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

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Abstract

Trust has always been a critical issue in online shopping environments. However, it is even more important in social commerce platforms, due to the salient role of peer- generated contents on users' purchase intentions. This study investigates the relationship between trust of social commerce and users' purchase intentions and proposes a mechanism explaining the relationship. Thus, we present a main and two alternative models by drawing on the critical notions related to purchase intention, including social commerce information seeking, familiarity with platform, and social presence. The models clarify mechanisms by which trust, familiarity, social presence and social commerce information seeking influence behavioral intentions on social commerce platforms. Results of the survey gathered among Facebook users indicates that trust of a SNS increases users' information seeking in informational channels, such as communities and forums, reviews and ratings, and recommendations and referrals. Information seeking elevates users' familiarity with the platform as well as the sense of social presence. Moreover, the familiarity and social presence raises users' purchases intentions. Results indicate that the main model of the study is a better explanatory mechanism than the alternative models. The theoretical and practical implications are discussed.

Keywords: Trust; social commerce; e-commerce; purchase intention; familiarity with platform; social presence; information seeking.

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 (i.e. Starbucks Facebook and Toms' Twitter) and e-commerce (i.e. Alibabab) is that the former concept involves communities and conversation among the 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, i.e. LinkedIn, Facebook, and Twitter), support the acquisition of products/service through supporting users' interactions and contribution (Liang & Turban, 2011). According to the Financial Times social commerce usage increased by more than 500% between the years 2007 and 2008 and social commerce firms are growing their venture capital financing substantially (Stephen & Toubia, 2010). Social commerce made positive changes in the international scale as well, as more than 300 social commerce Korean firms created sales of $300-500 million in 2011(Kim & Park, 2013). The growing popularity of social commerce has reached to 43%, leading to the expansion of investment in social commerce for 88% of businesses (Huang & Benyoucef, 2013).

A number of retailers (e.g. Armani Exchange, Toms', and Samsung) and service providers (e.g. insurance, airlines, and banks) have successfully used social commerce to enhance their business. 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 and Turban 2011; Kim and Pak 2013). Trust—a belief in the reliability, truth, and ability of the exchange party—has been recognized as one of the pronounced reasons customers refrain from electronic purchases (Gefen, 2000; Gefen, Karahanna, & Straub, 2003; Jones & Leonard,

2008). However, given the context of social commerce, users are notified about a product/service on SNSs and are engaged in purchases. Thus, trust of the SNS and embedded content provided by peers (i.e. shared experiences, reviews, and pictures) could increase users' purchase intention from an e-vendor. In this regard, recently Kim and Park (2013) indicated that *trust of social commerce firms* (e.g. Amazon.com) directly enhances purchase and word-of-mouth intentions. However, there are a limited number of research papers in the context of social commerce, if there is any, indicating whether *trust of SNSs* influences users' purchase intention from *e-vendors*? Moreover, if there is any relationship, which mechanism carries the effect of trust on purchase intention?

Answering the above questions and provide explanations for the relationship between trust and purchase intention from an e-vendor on SNS, this study puts forward a model that draws on three key concepts on social commerce platforms, including: 1) social commerce information seeking (i.e. acquiring information from information channels of social commerce platforms); 2) familiarity with platform (i.e. comprehension of the platforms' features and procedures); and 3) social presence (i.e. the sense of warmth and sociability within the platforms)". The channels of information exchange have been revolutionized by the emergence of SNSs. Given the context of social commerce, users may seek for information about a product/service through various channels, including peer recommendations, reviews and ratings, or forums and communities, including a pool of information about a specific product/service (Flanagin, Metzger, Pure, Markov, & Hartsell, 2014; Hajli, 2015). In spite of this, Van Der Heide and Lim (2015) recently indicated that users familiar with SNSs are more likely to rely on peer-generated contents, which could motivate the purchase intention on social commerce platforms. Moreover, information

seeking together with the social presence in SNSs—the feeling of 'warmth' and 'being there'; Li, Daugherty, & Biocca (2002)—could heighten users' intention to purchase.

Taking different probable frameworks into consideration, we also propose two alternative models. Using 201 Facebook users, we test the main model of study as well as the alternative models by taking advantage of two structural equation modelling methods (partial least square and covariance-based). The results of the model fit and model selection analyses indicted that the main model of the study out performs the alternative models. This study highlights the importance of trust of social commerce and provides some recommendations about informational channels and customers information seeking, familiarity with the platforms and the sense of social presence wherein. Thus in the following sections: first we define social commerce and its difference from e-commerce and conceptualize the notion of trust of social commerce platforms. Second, in the hypothesis development section we respectively hypothesize the effects of trust on purchase intention and social commerce information seeking, relationship between social commerce information seeking, purchase intention, familiarity with platform, and social presence. Finally we propose the effects of familiarity and social presence on purchase intention. Third, the methodology and results of the model analysis will be presented. The paper will end with discussion and implications.

2. Conceptual Framework

2.1 Social commerce

Social commerce is well-established in the extant marketing literature (e.g. Huang and Benyoucef 2013; Liang and Turban 2011; Liang et al. 2011; Stephen and Toubia 2010), however, further clarifications could be useful for the practice of this study. 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 can be considered a subset of e-commerce that involves using social media to assist in e−commerce transactions and activities" (Liang and Turban 2011, p. 6). Similarly, Stephen and 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 and services in online marketplaces and communities" (p. 215). Similar definitions are proposed by other social commerce literature (e.g. Liang et al. 2011; (Zhou, Zhang, & Zimmermann, 2013). Social commerce has three main characteristics, including social media technology, interactions in the community level, and commercial activities. Social media refers to "Internet-based applications built on Web 2.0, while Web 2.0 refers to a concept as well as a platform for harnessing collective intelligence" (Huang and Benyoucef 2013, p. 246). Social media, such as Facebook, Twitter, and LinkedIn, provide people with a pervasive network connectivity, which enables their active participation in online marketing and sales activities (Asur & Huberman, 2010). E-commerce refers to the "use of the *Internet* to facilitate, execute, and process *business transactions*. Business *transactions* involve a *buyer and seller* and the *exchange of goods or services for money"* (Delone & Mclean, 2004, p. 31). In social commerce value is mainly originated from the network of interactions among actors, while the facilitation of buyer-seller connections is central to value co-creation in e-commerce.

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 are the basis of value co-creation (i.e. integration of resources among actors of a value network). In line with Vargo and Lusch (2016) recent modifications on 6th 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 firm in e-commerce platforms (Liang & Turban, 2011). Social commerce facilitates the exchange of operant resources (i.e. nonphysical; information, idea, knowledge, etc.) among multiple actors outside the market, leading to the integration of operand resources (i.e. physical, money, product, etc.) between the buyer and seller.

Huang and Benyoucef (2013) differentiate social commerce from e-commerce, drawing on the three main aspects, including *goal, customer connection, and system interaction*. Regarding the *business goals*, as opposed to e-commerce, social commerce's first goal gears towards the creation of a network, consisting of interactions, collaborations, and information exchange and commerce is placed as the latter goal. In terms of *customer connection*, social commerce consists of online communities that enables membership, social connection, and enhance quality/quantity of communication and resource integration (Liang et al. 2011). Lastly, social commerce adopts an *interactive approach* toward the commerce, since it involves a network of customer-customer and customer-firm interactions. While classical e-commerce provides "one-way browsing, where information from customers is rarely (if ever) sent back to businesses or other customers" (247). Social commerce consists of 4 layers from inner to outer, including individual (personal profile/activity), conversation (information exchange), community (support and connection), and commerce (purchase) (Huang and 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). As an exemplar, According to the Wall Street Journal, Alibaba (www.alibaba.com)–the world's largest e-commerce that "flexes muscles before IPO [Initial Public Offering]" (Osawa, Mozur, & Winkler, 2014). The main goal of Alibaba is commerce and interactions that are basically limited to one-one communications among buyers

and sellers. As Appendix B exhibit, there is a low amount of interaction/conversation among customers as well as communities, if there is any. Customers are not able to react or observe reactions to products/services in terms of comment/reviews/suggestions.

On the other hand, two types of social media commerce are presented in the literature. The first type is inherently based upon e-commerce websites, equipped by Web 2.0 tools in order to enhance customers' content generation and the interactivity among them, such as Amazon (www.amazon.com). 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. Just as with e-commerce, the culmination of a transaction journey may take place on a different site from the site where the transaction originated (please see Social Commerce Type 1 in Appendix B). This has parallels in conventional e-commerce. For example, a purchase journey originating on EBay or Amazon may lead to a seller's website and conclude on Paypal or Worldpay. The second category, *which is the target of this study*, is based upon Web 2.0 platform that incorporates e-commerce features, such as Armani Exchange page in Facebook (please see Social Commerce Type 2 in Appendix B) (Huang and Benyoucef 2013). 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 page with the help of users, upload picture, videos, news, and promotions on their pages and all over the social commerce platform and interact with customers in numerous ways. Customers are also able to comment on, rate, react to, and share (picture, videos, and news) an e-vendor or product/service on the platform and interact with the e-vendor and other customers.

2.2 Trust

Trust is a key notion in interactions and crucial for companies in developing a bond with sellers (Ali, 2011), this has been studied by previous research (Gefen, 2002; Gefen, Karahanna, & Straub, 2003b; Mutz, 2005; Pavlou, 2003). Trust is defined differently since it is studied in multiple literatures. Schurr and Oznne (1985) define trust as one's confidence on exchange party's capability and willingness to establish the business, adherence to the relationship norms, and keeping the promises. Mayer et al. (1995) believe that trust is the expression for firms' beliefs from the exchange party's actions. Ba and Pavlou (2002) posit that trust is individual's belief that an exchange will happen in a manner consistent with one's confident expectation.

Trust is considered both a unidimenional or a multidimensional concept in the literature (Gefen 2002). However, a better understating of trust benefits from the recognition of the dimensions. Cognitive and affective trusts are proposed as the major types of trust (Aiken and Boush 2006, Kim and Park 2013). Cognitive trust is the customer's belief in and willingness of dependency on an exchange partner's ability and consistency (Moorman et al. 1992). Affective trust refers to a customer's belief about a firm's level of care and concerns, based on her emotions (Rempel et al.1985). 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 motived by seeking joint gain; Aiken and Boush 2006). More specifically, in online environment Mcknight and Chervanys (2001) propose a trust typology consisting four levels: 1)disposition to trust, which is molded by attributes toward the exchange party, stabled over time; 2) institution-based trust that establishes based on the environmental or situational factors, as opposed to interpersonal factors; 3) trusting belief; and 4) trusting intention. The two latter trusts consider interactions among people and cognitive-emotional reactions as the determinant of trust.

In this study trust is conceptualized in the sense of trusting belief, referring to the belief 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 and Han 2003, p. 137). In online contexts, trust is based on beliefs in the trustworthiness of an exchange party and the characteristics of ability, integrity, and benevolence (Bhattacherjee, 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). In spite of this, the enhancement of experience with exchange parties could reduce the uncertainly and increase tendencies for online commerce adoption, through the elevation of trust (Gefen, 2002; Gefen & Straub, 2004).

The lack of face-to-face interaction could result in customers' suspicion of truthfulness in online exchanges (Grabner-Kraeuter, 2002). Accordingly, the paucity of knowledge about a e-vendor could also heighten the adverse influence of risk in online shopping (Kaiser & Müller-Seitz, 2008). However, trust issues could be intensified when the product or online shopping involves a high level of risk (Mutz, 2005). Kim and Park (2013) investigate the antecedents of trust and its direct effect on purchase intention and word-of-mouth intentions on social commerce platforms. Seven social commerce characteristics are demonstrated as the key antecedents of trust: reputation, size, information quality, transaction safety, communication, economic feasibility, and word-of-mouth referrals. Accordingly, Ming-Hsien et al. (2009) indicate that if a website describes products accurately, consumers' trust of the website will be enhanced. It is noteworthy that customers trust of the website can be facilitated by customer reviews and experiences posted in forums and communities. For instance, when a reputable member of an online forum or a community recommend a vendor, other members are more likely to demonstrate a high level of

trust toward the vendor (Lu, Zhao, & Wang, 2010). Social trust reduces "transaction cost" in

business interactions well as the tendency to monitor other parties' activities (Mutz, 2005).

3. Hypothesis Development

3.1 Purchase Intention: The Effect of Trust

Purchase intention in social commerce context refers to customers' intentions to engage in online

purchases from e-vendors on SNSs. There are two core theories to test and predict an

individual's behavioral intention (Mathieson, 1991): TAM (Davis, 1989) and the theory of

planned behavior by (Ajzen, 1991). According to these theories, intention is the determinant of

behavior and is defined as "the strength of ones' intention to perform a specified behavior"

(Fishbein & Ajzen, 1977, p.288).
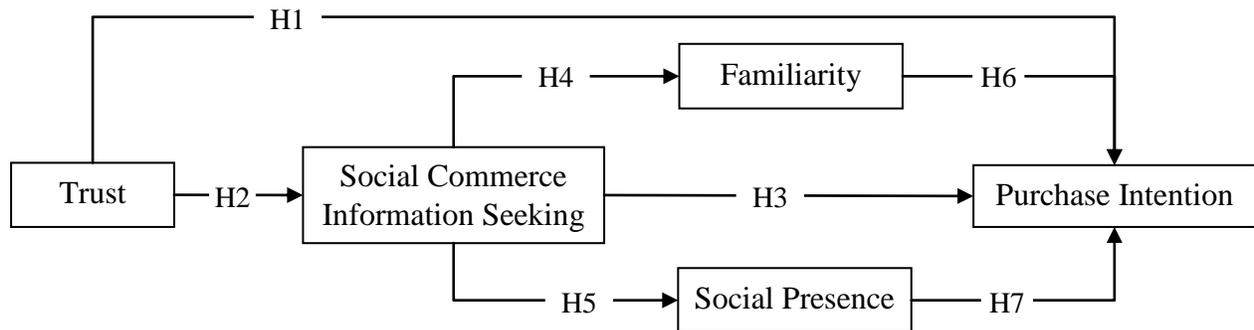
Figure 1 Main Conceptual Model

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 of a SNS could

enhance customers' purchase intentions from the e-vendors, presented by the platform. SNSs as

social commerce platforms bring customers into contact with e-vendors and provide the facilities

for the value exchange between the parties. Customers encounter with advertisements,

pictures/videos/news, recommendations and Likes, and communities related to e-vendors' on the

SNS. However, trust of the SNS, as the encompassing platform, could dominants customer's

reliance on the credibility of the contents and e-vendors' activities. In line with the categorization of trusting belief suggested by McKnight and Chervany (2001), there could be four trusting beliefs in SNSs, including: 1) competence or power of the SNS to fulfill a successful exchange or the provision of recovery if the failure occur from the e-vendor side; 2) benevolence, indicating the goodwill of the SNS in doing good to users, aside from egocentric profit motive; 3) integrity, originated from the SNS's ethical actions and fulfillment of promises; and 4) predictability, as the consistency of SNS actions, enabling users to forecast the future exchanges. These trusting beliefs are mainly based upon previous interactions and experiences (Gounaris 2005), which enhance customer's reliance on the constituted user-generated contents, reduce the uncertainty of exchange outcomes, and prolong the duration of the relationship (Suh and Han 2003). In spite of this, if customers do not trust of a platform but trust in the e-vendor, they are less likely to engage in the purchasing behavior with the e-vendors through the social commerce platform and may chose 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; Pongsakornrungsilp & Schroeder, 2011). Recently Kim & Park (2013) indicated that users who trust of social commerce sites are more likely to spread positive worth-of-mouth and purchase on these platforms. Following previous research, we propose that:

H1: Trust of a SNS increases customer's purchase intention from e-vendors.

3.2 Social Commerce Information Seeking: The Effect 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 her pre-

existing knowledge, and make sense in accordance to her presumptions. Social commerce information seeking is a customer's endeavor for acquiring information regarding a product/service/e-vendor from available resources on SNSs—such as reviews, ratings, and recommendations in online communities—to optimize her purchase decision. Customers seek information to gain knowledge about a product/service, satisfy their cognitive needs, and clarify the requirements and their roles in the value exchange process (Kellogg, Youngdahl, & Bowen, 1997). Information acquirement enhances customers' knowledge of the product/service's various aspects and assists throughout their decision making and purchases (Chen, Teng, Yu, & Yu, 2016). Information enhances customer's control over the co-creation process and enables the mastery in roles (Yi & Gong, 2013).

Ellis, Cox, & Hall (1993) propose a general model of information seeking behavior, encompassing 6 phases: 1) starting: activities related to the initial search for information, such as recognizing a specific platform containing the information about a specific product/service; 2) backward/forward chaining: pursuing the pointers in initial information sources, such as pursuing the same product/service in the relevant sites; 3) browsing: semi-directed search in the possible search areas, such as looking into the content provided in online communities about the product/service; 4) differentiating: selecting the favorable sources by determining the nature and quality of information, such as bookmarking the favorable brands of the products/services; 4) monitoring: supervising the developments; such as receiving and reading new peers' comments about different vendors of the product/service; and 5) extracting: systematically excerpting the materials of interest, such as choosing the favorable e-vendor and Website for purchasing the product/service.

Information seeking is characterized as a trade-off between the cost of the search for

assessing the alternatives and the benefit perceived from making a better decision (Hauser & Wernerfelt, 1990). Technology contributes to both the reduction of searching cost and the enhancement of decision quality by provision of different information seeking channels (Van der Heijden, Verhagen, & Creemers, 2003). Social commerce information seeking are mainly conducted through three channels of information (Hajli & Sims, 2015), including: 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 provided platform (Bagozzi & Dholakia, 2002). In recent years, the growth of online communities has been extensive (Grabner-Kräuter, 2009). As social computing has proliferated, alternative forms of content are required as people need to readily exchange experiences and information (Chen, et al., 2011). Ratings and reviews. Online consumer reviews are evaluations of a product, generated by peers, on the website of a company or a third party platform (Nambisan, 2002). 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 (Huang, Cai, Tsang, & Zhou, 2011). The reviews have the potential to add value for other interested buyers (Heinonen, 2011; Keller, 2009). Aside from peer-generated reviews, rating/reviews offered by a third party, such comparison websites is another form of worth-of-mouth (Aiken & Boush, 2006). Ratings are quantitative evaluations of the quality of goods and services. Ratings are often both transparently individual, where the rater is identified by their online username, and aggregated across all of the ratings that have been provided.*Recommendations and referrals.* Recommendations arise when individuals visit a product webpage, based on the assumption that the consumer is 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 process (Huang, et al., 2011). Customer reviews and recommendations are key features of current business to consumer websites (Piller & Walcher, 2006).McKnight and Chervany (2001) if the trustors (customers) hold high trusting belief on a trustee (platform), they will have a high level of willingness to depend on the trustee. Trusting beliefs are the drivers of "trust-related behaviors", such as information exchange (McKnight and Chervany 2001). Thus, we propose that:

H2: Trust of a SNS increases social commerce information seeking.

3.3 Purchase Intention: The Effect of Social Commerce Information Seeking

Social commerce information seeking enhances individuals' knowledge about a product/service through the provision of access to the pool of information. Accordingly, the elevation of customers' knowledge toward a product/service facilitate 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 both diagnostic value for consumers in their purchase decision processes (Nambisan, 2002) and elevates the level of sales for e-vendors (Heinonen, 2011). Information seeking could enhance individuals' knowledge about the product/service and e-vendors as well as their expertise in using the features of the platform (Choo, Detlor, & Turnbull, 2000). In this vein, 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 (Di Maria & Finotto, 2008) and increase the likelihood of intention to buy (Di Maria & Finotto, 2008). However, online purchases are inherently risky and uncertain (Featherman and 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). In this vein, Murray (1991) indicated that information seeking, as a risk handling strategy, enhances purchase intentions. Thus in line with previous research we propose that:

H3: Social commerce information seeking increases intention to purchase from e-vendor.

3.4 Familiarity: The Effect of Social Commerce Information Seeking

Customers' familiarity with novel technologies has always been critical for online interactions and firms success (Gefen et al. 2003b). Previous research has intensively investigated the role of *familiarity with brand* or *product/service* in users' perceptions, such as purchase intention (Chen & Teng, 2013; Fan, Liu, & Zhang, 2013; 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 in general 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 online platform is the degree to which a consumer comprehends the Website procedures (Gefen et al. 2003b) for instance, familiarity with search engines of a website and interaction channels with peers. Familiarity differs from trust, since "trust reduces social complexity relating to future activities of the other party, [while] familiarity reduces social uncertainty through increased understanding of what is happening in the present" (Gefen et al. 2003b, p. 63).

Information seeking on web sites deepens users' understanding of contents and knowledge of the platform (Choo, Detlor, & Turnbull, 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 a specific online platform. For instance, users who actively seek for information about a product/service in different channels,

such as reviews and e-vendors forums, become familiar with searching tools, the rating policies, contents of recommendations, and the purchasing process. Thus we propose that:

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

3.5 Social Presence: The Effect of Social Commerce Information Seeking

Social presence is one of the key blocks of social media and social commerce platforms (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). Social presence is the sense of "warmth" and sociability within a website (Gefen & Straub, 2003c). More specifically, social presence is defined as "the extent to which a medium allows users to experience others as psychologically present" (Hassanein & Head, 2005). Presence is the "illusion of being there or an experience of being in an environment while physically situated in another location" (Li et al., 2002). Social presence theory (Short, Williams, & Christie, 1976) posit that intimacy and immediacy enhance the warmth of the media and the presence is higher for interpersonal and synchronous communications than mediated and asynchronous (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). Previous research drew on social presence theory to illustrate the lack of warmth in traditional media (e.g., Sproull & Kiesler, 1986; Straub, 1994). Different interactional tools in social commerce websites enhance the sense of social presence, such as pictures, comments, reviews, likes, emoticons, and so forth. However, Biocca et al (2003) posit social presence theory benefits from "the properties that simulates agency in inanimate things such as pixels, paint, and clay" (p. 35).

In this vein, Bente et al. (2008) claim that using new technologies such as avatars "allow for real-time information interchange and the synchronization of distributed working efforts over large distances", which enhance social presence in net-based collaborations (p. 287).

Naylor, Lamberton, and West (2012) indicated that the Facebook Like button, as an indicator of "mere virtual presence", enhances the customers' brand evaluations and purchase intention. However, recently Facebook took one step further and added reactions buttons (i.e. Love, Haha, Wow, Sad, and Angry), which visualize the emotional expression toward peer-generated contents. Users express their presence and genuine feeling about the content and observe peers' animated/alive reactions toward a product/service.

Facebook reactions buttons, Twitter's "Tweet" button, and Plurck's "Share" button are samples of social commerce features, which facilitate the information/consult seeking process and enhance users' perception of social support and relationship quality (Liang et al., 2011). Thus, navigation and information seeking on these platforms exposes users to the embedded vibrant and ongoing contents, which could instigate/improve the feeling of warmth and social presence throughout the purchase process. Thus we propose that:

H5: Social commerce information seeking increases social presence perception.

3.6 Purchase Intention: The Effects of Familiarity
Previous research indicated that familiarity with product/service/brand increases purchase intention (e.g. Harlam, Krishna, Lehmann, & Mela, 1995; Laroche et al., 1996). In this vein, we argue that familiarity with SNS could enhance the purchase intention from an e-vendor on the SNS (i.e. purchase intention). Online purchase intention is a technical process, requiring following some specific steps, such as searching for the favorable produce/service, finding other

customers' reviews/comments on the product and e-vendor, selecting the product and 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 online environment causes purchase avoidance; however, familiarity with the platform enhances customers understanding of the shopping process and reduces the intricacy of decisions (Gefen, et al., 2003a).

Recently, Van Der Heide and 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 rather than customers who are unfamiliar. Accordingly, Martínez-López, Esteban-Millat, Cabal, and Gengler (2015) indicated that familiarity with a recommendation system enhances perceived ease of use, intention to use recommendation system, and purchase intention. Thus we propose that:

H6: Familiarity with the online platform increases intention to purchase from e-vendors.

3.7 Purchase Intention: The Effect of Social Presence

Gefen and Straub (2004) indicate that social presence enhances purchase intention in online platforms through the elevation of integrity, predictability, ability, and benevolence. Other researchers indicate that social presence influences attitude toward use and e-loyalty through perceived usefulness, trust, and enjoyment (Cyr, Hassanein, Head, & Ivanov, 2007; Hassanein & Head, 2005). Moreover, Cheung, Chiu and Lee (2011) demonstrated that social presence enhances users' continuance of social media usage.

Drawing on the advertisement literature, Li et al. (2002) indicate that 3-D advertising increases the viewer's sense of social presence ,thus enhances purchase intention. Accordingly, the

emoticons and novel features of SNS (e.g. Facebook buttons of Like, Haha, Anger, Wow, Sad) could improve the sense of warmth in interactions and subsequently purchase intention. Thus we propose:

H7: Social presence increases intention to purchase from e-vendors.

We acknowledge when proposing this model that there are other plausible theoretical frameworks that should be tested. Therefore, following Burnham and Anderson (2004) recommendations we propose two alternative models in Appendix A to present the most appropriate model to the theory and practice. Given structural equation modeling (SEM) as the method of this study, using rival models for the verification of model power and validity is suggested (Kellogg et al., 1997).

Based on the findings of the previous study in the area of trust, familiarity, and intention to use/purchase (Cyr, Hassanein, Head, & Ivanov, 2007; Gefen et al., 2003; Martínez-López et al., 2015), we present the following alternative models: 1) It is plausible that information seeking increases familiarity and social presence and together they elevates trust and subsequently purchase intention. Thus, alternative model 1 proposes a mechanism explaining the effect of social commerce information seeking on purchase intention 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 elevate social commerce information seeking and purchase intention. Thus, alternative model 2 incorporates familiarity and social presence as the outcome of trust and social commerce information seeking as the consequence of them (please see Appendix A).

4. Research methodology

4.1 Sample and Data Collection

There are a number of social commerce platforms, such as Facebook, Twitter, and Ebay, which link users to e-vendors. However, these platforms differ based on different aspects, such as informational/interactional channels, privacy policies, quality/quantity of peer content generation, economic feasibility, size, and reputation (Kim & Park, 2013). Narrowing down the context and reducing the effect of SNS choice, we use Facebook as the target platform, since it provides users with the majority of content generation tools and is the most popular SNS in the world (Duggan et al. 2015). The data analysis is carried out with 201 participants, comprised of 55% women and 45% men. Participants are 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 had not access to the Internet at the time of study and to elevate the response rate. The integration of both survey methods is also used in previous studies in online context (e.g. Kim & Park, 2013; Reich, Subrahmanyam, & Espinoza, 2012). However, the statistical analysis was conducted to avoid any probable biases on the results. Following Dong, Evans, & Zou (2008), we examine the data gathered from each group (online and offline respondents), using Box's M test. This test examines the homogeneity of variance of covariance matrices among the groups. Results indicated the Box's M value of 120.70 was not significant ($p=.44$), indicating the equality of covariance matrices among the two groups of responses. Thus, there was no evidence suggesting two samples would be significantly different. As a result, a total of 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 construct, included in the model. 4-item scale of trust was adapted from (Gefen et al., 2003b), measuring benevolence and credibility in SNSs. Social presence 4-item scale 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 acquirement through the informational channels, including rating/reviews, recommendations, communities, and forums. Familiarity 3-item scale is adopted from Gefen (2000). Purchase intention was adapted from 2-item scale of Gefen, Karahanna, and Straub (2003a) to capture customers' intention to engage in online 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 improved by three marketing faculty familiar with social media and social commerce research as well as three PhD students. Finally, the items were checked by three independent judges who did not have previous knowledge about the questionnaire. This gave an evaluation of the overall questionnaire and ensured content validity (Wang, et al., 2012).

5. Analysis

We draw on two methods of structural equation modeling (SEM), namely partial least square (PLS) and covariance-based (CB) to analyze the model. PLS is more suitable for a low-structured environment and theory development, while CB-SEM is recommended for theory confirmation (Esposito Vinzi, Chin, Henseler, & Wang, 2010). Thus, due to the exploratory nature of this study we use PLS to run the SEM model. However, CB-SEM compares the rival models and indicates the fit indices, while PLS does not (Hair et al. 2012). Thus, we use CB-

SEM to compare the rival models and select the best model for the data.

5.1 Reliability and Validity

Reliability Internal consistency has been assessed by Cronbach's alpha and composite

reliability scores. As Appendix C indicates all Cronbach's alpha and composite reliability values

were higher than .70 (Naylor, et al., 2012). *Convergent and Discriminant Validity* The reason for

testing convergent validity is to ensure that the correlations between measures of the same

constructs are relatively high (Straub, 1989). Additionally, discriminant validity can be achieved

by low correlations between measures of constructs, which are expected to be different (Straub,

1989). Convergent validity was assessed through three steps. First, all item loadings were higher

than .5. Second the composite reliability were higher than .7 (Naylor, et al., 2012). Third, AVE

values exceeded .5, indicating that that the majority of the variance is accounted for by the

constructs (McLure Wasko & Faraj, 2005; Wixom & Watson, 2001). As Table 1 exhibits the

square of the correlations among the constructs were lower than the corresponding AVEs, which

indicates the establishment of discriminant validity (Chin, 1998).

Table 1 Descriptive statistics and measurement validation.

Constructs	M	SD	AVE	R^2	1	2	3	4	5
1. Familiarity	3.85	.98	.65	.41	**.80**				
2. Social Commerce Info. Seeking	3.25	.99	.59	.21	.36	**.76**			
3. Purchase Intention	3.42	.97	.60	.43	.48	.36	**.77**		
4. Social Presence	2.95	.95	.65	.1	.14	.23	.38	**.80**	
5. Trust	3.58	.91	.61	—	.60	.31	.57	.26	**.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 constructs.

5.2 Common method Bias and Multicollinearity

Reducing common method bias, we followed (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003)

recommendations. First, scales were carefully adapted and improved by the expert familiar with

the research. Second, independent and dependent variables were distanced in the questionnaire,

using other items, which are not included in the current study. We also statistically checked the common method bias in order to minimize the effect on results. Unrotated exploratory factor analysis indicated five factors, explaining 67% of variance in the model. This rejects the probability of one general factor (Chin, Thatcher, & Wright, 2012). Multicollinearity was assessed through 2 steps. First, all AVEs were higher than .5. Second, variance inflation factors ranged from 1.11 to 1.68 that were far below the common cutoff of 5 (Hair, Sarstedt, Ringle, & Mena, 2012)

6. Results

The result of the CB-SEM analysis indicated that the model fit the data quite well: $\chi 2$ =144.12; *d.f.* = 99; SRMR =.059; CFI =.95; RMSEA =.055; TLI =.94; IFI = .96; *p* = .00. The analysis of R^2 ranging from .12 to .43, indicated that the model explains a considerable portion of the variance in the endogenous variables (Hair et al., 2012). Moreover, Stone-Geisser's values of blindfolding analysis indicated that Q^2 ranged from .08 to .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.

Fit Index: χ2 =144.12; *df* = 99; SRMR =.059; CFI =.95; RMSEA =.055; TLI =.94; IFI = .96; *p* = .00.
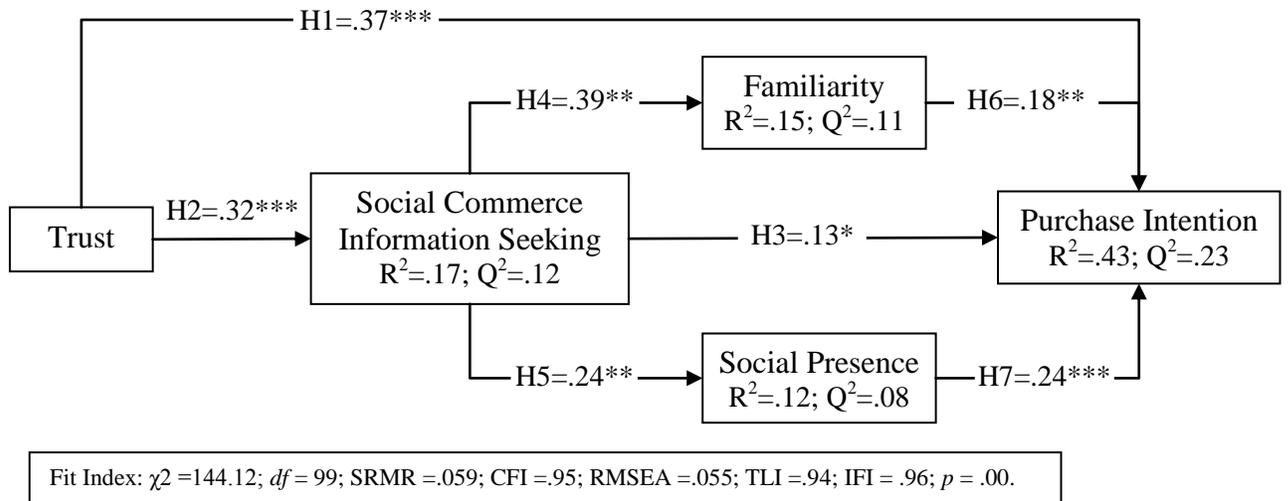
5000 bootstrap samples; # of cases = 200 = # of usable responses; and 300 iterations Hair et al. (2012); *p<0.05, t=1.96; **p<0.01, t=2.56; ***p<0.001.

Figure 2 Results

H1 postulates a positive relationship between trust and purchase intention, which is supported

(*β*=.37; *p*<.001). Consistent with H2, the results indicate a significant positive relationship

between trust and social commerce information seeking (*β*=.32; *p*<.001). Social commerce

information seeking is positively associated with purchase intention, indicating support for H3

(*β*=.13; *p*<.01). We found support for H4 and H5, as the results indicate that social commerce

information seeking is positively associated with familiarity and social presence (respectively,

β=.39; *p*<.001; *β*=.24; *p*<.01). Moreover, H6 and H7 were also supported, as familiarity and

social presence were positively associated with purchase intention (respectively, *β*=.18; *p*<.01;

β=.24; *p*<.001).

In order to provide more explanations for the indirect paths, we ran mediation analysis , using

INDIRECT Macro for SPSS (Hayes, 2013). Table 2 indicates that social commerce information

seeking partially mediates the relationship between trust and familiarity, and between trust and

social presence. Moreover, familiarity and social presence are found to be partial mediators of

the relationship between social commerce information seeking and purchase intention.

Path	Path A[a] $(X \rightarrow M)$	Path B $(M \rightarrow Y_X)$	Path C′ $(X \rightarrow Y_M)$	Indirect effect[b] 95% confidence interval	Sobel test[c]/ Type

	B	*B*	*B*	Effect	Lower	Upper	
Trust → Info. Seeking → Familiarity	.32***	.20**	.54***	.061†	.026	.110	3.01**/partial
Trust → Info. Seeking → Social Presence	.32***	.18**	.21**	.05†	.006	.137	2.53*/partial
Trust → Info. Seeking → Purchase Intention	.32***	.20***	.51***	.15†	.074	.248	3.01**/partial
Info. Seeking → Familiarity → Purchase Intention	.37***	.40***	.22**	.15†	.044	.074	3.66***/partial
Info. Seeking → Social Presence → Purchase Intention	.24**	.31***	.29***	.08†	.029	.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 Preacher & Hayes, (2008) 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, using Baron & Kenny (1986) approach.

Table 2 Mediation analysis

Appendix A indicates the results of the SEM analysis for alternative models 1 and 2. As the CB-SEM analysis demonstrates, all fit indices of the model provided in Figure 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 and Anderson (2004) suggestion. The results indicated that main model is the best fit to the data, relative to alternative model 1 and 2, since AIC and BIC values are the lowest (Akaike 1987); Main model: AIC= 236.126, BIC= 388.078; alternative model 1: AIC= 277.528, BIC= 419.570; alternative model 2: AIC= 269.470, BIC= 418.119.

7. Discussion

This study contributes to the literature by investigating the role of trust in customer's intention to purchase from e-vendors on social commerce platforms. Doing so, we propose a mechanism to explain the relationship between trust of platform and purchase intention. The mechanism encompasses three critical constructs related to social commerce: social commerce information seeking, familiarity with the platform, and social presence. We drew on Facebook as the most well-known SNS and a fertile platform for social commerce to find empirical support

for the study model. We also validated our model, proposing two alternative models and comparing the fitness of models to the gathered data. The results of the empirical study among Facebook users indicated that the main model of study, presented in Figure 1, fits the data better than the alternative models.

In line with the first study question, trust of the SNS was found to be a key predictor of customers' intention to purchases from e-vendors. The explanatory mechanism indicated that trust of a SNS elevates information seeking within the SNS through different channels, such as forums/communities, reviews and ratings, and recommendations about a product/service. Subsequently, the information acquirement on SNSs directly augments individuals' intention 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. One the one hand, the more people seek information in different informational channels of a SNS, the more they will be familiar with the procedures and functionality of the SNS. On the other hand, the more users seek information and the more they feel the extant 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 the purchasing process from e-vendors.

Results of the mediation analysis (Table 2) indicate that the effect of trust on familiarity and social presence are partly carried through social commerce information seeking. On the one hand, trust of a social commerce site increases the information seeking and thus elevates their familiarity with the platform, due to the expansion of their knowledge about the platform. On the other hand, trust augments users' information acquirement through different channels and the exposure to peer-generated contents enhances their feeling of social presence within the platform. Moreover, the effect of trust on purchase intention is partially mediated by information

seeking, indicating that trust elevates usage of SNS informational channels for acquiring useful information toward a purchase. In addition, active participation in the information seeking enhances individuals' familiarity with the platform and the sense of social presence, which inspire the purchases.

8. Implications

Social commerce has expanded widely during the last decade and its market has grown to $30 billion in U.S. (Zhou, Zhang, & Zimmermann, 2013). However, trust has been known as one of the main reasons for purchase hindrance and firms' failures in social commerce strategies (Kim & Park, 2013). In spite of this, trust issues raise to a higher level in a social commerce context due to the reliance on peer-generated contents in SNSs (Liang & Turban, 2011).

This research has several implications for firms and social commerce managers. *Trust* is a critical issue in a social commerce context and specifically has an important role in customers' purchase intention. The more customers trust the platform, the more likely they are to engage in the purchase 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, communication, economic feasibility, and word-of mouth-referrals (Kim & Park, 2013). However, trust is not the only factor and the following elements are also important in the elevation of purchase intention.

Social Commerce Information Seeking customers look into different informational channels within a social commerce platform to reach their required information for the purchase decision. Results of our study indicate the more customers seek for information within a social commerce platform the more they are likely to purchase. Thus, e-vendors are able to increase purchase intention within their communities or forums by providing an easy access to the search engines,

channels of information, information exchange processes, and enhancing trust of the embedded contents. User's participation in communities, forums, reviews and rating and recommendation systems should be facilitated to inspire information seeking and interaction 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 (i.e. Facebook, Twitter, LinkedIn, etc.) could facilitate the seeking 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 salient predictor of customer purchase intention. Previous research also indicated that unfamiliar users rely on their consensus heuristics rather that peer or system-generated contents for their purchases (Van Der Heide & Lim, 2015), including education tabs, explanation/instructions for features of the platform, and online chat with agents. E-vendors are able to equip their pages by pull down menu, helpful tips about the new features of the page, Frequently Asked Questions tab, graphical instructions, and speech-bubble.

Social Presence The feeling of warmth and vividness in social commerce platforms increases customers' purchase intention. Facebook has recently featured animated reaction and GIF buttons to enhance the expression of feelings in the platform. Accordingly, adding visual indicators into pages/communities/forums may enhance the social presence. In line with communication and social media research (i.e., Asur & Huberman, 2010; Bente et al., 2008; Zeng, Chen, Lusch, & Li, 2010), 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'.

Limitations

Similar to all research, this study contains a number of limitations and recommendations for future studies. First, the context of this study is limited to Facebook as one of the most well-known SNSs. However, future studies could test the main and alternative models of this study in other SNSs, including Twitter, LinkedIn, Instagram, Xing, Google+, and so forth. Furthermore, we relied on cross-sectional survey to find support for our conceptual model. Future studies could draw on longitudinal studies and experimental research to capture the effect of trust and its consequences on purchase intention. Moreover, future studies may test the effect of some potential moderation on the relationships presented in the main model, such as tie strength, social media involvement, and habit.

References

Adjei, M. T., Noble, S. M., & Noble, C. H. (2010). The influence of C2C communications in online brand communities on customer purchase behavior. *Academy of Marketing Science. Journal, 38*(5), 634-653.

Aiken, K. D., & Boush, D. M. (2006). Trustmarks, Objective-Source Ratings, and Implied Investments in Advertising: Investigating Online Trust and the Context-Specific Nature of Internet Signals. *Journal of the Academy of Marketing Science, 34*(3), 308-323.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211.

Akaike, H. (1987). Factor analysis and AIC. Psychometrika, 52(3), 317-332.Ali, H. (2011). Exchanging value within individuals' networks: Social support implications for health marketers. [Article]. *Journal of Marketing Management, 27*(3/4), 316-335.

Asur, S., & Huberman, B. A. (2010). Predicting the future with social media. In *Web Intelligence and Intelligent Agent Technology (WI-IAT), 2010 IEEE/WIC/ACM International Conference on*. IEEE. *1*(2), 492–499

Ba, S., & Pavlou, P. A. (2002). Evidence of the Effect of Trust Building Technology in Electronic Markets: Price Premiums and Buyer Behavior. [Article]. *MIS Quarterly, 26*(3), 243-268.

Bagozzi, R. P., & Dholakia, U. M. (2002). Intentional Social Action in Virtual Communities. [Article]. *Journal of Interactive Marketing (John Wiley & Sons), 16*(2), 2-21.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173.

Bente, G., Rüggenberg, S., Krämer, N. C., & Eschenburg, F. (2008). Avatar-Mediated Networking: Increasing Social Presence and Interpersonal Trust in Net-Based Collaborations. *Human Communication Research*, *34*(2), 287–318.

Bhattacherjee, A. (2002). Individual trust in online firms: Scale development and initial test. *Journal of Management Information Systems*, *19*(1), 211–241.

Biocca, F., Harms, C., & Burgoon, J. K. (2003). Toward a more robust theory and measure of social presence: Review and suggested criteria. *Presence, 12*(5), 456-480.

Burnham, K. P., & Anderson, D. R. (2004). Multimodel inference understanding AIC and BIC in model selection. *Sociological Methods & Research*, *33*(2), 261–304.

Chen, M.-Y., & Teng, C.-I. (2013). A comprehensive model of the effects of online store image on purchase intention in an e-commerce environment. *Electronic Commerce Research*, *13*(1), 1–23.

Chen, J., Xu, H., & Whinston, A. B. (2011). Moderated Online Communities and Quality of User-Generated Content. [Article]. *Journal of Management Information Systems, 28*(2), 237-268.

Cheung, C. M., Chiu, P.-Y., & Lee, M. K. (2011). Online social networks: Why do students use facebook? *Computers in Human Behavior*, *27*(4), 1337–1343.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research, 295*(2), 295-336.

Chin, W. W., Thatcher, J. B., & Wright, R. T. (2012). Assessing common method bias: Problems with the ULMC technique. *MIS Quarterly*, *36*(3), 1003–1019.

Chiou, J.-S., Droge, C., & Hanvanich, S. (2002). Does customer knowledge affect how loyalty is formed? *Journal of Service Research*, *5*(2), 113–124.

Choo, C. W., Detlor, B., & Turnbull, D. (2000). Information seeking on the Web: An integrated model of browsing and searching. *First Monday*, *5*(2).

Cyr, D., Hassanein, K., Head, M., & Ivanov, A. (2007). The role of social presence in establishing loyalty in e-service environments. *Interacting with Computers*, *19*(1), 43–56.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340.

Delone, W. H., & Mclean, E. R. (2004). Measuring e-commerce success: Applying the DeLone & McLean information systems success model. *International Journal of Electronic Commerce*, *9*(1), 31–47.

De Maria, E. D., & Finotto, V. (2008). Communities of consumption and made in Italy. *Industry and Innovation*, *15*(2), 179-197.

Dong, B., Evans, K. R., & Zou, S. (2008). The effects of customer participation in co-created service recovery. *Journal of the Academy of Marketing Science*, *36*(1), 123-137.

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). Social media update 2014. *Pew Research Center*, *19*. Retrieved from http://www.foothillspresbytery.org/wp-content/uploads/sites/175/2015/07/Social-Media-Site-Usage-2014-_-Pew-Research-Centers-Internet-American-Life-Project.pdf

Ellis, D., Cox, D., & Hall, K. (1993). A comparison of the information seeking patterns of researchers in the physical and social sciences. *Journal of Documentation*, *49*(4), 356–369.

Esposito Vinzi, V., Chin, W., Henseler, J., & Wang, H. (2010). *Handbook of Partial Least Squares*: Springer Berlin Heidelberg.

Fan, X., Liu, F., & Zhang, J. (2013). To be familiar or to be there? The roles of brand familiarity and social presence on web store image and online purchase intention. *International Journal of Electronic Marketing and Retailing*, *5*(3), 199–221.

Featherman, M. S., & Hajli, N. (2015). Self-Service Technologies and e-Services Risks in Social Commerce Era. *Journal of Business Ethics*, 1-19.

Fishbein, M., & Ajzen, I. (1975). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological bulletin, 85*(5), 888-902.

Flanagin, A. J., Metzger, M. J., Pure, R., Markov, A., & Hartsell, E. (2014). Mitigating risk in ecommerce transactions: perceptions of information credibility and the role of user-generated ratings in product quality and purchase intention. *Electronic Commerce Research*, *14*(1), 1–23.

Gefen, D. (2000). E-commerce: the role of familiarity and trust. *Omega*, *28*(6), 725–737.

Gefen, D. (2002). Reflections on the dimensions of trust and trustworthiness among online consumers. *Database for Advances in Information Systems, 33*(3), 38-53.

Gefen, D., Karahanna, E., & Straub, D. W. (2003a). Inexperience and experience with online stores: The importance of TAM and trust. *Engineering Management, IEEE Transactions on*, *50*(3), 307–321.

Gefen, D., Karahanna, E., & Straub, D. W. (2003b). Trust and TAM in online shopping: an integrated model. *MIS Quarterly*, *27*(1), 51–90.

Gefen, D., & Straub, D. (2003c). Managing user trust in B2C e-services. *E-Service Journal*, *2*(2), 7–24.

Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services. *Omega*, *32*(6), 407–424.

Grabner-Kraeuter, S. (2002). The role of consumers' trust in online-shopping. *Journal of Business Ethics*, *39*(1-2), 43-50.

Grabner-Kräuter, S. (2009). Web 2.0 social networks: the role of trust. *Journal of business ethics*, *90*(4), 505-522.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, *40*(3), 414–433.

Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International Journal of Information Management*, *35*(2), 183–191.

Hajli, N., & Sims, J. (2015). Social commerce: The transfer of power from sellers to buyers. *Technological Forecasting and Social Change, 94*, 350-358.

Harlam, B. A., Krishna, A., Lehmann, D. R., & Mela, C. (1995). Impact of bundle type, price framing and familiarity on purchase intention for the bundle. *Journal of Business Research*, *33*(1), 57–66.

Hassanein, K., & Head, M. (2005). The impact of infusing social presence in the web interface: An investigation across product types. *International Journal of Electronic Commerce*, *10*(2), 31–55.

Hauser, J. R., & Wernerfelt, B. (1990). An evaluation cost model of consideration sets. *Journal of Consumer Research*, *16*(9), 393–408.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of Consumer Behaviour*, *10*(6), 356-364.

Huang, Z., & Benyoucef, M. (2013). From e-commerce to social commerce: A close look at design features. *Electronic Commerce Research and Applications*, *12*(4), 246–259.

Jones, K., & Leonard, L. N. (2008). Trust in consumer-to-consumer electronic commerce. *Information & Management*, *45*(2), 88–95.

Huang, M., Cai, F., Tsang, A. S., & Zhou, N. (2011). Making your online voice loud: the critical role of WOM information. *European Journal of Marketing*, *45*(7/8), 1277-1297.

Kaiser, S., & Müller-Seitz, G. (2008). Leveraging lead user knowledge in software development—The case of weblog technology. *Industry and Innovation*, *15*(2), 199-221.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*(1), 59–68.

Keller, K. L. (2009). Building strong brands in a modern marketing communications environment. *Journal of marketing communications*, *15*(2-3), 139-155.

Kellogg, D. L., Youngdahl, W. E., & Bowen, D. E. (1997). On the relationship between customer participation and satisfaction: two frameworks. *International Journal of Service Industry Management*, *8*(3), 206–219.

Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management*, *33*(2), 318–332.

Kuhlthau, C. C. (2004). Seeking meaning: A process approach to library and information services. Libraries Unlimited Incorporated. *Westport, CT*.

Laroche, M., Kim, C., & Zhou, L. (1996). Brand familiarity and confidence as determinants of purchase intention: An empirical test in a multiple brand context. *Journal of Business Research*, *37*(2), 115–120.

Li, H., Daugherty, T., & Biocca, F. (2002). Impact of 3-D advertising on product knowledge, brand attitude, and purchase intention: The mediating role of presence. *Journal of Advertising*, *31*(3), 43–57.

Liang, T.-P., Ho, Y.-T., Li, Y.-W., & Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International Journal of Electronic Commerce*, *16*(2), 69–90.

Liang, T.-P., & Turban, E. (2011). Introduction to the special issue social commerce: a research framework for social commerce. *International Journal of Electronic Commerce*, *16*(2), 5–14.

Liberatore, M. J., & Titus, G. J. (1983). The practice of management science in R&D project management. *Management Science*, *29*(8), 962–974.

Lim, Y., & Van Der Heide, B. (2015). Evaluating the wisdom of strangers: The perceived credibility of online consumer reviews on Yelp. *Journal of Computer-Mediated Communication*, *20*(1), 67–82.

Lu, Y., Zhao, L., & Wang, B. (2010). From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. [Article]. *Electronic Commerce Research & Applications, 9*(4), 346-360.

Martínez-López, F. J., Esteban-Millat, I., Cabal, C. C., & Gengler, C. (2015). Psychological factors explaining consumer adoption of an e-vendor's recommender. *Industrial Management & Data Systems*, *115*(2), 284–310.

Marshall, G. W., Moncrief, W. C., Rudd, J. M., & Lee, N. (2012). Revolution in Sales: The Impact of Social Media and Related Technology on the Selling Environment. *Journal of Personal Selling and Sales Management, 32*(3), 349-363.

Mathieson, K. (1991). Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior. [Article]. *Information Systems Research, 2*(3), 173-191.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of management review*, *20*(3), 709-734.

McKnight, D. H. & Chervany N. L. (2001). What trust means in e-commerce customer relationships: an interdisciplinary conceptual typology. *International journal of electronic commerce*, *6*(2), 35-59.

McLure Wasko, M., & Faraj, S. (2005). Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice. [Article]. *MIS Quarterly, 29*(1), 35-57.

Ming-Hsien, Y., Chandlrees, N., Binshan, L., & Hung-Yi, C. (2009). The Effect of Perceived Ethical Performance of Shopping Websites on Consumer Trust. [Article]. *Journal of Computer Information Systems, 50*(1), 15-24.

Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: the dynamics of trust within and between organization.*Journal of Marketing, 29*(3), 314–328

Mutz, D. C. (2005). Social Trust and E-Commerce: Experimental Evidence for the Effects of Social Trust on Individuals' Economic Behavior. *Public Opinion Quarterly, 69*(3), 393-416.

Murray, K. B. (1991). A test of services marketing theory: consumer information acquisition activities. *The Journal of Marketing*, *55*(1), 10–25.

Nambisan, S. (2002). Designing Virtual Customer Environments for New Product Development: Toward a Theory. *The Academy of Management Review, 27*(3), 392-413.

Naylor, R. W., Lamberton, C. P., & West, P. M. (2012). Beyond the "like" button: the impact of mere virtual presence on brand evaluations and purchase intentions in social media settings. *Journal of Marketing*, *76*(6), 105–120.

Osawa, J., Mozur, P., & Winkler, R. (2014, April). Alibaba Flexes Muscles Before IPO. Chinese E-Commerce Giant Speeds Toward $15 Billion Deal. *The Wall Street Journal*.

Pavlou, P. A. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. [Article]. *International Journal of Electronic Commerce, 7*(3), 101-134.

Piller, F. T., & Walcher, D. (2006). Toolkits for idea competitions: a novel method to integrate users in new product development. *R&D Management, 36*(3), 307-318.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879.

Pongsakornrungsilp, S., & Schroeder, J. E. (2011). Understanding value co-creation in a co-consuming brand community. *Marketing Theory, 11*(3), 303-324.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879–891.

Reich, S. M., Subrahmanyam, K., & Espinoza, G. (2012). Friending, IMing, and hanging out face-to-face: overlap in adolescents' online and offline social networks. *Developmental Psychology*, *48*(2), 356.

Schurr, P. H., & Ozanne, J. L. (1985). Influences on exchange processes: Buyers' preconceptions of a seller's trustworthiness and bargaining toughness. *Journal of consumer research*, *11*(4), 939-953.

Rempel, J. K., Holmes, J. G., & Zanna, M. P. (1985). Trust in close relationships. *Journal of personality and social psychology*, *49*(1), 95-112.

Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. New York: John Wiley & Son.

Sproull, L., & Kiesler, S. (1986). Reducing social context cues: Electronic mail in organizational communication. *Management Science*, *32*(11), 1492–1512.

Stephen, A. T., & Toubia, O. (2010). Deriving value from social commerce networks. *Journal of Marketing Research*, *47*(2), 215–228.

Straub, D. W. (1989). Validating Instruments in MIS Research. [Article]. *MIS Quarterly, 13*(2), 147-169.

Straub, D. W. (1994). The Effect of Culture on IT Diffusion: E-Mail and FAX in Japan and the US. *Information Systems Research*, *5*(1), 23–47.

Suh, B., & Han, I. (2003). The impact of customer trust and perception of security control on the acceptance of electronic commerce. *International Journal of electronic commerce*, *7*(3), 135-161.

Turcotte, J., York, C., Irving, J., Scholl, R. M., & Pingree, R. J. (2015). News recommendations from social media opinion leaders: effects on media trust and information seeking. *Journal of Computer-Mediated Communication*, *20*(5), 520–535.

Van Der Heide, B., & Lim, Y. (2015). On the Conditional Cueing of Credibility Heuristics The Case of Online Influence. *Communication Research*, *3*(4),1–22.

Van der Heijden, H., Verhagen, T., & Creemers, M. (2003). Understanding online purchase intentions: contributions from technology and trust perspectives. *European Journal of Information Systems*, *12*(1), 41–48.

Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, *44*(1), 5–23.

Wang, Y., Min, Q., & Han, S. (2016). Understanding the effects of trust and risk on individual behavior toward social media platforms: A meta-analysis of the empirical evidence. *Computers in Human Behavior*, *56*(7), 34–44.

Wang, X., Yu, C., & Wei, Y. (2012). Social Media Peer Communication and Impacts on Purchase Intentions: A Consumer Socialization Framework. *Journal of Interactive Marketing, 26*(4), 198-208.

Wixom, B. H., & Watson, H. J. (2001). An Empirical Investigation of the Factors Affecting Data Warehousing Success. [Article]. *MIS Quarterly, 25*(1), 17-41.

Yi, Y., & Gong, T. (2013). Customer value co-creation behavior: Scale development and validation. *Journal of Business Research*, *66*(9), 1279–1284.

Zeng, D., Chen, H., Lusch, R., & Li, S.-H. (2010). Social media analytics and intelligence. *Intelligent Systems, IEEE*, *25*(6), 13–16.

Zhou, L., Zhang, P., & Zimmermann, H.-D. (2013). Social commerce research: An integrated view. *Electronic Commerce Research and Applications*, *12*(2), 61–68.

Appendix A
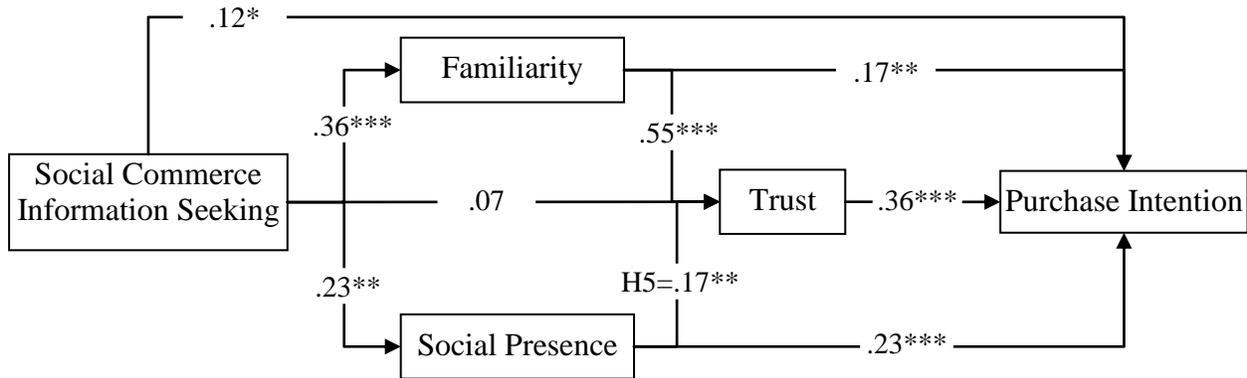
Fit Index: χ^2 =171.42; *df* = 96; SRMR =.068; CFI =.92; RMSEA =.066; TLI =.90; IFI = .92; *p* = .00

Alternative model 1
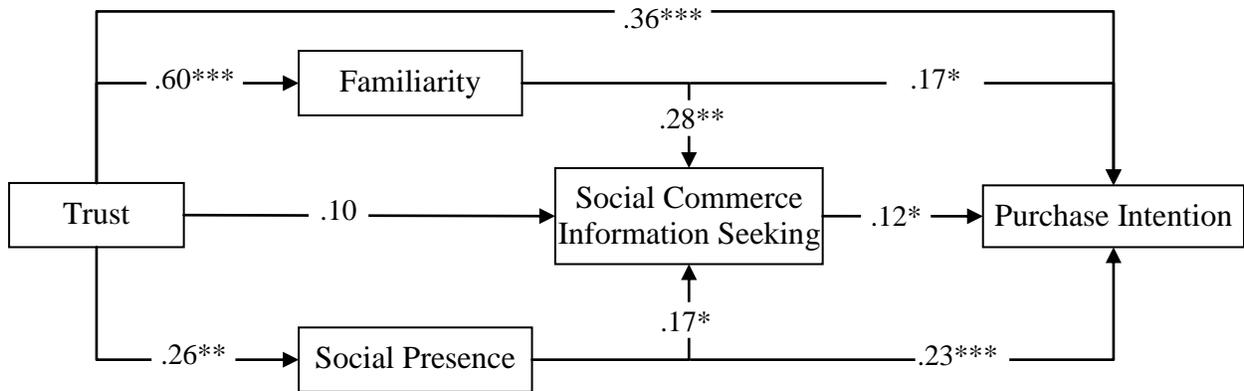
Fit Index: χ^2 =179.47; *df* = 96; SRMR =.067; CFI =.91; RMSEA =.07; TLI =.89; IFI = .912; *p* = .00

Alternative model 2

Appendix

Measures	
Items	**Loadings**

Trust (CA= .78; CR= .84)

Promises made by Facebook are likely to be reliable.	.84
I do not doubt the honesty of Facebook.	.80
Based on my experience with Facebook, I know it is honest.	.75
Based on my experience with Facebook, I know they care about users.	.72

Purchase intention (CA= .71; CR= 75)

I am very likely to provide the online vendor with the information it needs to better serve my needs through Facebook.	.66
I am happy to use my credit card to purchase from an online vendor through Facebook.	.86

Familiarity (CA= .72; CR= .84)

I am familiar with searching for materials in Facebook.	.80
I am familiar with buying materials in Facebook.	.88
I am familiar with inquiring about material ratings in Facebook.	.72

Social commerce information Seeking (CA= .74; CR= .81)

I use online forums and communities for acquiring information about a product.	.75
I usually use people ratings and reviews about products on the internet.	.77
I usually use people`s recommendations to buy a product on the internet.	.77
I trust my friends on online forums and communities. *	

Social presence (CA= .83; CR= .88)

There is a sense of human contact in Facebook.	.83
There is a sense of sociability in Facebook.	.82
There is a sense of human warmth in Facebook.	.77
There is a sense of human sensitivity in Facebook.	.81

Notes: CA= Cronbach's Alpha; CR= Composite Reliability; * = Dropped