The role of trust and its impacts on consumer satisfaction in the context of social commerce

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Abstract

The term “social commerce” is used to describe a subgroup of e-commerce that uses social media to allow users to share input, thus helping them make decisions about whether to purchase services and products. This study explores the relationships that affect consumer satisfaction in the context of social commerce. The relationships between trust and other factors associated with it, as well as the role trust plays in affecting consumer satisfaction in social commerce, were measured using a survey method. A total of 314 students from Saudi Arabia at Saudi Arabia’s UBT University and at various Australian universities were surveyed. To test the structural model, as well as to study the relationship between variables, the researchers used partial least square (PLS). The results showed five constructs as having a significant relationship with consumer satisfaction: trust, communication, information quality, reputation, transaction safety and word of mouth (WOM). This research also recognizes that in the social commerce field, the factors that influence trust may be different compared to those that influence the consumer in face-to-face transactions. This research is expected to help businesses devise effective sales strategies, and ultimately build successful social commerce businesses. The results obtained from this study will add depth to existing literature relating to social commerce, and will also serve as an opportunity for future researchers to delve more deeply into the different factors that correlate with trust in social commerce.

Keywords: Social commerce, Trust, Customer satisfaction, Saudi Arabia, Australia, SEM, PLS

Introduction

Great changes have taken place in the Information and Communication Technology (ICT) of the twentieth century. Through the past few decades, groundbreaking innovations have included the development of the Internet and vast increases in computing speed. New ways to communicate were developed, which changed how business transactions take place (Canavan et al. 2007). The majority of IT advancements can be linked to the benefits from the growth of the Internet. Web 2.0 has given individuals the opportunity to interact directly in real time via chat, photo sharing and more (Hajli 2013).

With the emergence of this newly developed social environment, the number of people around the globe exchanging information on the internet is higher than ever. This technological progress has also allowed new types of business to develop and succeed. Consumers now have more power than before, since they can inform themselves and ensure they are armed with sufficient knowledge before making purchasing decisions. Consumers are also able to talk to each other and affect a business’s reputation through word-of-mouth. Businesses must pay close attention to what consumers’ want, since their growth is based on the consumer’s satisfaction.

The origins of Social Commerce (SC) can be traced to the development of Web 2.0 technology and the operations of the social network (Yang et al. 2013). SC was initially introduced as far
back as 2005 on the Yahoo website; it represented a combination of social networking and shopping activities done over social media (Wang & Zhang 2012). It differed from other forms of online shopping that offered a more static experience and provided consumers with information only from the vendor, not from other consumers.

This study investigates how trust strongly influences consumer satisfaction in SC, while also contributing to the current literature on SC. To fulfil the aim of this research, three main research questions were developed as follows: (1) What are the key factors affecting consumer satisfaction in social commerce? (2) What are the key factors affecting trust in social commerce? Thus, this research aims to help businesses enjoy greater competitive advantages and stronger performance.

This paper is organized as follows. In section 2, the related literature is reviewed. Based on this literature, a theoretical foundation and hypotheses were developed for this study, as discussed in Section 3. A description of the research methodology follows in Section 4. Data analysis and findings are presented in Section 5. Finally, Section 6, the conclusion, discusses limitations of the present research and possible avenues for future research.

**Literature Review**

**Social commerce**

The term “social commerce” refers to a subgroup of e-commerce that uses social media to allow users to share input, thus helping them make decisions about whether to purchase services and products (Kim & Peterson 2017; Mardsen 2010). According to Zhou et al. (2013), social commerce is not simply an easy fusion between existing social networking technology and e-commerce, but a sophisticated integration of social and commerce activities for the promotion of social trust and interaction. (Jha et al. 2017); Kim and Srivastava (2007) explain SC as e-commerce companies making use of web-based social communities, with a focus on trust shaping the interaction among many consumers.

Table 1 reviews the previous literature in social commerce and the theories have been used to investigate the different aspects.

**Table 1. Summary of the literature review in Social commerce**

<table>
<thead>
<tr>
<th>Main Theory Used</th>
<th>Author/Year</th>
<th>Major Constructs/Conceptual Models</th>
<th>Key Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation Theory</td>
<td>(Kim &amp; Park 2013)</td>
<td>Reputation, size, information quality, transaction safety, communication, economic feasibility, word of mouth (WOM) referrals</td>
<td>The effects of trust on performance</td>
</tr>
<tr>
<td>Trust Transference Theory</td>
<td>(Ng 2013)</td>
<td>Closeness (CLO), familiarity (FAM), culture, trust in social network community (TCO)</td>
<td>The effect of culture and trust in a social network community</td>
</tr>
<tr>
<td>Social Presence Theory &amp;</td>
<td>(Mäntymäki &amp; Salo 2010)</td>
<td>Integrity users, integrity and benevolence staff,</td>
<td>How trust, social presence and</td>
</tr>
<tr>
<td>Information Richness Theory</td>
<td>continued use intention</td>
<td>consumer loyalty affect the use of social media and SC</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------</td>
<td>------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Unified Theory of The Acceptance and Use of Technology (UTAUT)</td>
<td>(Rosen &amp; Kluemper 2008)</td>
<td>Agreeableness, openness, extroversion, conscientiousness, neuroticism</td>
<td></td>
</tr>
<tr>
<td>Theory of Planned Behavior (TPB)</td>
<td>(Mikalef et al. 2013), (Pentina et al. 2013), (Hajli 2012c), (Liang et al. 2011), (Hajli 2012a)</td>
<td>Convenience, information availability, product selection, customized advertisements, trend discovery, socializing, adventure, authority and status, utilitarian motivation, hedonic motivation, social media, social presence, product browsing, purchase intention, word of mouth intention, behavioral intention towards the SNS, behavioral intention towards hosted, perceived usefulness, intention to buy, SC intention, continuance intention, intention to use</td>
<td></td>
</tr>
<tr>
<td>Technology Acceptance Model (TAM)</td>
<td>(Pentina et al. 2013), (Hajli 2012c), (Tan et al. 2012), (Liang et al. 2011), (Hajli 2012a), (Rosen &amp; Kluemper 2008)</td>
<td>Self-SNS personality match, brand relationship quality with the SNS, brand engagement in self-concept, Recommendations and referrals, forums and communities, ratings and reviews, trust, perceived usefulness, Privacy concern (PC), perceived ease of use (PEU), website quality, system quality, service quality, SC components, user experience, learning and training, flow, network size, Perceive the quality from social network sites. Intention to continue to use social network sites them, as well as the intention to continue using the hosted brands that consumers “follow”. The new social technologies channels for businesses to get in touch with consumers. Social support, web design and</td>
<td></td>
</tr>
</tbody>
</table>
There are many theories that can provide a better understanding of the satisfaction in SC (Liang et al. 2011; Liang & Turban 2011; Pagani & Mirabello 2011). For instance, the theory of social interaction (Liang & Turban 2011) and the theory of social process (Amblee & Bui 2011) can both help in understanding consumer behaviours. The theory of social interaction studies consumer interactions with other people and creates a channel for exchanging experiences and obtaining information about products and services (Liang et al. 2011). The theory of social process helps to understand people’s interactions with organizations, institutions and processes in society (McCarthy & Zald 1977). In addition, the motivation theory might help in understanding why people use SC as well as how intrinsic and extrinsic motivations carry on in SC (Liang & Turban 2011). The trust theory has been used in SC to understand purchase intentions (Ng 2013). It has also been used to study satisfaction in e-commerce (Kim et al. 2009) however, there is limited research on the application of the trust theory in studying consumer satisfaction in SC (see table 1). In addition, the trust theory may help this research to understand the factors that affect consumer satisfaction as well as help to evaluate the overall experience.

### Consumer Satisfaction

Consumer satisfaction is defined as a post-evaluation regarding purchase decisions (Beyari & Abareshi 2018a; Churchill Jr & Suprenant 1982). Kotler (2000) defined consumer satisfaction as a consumer’s feelings of either pleasure or disappointment resulting from a comparison between the perceived performance of a specific product or service and his or her expectations. Consumers usually seek a relationship between their needs and wants and their perceived evaluation (Parker & Mathews 2001). Therefore, if the perceived performance is worse than expected, the consumer will be disappointed, and if the perceived performance is better than expected, the consumer will be satisfied. If the performance perceived by the consumer is equal to their expectation, they will be indifferent or in a neutral state (Filieri et al. 2017; Lin 2003). A

| Theory of Reasoned Action (TRA) | Behavioral intention, emotional support, informational support, social support, satisfaction, commitment, relationship quality, User interface quality, perceived security, perceived privacy, e-consumer satisfaction, e-consumer trust, e-consumer loyalty | Key factors in SC
|---------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------|
The impact of users’ privacy concerns on their acceptance of social networking websites (SNWs)
consumer’s buying decisions are measured by cultural, social, personal and psychological factors (Lin 2003). In addition, three significant factors affect consumer satisfaction: consumer need, consumer value and consumer cost. A consumer need is the consumer’s desire to buy a product or service to satisfy a need (Huang et al. 2017; Parker & Mathews 2001). Researchers found that consumers are driven by a desire to fulfill their needs and they are influenced by specific expectations (Parker & Mathews 2001). Consumer value refers to an individual’s judgement regarding what is necessary and essential for his or her life (Kenny 1994). It shows an individual reflection of what is essential or valuable in life (Lin 2003). The consumer cost represents what the consumer will pay for either a service or product that matches his or her desire and value (Best 1997). Consumers are typically concerned with receiving something worth what they paid for, and that is a reflection of satisfaction (Beyari & Abarahi 2018b; Lin 2003).

**Trust**

Trust as a concept has been studied numerous times in different fields, such as economics, psychology and sociology (Kim & Park 2013). For instance, in economics, trust studies have been focused on the expectations of interactions as well as weakness exposure and acceptance (Beldad et al. 2010). In psychology, there are some studies focused on trust to identify personal characteristics, such as risk propensity and trust propensity, while in sociology, studies focused more on institutional aspects of trust, such as transaction safety and the use of new technologies (Das & Teng 2004). There is no consensus on trust as a concept, as researchers from different fields define it from different angles (McKnight et al. 2002). For example, Mayer et al. (1995) defined trust as the expression for enduring beliefs from the opponent action. Doney and Cannon (1997b) claimed that trust is the confidence of someone against the other. Previous studies tested the effects of trust in online business (Doney & Cannon 1997b; Gefen 2000; Jones & Leonard 2008). In addition, many companies have trouble gaining consumer trust (Kim & Park 2013). Moreover, Some studies show that trust affects consumer online purchase decisions (Hajli 2012c) and other studies show that trust plays the main role in consumer purchase intentions (Gefen 2000; Kim et al. 2008). Therefore, trust is playing a main role in consumer’s purchasing intentions, buying behavior, and purchasing decisions (Hajli 2012c).

Trust involves some factors that might influence and affect a consumer in SC, such as a company’s reputation and transaction safety (Kim & Park 2013). A company’s good reputation creates a strong relationship between consumers and SC companies by giving the consumers a high level of care and service quality (Jarvenpaa et al. 1999a; Landon & Smith 1997; Park et al. 2012; Teo & Liu 2007). Furthermore, transaction safety plays a main role in trust by giving consumers a high level of security during their transactions in both e-commerce and SC, as there are no face-to-face interactions in online environments. (Cheung & Lee 2006; Kim et al. 2008). Moreover, other studies found that word of mouth (WOM) and low prices affect trust in online businesses (Kim & Park 2013; Kim 2011; Mikalef et al. 2013). Kim and Prabhakar (2000) claimed that WOM communication among consumers has a great impact on consumer purchase intentions, which SCs present through social network sites (SNS).

There is a strong relationship between trust and satisfaction (Bauer et al. 2002). It is the company’s responsibility to satisfy its consumers’ needs and wants (Kennedy et al. 2001). Satisfaction is a favorable attitude shown by a consumer when he or she experiences desired expectations (Anderson & Sullivan 1993). Anderson and Sullivan (1993); (Beyari & Abarahi 2018c) stated that satisfaction depends on the consumer’s initial expectation and the results obtained. Therefore, satisfaction is measured by what the consumer wants and whether he or she obtains tangible aspects, such as web system security and delivery time, and intangible aspects, such as feelings of joy and the happiness or anger resulting from the purchase of a product or a service (Ashraf et al. 2017; Flavián et al. 2006). The consumer will be satisfied when high levels
of trust, honesty and competence regarding the website are perceived (Flavián et al. 2006). Thus, trust is an essential element that affects the consumer satisfaction when they intend to buy from online website (Kim & Park 2013).

Communication

Communication is an important construct in SC; as in other forms of e-commerce, it plays a key role in building consumer trust (Moorman et al. 1992b). Communication is vital for trust and satisfaction to be achieved. According to (Kim et al. 2003), communication reflects relevant and timely information to customers and is crucial in any marketing relationship. Hence, communication ensures that customers obtain any necessary information that guides their purchasing decisions. This entails sufficient information about a particular product or service and details on delivery schedules, payment options, shipping conditions, etc. in relation to the relationship between shoppers and online vendors, two way communication is fundamental. For example, online vendors should provide relevant and timely information while consumers should have the tendency to offer appropriate information for online vendors. However, as perceived by online customers, privacy includes the safeguarding of their personal information (e.g. address, phone number, credit card number, etc.). In a similar vein, consumers may have the propensity to share their personal information if online vendors are responsible for protecting and respecting their privacy (Lubbe 2002). (Kim & Noh 2012) indicated that a social commerce user can trust a social commerce site whose communication styles, information quality, size, and reputation are able to satisfy the user.

Information Quality

Consumers consider the quality of the information that is provided by social commerce sites they use. As (Kim & Noh 2012) demonstrate, information quality is essential to determining trust in social commerce.

Information quality, for the purpose of this study, refers to the quality of information available to the consumers, mainly on the social commerce site. This quality of information, in context of social commerce, is of vital significance as, according to (Kim & Noh 2012), it partly (along with other factors) determines the level of trust that the consumers have in social commerce. According to (Huang & Benyoucef 2013), information quality is the relevance, accuracy, understanding and usefulness of the information provided by any e-commerce website. According to (Huang & Benyoucef 2013), information quality is the quality of the content which can significantly influence both the attitude of consumers and the interaction on the e-commerce website.

As per (Kim et al. 2008), social commerce consumers are very dependent on this information that the website provides because these consumers have limited information on products and services available online. Since the context here is social commerce, the consumers do not have the liberty to actually see or feel the product first hand. It is logical then that these consumers are likely to trust those social commerce websites which provide them with accurate and complete information on a real-time basis. As per (Jaiswal et al. 2010), information quality is an important factor which influences both consumer satisfaction with e-commerce and consumer’s loyalty towards the website. As per (Liao et al. 2006), consumers may accept websites which provide high quality of information on products and services as reliable online businesses. Hence, social commerce websites which provide their consumers with high quality information – complete, sufficient and real time – stand a chance of being considered as reliable online social commerce enterprises by these consumers. According to (Huang & Benyoucef 2013), information quality is closely linked to business profitability, quality of decisions and performance, the perceived benefits of information systems and the level of system usage. Hence, information quality in the context of e-commerce needs to be underlined on elements such as accuracy, timeliness,
relevance, flexible information presentation, price information, product comparability, service differentiation and complete product description (Huang & Benyoucef 2013).

Reputation

Correspondingly, the reputation of a company is crucial to creating strong relations. The existence of a positive reputation assures consumers a company will provide them good-quality service and high level of care (Park et al. 2012). Previous studies in e-commerce have shown that reputation is an essential element affecting consumer trust (Einwiller 2003). Information from a friend, relatives or media can impact the way a consumer sees a company, and thus their willingness to trust it (Einwiller 2003). Depending on the subject, the term ‘reputation’ can have numerous meanings but in general, it refers to the perception people have of anyone or any organization or the level of confidence people have in this person or business. For the purpose of this study, reputation refers to the reputation of the social commerce enterprise. According to (Einwiller 2003), reputation has a variety of definitions which differ between disciplines. Hence, the reputation of a social commerce firm is an important facet affecting the trust of social commerce users (Kim & Noh 2012). According to (Kim & Noh 2012), consumer’s perception of the reputation of a social commerce enterprise plays a vital role in the formation of their trust in the enterprise. This means that the reputation of a social commerce website can be influential in determining the level of trust of the consumers in the website. It is important to note that social commerce consumers also share information about the reputation of the website with other consumers. Hence, this reputation of the social commerce website is used by consumers to influence their level of trust in the website. In general, trust is considered to be a vital mechanism for reducing perceived risk involved in context of social commerce, and reputation can serve as a powerful antecedent for trust to develop (Einwiller 2003).

A company’s good reputation creates a strong relationship between consumers and SC companies by giving the consumers a high level of care and service quality (Jha et al. 2017; Park et al. 2012). Previous studies have empirically shown the role of reputation to engender trust in the context of e-commerce (Einwiller 2003). Information from independent personal sources such as friends, acquaintances and colleagues, and also from independent impersonal sources like organizations for consumer protection or media reports have great potential to enhance reputation and ultimately engender trust (Einwiller 2003).

According to Einwiller (003), by their inherent nature, electronic markets possess particular network characteristics which could serve as facilitators for the development and diffusion of information – hence, could act as enhancers of reputation.

Transaction Safety

Consumers want to feel that their transactions on social commerce sites are safe and secure. In the online setting, there are no face-to-face interactions, and the potential for risk is high. Therefore, a high level of transaction safety on a site enhances consumer trust (Kim et al. 2008). Transaction Safety refers to the level of security being offered by the social commerce site to the consumers both during and after the purchase. In today’s e-commerce environment, online consumers have the knowledge that purchasing goods/services online basically entails a higher level of risk than traditional commerce transactions, mainly due to the inherent anonymity of the online environment. Hence, the level of transaction safety a social commerce site is able to provide to its users determines, to a certain extent, the level of trust which these users are likely to have in social commerce. In fact, transaction safety plays the primary role in trust building by giving consumers a high level of security during their operations in both e-commerce and SC, as there are no face-to-face interactions in online environments (Kim et al. 2008). Since most transactions in social commerce occur online, it is important that social commerce businesses as well as the consumers using these sites pay sufficient importance to the issue of transaction
safety as online transactions run a high level of risk of fraud. According to (Kanyaru & Kyalo 2015), the level of fraud in online transactions is higher than telephone or in-person transactions of the same nature. Due to the nature of online transactions, where there is no face-to-face interaction between the buyer and the seller, the risk involved increases. According to (Excell 2012), the internet is a perfect medium for fraudsters because it gives them the anonymity required to commit crimes against a large section of the population spread out over a vast geographical area, including remote locations.

**Word of Mouth**

Furthermore, consumers, for the most part, assess companies by looking at what the others say about them. As discussed by Kim and Prabhakar (2000), Word of Mouth (WOM) is the sharing of information and experiences between consumers to help each other in making purchase decisions. If a consumer is satisfied with the experience he or she has had, he or she is likely to contribute to positive Word of Mouth about the organization. According to (Kim & Prabhakar 2000), Word of Mouth (WOM) is the exchanging of experiences and information between consumers to help each other in making purchase decisions. Hence, if the consumer is happy with his/her experience, he/she is likely to have a positive Word of Mouth for the company. Likewise, firms place a high level of importance on consumer feedback as negative comments by these consumers may generate negative Word of Mouth (Mikalef et al. 2013). Studies have shown that attributes of social media such as social presence and interactivity affect the level of consumer satisfaction related to social commerce (Chen & Wang 2016; Wang & Yu 2017). There is credible justification for deeming that trust represents a major challenge for organisations that desire to utilise social e-commerce to attain their objectives. In order to attain their goals, organizations using social commerce need to focus on the expectations as well as trust of their consumers which is a guarantee for future purchase behaviour. Studies show that social word of mouth, available through social media, increases the level of trust on new products amongst users of social media. This online communication between individual users through the sharing of knowledge and experience of a new product provides them with the value of trust (Hajli et al. 2013). According to (Ahmad & Laroche 2017; Hajli 2013), in case of new products, when there is either no market or limited knowledge about the product in the market, users of social commerce prefer to search for more information than what is provided by the company website – usually through social media, or other technological developments or through offline environment sources such as friends or family. Successful businesses owe their success to the hard work that they put in to develop their trust building strategies in online platforms (Hajli et al. 2013). As per (Füller et al. 2006), online companies try out different strategies in order to enhance their relationship with consumers and try to develop their trust in the company’s networks. According to (Hajli 2013), they use social media to build such relationships.

**Theoretical Background and Hypothesis Development**

In this study, trust theory is used to explore the relationship between the trust of consumers in SC and their willingness to make a purchase. (Kuan & Bock 2007) had theorized that a higher degree of trust held by a consumer results in a higher level of intention to buy items and services, particularly online. The research model used in (Kuan & Bock 2007) study shows that trust is a key factor in testing the elements that impact consumer satisfaction. Oliver (1980) indicated that trust has a significant impact on consumer satisfaction. (Geyskens et al. 1996) define consumer satisfaction as the measure of how satisfied a consumer is with a provided product or service. A higher level of consumer satisfaction is an indicator of a higher level of trust (Anderson et al. 1994; Zins 2001). Companies must be aware of some factors to build consumer satisfaction, such as perceived value and trust (Anderson & Srinivasan 2003). Gaining
trust in SC sites will ensure consumers are satisfied with their purchase decisions. Therefore, the following hypothesis is proposed:

**H1. There is a positive effect of trust among consumers on consumer satisfaction in SC.**

Social relationships are a major aspect of SC transactions, and set them apart from other online commercial activities. Communication between people in social relationships can have a strong effect on consumer trust. Communication is the process of sharing information through either formal or informal methods; in the context of online commerce, it refers to the sharing of information between consumers (Moon & Lee 2008). In SC, there are multiple ways for consumers to share information, including reviews, recommendations and ratings. Engaging in online communication can save time in an online shopping environment (Kim & Joo 2001). When consumers read positive reviews and ratings, this also improves the relationship and the level of trust between consumers and companies (Moorman et al. 1992a). In addition, consumers who share their experiences and information with others are also likely to trust online shopping and online companies (Park & Kang 2003). In SC, communications is essential in making consumers trust the organisations about whom they are exchanging information. Thus, the following hypothesis is proposed:

**H2. There is a positive effect of communication among consumers on trust in SC.**

As argued by Kim et al. (2008), in an e-shopping environment, consumers have access to limited information and will thus tend to rely on the information presented on the website about the service or product. If the consumer comes to believe the information quality is adequate, their level of trust will likely improve, thus driving repeat purchase behaviour and improved reputation. Since quality of information is important to influencing consumer trust in social commerce, the following hypothesis is proposed:

**H3. There is a positive impact of information quality on trust in social commerce websites**

When an organization has a good public image or reputation, consumers are likely to have a high level of trust in the operations it performs (Park et al. 2012). By the same logic, organisations pursuing success need a good reputation so as to gain consumer trust. If a social commerce company’s reputation is good, their consumers will probably place a great deal of trust in them. Thus the following hypothesis is proposed:

**H4. An organization’s positive reputation positively impacts trust in social commerce websites**

The level of security provided by a social commerce site is called “transaction safety.” This term refers to both the information provided by the consumer, and the financial transaction itself. It would seem obvious that when a social commerce site provided an excellent level of security, consumer trust will tend to be high (Yoon 2002). Therefore, the following hypothesis is proposed:

**H5. There is a positive impact of transaction safety on trust in social commerce websites**

Consumers place more faith in what friends, family and acquaintances say about a product than they do in an advertisement. This person-to-person communication is known as Word of Mouth (Park et al. 1998). Online shoppers usually search for information about products and services on social networks. Their purchase decision are impacted by what they hear from online communities (Evans et al. 2009). Kuan and Bock (2007) have further claimed that WOM is an essential factor impacting consumer’s trust in SNSs. As discussed by De Vries et al. (2012), many business enterprises are investigating the potential of social commerce to convey promotional information to their consumers. Through this e-WOM approach, they hope to improve their brand recognition. Consumers trust others in their social network, and when they
hear about positive experiences, this builds their trust and guides them in making purchase
decisions. Therefore, the following hypothesis is proposed:

**H6. There is a positive impact of WOM on trust in social commerce websites**

Based on the above discussion and hypotheses, the research model presented in Figure 1 below was developed. This theoretical model was used to analyse the components that influence consumer satisfaction in the social commerce context.

![Research model and hypotheses](image)

**Figure 1. Research model and hypotheses.**

### Research Methodology

The study aimed to test the hypotheses through the development of a questionnaire as a research instrument. The questionnaire asks respondents about their satisfaction with social commerce; responses were collected from Saudi Arabian students studying in both Australia and Saudi Arabia. These two different groups were included in the study to see if there are any differences in use of SC sites between the populations of the two different countries. The researchers chose students as potential respondents because SC is popular among students as well as the easy access to a significant number of students through working in the academic field. However, the researchers acknowledge the limitation that students are a subset of all consumers and the results may not be generalised to all consumers. The rationale behind the selection of these particular groups is that Saudi Arabian students, both in Australia and Saudi Arabia, commonly use SC and have good knowledge and familiarity with SC sites. Moreover, cultural anomalies in the two countries may have some impact on consumer satisfaction in SC. Data from students studying in Saudi Arabia was obtained by distributing paper copies of the survey to students at UBT University. Participants were selected by choosing classes at random and asking each class member to complete the survey; of the 500 students who were included, completed surveys were obtained from 300, for a response rate of 60 percent. Data from students studying in Australia was collected through Saudi social groups on Twitter and Facebook, via a survey link that was spread using Qualtrics software. For this population, it was difficult to calculate the online survey response rate, since researchers were not sure how many respondents saw the link. However, a total of 314 valid responses were obtained from the two groups. The respondents were 64.8 percent male and 35.2 percent female. A majority of respondents, 50.3 percent, were between the ages of 26 and 35; an additional 24.3 percent were between 36 and 45. Their education level was generally high; 32.8 percent of respondents were graduate students and 61.8 percent were postgraduate students (i.e., they had already obtained at least one graduate degree).
This study makes use of the Smart PLS program to analyse the measurement and structural models, in particular the “Partial Least Squares Structural Equation Modelling” techniques (PLS-SEM) (Ringle et al. 2012).

Results

The researchers made use of the common path weighting scheme to set the inner weighting option, for the purpose of assessing the indicator reliability with the PLS algorithm calculation. As argued by Vinzi et al. (2010), such a scheme is preferable to the centroid weighting and factorial weighting schemes. The number of high iteration is 50. The factor loadings of the measurement items were ascertained through this procedure. In order to attain an item reliability of roughly 0.5, the item loadings should each be at 0.7 or more, as discussed by Hair et al. (2013). Table 1 below summarizes the constructs’ factor loadings, reliability and Average Variance Extracted values.

Table 2. Summary of constructs’ factor loadings, reliability and Average Variance Extracted values

<table>
<thead>
<tr>
<th>Latent Factor</th>
<th>Range of Factor loading within constructs</th>
<th>Reliability α &gt; 0.7</th>
<th>AVE &gt;= 0.5</th>
<th>Items’ Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Satisfaction</td>
<td>0.96 - 0.87 (7 Items)</td>
<td>0.98</td>
<td>0.90</td>
<td>(Kim &amp; Prabhakar 2000); (Kennedy et al. 2001)</td>
</tr>
<tr>
<td>Trust</td>
<td>0.90 - 0.95 (6 Items)</td>
<td>0.97</td>
<td>0.85</td>
<td>(Hajli 2012c); (Gefen et al. 2003); (Kim et al. 2009); (Kassim &amp; Abdullah 2010)</td>
</tr>
<tr>
<td>Communication</td>
<td>0.75 - 0.82 (4 Items)</td>
<td>0.87</td>
<td>0.63</td>
<td>(Kumar &amp; Benbasat 2002); (Kim &amp; Park 2013)</td>
</tr>
<tr>
<td>Information Quality</td>
<td>0.85 - 0.93 (7 Items)</td>
<td>0.97</td>
<td>0.82</td>
<td>(Kim &amp; Park 2013); (Kim et al. 2009); (Barnes &amp; Vidgen 2002)</td>
</tr>
<tr>
<td>Reputation</td>
<td>0.89 - 0.96 (5 Items)</td>
<td>0.96</td>
<td>0.86</td>
<td>(Doney &amp; Cannon 1997a); (Jarvenpaa et al. 1999a); (Kim et al. 2009)</td>
</tr>
<tr>
<td>Transaction Safety</td>
<td>0.87 - 0.94 (6 Items)</td>
<td>0.96</td>
<td>0.83</td>
<td>(Kim &amp; Kim 2004); (Yoon 2002); (Shergill &amp; Chen 2005)</td>
</tr>
<tr>
<td>Word of Mouth</td>
<td>0.84 - 0.92 (7 Items)</td>
<td>0.96</td>
<td>0.81</td>
<td>(Hajli 2012c); (Srinivasan et al. 2002); (Harrison-Walker 2001)</td>
</tr>
</tbody>
</table>

Composite reliability is another approach used to evaluate reliability and internal consistency. As shown in Table 2 above, all constructs displayed a composite reliability of > 0.7. The
reliability of each construct is thus satisfactory (Hair et al. 2011). AVE value is also important to validity; when the AVE of a construct is at or above 0.5, sufficient convergent validity is achieved (Fornell & Larcker 1981). As Table 2 shows, the AVE values for all constructs are between 0.63 and 0.90, exceeding the 0.5 minimum value and demonstrating convergent validity. Discriminant validity also helps measure the degree to which an individual construct is related to the items that are intended to measure it, as compared to other constructs. The prevalent approaches for measuring discriminant validity are Fornell-Larcker standards and investigation of the cross loadings. Fornell-Larcker measurements are shown in Table 2, along with the AVE values’ square root.

Table 2. The Fornell-Larcker Criterion

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Communication</th>
<th>Consumer Satisfaction</th>
<th>Information Quality</th>
<th>Reputation</th>
<th>Transaction Safety</th>
<th>Trust</th>
<th>Word Of Mouth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>0.795</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Satisfaction</td>
<td>0.051</td>
<td>0.951</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Quality</td>
<td>0.134</td>
<td>0.604</td>
<td>0.898</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputation</td>
<td>0.039</td>
<td>0.552</td>
<td>0.744</td>
<td>0.928</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transaction Safety</td>
<td>0.002</td>
<td>0.265</td>
<td>0.319</td>
<td>0.382</td>
<td>0.914</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.111</td>
<td>0.602</td>
<td>0.864</td>
<td>0.751</td>
<td>0.268</td>
<td>0.931</td>
<td></td>
</tr>
<tr>
<td>Word Of Mouth</td>
<td>0.157</td>
<td>0.556</td>
<td>0.773</td>
<td>0.642</td>
<td>0.280</td>
<td>0.869</td>
<td>0.909</td>
</tr>
</tbody>
</table>

Finally, as discussed by Henseler et al. (2015), the Heterotrait-Monotrait Correlations Ratio (HTMT) can also be used to evaluate discriminant validity. These results are shown in Table 3.

Table 3. The Heterotrait-Monotrait Correlations Ratio

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Communication</th>
<th>Consumer Satisfaction</th>
<th>Information Quality</th>
<th>Reputation</th>
<th>Transaction Safety</th>
<th>Trust</th>
<th>Word Of Mouth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Satisfaction</td>
<td>0.071</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Quality</td>
<td>0.143</td>
<td>0.621</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputation</td>
<td>0.051</td>
<td>0.569</td>
<td>0.773</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transaction Safety</td>
<td>0.049</td>
<td>0.274</td>
<td>0.334</td>
<td>0.398</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.115</td>
<td>0.618</td>
<td>0.897</td>
<td>0.782</td>
<td>0.278</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word of Mouth</td>
<td>0.172</td>
<td>0.567</td>
<td>0.800</td>
<td>0.665</td>
<td>0.29</td>
<td>0.899</td>
<td></td>
</tr>
</tbody>
</table>
In cases where the HTMT value is below 0.90, discriminant validity exists between two reflective constructs. With regard to the original framework, the HTMT ratio for most relationships meets this criterion, falling at well below 0.90. However, the HTMT ratios for the relationship between ‘Word of Mouth’ and ‘Trust’ is more than 0.90. And for the relationship between ‘Trust’ and ‘Information Quality,’ the HTMT value is very close to the threshold level, at 0.899. Since these relations represent deviations from the ideal threshold level, discriminant validity is not established for them by the HTMT. After analyzing the relevance and significance of the path coefficients, the researcher determined the explanatory power. This was achieved by determining the coefficient, $R^2$. The $R^2$ value for Trust and consumer satisfaction are 0.863 and 0.362, which are considered strong and moderate respectively (Chin 2010). Predictive relevance is defined as a measurement of a model’s effectiveness at predicting outcomes. The hypothesis testing results for these relationships are shown in Table 4. The strongest predictors of Consumer Satisfaction are Trust, Information Quality, Word of Mouth, Reputation, and Transaction Safety.

Table 4. The Results Obtained from the Analysis of the Structural Equation Model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>P-Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Trust $\rightarrow$ Consumer satisfaction</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Communication $\rightarrow$ Trust</td>
<td>0.366</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3</td>
<td>Information Quality $\rightarrow$ Trust</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Reputation $\rightarrow$ Trust</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>Transaction Safety $\rightarrow$ Trust</td>
<td>0.004</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>Word of Mouth $\rightarrow$ Trust</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

This study contributes to existing social commerce literature in a number of ways. The results of the present research can provide insight to businesses seeking competitive advantage. The use of a tested theoretical framework, the Trust theory, gives insight into the factors affecting consumer satisfaction. The results of this research provide owners of social commerce websites with a tool to guide the development of their services. By understanding the factors that are most important in building trust, they can more effectively improve their services and satisfy their consumers.

Discussions

The results of this study suggest that Saudi consumers perceive that their positive experience with SC vendors is influenced by the vendors’ assurances of meeting their expectations of the safety of personal and payment-related information, as well as the security of the transaction environment. As such, the finding of the first hypothesis is consistent with previous studies that indicate a strong relationship between trust and consumer satisfaction in general (Alshibly 2015; Anderson & Srinivasan 2003; Bauer et al. 2002; Hajli 2012b; Kim et al. 2003), and in e-commerce in Saudi Arabia in particular Eid (2011).

In the second hypothesis, it is argued that communication has an impact on consumers’ trust when they use SC sites. It may be rational to assume that effective communication develops trust and trust develops effective communication; however, this hypothesis was rejected. In other words, this finding is not consistent with previous studies, which supports the relationship between communication and trust (Cheng et al. 2017; Kim & Noh 2012; Kim & Park 2013; Moorman et al. 1992a; Park & Kang 2003), but is in line with the results obtained by Liao et al.
Since the items of both constructs were adopted from SC literature, the hypothesis might not be supported when applied to the Saudi context.

The third hypothesis proposes that information quality provided by SC sites has a positive impact on consumers’ trust in SC. The results revealed a significance positive relationship that exists between information quality and trust. This finding is consistent with the views of other researchers who suggest that increasing the information quality on SC sites can enhance consumer trust in the sites and thereby have a positive influence on consumer purchase behaviour (Cheng et al. 2017; Fung & Lee 1999; Kim et al. 2009; Kim et al. 2011; Kim & Noh 2012; Kim & Park 2013; Liao et al. 2006).

The fourth hypothesis suggests a positive association between reputation and trust in social commerce websites. This hypothesis revealed a significant and positive relationship between the reputation of an SC organisation and the level of trust held in that organisation. Alternatively, the better an organisation’s reputation, the greater is the degree of trust held. Similarly, previous studies indicate that reputation is associated with initial trust and there is a measurable association between trust and the reputation of an organisation (Beldad et al. 2010; Casalo et al. 2007; Füller & Matzler 2007; Jarvenpaa et al. 1999b; Kim et al. 2009; Kim & Park 2013; Metzger 2004; Wu & Chang 2006).

The fifth hypothesis indicates that transaction safety is considered a factor that has a positive impact on trust. The results did not support the hypothesis and contradicts the findings of most previous research. This was due the items of both constructs were adopted, reworded and used in different contexts. The sixth hypothesis proposes that WOM is considered a crucial factor that has a positive impact on consumers’ trust when they use SC sites. A significant positive relationship was found between the two variables; therefore, the results of this study support the hypothesis. This finding is in line with previous research that has demonstrated a strong relationship between WOM and trust (Brown and Reingen 1987), Kassim and Abdullah (2010), Kim and Park (2013), Hajli et al. (2013).

Conclusion and Recommendations

This study aimed to improve the research community’s understanding of the factors affecting consumer satisfaction in the context of social commerce. It sheds light on the interrelationships between key aspects of social commerce, including trust. With the exception of one relationship, the results of the study supported the theoretical model. The exception was the relation between communication and trust. There are various possible explanations for this unexpected finding. Consumers may have bad experiences with specific websites in terms of after-purchase experience. Businesses may feel the need to communicate more frequently with consumers who have had a problem with their order, thus weakening any positive association between amount of communication and trust. The results showed that in the social commerce context, Word of Mouth had the strongest influence on trust. Since Trust was so strongly impacted by Word of Mouth, social commerce enterprises should give special consideration to consumer feedback and reviews; these will play a large role in determining the Trust level that consumers have in the products and services they offer. Ultimately, increasing trust of the consumer in a social commerce website will improve the consumer’s overall experience and satisfaction as well.

The findings obtained by this study must be interpreted within the context of its limitations. One limitation was that only students were included among the survey respondents. The findings from this research may not be generalizable to non-students and members of other demographic groups. Areas of improvement for possible future studies include: (1) enhancing the study model by adding new antecedents and variables relating to consumer satisfaction; (2) more exploration...
of hypothesized relationships, using investigative techniques other than surveys; (3) more exploration of the existing relationships between the variables in this study.

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