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EXAMINING THE CULTURAL DIFFERENCE IN THE INTENTION TO PURCHASE IN SOCIAL COMMERCE

(Research in Progress)

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Abstract
This study attempts to investigate how culture plays a role in influencing peers’ online shopping intentions in social commerce, conducted in Facebook – a social network site in a cross-national settings. We are interested in studying the moderating effects of the culture factor on the relationship between social interaction and social commerce purchasing intention, and trust; and the mediating effect of trust on the relationship between social interaction and social commerce purchasing intention. In order to achieve this, social influence theory and social impact theory are investigated and used to explain how social interaction potentially causes the intention to purchase in a social commerce context. And, Hofstede’s dimensions of national culture are considered in analyzing the culture difference among the countries considered in this study. Online surveys are conducted. The expected main outputs from this research are: (1) better understanding of the impact of culture difference on social commerce user’s behavior and acceptance, (2) better comprehension of the social commerce user characteristics and the impacts of social interaction on social commerce purchasing decision to design appropriate level of interactions with customers and fans in word-of-mouth marketing, and (3) a foundation for a better conception of social commerce model in the future.

Keywords: social commerce, social influence theory, social impact theory, culture, social interaction, trust, social network site.
1 INTRODUCTION AND PURPOSE

Over the last decade, we have witnessed quite a few business jargons originated from the field of electronic commerce, starting from the term e-commerce in the late 1990’s, mobile-commerce and location-commerce in the late 2000’s, and now social-commerce in 2010’s. While e-commerce emphasizes on the cost-efficiency for both seller and buyer, mobile-commerce and location-commerce focus on providing maximal mobility to the buyer, and social commerce concentrates on consumer-product information sharing. This development is driven by two main drivers; one is consumer bargaining power and the other is the rapid advancement in information technologies, in particular the introduction of Web 2.0. The former has eminently caused by a shift from the relationship between business and consumers to the relationship among business, current consumers and potential consumers. More interestingly, these consumers are digital consumers and sometimes these consumers may have a very close relationship with each other, as in social commerce.

In this study, we define social commerce as the intersection between social media and e-commerce (cf. (Cohen 2011)). In details, social commerce involves using social media that supports social interaction and user contributions or UGC (such as ratings and reviews, blogs, micro-blogging), to assist in the online buying and selling of products and services (Wikipedia 2011). According to the business consulting firm Booz & Co (2012) forecast, the social commerce market will be driving $30bn in annual sales in five years time, from 2011 to 2015. One of the powerful drivers possibly underpins the expansion in social commerce market, consumer spending or purchasing is --- the word-of-mouth marketing and viral marketing capabilities inherent in a social commerce site or fan-store, and the possible incentive-driven advocacy provided by the online stores. The rapid growth of social network (e.g. Facebook) in the past five years and in the future, compared to Myspace, can be attributed to the ‘group communication’ type of interaction mechanism (Jung & Lee 2011). In this text, we use ‘group communication’ and ‘social interaction’ interchangeably. It is social interaction that results in product advocacy for a consumer brand and word-of-mouth marketing.

The social networks (e.g. the Chinese social networking website Taobao) that spread consumer’s rating, evaluation and advice on a product have been found to increase other customer's trust in one retailer over another (Guo et al. 2011). Business consultants (Anderson et al. 2011) report that “individuals on a social networking site are usually connected to other individuals whom they trust and respect.” (p. 1). These studies indicate that social network users or potential social commerce consumers trust in the people who they communicate or interact with.

However, according to another marketing report done by Booz & Company in 2010 mentioned in (Anderson, Sims et al. 2011) on social commerce found that 73% of online shoppers would not purchase goods on Facebook or through other social networking sites. Some academic researchers (Lewis et al. 2011), found little evidence of peer influence in college students in Facebook online social network. These show that not all people trust and are equally influenced by all their connections on the social network. This could be due to some friends’ opinions have a disproportionate influence on others behavior (Iyengar et al. 2011). Also, these fragmented and inconsistent findings could be due to the differences in the cultural and countries contexts (c.f. (Cha 2009), (Celik 2011)). In particular, the behavior of consumers in the West may not be applicable to a cross-cultural context (Najmul Islam & Mantymaki 2011); for instance, due to cultural differences Kim et al. (2011) suggested that social network site users in different countries have different motivations in using the networking site. Different countries both developed and developing have their inherent values, symbols and culture differences (Celik 2011); thus, their behaviour of intention to purchase in social commerce site may not be the same.

While quite a lot had been studied on the issue of trust in online shopping, very few is known about the influence of social interaction on social commerce and the acceptance of social commerce in different countries from different cultures. Moreover, prior studies on social interactions are mainly
based in student population. Following the above-mentioned, our research questions (RQ) are: (RQ1) how does trust mediate the relationship between the information sender’s social interactions and the information receiver’s intention to purchase from sender’s recommended social commerce site? (RQ2) how does culture difference moderate to relationships mentioned in RQ1? The purpose of this study is to investigate how culture plays a role in influencing peers’ online shopping intentions in social commerce, conducted in social network sites such as Facebook in a cross-national setting (involving Latin America, and East Asia countries). The research questions addressed here will help to understand if one’s (i.e. information sender) online interaction with others will have any influence on others’ trust and confidence in the word-of-mouth advertisement and recommendation received (from the sender) and social purchasing decision. This understanding is important to social commerce company in designing their communication strategies with online customers from different cultures.

2 LITERATURE REVIEW

2.1 Social commerce site

In the social commerce, the main aim to seller is to make its customers to be its brand advocacy; and the aim of the buyer is to make a better informed purchasing decision and/or to purchase a product at a special discount rate. It happens when a consumer starts to share his/her purchasing experiences in a personal email, microblog, blog or social network sites, such as Twitter and Facebook. Referral of goods and services regardless positive or negative feedback, reviews, ratings and testimonials regarding past and present experiences are contributed by friends, family and acquaintances dynamically (Cohen 2011). In general, social commerce is a trusted environment of which prospective consumers make buying decisions based on the advice of a network of friends and family, not strangers they don’t know or trust (LeeRaito.com 2007). Thus, commerce is usually generated via social recommendation (ShopSocially 2011).

One of the most well-known starting point for social commerce company is getting access to social network services (e.g. those provided in Facebook) such as creation of personal profile, adding other users as friends, exchanging messages and photos, online video chatting, voice recording, sending gifts, and creating fan pages (Wikipedia 2011). The strengths in Facebook for functioning as a powerful social commerce site are rooted in its Social Plugins (e.g. the ‘Like’, ‘Send’, ‘Comment’, ‘Recommendation’) and Open Graph Protocol (allowing a personal or e-commerce website to function as a Facebook’s fan-store) (Facebook 2011). A survey conducted with 1787 respondents on the influence of social media on online shopping shows that “the appetite for buying directly through social networks appears strong: one-third of shoppers say they would be likely to make a purchase directly from Facebook (35%) or Twitter (32%)” (shop.org 2011). These statistics indicate a promising future for social commerce.

In general, social commerce companies provides a platform for people to connect with friends, conduct online social networking activities and send product recommendations and/or discounts to friends; and for retailers to leverage consumers’ connections for commerce purposes, advertise and promote their brands/products (e.g. the ‘Marketplace’ and ‘Fan page’ in Facebook), and manage interaction with consumer directly in an open environment and sharing-economy.

2.2 Theoretical background

2.2.1 Trust

Trust in IT artifacts and online environments, such as e-commerce, mobile commerce and e-government, have increasingly obtained research attentions (see (Wang & Benbasat 2005), (Vance et
al. 2008), (Teo et al. 2008-9)) due to lack of such studies in the past. Similar to most e-business or e-commerce websites, social commerce sites also involve both human-and-human interactions and human-and-technology interactions. This implies that studying both the trust in friends in the social network site and trust in a social commerce site are important and relevant in this study.

Trust in social network technology (e.g. the Internet connection, web-based technology, online security technology) or institution-based trust as described by McKnight, Choudhury, and Kacmar (2002) is focused on the perceptions of the Internet environments; and is “the belief that the needed structural conditions are present (e.g. in the Internet) to enhance the probability of achieving a successful outcome in an endeavour like e-commerce” (pg. 339). These structural conditions include technological and legal safeguards. It is found that greater trust in a site has a direct positive effect on user’s intention to use the site (Gefen et al. 2003). If a user believes that a social commerce site is secure and trustworthy, he or she will have a stronger intention to use the site such as intention to purchase from the website as his or her personal transaction data will be fully safeguarded and rightfully used. It follows that:

H1: The trust in the social commerce site will have a positive influence on the intention to purchase.

Interactions such as writing and obtaining messages, feedbacks or recommendations from other friends in the social network community are the main activities in social network websites. While in some cases users know most of the social network communities, some will know a few. Other study in virtual communities has found interpersonal trust significantly influence members’ intention to give information and get information (Ridings et al. 2003). Business consultant (Anderson, Sims et al. 2011) reveals that in the social networking environment, there is a typical atmosphere of friend trusting friends. In other words, if a user trust a social network community, he/she is more likely to have the intention to purchase from a social commerce site recommended by its community. Following this line of argument, we expect that:

H2: The trust in the social network community will have a positive influence on the intention to purchase.

2.2.2 Social interaction

Recent research results (see (Ou et al. 2011)) have suggested that although system quality also plays an important role in system use and user satisfaction, information quality and service quality only have moderate impacts. Interestingly, networking quality – referring to social networking features such as in-touch with others, information exchange and contact management – turns out to have the strongest link with user satisfaction. Wu and Wang (2011) also confirm that social interaction provided in social network sites which allows users to cultivate, foster and maintain online relationships with others is a significant predictor in behavioral intentions.

This kind of social networking behavior intention can be accounted for by the social influence theory in this study. According to Kelman (1958), there are three categories of social influence, i.e. compliance, identification and internalization. Among the three categories of social influence, internalization social influence (i.e. when one accepts and agrees with other’s belief and behavior publicly and privately because the influence content is intrinsically rewarding (Kelman 1958)) is the most relevant to the online social networking and social commerce. The main reason is that friends’ interactions with others, participations in all online activities, and product recommendations and product reviews are written, sent, read and evaluated freely and voluntarily among them. However, the social influence of the friend who writes a product recommendation may have an important role in the acceptance of the recommendation by other friends.

One of the salient ways to measure the social influence of a sender to a receiver is by quantifying the social impact of the sender on the receiver (Latané 1981). The social impact theory states that the
impact of any information source can be accounted for in a function of three factors, i.e. the number of others who make up that source, their immediacy (i.e. closeness), and their strength (Latané 1981).

For simplicity, in our study we are only considering one source of information at a time. In reviewing the literature for the definitions of immediacy and tie strength, we observe that there is a mixture and interlink of these two concepts. Brown and Reingen (1987) define tie strength as the familiarity of oneself with another. Lee and Kwon (2011) define familiarity as the “feeling of the understanding of an entity, often based on previous interactions, experience, and learning of the what, who, how, and when of what is happening” (p. 348). Marsden and Campbell (1984) suggest that the best indicators of tie strength are the ones having to do with time-spent in the relationship and the depth of the relationship. Lee and Kwon (2011) call immediacy as intimacy and describe it as the “feeling of closeness and emotional bonding, involving intense liking, moral support, and the ability to tolerate flaws in the service” (p. 348).

Recent literature proposes seven dimensions for characterizing and measuring a tie strength or social interaction. Gilbert and Karahalios (2009) summarize the seven dimensions as: the amount of time, the emotional intensity, the intimacy and the reciprocal services (Granovetter 1973); the network structural factors (Burt 1992); the emotional support (Wellman & Wortley 1990); and social distance between connections(Lin et al. 1981).

Lee and Kwon (2011) study on the continuance intention in Web-based services discovered that both intimacy and familiarity affect users’ continuance intention; but intimacy, a purer affective concept than familiarity has more impacts than familiarity. A study on Korean social promotion sites indicated that both cognitive and affective involvements to a social promotion site can increase social network users’ purchasing intention for deals recommended by online social network friends (Shin et al. 2011). Another study from Liu and Liu (Liu & Liu 2011), conducted among the undergraduate students in China, indicates that the stronger the tie strength between the information receiver and information sender the more likely is the intention to buy the product or service from the information sender. Consistent result is also reported in a focus group study with university students in China which shows that consumers prefer to share group-buying information with close friends (who they are familiar with) than loosely related friends, via instant messenger (Liu & Sutanto 2011). These prior studies are mainly focused on student populations and based in China. Based on this line of argument, we hypothesize that:

H3: The stronger the social interactions between information sender and information receivers in the social network community, the more positive are its influence on the intention to purchase.

Tsai and Groshal (1998) find that there is a significant relationship between social interactions and trust. Other study in (Dwyer & Hiltz 2007) suggests that trust can develop online or in social network site like Facebook through online social interactions. Prior study also proves that trust plays a mediating role in the relationship between the social interaction (i.e. strong ties) and the receipt of useful knowledge (Levin & Cross 2004). Thus, we argue that the stronger the social interactions between information sender and information receivers in the social network community, the more the information receivers trust the information sender (one of the social network community) for sending useful product recommendations to them. A study in the e-commerce context proves that familiarity with an e-commerce site through some means of interactions with the site builds trust in the e-commerce site (Gefen 2000). Based on the basis of trust in the information sender, the information receivers will have stronger intention to purchase from the social commerce site recommended by the information sender. We propose that:

H4: Trust plays the mediating role in the relationship between the information sender’s social interactions and the information receiver’s intention to purchase from sender’s recommended social commerce site.
2.2.3 Culture

In studying the culture issue, the solid work of Geert Hofstede’s dimensions of national culture is referred. The six dimensions of national culture proposed in (Hofstede et al. 2010) are power distance, uncertainty avoidance, individualism, masculinity, long-term orientation, and indulgence. While the first four dimensions are the original Hofstede dimensions of national culture, the last two dimensions are suggested by Michael Bond and Michael Minkov respectively.

The definition for these six dimensions (see (Hofstede & Hofstede 2011)) is as follows: power distance dimension is related to inequality in power distribution among members of a group; masculinity dimension is related to men and women modesty and concerned with quality of life; uncertainty avoidance dimension is the degree to which the members of a culture feel threatened by uncertain or unknown situations; individualism is the extent to which the ties between individuals are loose; long term orientation is the degree to which the members of a culture oriented towards future rewards, perseverance and thrift; and indulgence is the degree to which the members of a culture allow relatively free gratification of basic and natural human drives related to enjoying life and having fun. We find that power distance dimension and masculinity dimension are not very relevant in our study of social commerce as they can hardly play a role in or impact on purchasing behavior. Using survey data collection method, Hofstede et al. (2010) produce the scores on the dimensions of national culture from 76 countries.

As pinpointed in (Hofstede & Hofstede 2011), the scores for all national culture dimensions differ quite obviously among countries from different regions; Latin America country has the culture of avoiding the unknown and more oriented towards the short-term point-of-view compared to the East Asia country. According to the social presence theory, the choice of an appropriate communication media (e.g. face-to-face, telephone or online social networking site) depends on the degree of awareness or presence required of the other person in a communication interaction (Sallnas et al. 2000). However, Steinfield (1986) finds that the uncertainty involved in long-distance communication is positively associated with increasing online communication. Straub et al. (1997) find that country (such as Japan) with high uncertainty avoidance may limit their online communication media. Moreover, individual from such society are more likely to perceive the technology a less useful and thus has less influence on behavioral intention (i.e. social commerce purchase intention) (Sun & Zhang 2006). For these reasons, Latin America people may tend to be more careful in considering a social commerce site (an online media) which they are not familiar with and perceive as risky. Moreover, due to their short-term orientations they do not tend to easily trust a third-party person simply because a social commerce site is recommended by their friends. Thus, we hypothesize that:

**H5:** Culture (based on the uncertainty avoidance and long-term orientation dimensions) will moderate the mediating role of trust in social network community in the relationship between social interactions and intention to purchase from social commerce site, such that the effect is significantly stronger for East Asia countries than Latin America countries.

Also, Latin America country has the highest collectivism scores than the East Asia countries (Hofstede & Hofstede 2011; Hofstede, Hofstede et al. 2010). This means that Latin America people are also more likely to listen to others’ opinion in their society rather than act individually based on their intrinsic needs alone. Al-Gahtani et al. (2007) argue that country with low individualism scores might indicate a strong relationship between subjective norm (i.e. influence of people in one’s social environment) and behavior intention. Also, college students from low individualism score country such as Korea rely more on social support from existing social network relationships than college students from high individualism score country such as the US (Kim, Sohn et al. 2011). Together with high uncertainty avoidance scores for the Latin America people, we propose that:

**H6:** Culture (based on the collectivism and uncertainty avoidance dimensions) will moderate the relationship between social interactions and intention to purchase from social commerce site, such that the effect is stronger for Latin America countries than East Asia countries.
3 RESEARCH METHODOLOGY

The focus of this study is on the intention to purchase a real product in a social commerce context. The targeted social networking site is the Facebook that has recently experienced explosive growth of users. In order to test the research model here, we set up an experimental social commerce site in the Facebook. Our main intention here is to make sure that the social commerce site is built completely based on our social network relationships but not other unknown customers’ reviews and recommendations. Also, this allows us to control the level of interaction or familiarity between the sender and receiver of the product reviews and recommendations.

The products sold in the site are accessories (such as scarf, bracelet, bangles, etc.) and clothing. This experiment commerce site begins by using convenience sampling method, i.e. it has four close friends (i.e. the research participants in this study) from the two different regions – Latin America and East Asia. For ease of reference, we call them as 1st-level friends. We post all the products picture and description on the Facebook account to share with the 1st-level friends by posting them on the ‘wall’ in the experiment Facebook account. The 1st-level friends assess the products and put their positive review and recommendation of the products (one at a time) on their Facebook account’s (as a message), so that all their friends (the 2nd-level friends) can read their reviews and product recommendations. We observe the purchase intention of this social commerce site for a period of two weeks. We use the snowball sampling method to send out the online-questionnaire (in a message) to all the 2nd-level friends – meant to collect data on social interaction, trust, respondents’ country of origin, and social commerce purchasing intention.

The survey instrument is developed with items validated in prior research, whenever possible, and is adapted to the technologies and individual/social network site studied. The survey items for the survey and their references are as such: social interaction - (Tomasi 2007), (Chelune & Waring 1984), (Gefen, Karahanna et al. 2003), (Levin & Cross 2004); trust in technology and social network community - (Cha 2009), (McKnight, Choudhury et al. 2002), (McKnight, Choudhury et al. 2002), (Levin & Cross 2004); and culture - (Hofstede, Hofstede et al. 2010), (Hofstede & Hofstede 2011). All items are measured on a 7-point Likert scale, with anchors from “strongly disagree” to “strongly agree”.

As this survey is meant for respondents from different languages, we have translated the English-version of the survey instrument into two other languages, i.e. Mandarin (for respondents from Taiwan) and Thai (for some respondents from Thailand). The English version of the survey instrument is used in the Latin America respondents. In order to check the content and translation validity of each different-language survey, three persons (for each survey, such as university professors and graduate students) who understand both English and the foreign language used in the survey are recruited for this purpose. Also, we used the back-translation to ensure the quality of the translated surveys (Brilin 1970; Brilin 1983). This is meant to minimize the construct bias, method bias, and item bias commonly found in cross-cultural studies (Lin et al. 2005; Van de Vijver & Hambleton 1996).

The collected survey data is analyzed using the SPSS 17 statistics software package and structure equation modelling (SEM) technique as applied in (Casimir et al. 2006) for testing similar research model. The expected minimum sample size in this study will be equal to ten times the largest number of structural paths directed at a particular latent construct in the structural model (Hair et al. 2011).

SPSS software package is used in conducting the descriptive data analysis, reliability analysis and exploratory factor analysis. Variance inflation factors (VIFs) will be assessed for any multicollinearity problem, i.e. VIFs being greater than five. Internal consistency reliabilities (ICRs) (of survey instruments), measure of reliability of different survey items intended to measure the same construct, will also be checked. Intra-construct item correlations and inter-construct item correlations will also be examined to confirm the convergent and discriminant validity of the constructs and the measurement items used in the survey instrument (Fornell & Larcker 1981).
For analyzing the mediation effect of trust, structure equation modelling is used (see (Shaver 2005), (Kenny 2011)). For this purpose, SmartPLS software (Ringle et al. 2005) will be used in this study. In testing the mediation effect of trust, Kenny (Kenny 2011) and colleagues (Baron & Kenny 1986; Judd & Kenny 1981) claim that three conditions must be met: (1) the independent variable (i.e. social interaction) significantly predicts the dependent variable; (intention to purchase) (2) the independent variable significantly predicts the mediator variable (i.e. trust); and (3) when the dependent variable (intention to purchase) is regressed on both the mediator (trust) and the independent variable (social interaction), the mediator significantly predicts the dependent variable, while the predictive utility of the independent variable is reduced.

In order to evaluate the magnitude of the moderating effects (i.e. culture), the Cohen’s $f^2$ will be computed (see (Chin et al. 2003)). Cohen’s $f^2$ represents the extent a phenomenon present in a given population sample; its values of 0.02, 0.15 and 0.35 are considered as small, medium and large effect sizes respectively (Cohen 1988). The R-square statistic produced by the SmartPLS will indicate the fit of the research model in explaining the variance in the sample.

4 CONCLUSIONS AND LIMITATIONS

The anticipated results from this study are meant to: (1) provide better understanding of the impact of culture difference on social commerce behaviour – in order to decide whether social commerce is suitable for a culture and their level of acceptance in this technology; (2) provide better comprehension of the characteristics of social commerce user characteristics and the impacts of social interaction on social commerce purchasing decision – in order to provide a guideline in designing appropriate level of interactions with customers and fans in word-of-mouth marketing; and (3) serve as a foundation for a better conception of social commerce model in the future. The limitations of this study and/or the possible future studies may include considering or controlling the payment behaviour and the macroeconomic differences of different world regions, and differences on an individual level like an individual’s purchasing power and personal interests (for the types of product).

References


