ITP 32,1

68

Received 25 April 2018 Revised 22 August 2018 Accepted 12 September 2018

Impact of social commerce constructs and social support on social commerce intentions

Zaryab Sheikh

School of Management, Hefei University of Technology, Hefei, China and Department of Management Sciences, Beaconhouse National University, Lahore, Pakistan

Liu Yezheng

School of Management, Hefei University of Technology, Hefei, China

Tahir Islam

School of Economics and Management, Tongji University, Shanghai, China and School of Management, Mohammad Ali Jinnah University, Karachi, Pakistan

Zahid Hameed

Department of Management Sciences, Khawaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan, and

Ikram Ullah Khan

Institute of Management Sciences, University of Science and Technology, Bannu, Pakistan

Abstract

Purpose – The purpose of this paper is to investigate the influence of social commerce constructs (SCCs), social support and relationship quality on social commerce intentions, which lead to use behaviour of social networking sites for social commerce.

Design/methodology/approach – Data were collected from 343 users of social networking sites in Pakistan. The data analysis was conducted using PLS-SEM.

Findings – The results show that SCCs have empowered consumers through the existence of virtual groups, ratings and reviews and recommendations and referrals, thereby having a significant impact on social commerce intentions. The relationship quality with social networking sites, measured through commitment, satisfaction and trust, also proved to be a leading forecaster of social commerce intentions. The impact of social support could not positively influence the relationship quality with the social networking site. However, social support influences the social commerce intentions significantly.

Research limitations/implications – Future research should enrich model with some moderating variables and data may be collected from actual online shoppers only.

Practical implications – This study provides valuable insights to retailers to formulate their social commerce strategies as per decision factors results to have maximum engagement of consumers in social commerce.

Originality/value – The study proposes the unique model for finding the social commerce intentions and use behaviour using social support theory, relationship marketing theory and information systems literature.

Keywords Social media, Web 2.0, Information sharing, Social networking

Paper type Research paper



Information Technology & People Vol. 32 No. 1, 2019 pp. 68-93 © Emerald Publishing Limited 0959-3845 DOI 10.1108/TTP-04-2018-0195 1. Introduction

In the present era, rapid increases on the internet, especially in Web 2.0 technology, giving an enormous number of individuals a chance to use social networking sites (SNSs) like Twitter, Facebook and LinkedIn. The primary objective of the SNSs is to build an online environment where participants can share and pursue common experiences, activities and common interests (Zeng et al., 2009). SNSs are the key source of social commerce



Social Social

commerce

constructs and

social support

because they enhance the quality of the relationship between suppliers and consumers (Liang and Turban, 2011), increasing trust and motivating the consumer to buy company products after hearing about the complete satisfaction of other SNS users (Kim and Park, 2013). Social commerce is a novel concept and is the mixture of e-commerce and Web 2.0 technologies such as social media and SNSs (Ahmad and Laroche, 2017; Hajli, 2014c, 2015; Liang *et al.*, 2011; Liang and Turban, 2011), which empower consumers to produce content (Heinonen, 2011).

According to Marsden (2009), 83 per cent online customers were eager to share purchasing details with peers, and while shopping, 67 per cent of virtual customers preferred recommendations received from the online community. Kelly *et al.* (2010) found that consumers believed that information provided by a friend is more credible than information received from a company about the product and there is a positive relationship between positive views of peers and purchase intentions. Scholars claimed that the role of social platforms in providing referrals, reviews, ratings, online communities and recommendations about the products and services enhanced the social commerce intentions (Park *et al.*, 2007; Yadav *et al.*, 2013). The online social platforms such as forums and communities provide opportunities to consumers to rate, review, recommend and refer the products and services for peer consumers and empower the consumers to communicate and negotiate with sellers. Such forums and communities, ratings and reviews, recommendation and referrals are known as social commerce constructs (SCCs) (Hajli, 2015; Haili and Sims, 2015).

In the literature, relationship quality is measured through commitment, satisfaction and trust (Hajli, 2014c). These three facets of relationship quality play a significant role in social commerce (Hajli, 2014a). Yang *et al.* (2005) explained satisfaction as the user's overall evaluation of a service provider. Researchers know that trust is a key construct in social commerce (Hajli, 2014c) because an increasing level of customer trust motivates consumers to go shopping online rather than buying physically (Hajli, 2015). In social commerce, commitment relates to the psychological state, and it happens when the supplier–customer ongoing relationship makes efforts to maintain it (Arnott *et al.*, 2007). Several scholars argued that relationship quality is a significant determinant of social commerce regarding social commerce intention (Hajli, 2014c; Liang *et al.*, 2011; Rauyruen and Miller, 2007; Wang and Hajli, 2015).

In the present social environment, potential customers have access to information provided through social interaction by social media (Liang *et al.*, 2011), with regular interconnectivity amongst individuals to support them in their buying decisions and this process generates social support in an online context (Hajli, 2014c). Social support is a well-known concept in sociology, now welcomed in business studies, defined as "information leading the subject to believe that he is cared for and loved, esteemed and a member of a network of mutual obligations" (Cobb, 1976). The availability of social support in SNSs is a prominent factor which may affect the social commerce intentions. Users get informational and emotional support from their peer consumers through SNSs and assist them in their buying decisions (Sheikh *et al.*, 2017).

Nevertheless, limited efforts have been made to study online consumer behaviour in the social commerce context in developing countries, such as Pakistan, where a significant consumer concern is a lack of trust in the accuracy of information about products before purchase. Because pre-purchase information exists on different online social platforms, ratings, reviews and recommendations of goods have become a primary concern for the consumer in this region. Also, the information accuracy of the product is being considered as one of the major hurdles in the development of social commerce. This study will help consumers to make well-informed purchase decisions and share their product- and service-related experiences with other users of online communities to assist them to perform



social commerce activities. Several studies have investigated the social commerce intentions, but very few have focussed on online social support, relationship quality with the SNSs, and SCCs in determining the social commerce intentions and the actual use behaviour of SNSs for social commerce. To address the research gap, we proposed a theoretical framework ground upon social support theory, relationship marketing theory, and information systems (IS) literature.

The study has several contributions. First, it extends the extant literature on social commerce and correlated concepts. Second, the proposed theoretical model provides the empirical evidence to the factors such as social support in an online context, relationship quality and SCCs to determine the social commerce intentions. Third, this study investigates the actual use behaviour of SNSs for social commerce instead of investigating the intentions only. Several studies have investigated behavioural intentions, but very few have determined the actual use behaviour of SNSs in social commerce context. Overall, this research will provide a base for new theoretical models in social commerce context based on consumer's online social interaction.

The objective of this research is: to analyse the impact of SCCs, social support and relationship quality on social commerce intentions; to find the role of SCCs and social support in developing the relationship quality; and to investigate the impact of social commerce intentions on use behaviour of SNSs for social commerce.

The paper continues with the theoretical background, relevant literature and the conceptual framework. It will then discuss the research methodology we followed, results of the analysis, the discussion of the hypotheses followed by conclusion, limitations and future research direction.

2. Theoretical background

2.1 Social commerce

The innovations in Web 2.0 applications and information and communication technologies are the reasons behind the development of social commerce (Kim and Park, 2013), where consumers are enabled to interact with businesses and create content (FüLler *et al.*, 2009). Social commerce is a novel development and division of electronic commerce (Hajli, 2014c; Kim and Park, 2013), which empowers shoppers to create content (Hajli, 2015). The merchandisers, with the help of social commerce, can now gain access to various markets by participating in social communications of consumers (Hargadon and Bechky, 2006). The dissemination of information about e-commerce transactions and activities through social media, generally through SNSs, is referred to as social commerce (Liang *et al.*, 2011). SNSs such as Twitter, LinkedIn and Facebook are social media technologies empowered by Web 2.0. Also, the present transformation of e-commerce to social commerce is because of the popularity of SNSs (Hajli, 2013; Liang *et al.*, 2011; Liang and Turban, 2011; Zeng *et al.*, 2009).

The ultimate objective of SNSs is to create an online social platform as a place where members can interact, share experiences and information, do activities and seek mutual interests (Shin, 2010). Social commerce aims to mix the e-commerce with Web 2.0 tools to plan a customer-orientated business and to introduce new trade models based on virtual communities (Hajli and Sims, 2015). A social commerce strategy for businesses is to develop the virtual groups and motivate the members to share information, knowledge and experiences about their products and services. Alternatively, to get benefit from social commerce, companies may become part of popular SNSs such as Twitter, Facebook or LinkedIn and ask consumers to "like" their product or page (i.e. indicate approval using a facility provided by the SNS), which could lead the company to sell more of their product via this channel (Hajli, 2015). Most of the companies desire consumers to share their remarks regarding the services or products on different SNSs, such as Facebook or

Social

commerce

constructs and

social support

Twitter, using their brand fan page which assists businesses to innovate, improve or introduce new products as per the customers' requirements. Dell, Q mobile, Hyperstar, Next and Uniworth are a few examples of different available brands that are involved with social commerce in this research framework.

2.2 Social commerce constructs

The constructs like ratings and reviews, forums and communities and recommendations and referrals are called SCCs (Hajli, 2013). These SCCs can support consumers by providing textual information about their purchasing decisions. Today, using social media and SNSs, businesses can take part in consumer's social interaction on a platform created by online sellers (Amblee and Bui, 2011). Online communication and social interaction of consumers are facilitated by the SCCs employed by online sellers, including recommendation systems, reviews, ratings and development of virtual groups and forums. Now, most online stores are providing customer reviews on their websites, for example, Amazon and eBay (Huang *et al.*, 2011) because for prospective consumers, reviews provided by previous customers have auxiliary value (Heinonen, 2011; Keller, 2009).

Creating electronic word of mouth (WOM) in online communities is another essential tool of social commerce, and it can be significant for businesses (Kozinets *et al.*, 2010). The advancement of e-commerce towards social commerce is due to SNSs, as forums and communities are the hands-on tools of social media and SNSs (Huang and Benyoucef, 2013). Consumers can create support for other prospective consumers by recommending a product, as recommendations are another SCC (Piller and Walcher, 2006). Social perception is influenced by web applications and social technologies because consumers can quickly and broadly share their experiences, knowledge and information; can participate in forums and communities; and can leave their recommendations on record for other customers (Hajli, 2013).

Ratings and reviews are associated with social communication as one of the dimensions of SCC. Product reviews can simply be posted online by customers (Chen *et al.*, 2011) who rate the products based on their experience (Wang and Hajli, 2015). The comprehensive information about products can be achieved by these reviews and ratings for the assistance of other prospective customers. This information exchange and experiences through this communication channel, thus, assist the consumer in his buying decision (Han and Windsor, 2011; Islam *et al.*, 2017).

Different social platforms developed by online sellers to permit customers to share information and participate in group discussion is another dimension of SCCs; these facilities are known as forums and communities (Bagozzi and Dholakia, 2002; Wang and Hajli, 2015). These vendors, through the help of Web 2.0 applications, social media, social technologies, SNSs and online communities, support members sharing of information and knowledge about the product (Lu *et al.*, 2010). Consumers utilise these platforms to have more product information before they make a purchase decision (Wang and Hajli, 2015).

Another dimension of SCCs is recommendations and referrals, this dimension plays a significant role in social commerce intentions (Hajli, 2015). Consumers have to trust other folk's recommendations because they are unable to feel or touch the product physically in an online environment (Senecal and Nantel, 2004), whereas in bricks and mortar stores consumers can tangibly feel the product and communicate with the staff. The lack of physical pre-purchase physical contact is a significant challenge in an online environment (Kumar *et al.*, 2010) and, thus, reflects the importance of the recommendations dimension of SCCs.

2.3 Relationship quality

The relationship quality concept is derived from the theory of relationship marketing (Crosby et al., 1990; Dwyer et al., 1987). To transform unresponsive consumers into loyal



consumers and to reinforce the relationship between seller and buyer is the eventual goal of relationship marketing theory (Berry and Parasuraman, 2004). The dimensions of relationship quality like trust, commitment and satisfaction are the fundamental themes of this theory (Garbarino and Johnson, 1999; Palmatier *et al.*, 2006). The tightness and the strength of a relationship, which performs an essential role in compelling customer loyalty, is referred to as relationship quality (Palmatier *et al.*, 2006). Relationship quality has three primary features: relationship commitment, relationship satisfaction and trust (Wulf *et al.*, 2001). Past studies confirm and show empirically that relationship quality can be best measured by these three facets (De Cannière *et al.*, 2009). Consequently, this study assumes that relationship quality is comprised of these three indicators.

The aspiration to maintain a relationship with a retailer is called commitment (Moorman et al., 1993; Morgan and Hunt, 1994; Wulf et al., 2001). Commitment is a significant element for maintaining a long-term relationship (Garbarino and Johnson, 1999). To enhance efforts to guarantee the relationship, this indicator of relationship quality demonstrates the significance of the relationship with business (Gustafsson et al., 2005). The general emotional assessment of the performance of a service or product provided by the customer is referred to as satisfaction (Gustafsson et al., 2005). Relationship satisfaction is another construct of relationship quality, being an effective state of people after a thorough evaluation of the relationship (Wulf et al., 2001). This indicator of the relationship quality creates a connection with consumers, and it is entirely dependent on the service quality of the seller (Hajli, 2014c). "A willingness to rely on an exchange partner in the WOM that has confidence" is defined as trust (Moorman et al., 1993). In all social and economics businesses, particularly in a virtual setting where vast vagueness may exist, trust is an essential subject (Pavlou, 2003). Trust is a fundamental matter of social commerce as well (Hajli, 2014b). Benevolence and honesty of an online seller lead a customer to trust in business (Gefen et al., 2003). The two diverse kinds of trust are credibility and benevolence (Ba and Paylou, 2002). A faith that the other party in a deal is honest and trustworthy refers to credibility-based trust, which usually relies on reputation information and is impersonal, whereas repeated customer-seller relationships refer to benevolence-based trust (Ba and Pavlou, 2002).

2.4 Social support

A psychological perception or physical help an individual or a member of a group or organisation received or responded or being cared in an organisation by others is known as social support (Crocker and Canevello, 2008). To illuminate, how social relationships affect emotions, behaviours and perception of individuals; a social support theory has been proposed. The idea of social support is taken from social support theory (Lakey and Cohen, 2000).

Social support is the resultant of an individual's effective involvement and mobilisation of their personal networks; it is not only a by-product of their associations (Offer, 2012). Online engagements that individuals perform by cooperating with peers through social media are considered as online social support (Hajli and Sims, 2015). Individual's social needs are aided by their online social interactions and real experiences that satisfy people's social needs. Also, receiving social support online brings cordiality among users (Liang *et al.*, 2011). More favourable consumer attitudes can be attained if a higher level of perceived social presence exists as indicated by many studies (Hassanein and Head, 2007).

Social support is a multidimensional construct having many components for different contexts (Madjar, 2008; Xie, 2008). Social support is mainly covered by three types: informational, emotional and tangible as highlighted in the previous studies (Schaefer *et al.*, 1981). Online social interactions are computer-generated and dependent on virtual

Social

commerce

constructs and

social support

communications using social media. So, online social support is considered intangible, and it embraces emotional and informational support (Coulson, 2005; Madjar, 2008).

Emotional support is referred to an individual's trust on other online users that he is being cared and loved, and a feeling that a person is no stranger and is a member of that virtual group. In social commerce perspective, when consumers perceive that they are being commiserated or cared for by information shared by other consumers; it reflects that social support is present (Bai *et al.*, 2015). Emotional support received by individuals in the virtual community may help to decrease one's anxiety level (Taylor *et al.*, 2004).

Providing advice and information that could help another individual in the virtual group is referred as informational support. Different types of user generated content including knowledge, recommendation and advice are all indicators of informational support (Bai *et al.*, 2015). Information sharing or posting a message in reply to inquiries by users of the group may help to counter the difficulties, particularly honest evaluation of information (Coulson, 2005). To investigate social support in virtual communities; these two forms of messages are considered as the primary goal for investigation (Liang *et al.*, 2011) dissimilar to tangible support. These two support messages (informational and emotional) are considered as a critical support instrument for social commerce. Being cared for or thoughtful emotions improve the attentiveness of social relations among users and motivate them to proactively share information or contribute in endorsing a product by sharing its related information using social media which is a social commerce perspective (Bai *et al.*, 2015).

2.5 Social commerce intentions

For behavioural researchers, the intention is a standard measurement used to forecast possible human action. Behavioural intention is significantly correlated with actual behaviour, as has been verified by many research studies. The main objective of social commerce is to acquire benefit of interactions in a social network to achieve commercial advantages (Liang et al., 2011). Social commerce intention means what a possible consumer plans to do or can be expected to do (Shin, 2013). The commercial benefits of social commerce can lead the business to improve customer loyalty or enhance its sales. The theory of reasoned action (TRA), theory of planned behaviour and technology acceptance model (TAM) have been used extensively to investigate the "intention to use" (Hajli, 2014c). Therefore, the outcome construct of our proposed research model is social commerce intentions, which lead to actual use behaviour of SNSs for online purchases to check the relationship and power of social support, relationship quality and SCCs. One of the key elements in determining consumer behaviour is likely to be the social communication of associates in a community (Bagozzi and Dholakia, 2002). The quantity and worth of information provided by customers, like ratings and reviews and recommendations from consumers, affect social commerce intention (Park et al., 2007).

3. Hypotheses development

We now propose a conceptual framework based on social commerce literature to understand the developing relationships of individuals and to enhance understanding of social commerce. In particular, this paper examines the impact of SCCs, social support and relationship quality construct within the social commerce environment. The proposed model is built on social support theory, SCCs derived from the IS literature and relationship marketing theory. The hypotheses and rationalisation for associations among the constructs are discussed below. The theoretical model is shown in Figure 1.





74

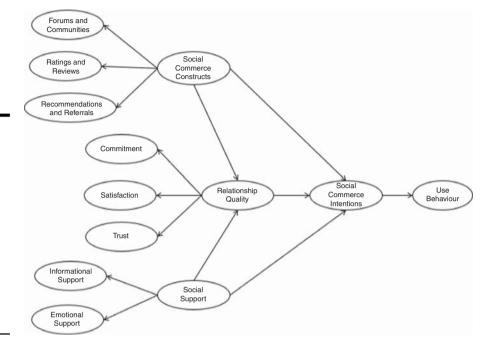


Figure 1.
Proposed research model

3.1 The effect of SCCs on relationship quality

Social technologies, like the shopper evaluation tool in Amazon.com, provide prospects to increase social communications among the users of the website in social commerce context (Wang and Hajli, 2015). The websites created by online retailers, however, provide an opportunity for customers to interact with them and with other users of the forum. In today's digital age, consumers are enthusiastic to continue a healthy relationship with retailers as well as peer consumers, which helps them in making the appropriate purchase decisions (Yoon *et al.*, 2008). On the other hand, information related to the identity of users on the online forum has always been a serious concern for consumers (Forman *et al.*, 2008). Consumers are always concerned about forged ratings and reviews by third parties (Riemer and Lehrke, 2009), which may lead customers to form an inappropriate opinion about buying, and consequently leads to lower satisfaction and commitment toward online sellers (Wang and Hajli, 2015).

Accurate and authentic ratings and reviews of the product by third parties with authenticity in the social commerce environment help consumers to maintain a healthy relationship with online sellers and other consumers, which ultimately leads to enhancement of consumer purchase intentions (Bai *et al.*, 2015). To gather more information about users or reviewers regarding their identity and increase the authenticity of reviews and ratings, online sellers have to encourage users to be transparent on social platforms, meaning the sellers must maintain a healthy relationship with consumers (Forman *et al.*, 2008). A study carried out by Yoon *et al.* (2008) found that consumers show more satisfaction with the business if a positive relationship is formed. Also, Wang and Hajli (2015) concluded that SCCs help businesses and online sellers to establish commitment, satisfaction and trust. Therefore, the following hypothesis is proposed:

H1a. SCCs have a positive relationship with the user's relationship quality on a social networking site.



Socia1

commerce

constructs and

social support

3.2 The effect of SCCs on social commerce intentions

In today's era, online sellers provide more opportunities for consumers to interact with each other using social media and SNSs than ever before (Amblee and Bui, 2011). Social commerce facilitates consumer use of online forums and communities to give ratings, reviews, recommendations and referrals with the help of SNSs and Web 2.0 applications (Hajli, 2015). These will help consumers in their purchasing decision processes by allowing consumers to look at friends' reviews and ratings for a specific product. The feedback from consumer reviews can also affect brand reputation (Davidson and Copulsky, 2006). An experience-based information source can lead to a significant impact on social commerce intentions (Hajli, 2015; Park *et al.*, 2007). Favourable consumer evaluations significantly enhance sales (Heinonen, 2011).

Several scholars claimed that the recommendation systems seem to have a considerable influence on consumers' buying intentions (Maria and Finotto, 2008; Riemer and Lehrke, 2009; Senecal and Nantel, 2004). Product certification and evaluation by a third party can also assist consumers making a purchase decision. Bai *et al.* (2015) conducted a study on consumer purchase behaviour in social commerce environment and found that the products recommended by a third party or consumers who have prior history and experience of using a particular product may have a significant impact on social commerce intentions. Hajli and Sims (2015) argued that consumer considers SNSs very useful and they affect their purchase intentions. Also, the TRA confirms that perceived usefulness affects the behavioural intention (Davis, 1989). Furthermore, Sheikh *et al.* (2017) revealed that SCCs positively influence the behavioural intentions in a social commerce environment. A study conducted by Cheung *et al.* (2014) found that such social technologies involve customers on SNSs and can affect shopper buying choices within the social commerce environment. Therefore, we formulate the following hypothesis:

H1b. SCCs positively affect user's social commerce intentions.

3.3 The effect of social support on relationship quality

The primary purpose of the SNSs is to build a relationship. The relationship quality can be assured if the consumers in a social commerce platform feel that users in virtual forums would provide considerable support to them (Liang et al., 2011). Users of SNSs feel more associated with online users and builds trust with those users with the presence of social support (Crocker and Canevello, 2008; Weber et al., 2004). The psychological needs of the users can be fulfilled in the SNS with the presence of social support and can offer psychological benefits to users (Islam, Attiq, Hameed, Khokhar and Sheikh, 2018; Islam, Sheikh, Hameed, Khan and Azam, 2018; Obst and Stafurik, 2010; Shaw and Gant, 2002). These benefits make the people feel that the SNS is valuable and this make the satisfactory relationship quality. Hajli (2014c) argued that social support measured by informational and emotional support is likely to enhance commitment, satisfaction and trust of the user in using a SNS. Interaction and participation of consumers in virtual communities have a positive impact on consumer commitment, which leads to more trust in the online forum itself (Casaló et al., 2008). The availability of social support and the relationship between users in SNSs provide trust to the SNS (Crocker and Canevello, 2008). Also, Obst and Stafurik (2010) argued that consumers get satisfaction with the presence of social support in the SNS and it enhances the relationship quality of individuals with that particular SNS. Research conducted by Kim and Ko (2012) revealed that activities performed on social media has a positive impact on relationship equity. Thus, the following hypothesis is proposed:

H2a. The social support has a positive impact on user's relationship quality in a social networking site.



3.4 The effect of social support on social commerce intentions

Social exchange theory claims that people would respond to others' support when the individual attains favours from other people (Blau, 1964). However, in an online context, an SNS is a platform for users to exchange support with each other (Cheshire, 2007; Crocker and Canevello, 2008). Users in online forums and communities have emotional and informational support (Wellman and Wortley, 1990). Users receive emotional and informational support from other users of online communities, which in turn motivate them to use the SNSs when buying a service or product to make an informed decision (Sheikh et al., 2017). Such type of support and consumers experiences help consumers in making their buying decisions (Park et al., 2007). Consumer communications endorse brand positively on social media platforms and can affect their purchase intentions (Naylor et al., 2012). Tsai et al. (2012) argued that online social support is extensively available in different online social platforms such as social media and SNSs and can influence the individuals online shopping intentions. A study conducted by Liang et al. (2011) found that online social support has a positive impact on social commerce intentions and encourage the individuals to make a favourable and informed purchase decision. Also, individuals' communication through different SNSs recommend a company positively and can affect the users' social commerce intentions positively (Naylor et al., 2012; Wang et al., 2012). Furthermore, Sheikh et al. (2017) conducted a study on Saudi Arabian consumers and found that social support positively influences the social commerce intentions. Therefore, the following hypothesis is proposed:

H2b. Social support in an SNS is positively associated with social commerce intentions.

3.5 The effect of relationship quality on social commerce intentions

The development of real partnerships between service providers and customers is the subject of research on relationship perspective in the real world (Wang and Hajli, 2015). There is a higher possibility that a consumer will continue communicating with the service provider as long as the relationship quality between the service provider and the user is high (Liang *et al.*, 2011). Users of virtual groups support other members' social interactions and communication and remain committed to participating in group activities on the provided platform (Bagozzi and Dholakia, 2002). It is possible to have positive customer interactions with an active and high-quality relationship, which raises the commitment (Fournier, 1998). Crosby *et al.* (1990) argued that consumers will be more committed and satisfied, and will show trust of the service provider for his services if the relationship quality is excellent and this will positively affect the purchase decision. These communications with friends and service providers, combined with the support users receive, can encourage them to continue using or re-using the system (Bhattacherjee, 2001) and affects their social commerce intentions (Hajli, 2014c).

The SNSs are not just a platform for social communication, in particular for users who are buyers also; it is a channel for getting valuable product information and recommendations and for sharing buying experiences (Liang *et al.*, 2011). Hajli *et al.* (2017) argued that the information acquirement in the SNS enhance the intentions to buy online from online sellers. A study conducted by De Cannière *et al.* (2009) found that relationship quality will affect the user's purchase intentions. According to the relationship marketing theory, positive correlation between customer and seller provides a basis for the competitive benefit (Lewin and Johnston, 1997). The relationship marketing theory confirms that relationship quality positively affects consumer purchase decision (Morgan and Hunt, 1994). Scholars confirmed that a positive association exists between relationship quality and user retention as upheld by the previous studies (Palmatier *et al.*, 2006; Shabbir *et al.*, 2007). Also, Liang *et al.* (2011)

carried out a study on Facebook user's social commerce intentions and concluded that the superior relationship quality would have a positive impact on the user's social commerce intentions. Therefore, based on the literature, this research formulates the following hypothesis:

H3. Relationship quality has a positive relationship with user's social commerce intentions in social networking sites.

Social commerce constructs and social support

3.6 The effect of social commerce intentions on use behaviour

Behavioural intentions crave individuals to actually use the technology. In a social commerce environment, the intention to use SNSs leads to actually use the SNSs for online purchases. Several psychological theories and TAMs revealed that behavioural intentions affect the user behaviour (Yu, 2012). A study conducted by Khan *et al.* (2017) found that behavioural intentions are positively associated with use behaviour in adopting the mobile internet banking. Also, Khan *et al.* (2018) performed a study for adopting the massive open online courses and found that user's behavioural intentions are positively associated with the use behaviour. Furthermore, Sheikh *et al.* (2017) argued that behavioural intentions have a positive impact in shaping the consumer's use behaviour in social commerce environment. Thus, the authors formulate the following hypothesis:

H4. Social commerce intentions have a positive association with the use behaviour of an SNSs for online purchases.

4. Research methodology

4.1 Survey design

We used a survey questionnaire to obtain empirical data from the users of social networking sites in Pakistan. The respondents for the current study were online users of at least one social networking site. We chose the survey method because it is a quantitative research method which is often used to examine behaviour and investigate the association among constructs (Newsted *et al.*, 1998). In many previous studies, the survey method has been broadly used to examine behaviours in social commerce (Huang and Benyoucef, 2015; Liu *et al.*, 2016). Required data were obtained through an electronic questionnaire in June and July 2017 (two months duration). To verify the understandability of the scale, we arranged a focus group of ten people including PhD management science students and two professors who specialise in survey design. Following the recommendations of the focus group, we rephrased some wording in the items. Before the final data collection, a pilot study was performed with 45 participants including students and ten management information system (MIS) researchers to make sure that statements of items are clearly understandable to the participants. As suggested by Bell (2014), the pilot study is useful for debugging the scale.

4.2 Measurement development

To measure the variables for current research, we used seven-point Likert scales from "(strongly disagree =)" 1 to "(strongly agree =)" 7. SCCs were measured through the three dimensions of forums and communities, ratings and reviews and recommendations and referrals. The items for SCCs were adapted from Hajli (2015) and Han and Windsor (2011). These three dimensions are essential dimensions in a social commerce context (Hajli, 2014a, c). The items of the construct relationship quality were measured through commitment, satisfaction and trust, and adapted from Hajli (2014c) and Liang *et al.* (2011). The items of the construct social support measured through emotional support, and



informational support, and were adapted from Liang *et al.* (2011) and Wang and Hajli (2015). The items for the construct social commerce intentions were adapted from Liang *et al.* (2011) and Hajli (2014c). The construct use behaviour was adapted from Venkatesh *et al.* (2003, 2012) to measure the frequency of consumer's use behaviour of SNSs for social commerce. The instrument items and their literature sources are shown in Table AII.

4.3 Data collection

Data were collected from SNSs users in Pakistan. Any user who was registered with any social networking site (e.g. Facebook, Twitter and LinkedIn) in Pakistan was a potential respondent. We shared our online survey questionnaire on different social media platforms, social networking sites, instant messaging groups and brand fan pages of online retailers. The respondents were also requested to share this survey with at least two of their friends following the snowballing technique. We received 361 responses, of which 343 responses were usable. Table I shows the demographic information.

4.4 Data analysis

To evaluate the structural model, the author used structural equation modelling (SEM) through partial least squares (PLS) estimation. According to Hair *et al.* (1998), PLS is a powerful technique, which used to test the measurement and structural model simultaneously, which also combines components factor analysis (CFA) and regression. Wasko and Faraj (2005) suggested that PLS-SEM is a sound method to examine the reliability and validity of research constructs. In the current research, we conducted PLS estimation through Smart-PLS 3.0 software.

Characteristics	Number of respondents
Gender	
Male	204
Female	139
Age	
≤ 20.00	63
21.00-25.00	109
26.00-30.00	96
31.00-35.00	42
≥36.00	33
Qualification	
Up to High School	21
Bachelor	176
Master	141
Doctorate	5
Experience	
1–3	114
4–6	178
7–9	37
≥ 10	14
Note: $n = 343$	

Table I.Demographic information



5. Results

5.1 Common method bias

In this research, we performed Harman's single factor test to ensure that the survey did not have common method bias. After categorising all items into eight factors, the first factor explains only 27.10 per cent of the variance. Thus, results show that common method bias is not a severe problem for this study.

Social commerce constructs and social support

5.2 Measurement model

As suggested by Hair *et al.* (1998), we performed CFA to examine the measurement model. In particular, we evaluated the measurement model by computing the content, convergent and discriminant validities. The content validity was assessed by evaluating the relevant literature and pre-testing of the scale. We assessed convergence through computing the value of the factor loadings, composite reliability (CR), average variance extracted (AVE), and Cronbach's α . The findings of the CFA exhibit item loadings which are all above 0.60 and cross-loadings (see Table AI). The cut-off values for CR, AVE and Cronbach's α are 0.70, 0.50 and 0.70, respectively (Fornell and Larcker, 1981; Hair *et al.*, 1998, 2010). As presented in Table II, the CR and Cronbach's α values are higher than 0.70, and the AVE values for all variables are more than 0.50. Thus, these findings demonstrate suitable convergent validity.

Discriminant validity was used to assess whether the measures of the variable are distinct from other variables. Following by Gefen and Straub (2005), we used two approaches to assess the discriminant validity. First, as suggested by Fornell and Larcker (1981), we evaluated discriminant validity by comparing the association among the correlations between variables and by taking the square roots of AVE of each variable. As shown in Table II, the square roots of the AVE of each construct are greater than the correlations among variables. Second, we analysed the items in the item loadings and cross-loadings to construct the correlations. The results demonstrate (see Table AI) that all the item loadings of the corresponding constructs are above the cross-loading values of the other latent constructs, thus, showing suitable discriminant validity. Table II also shows the descriptive statistics and correlations among variables. Furthermore, the Heterotrait–Monotrait Ratio of Correlations (HTMT) test was also performed to assess the discriminant validity. The results of HTMT test provided in Table III shows the sufficient discriminant validity.

5.3 Multicollinearity

The amount of multicollinearity was assessed using the variance inflation factor (VIFs) and tolerance values of the independent constructs. The tolerance values for all independent variables were above the recommended value 0.10 (Cohen *et al.*, 2003) and VIF values among 1.54 and 2.68, the results show that multicollinearity does not exist in this study.

5.4 Hypotheses testing

The relationship between variables was tested based on the examination of standardized paths. To estimate the significance levels (Henseler *et al.*, 2009; Islam, Attiq, Hameed, Khokhar and Sheikh, 2018; Islam, Sheikh, Hameed, Khan and Azam, 2018), we used bootstrap resampling method with 2000 iterations of resampling (Chin, 1998). As shown in Figure 2, results demonstrate that SCCs are positively related to relationship quality ($\beta = 0.565$, SE = 0.068, p < 0.001) and social commerce intention ($\beta = 0.254$, SE = 0.053, p < 0.001), hence H1a and H1b are supported. Our findings indicate that social support have positive significant effect on ($\beta = 0.375$, SE = 0.062, p < 0.001) commerce intention, supported hypothesis H2b. The results in Figure 2 showed that social support does not significantly related to relationship quality. Thus, H2a is not supported. The results also



ITP 32,1

80

10 6 ∞ 9 2 α 0.55 0.56 0.60 0.63 0.59 0.54 0.53 0.54 0.83 0.86 0.85 0.83 0.81 0.87 0.80 0.80 엉 0.74 0.78 0.73 0.71 0.74 0.81 0.76 0.73 0.76 0.75 0.793 S3.64 3.68 3.56 Z 2. Ratings and reviews 3. Recommendation and referrals 1. Forums and communities Variables

0.79

0.85

4. Commitment 5. Satisfaction

6. Trust

0.76 0.70 0.74 0.84

9. Social commerce intention 7. Informational support 8. Emotional support

Notes: n = 343. Ca. Cronbach's α : CR, composite reliability; AVE, average variance extracted. Diagonal elements are the square root of the average variance extracted 0.44 0.74 0.15 0.26 $0.73 \\ 0.49 \\ 0.12 \\ 0.15$ 0.80 0.07 0.09 0.29 0.23 0.77 0.59 0.14 0.05 0.31 0.21 0.44 0.13 0.21 0.28 0.28 0.46 0.44 0.35 0.13 0.16 0.57 0.56 0.58 0.45 0.22 0.09 0.35 0.46 0.48 0.47 0.07 0.07 0.33 3.43 3.60 3.76 3.38 3.78 3.47 3.23 of each construct. *p < 0.05; **p < 0.0110. Use behaviour

0.77

Table II. Descriptive statistics, Cronbach's α, CR, AVE and correlations

	COM	FC	PC	RQ	RR	RTR	SAT	SCC	SCI	TUR	Social commerce
COM FC PC	0.646 0.593	0.776									constructs and social support
RQ RR RTR	0.652 0.760 0.653	0.695 0.725 0.830	0.495 0.731 0.680	0.659 0.590	0.747	0.040					81
SAT SCC SCI TUR	0.751 0.701 0.406 0.633	0.703 0.593 0.649 0.633	0.566 0.672 0.724 0.333	0.740 0.661 0.538 0.835	0.819 0.735 0.471 0.632	0.642 0.799 0.793 0.491	0.737 0.464 0.445	0.653 0.596	0.420		Table III. Heterotrait–Monotrait Ratio (HTMT)

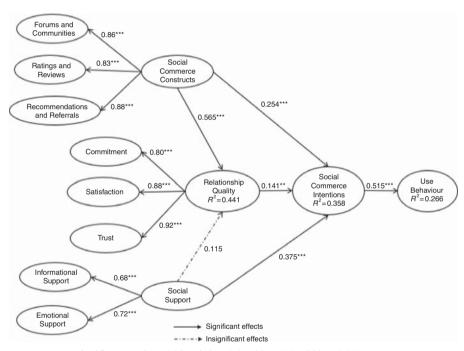


Figure 2.
The research model, showing standardized regression weights obtained through structural equation modelling

Notes: ns, not significant at the 0.05 level. *p<0.05; **p<0.01; ***p<0.001

show that relationship quality has a significant positive effect on social commerce intention (β = 0.141, SE = 0.059, p < 0.01), which supports H3. Moreover, our results show that social commerce intention has a positive and significant effect (β = 0.515, SE = 0.046, p < 0.001) on use behaviour of social commerce. The model explains 44.10 per cent of the variance in relationship quality, 35.8 per cent in social commerce intention and 26.6 per cent in use behaviour of social commerce (Table IV).

6. Discussion and conclusion

The central theme of the present research is to enhance the extant literature in social commerce and to better understand the consumer behaviour in the social commerce context. Using SCCs, social support, relationship quality construct and with the help of online



ITP 32.1

82

communities, consumer's social commerce intentions are affecting. The proposed model was developed from the theories of the existing literature. The SCC was derived from the IS stream, and the relationship quality construct was extracted from the relationship marketing theory, and social support was extracted from the social support to investigate the social commerce intentions.

The findings supported all the hypotheses of the present study as proposed except the relationship between social support and relationship quality was insignificant. First, the results revealed that SCCs, measured through forums and communities, ratings and reviews, and recommendation and referral, positively affect social commerce intentions. This confirms the findings of Hajli and Sims (2015) and Hajli (2015). This is because consumers like to share with peer consumers their views about products or services they have experienced. Now individuals are enabled to create such content and share it with others via SCCs which affects social commerce intentions. Enabled by Web 2.0 technologies, modern consumers are not only information seekers, but they are also active content creators. This empowerment of content generation and helping other consumers in their purchasing decision by sharing their product related experiences through SNSs has created significant value for businesses. Businesses are happy to see that their consumers are helping other consumers through different social platforms by sharing product-related information and their positive reviews about a product help the businesses to grow. An improved sort of customer relationship management is also growing by developing a close relationship with consumers from online sellers, a practice which ultimately affects consumer purchase behaviour within the social commerce context. As consumers are more empowered with the existence of SNSs, they can generate more content and share it with other potential consumers and can acquire sufficient information before final purchase decisions about products. Therefore, online sellers should motivate customers to socialise and share their product-related experiences using different social platforms to enhance social commerce intentions. E-sellers should also create more and more social forums and virtual communities for the consumers to communicate with each other and sellers for social commerce purposes.

The results also indicated that SCCs have a significant relationship with relationship quality, which puts our findings in accord with Wang and Hajli (2015). This is because consumers can only feel a sense of relationship quality through commitment, satisfaction and trust with a particular SNS when they can have access to the useful product- and service-related content shared by other users via SCCs. SCCs can enhance the consumer's relationship quality with SNS, which leads to customer trust on the platform and the sellers who are utilising such platforms for social commerce purposes. The SCCs concerned with products, the availability of different online social platforms and communities to share such

Hypotheses	Path coefficient	Standard error	<i>t</i> -value	<i>p</i> -value	Study results
H1a: Social commerce constructs→ relationship quality H1b: Social commerce constructs→SCI H2a: Social support→relationship quality H2b: Social support→SCI H3: Relationship quality→SCI H4: SCI→use behaviour Notes: n = 343.*b < 0.05: **b < 0.01: ***	0.565 0.254 0.115 0.375 0.141 0.515 b < 0.001	0.068 0.053 0.075 0.062 0.059 0.046	4.687 1.526 4.483 2.411	$\begin{array}{l} p < 0.001^{***} \\ p < 0.001^{***} \\ p > 0.05 \\ p < 0.001^{***} \\ p < 0.01^{***} \\ p < 0.01^{**} \\ \end{array}$	Supported Supported Not supported Supported Supported Supported

Table IV.Summary of hypotheses testing results



Social

commerce

constructs and

social support

content, and the ability to interact with other consumers in such groups all lead to higher relationship quality with SNS. The high relationship quality with the SNS will ultimately affect consumer social commerce intentions.

The findings of the study indicated that social support as measured by informational and emotional support has a positive association with social commerce intentions. This confirms the previous findings of Liang *et al.* (2011) and Hajli (2014c). Consumers use different social media platforms including SNSs, online communities and blogs to obtain the pre-purchase information about the product and they rely more on their peer users than companies product related material. The consumers also share their product or service related experience and support other user with informational and emotional support in their buying decisions and positively affects their social commerce intentions. However, contrary to our expectations, the social support does not have a positive impact on relationship quality with SNSs which disconfirms our findings with Hajli (2014c) and Liang *et al.* (2011). This is maybe because the participants of the present research context do not perceive that the availability of social support strengthens their relationship with the SNS. There might be the view that the availability or non-availability of the social support depends upon the user's personal network, as well as the product category they are intended to buy.

The research finding also revealed that the relationship quality with the SNS has a positive correlation with social commerce intentions. This finding corroborates the studies of Hajli (2014c) and Liang et al. (2011). Relationship quality, measured by commitment, satisfaction and trust, will affect the consumer purchase decision and good relationship quality will boost the social commerce intentions. The social communication of customers on social media and SNSs creates support for peer consumers as well as for businesses. This interaction increases the relationship quality of consumer and the SNS, and the enhanced relationship quality will positively affect the social commerce intentions. Greater consumer satisfaction with, commitment to and trust in the SNS will enhance the social commerce intentions. Relationship marketing theory also suggests that the close relationship between customer and seller will benefit the business and bring an improvement in consumer purchase intentions. Finally, our study revealed that behavioural intentions have a positive association with use behaviour in social commerce context. This confirms our findings with Venkatesh et al. (2012), Khan et al. (2017) and Sheikh et al. (2017). This implies that if consumers have intentions to buy online through SNSs, there will be higher chances that consumers will use SNSs for social commerce activities. Therefore, initially, e-vendors should try to enhance the social commerce intentions of the users by showing active online presence and support them and providing the consumers with online platforms to socialise and talk about their products and services. The more social commerce intentions they will have, the more actual behaviour will execute.

Therefore, it can be concluded that SCCs, social support and relationship quality are significant factors affecting consumer social commerce intentions and intention will affect the behaviour. These factors have empowered consumers to negotiate with virtual sellers digitally. Consumers are content generators, they have the power of WOM and influence other consumer's social commerce intentions. Businesses need to pay special attention to these factors to gain consumer interest in social commerce because consumers highly rely on ratings and recommendations by peer consumers before they make a final purchase decision. The consumer's good relationship quality with the SNS is essential for social commerce.

6.1 Theoretical implications

The current research makes key theoretical contributions to the literature. First, it enhances the previous literature on social commerce by testing and validating the proposed model



constructs, i.e., SCCs, social support and relationship quality. Social commerce is in its emerging stage in Pakistan, where the consumer has less trust in online shopping through SNSs as compared to physical shopping. Businesses must consider SCCs because they have a significant effect on the consumer's buying decisions (Weisberg *et al.*, 2011). Through SCCs sellers can show their active presence on the online social platforms and respond to consumers queries promptly.

Second, by incorporating the theory of relationship marketing, social support theory and constructs from IS, this study helps to give insights about social commerce and provide a basis for new theories by merging marketing and IS literature in predicting consumer behaviour. As social commerce is a novel concept without sufficient theoretical basis, so, the proposed conceptual model of this study might help to develop new theories in social commerce. This study borrowed concepts from information technology of social commerce, which highlight IS as a reference discipline for forecasting the online customer behaviour. Providing a research direction and a new theoretical framework to future scholars to explore the emerging field of social commerce is a crucial theme of this study.

Third, the research highlights the importance of the social interaction of consumers through SNSs which create social support in an online context and help consumers in their buying decisions. Availability of online social support is a significant factor in enhancing social commerce intentions and ultimately the use behaviour of SNSs for social commerce. Overall, the application of social support theory along with relationship quality from relationship marketing theory and amalgamation of IS literature construct is a key contribution of this study to determine the social commerce intentions which ultimately leads to finding the use behaviour of SNSs for social commerce.

7. Managerial implications

The current study also provides managerial implications for business managers by showing the online customer's behaviour using SCCs, social support and relationship quality. The present study highlights the key areas which are essential for social commerce. Our study suggests that managers should develop online communities, which individual users later join by using the SNSs to get social support. These online communities help business firms to improve their relationship with customers. SCCs are also helpful for the companies to promote products and conduct consumer research to understand consumer behaviour. The productive utilisation of SCCs may help e-vendors to develop new brands by facilitating consumer's virtual social interaction.

Our study also highlights that consumers interact virtually using SCCs and generate content and e-WOM. Therefore, each company should be careful about the e-WOM generated by consumers about the company and formulate their strategies accordingly to have a positive e-WOM. This study empirically proved that ratings, reviews and recommendations on social platforms by peer consumers have a significant impact on social commerce intentions.

Thus, social commerce empowers the virtual consumers by providing the ability to negotiate and communicate with sellers and peer consumers. The relationship quality with the SNSs also positively affected social commerce intentions, so companies should focus on trustworthy SNSs for marketing purposes, and their social commerce websites should give consumers trust and satisfaction for gaining maximum business. Note that the scope of the survey includes users from all available SNSs in Pakistan, so these contributions do not apply to just one particular SNS platform.

8. Limitations and future research

Like other studies, this study has some limitations. First, the proposed model was tested only with Pakistani SNSs users. Future studies may examine the conceptual model in



other geographical areas to validate our results. In some contexts, it may be advantageous to add additional constructs to the model. Second, the data were collected from SNSs users without restrictions related to the prior social shopping experience, so in future, data collection could be limited to customers who have actually used or regularly use social commerce. Furthermore, future research can use fsQCA analysis which can provide new insights.

Social commerce constructs and social support

References

- Ahmad, S.N. and Laroche, M. (2017), "Analyzing electronic word of mouth: a social commerce construct", *International Journal of Information Management*, Vol. 37 No. 3, pp. 202-213.
- Amblee, N. and Bui, T. (2011), "Harnessing the influence of social proof in online shopping: the effect of electronic word of mouth on sales of digital microproducts", *International Journal of Electronic Commerce*, Vol. 16 No. 2, pp. 91-114.
- Arnott, D.C., Wilson, D., Kingshott, R.P. and Pecotich, A. (2007), "The impact of psychological contracts on trust and commitment in supplier-distributor relationships", *European Journal of Marketing*, Vol. 41 Nos 9/10, pp. 1053-1072.
- Ba, S. and Pavlou, P.A. (2002), "Evidence of the effect of trust building technology in electronic markets: price premiums and buyer behavior", MIS Quarterly, Vol. 26 No. 3, pp. 243-268.
- Bagozzi, R.P. and Dholakia, U.M. (2002), "Intentional social action in virtual communities", *Journal of Interactive Marketing*, Vol. 16 No. 2, pp. 2-21.
- Bai, Y., Yao, Z. and Dou, Y.-F. (2015), "Effect of social commerce factors on user purchase behavior: an empirical investigation from renren.com", *International Journal of Information Management*, Vol. 35 No. 5, pp. 538-550.
- Bell, J. (2014), Doing Your Research Project: A Guide for First-Time Researchers, McGraw-Hill Education.
- Berry, L.L. and Parasuraman, A. (2004), *Marketing Services: Competing Through Quality*, Free Press, New York. NY.
- Bhattacherjee, A. (2001), "An empirical analysis of the antecedents of electronic commerce service continuance", *Decision Support Systems*, Vol. 32 No. 2, pp. 201-214.
- Blau, P.M. (1964), Exchange and Power in Social Life, Routledge, New York, NY.
- Casaló, L.V., Flavián, C. and Guinalíu, M. (2008), "Promoting consumer's participation in virtual brand communities: a new paradigm in branding strategy", *Journal of Marketing Communications*, Vol. 14 No. 1, pp. 19-36.
- Chen, J., Xu, H. and Whinston, A.B. (2011), "Moderated online communities and quality of user-generated content", *Journal of Management Information Systems*, Vol. 28 No. 2, pp. 237-268.
- Cheshire, C. (2007), "Selective incentives and generalized information exchange", Social Psychology Quarterly, Vol. 70 No. 1, pp. 82-100.
- Cheung, C.M., Xiao, B.S. and Liu, I.L. (2014), "Do actions speak louder than voices? The signaling role of social information cues in influencing consumer purchase decisions", *Decision Support Systems*, Vol. 65, September, pp. 50-58.
- Chin, W.W. (1998), "Commentary: issues and opinion on structural equation modeling", MIS Quarterly, Vol. 22 No. 1, pp. vii-xvi, available at: www.jstor.org/stable/249674
- Cobb, S. (1976), "Social support as a moderator of life stress", Psychosomatic Medicine, Vol. 38 No. 5, pp. 300-314.
- Cohen, J., Cohen, J., Cohen, P., West, S.G.A., Leona, S., Patricia Cohen, S.G.W. and Leona, S.A. (2003), Regression/Correlation Analysis for the Behavioral Sciences, Psychology Press, New York, NY.
- Coulson, N.S. (2005), "Receiving social support online: an analysis of a computer-mediated support group for individuals living with irritable bowel syndrome", *CyberPsychology & Behavior*, Vol. 8 No. 6, pp. 580-584.

- Crocker, J. and Canevello, A. (2008), "Creating and undermining social support in communal relationships: the role of compassionate and self-image goals", *Journal of Personality and Social Psychology*, Vol. 95 No. 3, pp. 555-575.
- Crosby, L.A., Evans, K.R. and Cowles, D. (1990), "Relationship quality in services selling: an interpersonal influence perspective", *The Journal of Marketing*, Vol. 54 No. 3, pp. 68-81, available at: www.jstor. org/stable/1251817
- Davidson, A. and Copulsky, J. (2006), "Managing webmavens: relationships with sophisticated customers via the internet can transform marketing and speed innovation", Strategy & Leadership, Vol. 34 No. 3, pp. 14-22.
- Davis, F.D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", MIS Quarterly, Vol. 13 No. 3, pp. 319-340.
- De Cannière, M.H., De Pelsmacker, P. and Geuens, M. (2009), "Relationship quality and the theory of planned behavior models of behavioral intentions and purchase behavior", *Journal of Business Research*, Vol. 62 No. 1, pp. 82-92.
- Dwyer, R.F., Schurr, P.H. and Oh, S. (1987), "Developing buyer–seller relationships", *Journal of Marketing*, Vol. 51 No. 2, pp. 11-27, available at: www.jstor.org/stable/1251126
- Forman, C., Ghose, A. and Wiesenfeld, B. (2008), "Examining the relationship between reviews and sales: the role of reviewer identity disclosure in electronic markets", *Information Systems Research*, Vol. 19 No. 3, pp. 291-313.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50, available at: www.jstor.org/stable/3151312
- Fournier, S. (1998), "Consumers and their brands: developing relationship theory in consumer research", *Journal of Consumer Research*, Vol. 24 No. 4, pp. 343-373.
- FüLler, J., MüHlbacher, H., Matzler, K. and Jawecki, G. (2009), "Consumer empowerment through internet-based co-creation", *Journal of Management Information Systems*, Vol. 26 No. 3, pp. 71-102.
- Garbarino, E. and Johnson, M.S. (1999), "The different roles of satisfaction, trust, and commitment in customer relationships", *Journal of Marketing*, Vol. 63 No. 2, pp. 70-87, available at: www.jstor.org/stable/1251946
- Gefen, D. and Straub, D. (2005), "A practical guide to factorial validity using PLS-Graph: tutorial and annotated example", *Communications of the Association for Information Systems*, Vol. 16 No. 1, pp. 91-109.
- Gefen, D., Karahanna, E. and Straub, D.W. (2003), "Trust and TAM in online shopping: an integrated model", MIS Quarterly, Vol. 27 No. 1, pp. 51-90.
- Gustafsson, A., Johnson, M.D. and Roos, I. (2005), "The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention", *Journal of Marketing*, Vol. 69 No. 4, pp. 210-218.
- Hair, J., Black, W., Babin, B. and Anderson, R. (2010), Multivariate Data Analysis, 7th ed., Prentice Hall, Upper Saddle River, NJ.
- Hair, J.F., Anderson, R.E., Tatham, R.L. and William, C.B. (1998), *Multivariate Data Analysis*, Prentice Hall, Upper Saddle River, NJ.
- Hajli, M. (2013), "A research framework for social commerce adoption", Information Management & Computer Security, Vol. 21 No. 3, pp. 144-154.
- Hajli, M. (2014), "A study of the impact of social media on consumers", *International Journal of Market Research*, Vol. 56 No. 3, pp. 387-404.
- Hajli, M.N. (2014a), "A study of the impact of social media on consumers", International Journal of Market Research, Vol. 56 No. 3, pp. 387-404.
- Hajli, M.N. (2014b), "Social commerce for innovation", International Journal of Innovation Management, Vol. 18 No. 4, pp. 1-24.

Social Social

commerce

constructs and

social support

- Hajli, M.N. (2014c), "The role of social support on relationship quality and social commerce", Technological Forecasting and Social Change, Vol. 87, September, pp. 17-27.
- Hajli, N. (2015), "Social commerce constructs and consumer's intention to buy", *International Journal of Information Management*, Vol. 35 No. 2, pp. 183-191.
- Hajli, N. and Sims, J. (2015), "Social commerce: the transfer of power from sellers to buyers", Technological Forecasting and Social Change, Vol. 94, May, pp. 350-358, available at: http://dx.doi.org/10.1016/j.techfore.2015.01.012
- Hajli, N., Sims, J., Zadeh, A.H. and Richard, M.-O. (2017), "A social commerce investigation of the role of trust in a social networking site on purchase intentions", *Journal of Business Research*, Vol. 71, February, pp. 133-141.
- Han, B. and Windsor, J. (2011), "User's willingness to pay on social network sites", Journal of Computer Information Systems, Vol. 51 No. 4, pp. 31-40.
- Hargadon, A.B. and Bechky, B.A. (2006), "When collections of creatives become creative collectives: a field study of problem solving at work", *Organization Science*, Vol. 17 No. 4, pp. 484-500.
- Hassanein, K. and Head, M. (2007), "Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping", *International Journal of Human-Computer Studies*, Vol. 65 No. 8, pp. 689-708.
- Heinonen, K. (2011), "Consumer activity in social media: managerial approaches to consumers' social media behavior", *Journal of Consumer Behaviour*, Vol. 10 No. 6, pp. 356-364.
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), New Challenges to International Marketing, Vol. 20, Emerald Group Publishing Limited, pp. 277-319.
- Huang, M., Cai, F., Tsang, A.S. and Zhou, N. (2011), "Making your online voice loud: the critical role of WOM information", European Journal of Marketing, Vol. 45 Nos 7/8, pp. 1277-1297.
- Huang, Z. and Benyoucef, M. (2013), "From e-commerce to social commerce: a close look at design features", Electronic Commerce Research and Applications, Vol. 12 No. 4, pp. 246-259.
- Huang, Z. and Benyoucef, M. (2015), "User preferences of social features on social commerce websites: an empirical study", Technological Forecasting and Social Change, Vol. 95, June, pp. 57-72.
- Islam, T., Attiq, S., Hameed, Z., Khokhar, M.N. and Sheikh, Z. (2018), "The impact of self-congruity (symbolic and functional) on the brand hate: a study based on self-congruity theory", British Food Journal (in press), available at: https://doi.org/10.1108/BFJ-03-2018-0206
- Islam, T., Sheikh, Z., Hameed, Z., Khan, I.U. and Azam, R.I. (2018), "Social comparison, materialism, and compulsive buying based on stimulus-response-model: a comparative study among adolescents and young adults", *Young Consumers*, Vol. 19 No. 1, pp. 19-37.
- Islam, T., Wei, J., Sheikh, Z., Hameed, Z. and Azam, R.I. (2017), "Determinants of compulsive buying behavior among young adults: the mediating role of materialism", *Journal of Adolescence*, Vol. 61 No. 8, pp. 117-130, available at: https://doi.org/10.1016/j.adolescence.2017.10.004
- Keller, K.L. (2009), "Building strong brands in a modern marketing communications environment", Journal of Marketing Communications, Vol. 15 Nos 2/3, pp. 139-155.
- Kelly, L., Kerr, G. and Drennan, J. (2010), "Avoidance of advertising in social networking sites: the teenage perspective", *Journal of Interactive Advertising*, Vol. 10 No. 2, pp. 16-27.
- Khan, I.U., Hameed, Z. and Khan, S.U. (2017), "Understanding online banking adoption in a developing country: UTAUT2 with cultural moderators", *Journal of Global Information Management*, Vol. 25 No. 1, pp. 43-65.
- Khan, I.U., Hameed, Z., Yu, Y., Islam, T., Sheikh, Z. and Khan, S.U. (2018), "Predicting the acceptance of MOOCs in a developing country: application of task-technology fit model, social motivation, and self-determination theory", *Telematics and Informatics*, Vol. 35 No. 4, pp. 964-978.
- Kim, A.J. and Ko, E. (2012), "Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand", *Journal of Business Research*, Vol. 65 No. 10, pp. 1480-1486.



- Kim, S. and Park, H. (2013), "Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance", *International Journal of Information Management*, Vol. 33 No. 2, pp. 318-332.
- Kozinets, R.V., De Valck, K., Wojnicki, A.C. and Wilner, S.J. (2010), "Networked narratives: understanding word-of-mouth marketing in online communities", *Journal of Marketing*, Vol. 74 No. 2, pp. 71-89.
- Kumar, R., Novak, J. and Tomkins, A. (2010), Structure and Evolution of Online Social Networks Link Mining: Models, Algorithms, and Applications, Springer, New York, NY, pp. 337-357.
- Lakey, B. and Cohen, S. (2000), "Social support theory and measurement", in Lakey, B. and Cohen, S. (Eds), Social Support Measurement and Intervention: A Guide for Health and Social Scientists, Oxford University Press, Oxford, pp. 29-52.
- Lewin, J.E. and Johnston, W.J. (1997), "Relationship marketing theory in practice: a case study", *Journal of Business Research*, Vol. 39 No. 1, pp. 23-31.
- Liang, T.-P. and Turban, E. (2011), "Introduction to the special issue social commerce: a research framework for social commerce", *International Journal of Electronic Commerce*, Vol. 16 No. 2, pp. 5-14.
- Liang, T.-P., Ho, Y.-T., Li, Y.-W. and Turban, E. (2011), "What drives social commerce: the role of social support and relationship quality", *International Journal of Electronic Commerce*, Vol. 16 No. 2, pp. 69-90.
- Liu, H., Chu, H., Huang, Q. and Chen, X. (2016), "Enhancing the flow experience of consumers in China through interpersonal interaction in social commerce", Computers in Human Behavior, Vol. 58, May, pp. 306-314.
- Lu, Y., Zhao, L. and 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 and Applications*, Vol. 9 No. 4, pp. 346-360.
- Madjar, N. (2008), "Emotional and informational support from different sources and employee creativity", Journal of Occupational and Organizational Psychology, Vol. 81 No. 1, pp. 83-100.
- Maria, E.D. and Finotto, V. (2008), "Communities of consumption and made in Italy", *Industry and Innovation*, Vol. 15 No. 2, pp. 179-197.
- Marsden, P. (2009), "The 6 dimensions of social commerce: rated and reviewed", Social Commerce Today, 22 December, available at: www.digitalintelligencetoday.com/the-6-dimensions-of-social-commerce-rated-and-reviewed (accessed March 2018).
- Moorman, C., Deshpandé, R. and Zaltman, G. (1993), "Factors affecting trust in market research relationships", *The Journal of Marketing*, Vol. 57 No. 1, pp. 81-101, available at: www.jstor.org/stable/1252059
- Morgan, R.M. and Hunt, S.D. (1994), "The commitment-trust theory of relationship marketing", *The Journal of Marketing*, Vol. 58 No. 3, pp. 20-38, available at: www.jstor.org/stable/1252308
- Naylor, R.W., Lamberton, C.P. and 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, Vol. 76 No. 6, pp. 105-120.
- Newsted, P.R., Huff, S.L. and Munro, M.C. (1998), "Survey instruments in information systems", MIS Quarterly, Vol. 22 No. 4, pp. 553-554.
- Obst, P. and Stafurik, J. (2010), "Online we are all able bodied: online psychological sense of community and social support found through membership of disability-specific websites promotes well-being for people living with a physical disability", *Journal of Community & Applied Social Psychology*, Vol. 20 No. 6, pp. 525-531.
- Offer, S. (2012), "Barriers to social support among low-income mothers", *International Journal of Sociology and Social Policy*, Vol. 32 Nos 3/4, pp. 120-133.
- Palmatier, R.W., Dant, R.P., Grewal, D. and Evans, K.R. (2006), "Factors influencing the effectiveness of relationship marketing: a meta-analysis", *Journal of Marketing*, Vol. 70 No. 4, pp. 136-153.



Social Social

commerce

constructs and

social support

- Park, D.-H., Lee, J. and Han, I. (2007), "The effect of on-line consumer reviews on consumer purchasing intention: the moderating role of involvement", *International Journal of Electronic Commerce*, Vol. 11 No. 4, pp. 125-148.
- Pavlou, P.A. (2003), "Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model", *International Journal of Electronic Commerce*, Vol. 7 No. 3, pp. 101-134.
- Piller, F.T. and Walcher, D. (2006), "Toolkits for idea competitions: a novel method to integrate users in new product development", *R&D Management*, Vol. 36 No. 3, pp. 307-318.
- Rauyruen, P. and Miller, K.E. (2007), "Relationship quality as a predictor of B2B customer loyalty", Journal of Business Research, Vol. 60 No. 1, pp. 21-31.
- Riemer, K. and Lehrke, C. (2009), "Biased listing in electronic marketplaces: exploring its implications in on-line hotel distribution", *International Journal of Electronic Commerce*, Vol. 14 No. 1, pp. 55-78.
- Schaefer, C., Coyne, J.C. and Lazarus, R.S. (1981), "The health-related functions of social support", Journal of Behavioral Medicine, Vol. 4 No. 4, pp. 381-406.
- Senecal, S. and Nantel, J. (2004), "The influence of online product recommendations on consumers' online choices", *Journal of Retailing*, Vol. 80 No. 2, pp. 159-169.
- Shabbir, H., Palihawadana, D. and Thwaites, D. (2007), "Determining the antecedents and consequences of donor-perceived relationship quality: a dimensional qualitative research approach", Psychology & Marketing, Vol. 24 No. 3, pp. 271-293.
- Shaw, L.H. and Gant, L.M. (2002), "In defense of the internet: the relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support", *CyberPsychology & Behavior*, Vol. 5 No. 2, pp. 157-171.
- Sheikh, Z., Islam, T., Rana, S., Hameed, Z. and Saeed, U. (2017), "Acceptance of social commerce framework in Saudi Arabia", *Telematics and Informatics*, Vol. 34 No. 8, pp. 1693-1708.
- 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*, Vol. 22 No. 5, pp. 428-438.
- Shin, D.-H. (2013), "User experience in social commerce: in friends we trust", Behaviour & Information Technology, Vol. 32 No. 1, pp. 52-67.
- Stewart, K.A. and Segars, A.H. (2002), "An empirical examination of the concern for information privacy instrument", *Information Systems Research*, Vol. 13 No. 1, pp. 36-49.
- Taylor, S.E., Sherman, D.K., Kim, H.S., Jarcho, J., Takagi, K. and Dunagan, M.S. (2004), "Culture and social support: who seeks it and why?", *Journal of Personality and Social Psychology*, Vol. 87 No. 3, pp. 354-362.
- Tsai, Y.-H., Joe, S.-W., Lin, C.-P., Wang, R.-T. and Chang, Y.-H. (2012), "Modeling the relationship between IT-mediated social capital and social support: key mediating mechanisms of sense of group", Technological Forecasting and Social Change, Vol. 79 No. 9, pp. 1592-1604.
- Venkatesh, V., Thong, J.Y. and Xu, X. (2012), "Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology", MIS Quarterly, Vol. 36 No. 1, pp. 157-178.
- Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003), "User acceptance of information technology: toward a unified view", MIS Quarterly, Vol. 27 No. 3, pp. 425-478, available at: www. jstor.org/stable/30036540
- Wang, Y. and Hajli, N. (2015), Co-Creating Brand Value Through Social Commerce Handbook of Research on Integrating Social Media into Strategic Marketing, IGI Global, pp. 17-34.
- Wang, X., Yu, C. and Wei, Y. (2012), "Social media peer communication and impacts on purchase intentions: a consumer socialization framework", *Journal of Interactive Marketing*, Vol. 26 No. 4, pp. 198-208, available at: http://dx.doi.org/10.1016/j.intmar.2011.11.004



- Wasko, M.M. and Faraj, S. (2005), "Why should I share? Examining social capital and knowledge contribution in electronic networks of practice", MIS Quarterly, Vol. 29 No. 1, pp. 35-57, available at: www.jstor.org/stable/25148667
- Weber, K., Johnson, A. and Corrigan, M. (2004), "Communcating emotional support and its relationship to feelings of being understood, trust, and self-disclosure", *Communication Research Reports*, Vol. 21 No. 3, pp. 316-323.
- Weisberg, J., Te'eni, D. and Arman, L. (2011), "Past purchase and intention to purchase in e-commerce: the mediation of social presence and trust", *Internet Research*, Vol. 21 No. 1, pp. 82-96.
- Wellman, B. and Wortley, S. (1990), "Different strokes from different folks: community ties and social support", American Journal of Sociology, Vol. 96 No. 3, pp. 558-588, available at: www.jstor.org/ stable/2781064
- Wulf, K.D., Odekerken-Schröder, G. and Iacobucci, D. (2001), "Investments in consumer relationships: a cross-country and cross-industry exploration", *Journal of Marketing*, Vol. 65 No. 4, pp. 33-50.
- Xie, B. (2008), "Multimodal computer-mediated communication and social support among older chinese internet users", *Journal of Computer-Mediated Communication*, Vol. 13 No. 3, pp. 728-750.
- Yadav, M.S., De Valck, K., Hennig-Thurau, T., Hoffman, D.L. and Spann, M. (2013), "Social commerce: a contingency framework for assessing marketing potential", *Journal of Interactive Marketing*, Vol. 27 No. 4, pp. 311-323.
- Yang, Z., Cai, S., Zhou, Z. and Zhou, N. (2005), "Development and validation of an instrument to measure user perceived service quality of information presenting web portals", *Information & Management*, Vol. 42 No. 4, pp. 575-589.
- Yoon, D., Choi, S.M. and Sohn, D. (2008), "Building customer relationships in an electronic age: the role of interactivity of E-commerce Web sites", Psychology & Marketing, Vol. 25 No. 7, pp. 602-618.
- Yu, C.-S. (2012), "Factors affecting individuals to adopt mobile banking: empirical evidence from the UTAUT model", *Journal of Electronic Commerce Research*, Vol. 13 No. 2, pp. 104-121.
- Zeng, F., Huang, L. and Dou, W. (2009), "Social factors in user perceptions and responses to advertising in online social networking communities", *Journal of Interactive Advertising*, Vol. 10 No. 1, pp. 1-13.

Social commerce constructs and social support

91

10121																															
ES	0.082	0.081	0.018	0.076	0.019	900.0-	0.157	0.172	0.058	0.127	0.150	0.092	0.101	0.002	0.113	0.018	0.081	0.013	0.110	0.102	0.036	0.076	-0.002	0.052	0.101	0.454	0.234	0.107	0.729	0.690	0.873
SI	0.129	0.133	0.109	0.144	-0.030	0.034	0.112	0.250	0.198	0.169	0.173	0.172	0.107	0.013	0.098	0.109	0.163	0.014	0.131	0.104	-0.038	0.089	900.0	0.140	0.122	0.841	0.746	0.698	0.369	0.372	0.630
Trust	0.328	0.458	0.359	0.375	0.334	0.397	0.344	0.386	0.355	0.439	0.401	0.286	0.266	0.354	0.662	0.359	0.588	0.291	0.255	0.221	0.191	908.0	0.769	0.809	0.821	0.139	0.043	-0.012	0.072	0.029	0.065
SCI	0.280	0.277	0.121	0.287	0.376	0.430	0.271	0.297	0.227	0.275	0.294	0.526	0.541	0.383	0.286	0.121	0.329	0.678	0.697	0.793	0.783	0.240	0.242	0.223	0.301	0.051	-0.009	0.052	0.053	-0.052	0.063
Satisfaction	0.490	0.647	0.746	0.373	0.376	0.357	0.346	0.484	0.459	0.405	0.474	0.341	0.344	0.390	0.766	0.746	0.799	0.249	0.219	0.213	0.262	0.449	0.393	0.622	0.726	0.182	0.064	0.046	0.046	0.004	0.091
	0.427	0.428	0.258	0.418	0.517	0.497	0.373	0.530	0.421	0.372	0.435	0.776	0.818	0.817	0.296	0.258	0.474	0.279	0.330	0.543	0.553	0.257	0.328	0.278	0.350	0.227	0.186	0.040	0.048	0.013	0.179
Forums and communities Recommendation and referrals Ratings and reviews	0.467	0.493	0.382	0.337	0.456	0.468	0.382	0.811	0.761	0.775	0.760	0.384	0.463	0.522	0.460	0.382	0.519	0.277	0.254	0.258	0.268	0.383	0.267	0.467	0.493	0.113	090.0	0.085	0.033	0.034	0.083
Forums and communities	0.371	0.433	0.292	0.718	0.781	90800	0.668	0.484	0.404	0.366	0.460	0.450	0.512	0.506	0.368	0.292	0.465	0.469	0.334	0.284	0.335	0.382	0.407	0.371	0.399	0.057	660.0	-0.021	0.002	-0.039	0.089
Indicators Commitment	0.716	0.852	0.805	0.355	0.369	0.336	0.322	0.456	0.457	0.364	0.471	0.317	0.372	0.433	0.469	0.805	0.542	0.228	0.219	0.179	0.234	0.382	0.292	0.415	0.457	0.183	0.055	0.032	0.007	-0.038	0.089
Indicators	RC1	RC2	RC3	FC1	FC2	FC3	FC4	REI	RE2	RE3	RE4	RT1	RT2	RT3	SAT1	SAT2	SAT3	SCII	SCIZ	SCI3	SCI4	TURI	TUR2	TUR3	TUR4	SII	SIZ	SI3	ES1	ES2	ES3

Table AI. Item loadings and cross-loadings



ITP 32.1

Appendix 2

Codes Measures

92

Social commerce constructs

adapted from Han and Windsor (2011) and measured from Hajli (2015) forums and communities

- FC1 I feel my friends on forums and communities are generally frank
- FC2 I feel my friends on forums and communities are reliable
- FC3 Overall, my friends on forums and communities are trustworthy
- FC4 I trust my friends on forums and communities and share my status, pictures with them

Ratings and reviews

- RT1 I feel my friends' rating and reviews are generally frank
- RT2 I feel my friends' rating and reviews are reliable
- RT3 Overall, my friends' rating and reviews are trustworthy
- RT4 I trust my friends on rating and reviews and share my status, pictures with them

Recommendation and referrals

- RE1 I feel my friends' recommendations are generally frank
- RE2 I feel my friends' recommendations are generally reliable
- RE3 Overall, my friends' recommendations are trustworthy
- RE4 I trust my friends on SNSs and share my status, pictures with them

Relationship quality

adapted from Liang et al. (2011) and measured from Hajli (2014c) commitment

- RC1 I am proud to belong to the membership of my favourite social networking site
- RC3 I feel a sense of belonging to my favourite social networking site
- RC3 I care about the long-term success of my favourite social networking site

Satisfaction

- RS1 I am satisfied with using my favourite social networking site
- RS2 I am pleased with using my favourite social networking site
- RS3 I am happy with my favourite social networking site

Trust

- RT1 The performance of my favourite social networking site always meets my expectations
- RT2 My favourite social networking site can be counted on as a good social networking site
- RT3 My favourite social networking site is a reliable social networking site

Social commerce intentions

adapted from Liang et al. (2011) and measured from Hajli (2014c)

- SCI1 I am very likely to provide the online vendor with the information it needs to better serve my needs
- SCI2 I am willing to provide my experiences and suggestions when my friends on my favourite social networking site want my advice on buying something
- SCI3 I am willing to buy the products recommended by my friends on my favourite social networking site
- SCI4 I will consider the shopping experiences of my friends on my favourite social networking site when I want to shop

Social support

adapted from Stewart and Segars (2002) and measured from Wang and Haili (2015) emotional support (ES)

- ES1 When faced with difficulties, some people on social networking sites comforted and encouraged me
- ES2 When faced with difficulties, some people on social networking sites listened to me and talk about my private feelings
- ES3 When faced with difficulties, some people on social networking sites expressed interest and concern in my well-being

Table AII.
Measurement items

(continued)



Codes Measures	Social commerce
Informational support (IS)	constructs and
 IS1 On the social networking sites, some people would offer suggestions when I needed help IS2 When I encountered a problem, some people on social networking sites would give me information to 	social support
help me overcome the problem When faced with difficulties, some people on social networking sites would help me discover the cause and provide me with suggestions	93
Use behaviour (UB) How often do you use social networking sites for online purchases? (Choose your usage frequency) (a) Never used (b) Once (c) Two to five times (d) Once a month (e) Twice a month	
(f) Once a week (g) More than once a week	Table AII.

Corresponding author
Tahir Islam can be contacted at: kktahir@hotmail.com

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com



Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

