

A study of the impact of social media on consumers

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Social media have provided new opportunities to consumers to engage in social interaction on the internet. Consumers use social media, such as online communities, to generate content and to network with other users. The study of social media can also identify the advantages to be gained by business. A multidisciplinary model, building on the technology acceptance model and relevant literature on trust and social media, has been devised. The model has been validated by SEM-PLS, demonstrating the role of social media in the development of e-commerce into social commerce. The data emerging from a survey show how social media facilitate the social interaction of consumers, leading to increased trust and intention to buy. The results also show that trust has a significant direct effect on intention to buy. The perceived usefulness (PU) of a site is also identified as a contributory factor. At the end of the paper, the author discusses the results, along with implications, limitations and recommended future research directions.

Introduction

The advancements in the internet in recent years have made new systems available to business: social media such as online communities being a good example (Lu *et al.* 2010). The general availability of the internet has given individuals the opportunity to use social media, from email to Twitter and Facebook, and to interact without the need for physical meetings (Gruzd *et al.* 2011). This has been facilitated by Web 2.0 applications. Web 2.0 is a new advancement, which has transferred the internet to a social environment by introducing social media, where individuals can interact and generate content online (Lai & Turban 2008). Web 2.0 has emerged to give users easier interconnectivity and participation on the web (Mueller *et al.* 2011). With the rise of social media and online

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communities, individuals can easily share and access information (Chen *et al.* 2011a). Online communities and social networking sites (SNSs) are an effective web technology for social interactions and sharing information (Lu & Hsiao 2010). SNSs take centre-stage in e-commerce in the current environment (Fue *et al.* 2009), where consumers make social connections and participate in cyberspace (Mueller *et al.* 2011). Today's consumers have access to many different sources of information and experiences, which have been facilitated by other customers' information and recommendations (Senecal & Nantel 2004). This is an important point as customer involvement through social media is a key factor in marketing (Do-Hyung *et al.* 2007).

Social media offer different values to firms, such as enhanced brand popularity (de Vries, Gensler & Leeflang 2012), facilitating word-of-mouth communication (Chen *et al.* 2011b), increasing sales (Agnihotri *et al.* 2012), sharing information in a business context (Lu & Hsiao 2010) and generating social support for consumers (Ali 2011; Ballantine & Stephenson 2011). In addition, the networking of individuals through social media provides shared values, leading to a positive impact on trust (Wu *et al.* 2010). Today, with the expansion of social media and SNSs, a study of consumer behaviour on these platforms is a research agenda (Liang & Turban 2011) because social media are likely to develop marketing strategies in firms through trust-building mechanisms and affecting customers' intention to buy online products.

The main thrust of this paper focuses on examining the role of social factors on trust, which can influence an individual's intention to buy. An understanding of this issue can aid in identifying factors that establish trust and social commerce intention through SNSs. This paper has four objectives. First, the study examines how social media – namely online forums, communities, ratings and reviews – can influence trust in e-commerce. Second, it looks at the relationship between trust and intention to buy. Third, this research examines the relationship between trust and perceived usefulness (PU) of a site on intention to buy. In conclusion, it examines the direct and indirect influence of social media on trust and intention to buy. To these ends, the study presents the following questions.

1. Do social media in social networking sites affect the user's trust?
2. Do PU and trust affect the user's intention to buy?
3. Which factors (PU or trust?) are more important in determining the user's intention to buy?

To answer these questions, the study borrows from technology acceptance model (TAM) constructs, along with concepts of trust, social media and social support to build up an interdisciplinary model. The purpose of this research is to investigate the role of social media and how they can influence the consumer's intention to buy and impact on a user's trust in a social commerce environment.

The paper is organised as follows. First, a literature review is provided to identify the issues and gaps in the current literature that have driven this study. The next section provides the research model and hypotheses. The paper continues with research methodology and the structural model. Finally, theoretical and managerial implications for the study are presented, along with limitations, future research directions and conclusions.

Literature review and theoretical background

With the advances in the internet and the emergence of Web 2.0, the interconnectivity between individuals has expanded on the internet. This development enables customers and businesses to collaborate on the internet (Füller *et al.* 2009). This has emerged through social media, which enable consumers to generate content and have social interactions online via social platforms. There are a number of social platforms that have facilitated information sharing. For instance, Wikipedia, a free online encyclopaedia, is one of the most popular platforms and has the facility for users to collaborate on information sharing (Chen *et al.* 2011a). Other platforms with the ability to generate reviews and ratings, such as Amazon.com, enable customers to review and rate products. In addition, members of these platforms are cooperatively interdependent (Chris *et al.* 2008). By using social media, consumers can create content and offer valuable advice to others (Füller *et al.* 2009). This new development has seen online communities and an electronic network of individuals emerge on social platforms where members share information globally and quickly (Molly McLure & Samer 2005).

With the rise in social networks, a new era of content creation has emerged, where individuals can easily share experiences and information with other users (Chen *et al.* 2011a). The next generation of online businesses will be based on communities – a good tool for new customer attraction (Bagozzi & Dholakia 2002; Ridings & Gefen 2004). Online communities offer an opportunity to organisations to have a better customer relationship management system (Ridings & Gefen 2004), for instance, giving rise to a new development where businesses can improve

performance. Moreover, on those platforms where consumers have social interaction, members can become familiar with one another, providing a possible source of trust (Lu *et al.* 2010). This can greatly influence users' intention to buy (Gefen 2002). Consequently, it is important for companies to have a business model adapted to social commerce (Lorenzo *et al.* 2007; Liang & Turban 2011). Social commerce is a new stream in e-commerce, which encourages the social interaction of consumers through social media (Hajli 2013). Social media provide opportunities for businesses to become more attractive universally (Chen *et al.* 2011b). Although social commerce and social media are key phenomena in e-commerce and the marketing literature, few studies, if any, have examined the concepts of trust and users' intentional behaviour. In the next section the literature related to the model of study maps out the theoretical foundation of the research.

Perceived usefulness

Perceived usefulness (PU) is one of the main constructs of the technology acceptance model (TAM) (Davis 1989). Users' acceptance of computing facilities was one of the initial developments of this theory (Davis *et al.* 1989). The theory has since been developed by many scholars in different areas (Adams *et al.* 1992; Gefen & Straub 2000; Gefen *et al.* 2003; Pavlou 2003; Hajli 2013; Kim 2012). TAM argues that constructs have a strong influence in the acceptance of systems by a user (Pavlou 2003). The original definition of perceived usefulness by Davis (Davis 1989) is 'the degree to which a person believes that using a particular system would enhance his or her job performance'. It is one of the main reasons why people are receptive to new technology (Davis 1989). The constructs introduced by TAM can be applied in a wide range of ways (Adams *et al.* 1992). These can also be used to predict consumer behaviour in e-commerce (Gefen & Straub 2000; Pavlou 2003). TAM is among the popular theories in Information Systems (IS) as it emphasises intention to use a system. Its instruments have been validated in different research (Pavlou 2003).

In the present study, only perceived usefulness and intention to buy have been selected as main factors to develop the proposed model. One of the main reasons for omitting perceived ease of use from the present study is that, it is argued, this construct has an indirect effect on user acceptance through PU (Gefen & Straub 2000). Previous researchers have been consistent in arguing that PU has a positive direct effect on acceptance of a system (Gefen & Straub 2000; Pavlou 2003). There are different aspects that define PU in an e-commerce environment. For instance, the

quality of a website in terms of system, service and information quality has a significant impact on perceived usefulness, which in turn encourages consumers to buy (Ahn *et al.* 2007). Businesses can concentrate on information, service and system quality to improve their websites, and also enhance perceived usefulness in their consumers (Ahn *et al.* 2007).

The use of social media platforms to generate social support

Today a large number of social media platforms have been developed that smooth the progress of sharing information and generation of content in an online context (Chen *et al.* 2011a). There are a number of social media that facilitate these activities, such as Wikipedia, Facebook, YouTube and Twitter. Individuals apply different social media tools, such as online forums and communities, recommendations, ratings and reviews, to interact with other users online. In fact, individuals are attracted online to exchange information and receive social support (Ridings & Gefen 2004).

Reviews are one of the key areas that have emerged from social media. Customer reviews are widely available for products and services, generating great value for both consumers and companies (Nambisan 2002). In fact, consumers are actively encouraged by firms to rate and review products and services online (Bronner & de Hoog 2010). These activities produce electronic word of mouth. This word of mouth, produced through social media, helps consumers in their purchasing decisions (Pan & Chiou 2011). Research shows that customer reviews have grown quickly on the internet (Chris *et al.* 2008). Amazon.com is a good example of using customer reviews, with almost 10 million available (Do-Hyung *et al.* 2007). Online communities and forums are other examples of social media. Online communities are now a place to share information and gain knowledge about products and services (Chen *et al.* 2011a). Recommendations are another tool widely used by potential customers. Research has shown that potential consumers are more interested in other users' recommendations rather than merely vendor-generated product information (Ridings & Gefen 2004). Hence, such interactions, provided through social media, help increase the level of trust and reduce perceived risk.

Virtual worlds as electronic environments are another important development of Web 2.0, a new way of generating and sharing information on the internet (Mueller *et al.* 2011). They facilitate human interactions for social and commercial purposes. One of the main characteristics of virtual worlds is learning by doing, which enables users to learn and practise in the virtual space (Mueller *et al.* 2011). However, with the widespread use

of social media where individuals can easily post information and accounts of their experiences, the quality of content posted by anonymous users has become a challenge (Chen *et al.* 2011a). The anonymity of some users is a concern in deciding on the quality of information provided and the content shared by consumers (Chen *et al.* 2011a).

Towards these ends, when individuals join online communities and participate in a group, they seek social support and friendship in the community (Ridings & Gefen 2004). The perceived care, love and support of members of a group is defined as social support (Cobb 1976). Research shows that online communities and SNSs generate both informational and emotional support (Ballantine & Stephenson 2011). Emotional and informational support are two dimensions of social support in an online context (Liang *et al.* 2011). Twitter is a good example, where individuals provide social support for other users (Gruzd *et al.* 2011). It may also attract many individuals to come online to search for information through these social media. Moreover, the study of social media is useful to see how individuals form their social interactions on the internet (Gruzd *et al.* 2011). These social interactions have been facilitated by social media such as online forums, communities, ratings, reviews and recommendations, all of which produce online social support. These are likely to increase the trust in e-commerce for vendors and buyers alike.

Trust

Trust is a cornerstone in developing e-commerce. In a business-to-consumer relationship, trust in the e-vendor is important in assessing risk in the transaction (McCole *et al.* 2010). Trust plays an important role in e-commerce (Aljifri *et al.* 2003). There are different definitions of trust, which are based on different dimensions of benevolence, integrity, ability, competence and empathy (Gefen 2002; McKnight *et al.* 2002; Gefen *et al.* 2003). There are also two-dimensional measurement scales for trust, competence and benevolence competence, leading to brand trust (Li *et al.* 2008). However, all definitions and dimensions refer to risk and uncertainty in the online environment. Benevolence and credibility are the two main dimensions of trust (Ba & Pavlou 2002) upon which this research is based. Credibility-based trust refers to the belief that the other party in a transaction is reliable and relies on reputation information, while benevolence refers to repeated seller-buyer relationships (Ba & Pavlou 2002). Therefore, in this research, trust is viewed in the context of transactions over the internet through SNSs and online communities.

Trust in peers on the network and trust in the SNSs themselves will also be considered. In the context of online communities, trust can facilitate the interaction of individuals and encourage them to stick to their current network.

Research model and hypotheses

The research proposes a research model, as shown in Figure 1, to examine the relationships between the constructs of this research, namely social media, trust, perceived usefulness and intention to buy in SNSs.

Effect of social media

The interconnectivity of consumers through social media such as communities, reviews or recommendations is likely to establish trust in e-commerce. In SNSs, the social interaction of consumers helps their peers to develop or reject trust in a provider. Consumer socialisation occurs through social media directly by social interactions among consumers, and indirectly by supporting product involvement (Wang *et al.* 2012). The social relationship of consumers generated through social media significantly affects the perceived trust of consumers (Pan & Chiou 2011). The interactions on these platforms generate social support. Social support generated through social media therefore influences trust (Weisberg *et al.* 2011). In addition, more positive comments, feedback and higher ratings lead to a higher level of trust in a vendor (Ba & Pavlou 2002). Reviews are perceived to be useful, and affect attitude and intention to buy in consumers through the impression created about a product or service (Purnawirawan *et al.* 2012). The results of previous research show that

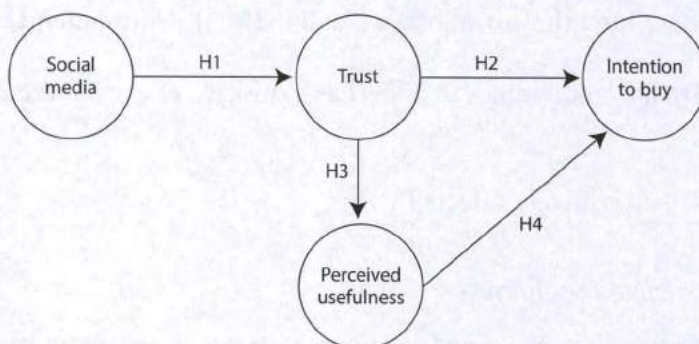


Figure 1 The research model

the quality and quantity of information produced by customer reviews influence intention to buy through increased trust (Do-Hyung *et al.* 2007). Therefore, this research postulates the following hypothesis:

H1: Social media have a positive effect on the user's trust.

Effect of trust

Trust and perceived security in SNSs play an important role in attitudes towards shopping (Jiyoung 2009). Research shows members of SNSs can assure each other through their information exchange and experience, thus increasing trust and, consequently, willingness to buy (Han & Windsor 2011). Trust in the transaction and the network influences the online purchaser (McCole *et al.* 2010), and enhances intention to buy (Lu *et al.* 2010; Shin 2010). Therefore, trust plays an important role in the proposed model of this research. The relationship between trust and perceived usefulness is also positive, and trust increases certain features of PU (Gefen *et al.* 2003). Previous research shows that trust will positively affect PU (Gefen *et al.* 2003). Moreover, trust plays a key role in determining both a consumer's behavioural intentions and actual behaviour (Gefen *et al.* 2003; Ming-Hsien *et al.* 2009; Shin 2010). Social media and the emergence of Web 2.0 can help customers to reduce their risk and increase social trust. Applications on Web 2.0 and social media, such as customer ratings and reviews, as well as participation in SNSs, would be a good solution to overcome this barrier. Apparently, interactions among the connected users in SNSs increase trust (Swamynathan *et al.* 2008) and trust is an important determinant in considering a consumer's intention to buy (Gefen 2002; Roca *et al.* 2009). In fact, the more trust perceived by consumers, the more likely their intention to buy (Han & Windsor 2011). Therefore, trust is likely to affect intention to transact (Pavlou 2003). Consequently:

H2: Trust of individuals in SNSs has a positive effect on intention to buy.

H3: Trust positively affects PU.

Effect of perceived usefulness

Research shows that perceived usefulness affects users' intentions to use e-commerce (Gefen & Straub 2000). It is also argued that, in SNSs, the

user's perceived value of online connection has a significant positive effect on their willingness to pay other members of SNSs (Han & Windsor 2011). PU plays an important role in e-commerce and it is likely to have a positive impact on the social commerce environment, too. The results of research on shopping in SNSs shows that the more consumers shop in SNSs that they perceive to be useful, the more intention they have to buy in SNSs (Jiyoung 2009). Hence, the research postulates this hypothesis:

H4: The site's perceived usefulness has a positive effect on the user's intention to buy on SNSs.

Research methodology

The study conducted a survey on individuals in order to validate the proposed model. The study was conducted through online and paper questionnaires. The participants are mostly resident in the UK and London (85%), although the research attracted some international participants.

Instrument development

This research developed a questionnaire, using a 5-point Likert-scale from 1 = Strongly disagree to 5 = Strongly agree. The items in the questionnaire were adopted from previous research to increase the validity of the study. Trust, one of the key constructs of the model, has been investigated in many previous research papers. In this study, trust measures trust in SNSs and peers in these networks. Social interaction measures the activity of individuals through online communities, forums, ratings, reviews and recommendations. Perceived usefulness, the other construct of the research, was measured by the effectiveness of a site's technology. This included ease of navigation and ease of searching on the website (Gefen *et al.* 2003). The dependent variable of this study is intention to buy. This construct measures the user's willingness to purchase on SNSs and their intention to buy through SNSs.

Data collection

The questionnaire was distributed in London, UK. The author also developed an online questionnaire and invited participation through email. The target individuals were members of social networking sites such as Facebook, Twitter and LinkedIn. The author excluded non-member

participants. A total of 500 emails and 300 paper questionnaires offered 237 usable questionnaires for use. Participants ranged from 18 to 45 years old: 60% men and 40% women.

Research method

The present study uses structural equation modelling (SEM). SEM is a popular approach in social science (Anderson & Gerbing 1988; Bandalos 2002). In SEM, the author uses a partial least square method (PLS) – a good way of managing complex data in a low-structure situation (Esposito Vinzi *et al.* 2010). PLS is very appropriate when theoretical information is low (Chin *et al.* 2003), as in the areas of social media and social commerce. SEM-PLS is a good method to assess the validity and reliability of constructs (McLure Wasko & Faraj 2005). PLS is also suitable for testing a new model (Gefen *et al.* 2011). This research proposes a new model to develop a theoretical foundation for social commerce through social media. The study uses the re-sampling method for significance testing and bootstrapping of 500 re-samples and 237 cases per sample in order to assess the path significance, which provides the basis for confidence intervals allowing an estimation of factor stability (Ringle *et al.* 2012).

Results

The reliability and validity of the structural model have been taken into account. In the following sections, they are discussed separately.

Reliability

The composite reliability, which should exceed 0.70, has been applied to test the reliability of the survey (McLure Wasko & Faraj 2005). The results indicate internal consistencies as the rate is above 0.70. The internal consistency, also measured by Cronbach's alpha, is above 0.70. These results ensure the reliability of the research (Naylor *et al.* 2012). An overview of the quality criteria is shown in Table 1.

Validity

The research tests the validity through both content validity and construct validity. In content validity the study has checked face validity by asking scholars to check the questionnaire items. Recommendations by these

Table 1 Overview of quality criteria

Constructs	AVE	Composite reliability	R square	Cronbach's alpha
Intention to buy	0.805093	0.891988	0.364183	0.759360
Perceived usefulness	0.812750	0.928666	0.312992	0.884904
Social media	0.660775	0.906516	–	0.871111
Trust	0.572564	0.869812	0.182861	0.813728

scholars have been taken into account. The research has also covered a substantial literature review (Gefen *et al.* 2003; Pavlou 2003). Perceived usefulness, trust and intention to buy are constructs that have frequently been used in information systems and marketing disciplines, and the questionnaire items were adopted from the existing literature, which increases the content validity of the research. Convergent validity can be ensured by assessing *discriminant* and *convergent* validity (Chin, Gopal & Salisbury 1997). The average variance extracted (AVE) is a criterion to measure convergent validity and should be more than 0.50 (Wixom & Watson 2001; McLure Wasko & Faraj 2005). AVE is a good test of convergent validity (Naylor *et al.* 2012). Table 1 shows the results of AVE. For the discriminant validity, PLS is a good way to ensure the extent to which a given construct of the model is different from other constructs (McLure Wasko & Faraj 2005). The square of the correlations among the variables has been compared with the AVE to assess the discriminant validity (Chin 1998). Table 2 shows the square of correlation between latent variables, ensuring the research's discriminant validity.

Finally, examining the factor loadings of each indicator gives a two-fold result for convergent validity and discriminant validity (McLure Wasko & Faraj 2005). This has been achieved by looking at factor loadings of an indicator, which should be greater than the construct of it than on any other factor (Chin 1998; McLure Wasko & Faraj 2005). The cross-loading is presented in Table 3, which shows that the factor loading of all indicators

Table 2 Square of correlation between latent variables

	Intention to buy	Perceived usefulness	Social media	Trust
Intention to buy	0.89			
Perceived usefulness	0.570785	0.90		
Social media	0.422259	0.394522	0.812	
Trust	0.481726	0.559457	0.427622	0.756

Table 3 Cross loadings

Indicators	Intention to buy	Perceived usefulness	Social media	Trust
IB1	0.879821	0.450836	0.336245	0.428935
IB2	0.914386	0.565658	0.416146	0.436136
PU1	0.548889	0.883894	0.305867	0.455289
PU2	0.448234	0.915987	0.303313	0.496945
PU3	0.539845	0.904405	0.446229	0.555348
SM1	0.334982	0.257840	0.755322	0.302961
SM2	0.347973	0.265605	0.769338	0.374047
SM3	0.379668	0.417398	0.872127	0.410002
SM4	0.322312	0.292947	0.778668	0.258269
SM5	0.325474	0.347113	0.880088	0.357648
T1	0.517561	0.450549	0.327314	0.814014
T2	0.345084	0.432535	0.180444	0.740661
T3	0.309901	0.425138	0.419940	0.732130
T4	0.323838	0.330553	0.216008	0.709575
T5	0.304397	0.461919	0.430928	0.782375

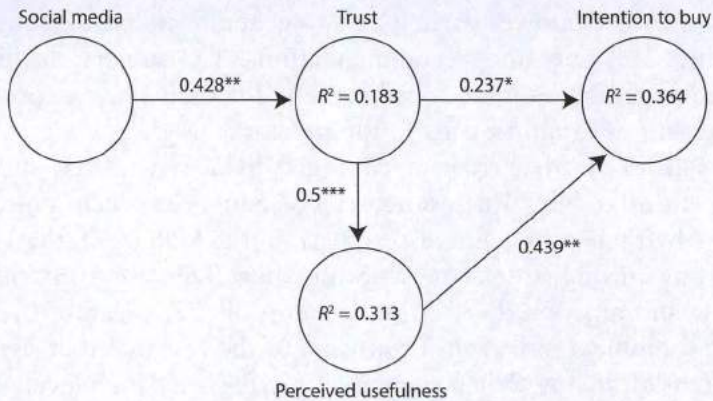
Notes: IB = intention to buy; PU = perceived usefulness; SM = social media; T= trust

is greater than the construct of them on any other factors. Therefore, the validity of the research has been achieved to a satisfactory level.

Structural model

For analysis of the data, this research used SmartPLS software (Ringle *et al.* 2005). The validity of the research model is assessed by the structural paths and R^2 s (Chwelos *et al.* 2001). The path coefficients in the research model are positively significant at the 0.05 level. According to the results (shown in Figure 2), the R^2 of intention to buy shows that almost 37% of the variance in the intention to buy was accounted for by trust and perceived usefulness. This means that intention to buy was affected by social media and perceived usefulness. The R^2 for trust means that almost 19% of the variance in trust was accounted for by social media. In addition, the R^2 for perceived usefulness means that almost 34% of the variance in this construct was accounted for by trust.

The results of path coefficients show that trust (0.237) and perceived usefulness (0.439) both have significant impact on intention to buy.



* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Figure 2 Results of the PLS analysis

Therefore, H2 and H4 are supported. The effect of perceived usefulness on intention to buy is higher than trust (0.44 vs 0.24). This result shows that the perceived usefulness of a website encourages consumers to buy. Social media also have a significant effect on trust (0.428) and this effect is strong. Hence, H1 is supported and shows that the interconnectivities of individuals through social media produce trust in e-commerce. Finally, trust has a significant effect on perceived usefulness (0.50). Therefore, the results support H3. Figure 2 shows the P -value of constructs.

Discussion and conclusions

Recent advances on the internet and the development of social media have facilitated the interconnectivity of consumers. Consumers have social interactions through social media such as online forums, communities, ratings, reviews and recommendations. These developments have introduced a new stream in e-commerce, called social commerce, which empowers consumers to generate content and influence others. These interactions provide different values for both business and consumers. Both are involved in the co-creation of value. The present study borrows constructs from the technology acceptance model, and integrates them with trust and social media concepts to propose a model to examine the role of social media in e-commerce and social commerce adoption. The model has been validated through a PLS-SEM method, indicating that social media increase the level of trust in consumers and indirectly encourage intention to buy through social networking sites. The results of data analysis reveal

that social media empower participants to generate content through online communities, reviews and recommendations. Consumers, facilitated by social media, generate online social support for their peers. Consequently, these interactions establish trust in the networks used.

The results show that trust, encouraged by social media, significantly affects intention to buy. When potential consumers are encouraged to trust in vendors by their peers, and also to trust in the SNS itself, they are more likely to buy through social networking sites. This confirms the related hypothesis and answers the second question of the research. In addition, perceived usefulness is the other construct of the research that significantly affects intention to buy. When participants experience high levels of system quality or information quality, they are more likely to buy through social networking sites. Data analysis shows that perceived usefulness has more influence than trust on intention to buy through social networking sites. Hence, improving the quality of websites enhances perceived usefulness in their consumers. The other data revealed by analysis confirms that trust has a positive and significant effect on perceived usefulness. Once participants accepted trust, not only had they more intention to buy, but they also found increased perceived usefulness in the site. This highlights the mediating role of trust in social commerce adoption. Therefore, trust has a significant role in e-commerce by directly influencing intention to buy and indirectly influencing perceived usefulness.

This research shows that advancements in the internet and the emergence of Web 2.0 along with social media have empowered customers. In this climate, consumers create added value through collaboration and social interactions on the internet. They support business through the co-creation of value via their social interactions. Consumers are now content generators through social media. They share information and experiences with other consumers and have easy access to one another's information. This is a value that can be useful for e-commerce adoption and social commerce intention. Because consumer social interactions produce online social support, e-commerce adoption is being promoted to establish trust and, consequently, users' intention to buy. In fact, social factors facilitated through social media develop a supportive climate, which in turn attracts many more individuals to come online and take part in social interactions.

The contribution of this research is to highlight the role of social media and its influence on trust building in e-commerce. The research shows how social media and social factors influence trust and intention to buy through social networking sites.

Implications, limitations and future research directions

The theoretical implication of this research is integrating a technology acceptance model, a popular theory in information systems, with trust and social media to develop a model for adoption in social commerce. Hence, this model is one that can be used as a new concept in e-commerce and social commerce studies. The model examines the social factors in e-commerce adoption. The results highlight the relevance of theory from information systems and marketing disciplines to social media studies. Consistent with previous research on the socialisation of consumers through social media (Wang *et al.* 2012), the study shows that the social interaction of individuals influences consumer attitude towards a product or service. The research also provides some implications for managers. This research has shown the key role of trust in e-commerce and social commerce. Building and maintaining trust through social media for online vendors is the main managerial implication of this study. This is consistent with previous research (McCole *et al.* 2010) indicating the role of trust on influencing consumer attitudes towards purchasing behaviour. Networking on social media sites supports trust-building mechanisms in e-commerce and social commerce adoption. E-vendors may encourage consumers to come online and use social media to develop trust. This is value co-creation with customers instead of value creation for customers. The results also provide a managerial implication for e-vendors to enhance the quality of their websites, as this research shows that improving a website's quality will enhance perceived usefulness in consumers. This research, like other studies, is not without its limitations. Samples were mostly collected from a single city and work needs to be expanded to include other areas. Further studies could focus on a specific social networking site and the gathering of data through their members. Future research should take further steps to examine the role of social media on intention to buy and perceived usefulness, and to identify their effect on the model.

References

- Adams, D.A., Nelson, R.R. & Todd, P.A. (1992) Perceived usefulness, ease of use, and usage of information technology: a replication. *MIS Quarterly*, 16, 2, pp. 227–247.
- Agnihotri, R., Kothandaraman, P., Kashyap, R. & Singh, R. (2012) Bringing 'social' into sales: the impact of salespeople's social media use on service behaviors and value creation. *Journal of Personal Selling & Sales Management*, 32, 3, pp. 333–348.
- Ahn, T., Ryu, S. & Han, I. (2007) The impact of web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44, 3, pp. 263–275.
- Ali, H. (2011) Exchanging value within individuals' networks: social support implications for health marketers. *Journal of Marketing Management*, 27, 3/4, pp. 316–335.

- Aljifri, H.A., Pons, A. & Collins, D. (2003) Global e-commerce: a framework for understanding and overcoming the trust barrier. *Information Management & Computer Security*, 11, 3, p. 130.
- Anderson, J.C. & Gerbing, D.W. (1988) Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103, 3, pp. 411–423.
- Ba, S. & Pavlou, P.A. (2002) Evidence of the effect of trust building technology in electronic markets: price premiums and buyer behavior. *MIS Quarterly*, 26, 3, pp. 243–268.
- Bagozzi, R.P. & Dholakia, U.M. (2002) Intentional social action in virtual communities. *Journal of Interactive Marketing*, 16, 2, pp. 2–21.
- Ballantine, P.W. & Stephenson, R.J. (2011) Help me, I'm fat! Social support in online weight loss networks. *Journal of Consumer Behaviour*, 10, 6, pp. 332–337.
- Bandalos, D.L. (2002) The effects of item parceling on goodness-of-fit and parameter estimate bias in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 9, 1, pp. 78–102.
- Bronner, F. & de Hoog, R. (2010) Consumer-generated versus marketer-generated websites in consumer decision making. *International Journal of Market Research*, 52, 2, p. 231.
- Chen, J., Xu, H. & Whinston, A.B. (2011a) Moderated online communities and quality of user-generated content. *Journal of Management Information Systems*, 28, 2, pp. 237–268.
- Chen, Y., Fay, S. & Wang, Q. (2011b) The role of marketing in social media: how online consumer reviews evolve. *Journal of Interactive Marketing*, 25, 2, pp. 85–94.
- Chin, W.W. (1998) Issues and opinion on structural equation modeling. *MIS Quarterly*, 22, 1, pp. vii–xvi.
- Chin, W.W., Gopal, A. & Salisbury, W.D. (1997) Advancing the theory of adaptive structuration: the development of a scale to measure faithfulness of appropriation. *Information Systems Research*, 8, 4, pp. 342–367.
- Chin, W.W., Marcolin, B.L. & Newsted, P.R. (2003) A partial least squares latent variable modeling approach for measuring interaction effects: results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, 14, 2, pp. 189–217.
- Chris, F., Anindya, G. & Batia, W. (2008) Examining the relationship between reviews and sales: the role of reviewer identity disclosure in electronic markets. *Information Systems Research*, 19, 3, pp. 291–313, 393–395.
- Chwelos, P., Benbasat, I. & Dexter, A.S. (2001) Research report: empirical test of an EDI adoption model. *Information Systems Research*, 12, 3, pp. 304–321.
- Cobb, S. (1976) Presidential address – 1976. Social support as a moderator of life stress. *Psychosomatic Medicine*, 38, 5, pp. 300–314.
- Davis, F.D. (1989) Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 3, pp. 319–340.
- Davis, F.D., Bagozzi, R.P. & Warshaw, P.R. (1989) User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35, 8, pp. 982–1003.
- de Vries, L., Gensler, S. & Leeftang, P.S.H. (2012) Popularity of brand posts on brand fan pages: an investigation of the effects of social media marketing. *Journal of Interactive Marketing*, 26, 2, pp. 83–91.
- Do-Hyung, P., Jumin, L. & Ingoo, H. (2007) The effect of on-line consumer reviews on consumer purchasing intention: the moderating role of involvement. *International Journal of Electronic Commerce*, 11, 4, pp. 125–148.
- Esposito Vinzi, V., Chin, W., Henseler, J. & Wang, H. (2010) *Handbook of Partial Least Squares*. Berlin/Heidelberg: Springer.
- Fue, Z., Li, H. & Wenyu, D. (2009) Social factors in user perceptions and responses to advertising in online social networking communities. *Journal of Interactive Advertising*, 10, 1, pp. 1–13.
- Füller, J., Mühlbacher, H., Matzler, K. & Jawecki, G. (2009) Consumer empowerment through internet-based co-creation. *Journal of Management Information Systems*, 26, 3, pp. 71–102.

- Gefen, D. (2002) Reflections on the dimensions of trust and trustworthiness among online consumers. *Database for Advances in Information Systems*, 33, 3, pp. 38–53.
- Gefen, D. & Straub, D. (2000) The relative importance of perceived ease of use in is adoption: a study of e-commerce adoption. *Journal of the Association for Information Systems*, 1, 8, pp. 1–30.
- Gefen, D., Karahanna, E. & Straub, D.W. (2003) Trust and TAM in online shopping: an integrated model. *MIS Quarterly*, 27, 1, pp. 51–90.
- Gefen, D., Rigdon, E.E. & Straub, D. (2011) An update and extension to SEM guidelines for administrative and social science research. *MIS Quarterly*, 35, 2, pp. iii–A7.
- Gruzd, A., Wellman, B. & Takhteyev, Y. (2011) Imagining Twitter as an imagined community. *American Behavioral Scientist*, 55, 10, pp. 1294–1318.
- Hajli, M. (2013) A research framework for social commerce adoption. *Information Management & Computer Security*, 21, 3, pp. 144–154.
- Han, B.O. & Windsor, J. (2011) Users' willingness to pay on social network sites. *Journal of Computer Information Systems*, 51, 4, pp. 31–40.
- Jiyoung, C. (2009) Shopping on social networking web sites: attitudes toward real versus virtual items. *Journal of Interactive Advertising*, 10, 1, pp. 77–93.
- Kim, J.B. (2012) An empirical study on consumer first purchase intention in online shopping: integrating initial trust and TAM. *Electronic Commerce Research*, 12, 2, pp. 125–150.
- Lai, L.S.L. & Turban, E. (2008) Groups formation and operations in the Web 2.0 environment and social networks. *Group Decision & Negotiation*, 17, 5, pp. 387–402.
- Li, F., Zhou, N., Kashyap, R. & Yang, Z. (2008) Brand trust as a second-order factor: an alternative measurement model. *International Journal of Market Research*, 50, 6, pp. 817.
- 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, pp. 5–14.
- 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, pp. 69–90.
- Lorenzo, C., Constantinides, E., Geurts, P. & Gómez, M. (2007) Impact of web experience on e-consumer responses, e-commerce and web technologies, in Psaila, G. & Wagner, R. (eds) *E-commerce and Web Technologies*. Berlin/Heidelberg: Springer, pp. 191–200.
- Lu, H.-P. & Hsiao, K.-L. (2010) The influence of extro/introversion on the intention to pay for social networking sites. *Information & Management*, 47, 3, pp. 150–157.
- 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. *Electronic Commerce Research & Applications*, 9, 4, pp. 346–360.
- McCole, P., Ramsey, E. & Williams, J. (2010) Trust considerations on attitudes towards online purchasing: the moderating effect of privacy and security concerns. *Journal of Business Research*, 63, 9–10, pp. 1018–1024.
- McKnight, D.H., Choudhury, V. & Kacmar, C. (2002) Developing and validating trust measures for e-commerce: an integrative typology. *Information Systems Research*, 13, 3, pp. 334–359.
- McLure Wasko, M. & Faraj, S. (2005) Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29, 1, pp. 35–57.
- Ming-Hsien, Y., Chandrees, N., Binshan, L. & Hung-Yi, C. (2009) The effect of perceived ethical performance of shopping websites on consumer trust. *Journal of Computer Information Systems*, 50, 1, pp. 15–24.
- Molly McLure, W. & Samer, F. (2005) Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29, 1, pp. 35–57.
- Mueller, J., Hutter, K., Fueller, J. & Matzler, K. (2011) Virtual worlds as knowledge management platform – a practice-perspective. *Information Systems Journal*, 21, 6, pp. 479–501.

- Nambisan, S. (2002) Designing virtual customer environments for new product development: toward a theory. *Academy of Management Review*, 27, 3, pp. 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, pp. 105–120.
- Pan, L.-Y. & Chiou, J.-S. (2011) How much can you trust online information? Cues for perceived trustworthiness of consumer-generated online information. *Journal of Interactive Marketing*, 25, 2, pp. 67–74.
- Pavlou, P.A. (2003) Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7, 3, pp. 101–134.
- Purnawirawan, N., De Pelsmacker, P. & Dens, N. (2012) Balance and sequence in online reviews: how perceived usefulness affects attitudes and intentions. *Journal of Interactive Marketing*, 26, 4, pp. 244–255.
- Ridings, C.M. & Gefen, D. (2004) Virtual community attraction: why people hang out online. *Journal of Computer-Mediated Communication*, 10, 1, pp. 1–10.
- Ringle, C.M., Sarstedt, M. & Straub, D.W. (2012) Editor's comments: a critical look at the use of PLS-SEM in MIS quarterly. *MIS Quarterly*, 36, 1, pp. iii–xiv.
- Ringle, C.M., Wende, S. & Will, A. (2005) *SmartPLS* (release 2.0 M3). Available online at: <http://www.SmartPLS.de>. University of Hamburg, Germany.
- Roca, J.C., García, J.J. & de la Vega, J.J. (2009) The importance of perceived trust, security and privacy in online trading systems. *Information Management & Computer Security*, 17, 2, pp. 96–113.
- Senecal, S. & Nantel, J. (2004) The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80, 2, pp. 159–169.
- Shin, D.-H. (2010) The effects of trust, security and privacy in social networking: a security-based approach to understand the pattern of adoption. *Interacting with Computers*, 22, 5, pp. 428–438.
- Swamynathan, G., Wilson, C., Boe, B., Almeroth, K. & Zhao, B.Y. (2008) Do social networks improve e-commerce? A study on social marketplaces. *Online Social Networks*, in *Proceedings of the first workshop on Online social networks*, pp. 1–6, ACM.
- 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, pp. 198–208.
- Weisberg, J., Te'eni, D. & Arman, L. (2011) Past purchase and intention to purchase in e-commerce: the mediation of social presence and trust. *Internet Research*, 21, 1, pp. 82–96.
- Wixom, B.H. & Watson, H.J. (2001) An empirical investigation of the factors affecting data warehousing success. *MIS Quarterly*, 25, 1, pp. 17–41.
- Wu, J.-J., Chen, Y.-H. & Chung, Y.-S. (2010) Trust factors influencing virtual community members: a study of transaction communities. *Journal of Business Research*, 63, 9–10, pp. 1025–1032.

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