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The Relationship between Perceived Security, Perceived Privacy and Social Commerce Intention among University Students in Saudi Arabia: The Mediating Role of Trust, Attitude and Satisfaction.

***Amro, A.M., Ariffin, A.M. , Norsiah, A.H.**

School of Multimedia Technology and Communication, University Utara Malaysia

ABSTRACT: Social commerce intention has increasingly become more attractive and enhanced by the users of social networking sites that often received attitudinal beliefs from contemporary users. It is in view of this background that, this study is designed to examine the influence of attitudinal beliefs (perceived privacy and perceived security) and the mediating relationship between trust, attitude and satisfaction on social commerce intention among university students in Saudi Arabia. As a result, a framework is developed to guide the study and demonstrate the possible relationship among the examined constructs. Supportive literature to corroborate the conceptualized model in the context of Saudi Arabia is inclusive. Therefore, the study emphasizes that the utilization of complimentary social network sites by university students, exerts a robust consequence on their social commerce intention. Furthermore, the study establishes that this relationship is mediated by trust, attitude and satisfaction.

KEYWORDS: Trust, Attitude, Satisfaction, Social Commerce Intention, Saudi Arabia.

I.INTRODUCTION

In the present global village, internet has afforded many consumers the opportunity to use social media such as Twitter, Facebook, Instagram, and others, without necessarily interacting physically with one another (Lu & Yang, 2011; Tiwari, Lane &Alam, 2016). This milestone is achieved through Web 2.0 applications that have assisted to transfer the internet to a social environment through the introduction of social media which makes it possible for individuals to interact and generate content online (Lai & Turban, 2008). As at 2013, Facebook was hosting 1 billion monthly active users while Twitter users have reached 340 million per month in the same year (Cheston, Flickinger, &Chisolm, 2013). In 2018, the number of social media users is amounted to 2.62 billion (Statista, 2018a), and it is expected to reach 3.02 billion in 2021 (Statista, 2018a). Moreover, Social Networking Sites (SNSs)- a representative use of Web 2.0 application is among the most widely debated issues today and the center-nerve of environment, as its easily allow consumers to participate in social activities and connect on the cyberspace (Lu & Hsiao, 2010; Chinomona, 2013; Hu, Ketinger& Poston, 2015).

In Saudi Arabia, the number of transactions through online have increased by 100 per cent, from $278 million in 2002 to $556 million in 2005 (Al Riyadh, 2006). Currently, the transaction value in digital payment has reached $977.46 per user, while in Saudi Arabia the number of transaction values in digital payment has reached up to $13,704 million for digital advert in 2018 (Statista, 2018b). In addition, the revenue in Social Media Advertising segment amounted to US$128 million in 2018 in Saudi Arabia (Statista, 2018c). Previously, social media tools have rapidly gained more dominanceand have been used widely in online business by Saudi Arabia. For instance, in the Middle East, Saudi Arabia occupies second position with 13 million internet users and the highest Facebook users (5.9 million).However, although Saudi Arabia occupies the largest position in retail market within the Middle East region, online sales comprise only a small percentage of total retail sales (Khalidi,soudodi,&syedsanad abdalla,2014). Thus, the use of social media to transact e-commerce is still low and marginal. Numerous contributions from the literature were extensively reviewed In order to identify the reasons causing the slow growth rate of e-commerce in Arab world and Saudi Arabia.The main reasons often cited for the slow growth includes poor ICT infrastructure, cultural issues, trust

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Vol. 5, Issue 9 , September 2018

and privacy issue, absence of clear legislation, rules and procedures and legislation on how to protect the rights of all parties that are involved (Agamdi, 2008; Alrawi&Sabry, 2009).
However, the number of studies concentrating on social commerce in Saudi Arabia is inadequate and requires further attention (AlGhamdi, Nguyen, Nguyen, & Drew, 2012). Meanwhile, some studies used Technology Acceptance Model (TAM) or extend it to cover attitudinal beliefs variables by integrating the TAM with a customer experience model (e.g. Hajli, 2016). In addition, Hajli and Lin (2016) are amongst the pioneer studies that extended the TAM to explain the role of social media. Their study is an attempt to cover this issue by developing a model that is comprehensive and can explain the factors influencing consumers' acceptance of and participation in social commerce within the context of Saudi Arabia. Following the previous arguments and discussions, this study proposes a conceptual model to understand the phenomenon of social commerce using the case of Saudi Arabia. On the other side, despite that social commerce has been widely discussed among numerousscholars, studies that described social commerce in terms of characteristics which stimulate its usage intention are still limited (Stephen &Toubia, 2010; Weijun& Lin, 2011; Hajli&Lin, 2016). Furthermore, many of the existing studies only focused on the analysis of social commerce market (Kim, 2011), as well as the disparities that exist between social commerce and other forms of e-commerce, and the adoption of e-commerce among various countries (Hsiao, Chuan-Chuan Lin, Wang, Lu, & Yu, 2010; Lin & Lu, 2011; Bansal & Chen, 2011). Therefore, empirical evidence has revealed that only a limited amount of previous studies has examined trust within the social commerce context with particular reference to important features of social commerce that can bring about trust performance towards greater purchase intentions (Kim & Pak, 2013). Importantly, Gefen (2002) argued that paucity of trust is one of the main issues inhibiting or making the customers to be reticent about the adoption of online purchases. This fact is also been reiterated by Jones and Leonard (2008). Since social commerce is a new form of Information System (IS) and a growing set of activities, understanding those factors that can influence consumers' trust in this important platform is highly essential (Kim & Pak, 2013).
According to Friedrich (2015) however, of special interest to e-commerce companies today is determining which factors influence the consumers' participation in social commerce. Due to lack of adequate knowledge and dearth of studies that can aid the understanding of these emerging commerce technologies in social media, additional research efforts are urgently required to analyze and assess social commerce theoretically with the aim of advancing the general comprehension of this expanding and important medium for both companies and individuals. In lieu of that therefore, this study is aimed at identifying the relevance of these factors in an online emerging market of Saudi Arabia. The study further provides clear understanding of social commerce in the Saudi Arabian context by proposing conceptual framework of customers' intention to use social commerce, using the trust, attitude, and satisfaction as mediating variables.

II.Review of the Lıterature

Numerous studies continuous to surface the literature on the significance of social commerce and its implications on national development through integrating customers on a single platform using the modern technology-based applications. Recent literature are reviewed and synthesized, hence are presented in the following sub-sections.

A. Social Commerce Intention

Social commerce is regarded as a new advancement in e-commerce which empowers consumers to generate content energetically on the Internet (Liang & Turban, 2011). Social commerce permits merchants to access various markets by taking advantage of social communication among customers (Hajli&Lin, 2016; Hajliet al. 2017). Social media is an influential tool for content generation which distinguishes social commerce from e-commerce, and it introduces new business models in the electronic commerce area due to its extreme popularity (Liang & Turban, 2011). The attraction of SNS applications is a key factor in the advancement of social media (Liang & Turban, 2011; Hajli&Lin, 2016). As argued and maintained by many different scholars (Huang &Benyoucef, 2013; Kim & Park, 2013), effective social commerce aims to orchestrate a convincing customer experience where social communication are fully entrenched at every phase of the customer decision-making process. Since products have become technical in nature and increasingly complex, consumers are keen to gain recommendations (e.g., comments, ratings, and suggestions) and appropriate product information from others' experience and capability (Hajli& Sims, 2015). This kind of information is called user-generated content and is professed to be a more trustworthy source of information than conventional media (Hajli& Sims, 2015). To facilitate the consumer's timely and perfect buying decisions, user generated content can be produced and disseminated rapidly using several social interaction activities (Hajli& Sims, 2015; Hajli, Sims, Zadeh, &

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Vol. 5, Issue 9 , September 2018

Richard, 2017). Consequently, the research on social commerce seems to be a significant frontier for consumer research.

B. Linkages between Perceived Security, Perceived Privacy and Trust

Lack of trust which is brought about by insecurity is a major issue in an online social networking. Basically, security is an important factor that customers normally consider while transacting online especially with the rising concern over security in SN. Perceived security refers to the degree of believe which people hold about presence of security of a particular SNS. Therefore, subjective security can be said to be a mirror image of risk similarity. Importantly, security in social media spaces can be judged by other factors along technical security measures (Roca, 2009). More so, Kim and Park (2013) maintain that the perception of security is mainly influenced when SNSs system users feel they are in control. According to Chen and Barnes (2007) lack of subjective security constitutes the biggest threats and is one of the frequent reasons why people refuse to participate in social media interaction. In addition, Al-Busaidi(2012) also supported the argument and established that the intrusion of subjective security creates barrier to using a particular procedure. However, the TRA model can be used to explain the relationship between website security and the customer trusts. In essence, when there is high level of security and features as provided in website of e-commerce, trusting intensions which bring about trust behavior can be generated. With regards to SNS, it can be concluded that perceptions of security by individual is differed from real security. Even though scientific evaluation of security can be done through technological solutions, the genuine assessment can be achieved effectively through customers' perceptions since the perception does influence intention and trust.
Nevertheless, the issue of privacy in online SNS depends on the level of identifiability of the information that is provided, the possible receivers, and the uses which the information will likely be subjected to (Dwyer,Hiltz&Passerini, 2007). Most research in the field of Information Systems (IS) has maintained that privacy issue as well as concerns of users is one of the essential issues in the contemporary technology-based environment (Miyazaki & Fernandez, 2001). Generally, privacy is an old concept and has been defined as the individual's ability to manage the terms through which their private information is obtained and used (Metzger, 2004). In addition, the extent to which SNS users perceive that SNS site is protected will go a long way to influence the level of trust that is developed among the users. Importantly, the content of SNS such as privacy statement will significantly influence the perceptions of users with regards to the protection of SNS site (Dong-Her, et al, 2004; Forsythye& Shi, 2003). Research suggests that when the perception about website privacy is enhanced through site characteristics such as privacy statements, the level of trust for organization will increase. For instance, Culnan et al. (1999) revealed that when organization makes the process of collecting information to be transparent, consumers' perception about security and trust will increase.
In view of the aforementioned arguments and to provide a solid framework that differ from the previous literature, hypotheses are hereby formulated to serve as a guide to the study. These hypotheses are developed taking into cognizance the shortcomings of foregoing studies and the greater calls for further contributions in this research domain. The detailed hypotheses are given as follows:

H1:Perceived Security positively relates to trust

H2:Perceived privacy positively relates to trust

C. Linkages between Trust, Satisfaction and Attitude

In the consumer behavior studies, a lot of discussions has ensued about the causal-relationship between trust and satisfaction. Many authors believe that trust is the precursor of satisfaction in an exchange relationship (e.g. Armstrong & Yee 2001; Flaherty & Pappas 2000). For instance, Ratnasingham (1998) and Kim (2012) opined that trust determines satisfaction and that eventually leads to loyalty in electronic commerce. The trust has direct and indirect effects on a consumer's purchase decision and has a long-term impact on consumer e-loyalty through satisfaction (Kim, Kim, &Kandampully 2009). Also, it has been empirically proven to impact on attitude towards behavior in e-commerce and this may likely impact the social commerce like SNSs. Moreover, several studies have proven that trust from online social activities can be transferred to attitude in terms of transactions on social networking sites (Han & Windsor, 2011; Leonard, 2012). Consequently, the hypotheses are hereby formulated as follows:

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H3: Trust mediates the relationship betweenattitudinal beliefs and attitude.
H4: Trust mediates the relationship betweenattitudinal beliefs and satisfaction.

D. Linkages between Satisfaction and Attitude

Satisfaction has to do with the ability of service provider to meet the expectation of customers in terms of product or service performance. When the expectation is met, the customer is satisfied, and versa. (Zeithaml, Berry &Parasuraman, 1996). In an online context, Eid (2011) proved that e-satisfaction is an antecedent of loyalty. In social commerce, the studies of Carlson and O'Cass (2010) and Yusliza and Ramayah (2012) found that consumers 'evaluations of satisfaction using a web site have a significant positive influence on attitudes towards the site. Consequently, the hypothesis is hereby formulated as follows:

H5: Satisfaction positively relates to attitude

E. Linkages between Satisfaction, Attitude and Social Commerce Intention

Large amount of supportive literature has explained that satisfaction which may come in different forms such as recommendation may amplify intention to continue to use the sites (Chevalier &Mayzlin, 2006; Watts &Dodds, 2007). In fact, comprehending the intentions and the purpose why the consumers use the service or network on sites has become an important assignment for marketers since the attitude of consumers are linked with these perceptions (Gursoy, Spangenberg, & Rutherford, 2006). In a traditional platform, behavioral intention is regarded as the likelihood that an individual will engage in certain behavior, and it has been proven to be influenced by the level of satisfaction both in traditional and the online settings (Ajzen&Fishbein, 1980). Hereby, it is logical to assume that when a person is satisfied with services rendered and formulate positive attitude towards social commerce, the possibly of developing intention to use the site will increase (Kim, 2013). Consequently, the hypothesis is hereby formulated as follows:
H6: Attitude mediates the relationship between trust and social commerce intention
H7: Satisfaction mediates the relationship between trust and social commerce intention.
To provide a solid framework that differ from the previous literature and established the originality of this study, Figure 1 illustrates the study framework and depicts the causal influence among the parameters. The framework shows the quantitative implications and demonstrates the link between perceived security and privacy, the mediating variables (trust, attitude, and satisfaction) and the social commerce intentions.
Attitudinal beliefs

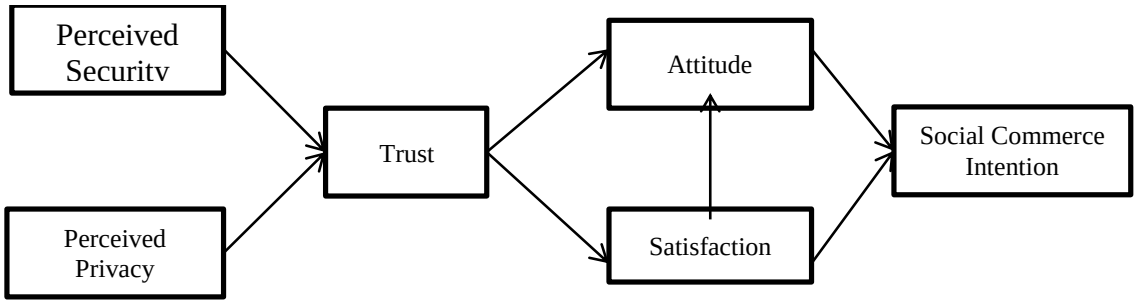

Figure 1.1: the study Framework

Given the formulated hypotheses and the framework, surprisingly this study is still conceptual in nature. In other words, the study is conducted using descriptive analysis which solely depends on the extensive review of literature, articles, thesis and several published documentations. The rationale for choosing this approach is to provide supportive ground in preparation for future empirical investigation. The proposed research will be a cross sectional study in which data

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will be collected through questionnaire distribution. The target respondents shall constitute university students from seven universities in Saudi Arabia.

III. CONCLUSION

In the past, various literature has shown that both perceived privacy, and perceived security have been instrumental in enhancing a robust social network sites especially among non-educational institutions. The study framework shows that university student in Saudi Arabia will be among the greatest beneficiaries of a robust and efficient social network sites. This hypothesize that trust, attitude and satisfaction mediate the relationship between attitudinal beliefs and social commerce intention. Furthermore, data will be collected to examine the hypothesized relationships.

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