of sociability in Facebook.	0.82
There is a sense of human warmth in Facebook.	0.77
There is a sense of human sensitivity in Facebook.	0.81

Notes: CA = Cronbach's Alpha; CR = composite reliability; * = dropped.

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