SMRJ

THE DEVELOPMENT OF A CONCEPTUAL FRAMEWORK FOR MOBILE SOCIAL COMMERCE AND PURCHASING DECISIONS: A SYSTEMATIC LITERATURE REVIEW FROM 2010 – 2020

Shirley Law Kheen*, Mohd Nazri Mohd Noor

Cluster of Business and Management, Open University Malaysia
47301 Petaling Jaya, Selangor

*Corresponding author's e-mail: shirleylk@oum.edu.my

ABSTRACT

This paper aims to develop a framework for mobile social commerce purchase decisions based on the existing literature. Social media and mobile technology advancement has shifted the way contemporary selling is conducted online. This new business model has revolutionised the relationship between consumers and businesses. Mobile social commerce integrates the features of social media, which enables the interactions between users during their mobile shopping experience. Users' creativities provide innovative solutions in user generated content (UGC) that not only solves their own problems, but also provides possible improvements to products and services. Even so, the authenticity of UGC and the possibility of fabrication remains a challenge that needs to be resolved. Previous studies have shown that user engagement in UGC has a significant effect on enhancing the efficiency of social interaction between businesses and consumers. The corresponding purchasing decisions depend on the degree of consumer involvement in UGC. Based on a review of the literature from 2010 – 2020, the positive attitudes towards online community knowledge sharing will positively influence consumers' purchasing decisions. A favourable review about the products or services that generate strong positive attitudes is more likely to be considered by consumers. Thus, their purchasing decisions are determined by their commitment to an attitude.

PENERBIT PRESS
UNIVERSITI TEKNOLOGI MARA

The risk perception of consumers differs from various dimensions and capacities. The risk tolerance of each purchasing goal will have an effect on their purchasing decisions. The framework proposed in this study can be further tested in the context of Malaysian consumers.

INTRODUCTION

Social media has had a massive impact on the globalisation of online shopping. Social commerce has improved conventional e-commerce by integrating the influence of social networking with online shopping, and introducing products across social media. Taking advantage of the immense social media capital and users' engagement, social commerce is able to customise products and services based on consumers' interests and preferences. The wide acceptance of mobile commerce is largely due to the ubiquity of smartphones enabled with real-time internet access. Consumers can communicate among themselves and with the sellers about goods and services before making a purchase. This represents one of the appealing aspects of social commerce and mobile commerce. Based on the purchasing trends, each mobile commerce site can undergo customisation to suit each customer's shopping habits by offering similar products and services from a range of brands and prices (Turban, King, Lee, Liang, & Turban, 2012).

Companies use social media to keep their customers' informed of their current business activities, new products, exclusive deals and the new ways to use their products. According to Li, Dong and Chen (2012), perhaps the most important success determinant of mobile commerce is the versatility of technology where consumers adapt to their individual and community needs in different social and business contexts. Instead of technological innovation, users' innovativeness drives mobile commerce to greater heights (Chao, Reid, & Mavondo, 2013). Thus, it can be deduced that the incorporation of social media and mobile commerce, also known as mobile social commerce, is the result of that innovativeness.

The advancement of technology provides convenience of accessing online communities mediated by an online environment that created social media. The computer-mediated social environment (Yadav, de Valck, Hennig-Thurau, Hoffman, & Spann, 2013) has aided the exponential growth of online shopping over the last decade. However, Ward, Schlechter and Boshoff (2011) emphasised the reality that the growth is in fact much more sluggish than anticipated. According to their study, the majority of internet users utilised the internet for the search of pre-purchase information rather than actual purchasing. In the fourth quarter of 2018, the growth of e-commerce in the United States was less than projected (Ali, 2019) while China's online retail market grew at a slower pace in the first quarter of 2019 (Lam & Li, 2019). Although the perceived risk is an important predictor for explaining the behaviour, consumers prefer to mitigate possible failures rather than solidify desired buying activities (Pappas, 2016).

Users' engagement in social commerce is expected to enhance business operations by increasing traffic to social commerce platforms, identifying potential business opportunities and optimising the efficacy of marketing campaigns. On the other hand, users' engagement can also improve social interaction reliability between businesses and consumers (Shen, Li, Sun, Chen, Zhang, & Zhao, 2017). However, users' engagement has not been evenly distributed, with only a small portion of users commenting and participating in the discussion (Khan, 2017).

As user-generated content and information sharing become more widely available, the level of perceived risks rises even further. Hence, there are questions in regards to whether user-generated content reviews or comments are real or merely fabrications done by paid reviewers to increase the appeal of websites (Filieri, Alguezaui, & McLeay, 2015). Debates about fake online reviews have raised consumers' awareness and called the credibility of reviews into question (Munzel, 2016). Online reviews are frequently criticised because the information posted on the website often lack identity, comes from unreliable sources and does not usually go through a verification process to ensure authenticity (Kusumasondjaja, Shanka, & Marchegiani, 2012).

The current approaches towards consumer purchasing decisions due to the influence of mobile social commerce in Malaysia needs to be

comprehensively explored. Although perceived risks have been identified as a significant determinant of consumers' purchasing decisions in the online environment, it has not been thoroughly investigated in the context of user-generated content.

Research Objectives

The objectives of this research are as follows:

RO1: To review accessible literature from 2010 to 2020 associated with mobile social commerce purchasing decisions.

RO2: To develop a research framework for the mobile social commerce and consumers' purchasing decisions based on the existing literature.

LITERATURE REVIEW

Mobile social commerce is a relatively new concept that has emerged in the world of digital marketing. The widespread acceptance of smartphones and the advancement of technology has elevated the role of a phone to more than just a communication device. It is because of the popularity of social networking that businesses have begun to use it in conjunction with mobile phone technology to advertise and conduct business. The term 'mobile social commerce' refers to the combination of social commerce and mobile commerce.

Social Commerce

Social commerce is a subset of e-commerce that makes use of social media platforms in enabling consumers to actively participate in knowledge sharing and products and services reviews. It is a combination of social networking and shopping. However, the definition of social commerce varies. Stephen and Toubia (2010) sees it as a form of internet-based social media that allows people to sell and promote goods in online communities and marketplaces. According to Marsden and Chaney (2012), it is a selling channel on a social media website that promotes user-generated content and social interaction. Yadav *et al.* (2013) underlined social commerce as exchange-related activities of consumers at various stages of decision-making in the computer-mediated social environment.

According to Hajli, Sims, Zadeh, and Richard (2017), social commerce is based on three concepts. Firstly, ratings and reviews that provide comprehensive product information to potential customers. Engagement in co-creating content can empower and inform consumers in regards to product experiences of other users and promotes a higher level of trust. The identity of reviewers, on the other hand, has an effect on community members' views. Secondly, in the absence of sales representatives, recommendations and referrals enable consumers to rely on experiences of other users in making purchasing decisions. Finally, through exchanging experiences and knowledge, forums and communities provide social support and promote social interaction.

Connections, communication, and relationship building should be established prior to any actual purchase transactions. Unlike social media marketing, which redirects users to online stores, products are sold within the network at the time of use. Traditional e-commerce websites that host social tools limit consumer interactions to commenting on reviews and are unable to expand further in adding new customers, sending private messages, or creating communities (Hajli *et al.*, 2017). Transactions may occur differently from the original site, which has the same features as traditional e-commerce. Both e-retailers and customers can collaborate on co-creation of content through social commerce platforms. While engaging with customers, e-retailers can create and co-create their page, upload pictures, videos, news and promotions. In addition, the consumer can respond to, comment on, post and rate products and services, as well as engage with e-retailers and other consumers.

Mobile Commerce

The introduction of mobile devices, especially smartphones, has changed the way businesses conduct themselves over the internet and has gone beyond being merely a communication tool for utility (Chong, Chan, & Ooi, 2012). Kevin Duffey coined the word 'mobile commerce' in 1997 when he created the first mobile commerce server, which won the award for 'the most creative mobile product' (Shaik & Gupta, 2014). It was described as the use of wireless technology in offering direct electronic commerce capabilities to consumers anywhere (Madan & Yadav, 2016). Mobile commerce refers to all activities (direct or indirect) involving monetary

consumption or exhaustion of data services provided by a private or public network through telecommunication wireless services using handheld electronic devices (Chhonker, Verma, & Kar, 2017).

Due to a number of underlying principles, mobile commerce has developed at a ground-breaking rate. Ubiquity is viewed as the primary advantage of mobile commerce (Al-Adwan, Alrousan, Al-Soud, & Al-Yaseen, 2019) as it provides seamless connectivity regardless of users' locations. Ubiquity has eliminated spatial and temporal constraints, allowing continuous interaction between businesses and consumers (Prodanova, Martin, & Jiménez, 2017). Mobile commerce is closely linked to mobile apps, which provides consumers the ease of functionality and usability. Apps serve as bridges between operators and customers (Ye & Liu, 2017) that reduces search time and allows for purchase task completion, payment processing as well as product delivery (Ahuja & Khazanchi, 2016). Interactivity is the result of technology-enabled user interactions (Yim, Chu, & Sauer, 2017), enabling peer-to peer discussion on purchasing decisions (Ahuja & Khazanchi, 2016). When accessing the internet through a mobile device, users provide network operators with their location, enabling personalised services and the promotion of goods and services in the local area (Singha & Shukla, 2012; Taleb, Mada, Corici, Nakao, & Flinck, 2017).

Mobile Social Commerce

Academic interest in mobile commerce with social media or social commerce in the mobile sense is growing, resulting in a new research area called mobile social commerce (Sun & Xu, 2019). Kucukcay and Benyoucef (2014) defined mobile social commerce by examining three layers of its components and discussing its technical and functionality in depth. The key factors that affect consumers' intention in utilising mobile social commerce were identified by Liébana-cabanillas, Villarejo-ramos, and Manuel Franco (2014), who suggested the Mobile Social Commerce Acceptance Model as an extension of the TAM model. Sun and Xu (2019) examined 27 papers on terms applicable to the model of social commerce in order to identify some consumer behaviour themes and research studies.

The development of information and communications technologies (ICT) has largely driven the transformation of economic activity in recent

decades, with the internet becoming the most important tool for businesses (Liébana-cabanillas *et al*., 2014). Mobile social commerce involves the purchase and sale of products and services via mobile phones that is connected to social media and enables users to interact in a mobile shopping experience (Zhang, 2016).

Mobile social commerce is reinforced by the features of mobile phone apps and has the add-on social media functions in mobile commerce, all of which emphasises users' generated content. This exclusive characteristic has enabled the sharing and distribution of similar products and services information across social applications, giving mobile social commerce an edge over both social commerce and mobile commerce (Sun & Xu, 2019). An increasing rate of access to social networks through mobile phones, on the other hand, indicates that advertisements on social networks are rejected less frequently and that online purchases are more successful (Liébana-cabanillas *et al*., 2014).

According to statistics, e-commerce in Malaysia generated US\$3,681 million in revenue in 2019, a 27.5% increase over the previous year (E-Commerce Malaysia, 2019), and 58% of e-commerce users made an online purchase via a mobile device (Kemp & Moey, 2019). 44.1% respondents from the MCMC e-commerce consumer survey reported that they used social media to conduct product research to validate product quality through reviews, comments and feedback as well as discover promotions and discounts and learn about new and current trends. 24 million of Malaysian consumers use social media and access it through mobile devices (Kemp & Moey, 2019). Malaysia is also ranked fifth among the top ten fastest-growing e-commerce countries in 2019 (Lipsman, 2019) and has the highest mobile social media penetration in Southeast Asia (Bernama, 2019).

Research Framework

OUM-MyVLE has been used to perform the systematic literature review of this article. A total of 48 journals/articles from year 2010 to 2020 related to mobile commerce, social commerce and mobile social commerce were identified and reviewed for the proposed development of this research framework. Only English language journal articles were taken

from educational journal publishers such as Emerald, Ebsco, and ProQuest.

Table: Number of Articles Reviewed

Variables	No. of articles
Users' Engagement	17
User's Attitude	15
Perceived Risk	16

Users' Engagement on Mobile Social Commerce and Purchasing Decisions

According to Brodie, Ilic, Junic and Hollebeek (2013), consumer engagement implies certain interactive experiences between consumers and brands and/or members of the community, whereas transient engagement implies that the motivational nature creates relational (dependency) among members in the virtual community. A multidimensional concept of cognitive, emotional and behavioural dimensions is also taken into consideration. Mobile technology's popularity is driven not only by its usability, but also by its ability to engage users (Kim, Kim, & Wachter, 2013). The higher the degree of UGC engagement, the higher level of purchasing behaviours (Malthouse, Calder, Kim, & Vandenbosch, 2016). However, consumers must build a sense of passion before they engage; the majority of consumers prefer to associate with brands they are familiar with.

Users' engagement optimises online interactions and increases awareness. The engagement creates a kind of emotional connection between users and businesses, leading to brand loyalty and creating competitive advantages. Businesses are able to establish effective communication with users and overcome the limitations of the traditional advertising model. Since communication is direct, businesses will be able to respond quickly to fundamental changes in users' behaviour on the internet. In this way, businesses will have the advantage of controlling operating costs and generating sales (Turban et al., 2012). Users' engagement has been applied to literature as independent variables in 17 of the journals reviewed. Zheng, Cheung, Lee and Liang (2015) demonstrated that users' engagement is essential in fostering brand loyalty in online brand communities on Facebook. This was based on 185 responses collected during a Facebook event in Hong Kong. According to So, King, Sparks and Wang (2016), 496

hotel and airline customers in Australia suggested that engagement enhances customers' service brand evaluation, brand trust and brand loyalty. Survey responses from 408 of the undergraduate student population in south-eastern U.S. by Di Gangi and Wasko (2016) implied that social and technical factors impact users' engagement and subsequent usage.

Users' Attitude towards Mobile Social Commerce and Purchasing Decisions

Attitude is the tendency to respond to an object with some degree of favourableness or unfavourableness (Ajzen & Fishbien, 1975). Attitude comprises of three aspects: affect, behaviour and cognition, all of which influence how consumers feel about products or services (Kapoor & Madichie, 2012). When consumers develop feelings toward an object (affect), the desire to act (behaviour) develops, shaping the trust in the object's reality (cognition). Consumers are more likely to consider products or services that elicit strong positive attitudes. As a result, purchase intention is determined by the commitment to an attitude.

Ajzen and Fishbein (1975) disclosed that an individual's attitude towards a particular behaviour is based on a judgement of positive or negative feelings. Hence, positive attitudes towards information sharing in online communities would promote such practices. Individuals do not generally share their expertise in all situations, but the versatility of processing and presenting information in a technology-mediated environment allows the intention to share (Yu, Lu, & Liu, 2010). Cho and Son (2019) found that social connectedness positively influences social media attitudes and intentions towards adopting social commerce in apparel shopping. The study involved 445 respondents from a U.S. university. Akman and Mishra (2017) in their study on 142 information technology professionals who were attending a conference in Turkey found that behavioural factors such as trust, enjoyment, social pressure and satisfaction had a positive influence on the consumers' attitude towards usage of social media for commercial purposes. Hajli, Shanmugam, Powell and Love (2015) in their investigation involving 200 respondents from online communities in Malaysia has proved that social support and perceived value construct significantly influences attitude in the continuance of participation in online communities.

Perceived Risks and Mobile Social Commerce Purchasing Decisions

The amount of risks that a consumer perceives when making a purchasing decision or the possible effects of making a bad decision is referred to as perceived risks (Parumasur & Roberts-Lombard, 2012). Purchase activity is discouraged by the uncertainty of the severity of the result and the probability of losses associated with a purchasing decision (Thakur & Srivastava, 2015). Maziriri and Chuchu (2017) posited that any action by consumers will produce several consequences such as the inability to be anticipated and some may likely be unpleasant. Several studies have underscored that consumers continue to believe that online shopping is risky (Bianchi & Andrews, 2012; McCole, Ramsey, & Williams 2010). When faced with doubt on whether purchases would enable them to achieve their purchasing intentions, consumers prefer to prevent losses and take defensive measures.

When negative outcomes are likely to happen or positive outcomes are unlikely to occur, perceived risks will be high. In this situation, consumers tend to pay attention and carefully process information communicated through marketing efforts by collecting more data and evaluating them cautiously (Hoyer, Maclnnis, & Pieters, 2016). The mediating effect of perceived risks can be traced to Hanafizadeh and Khedmatgozar (2012) in the adoption of internet banking services in Iran. 414 completed questionnaires were obtained through a self-administered survey and an internet survey. The results indicated that apart from social risks, other dimensions such as time, financial, performance, security and privacy were found to have significant negative effects on the intention of internet banking adoption while at the same time increases customers' awareness and internet banking adoption. In Benedict and Raju (2019), subjects of the study were the young working professionals of India from the age group 18-35 who shopped for luxury goods online from online shopping sites, social media groups and used courier services for delivery. The results showed that perceived risks partially mediated the relationship between luxury online shopping perception, online purchasing intentions and the fact that precautions were necessary as huge sums were invested in buying luxury goods. Sözer (2019) tested the effect of the mediator role of perceived risks on consumers' purchasing intentions for a winter holiday in Istanbul

City, Turkey. A total of 675 questionnaires were collected. It was found that the effect of discount offers on purchasing intentions was mediated by the perceived risks level of consumers.

Based on the past literature, the research framework for mobile social commerce can be developed and tested in the context of Malaysian consumers as follows:
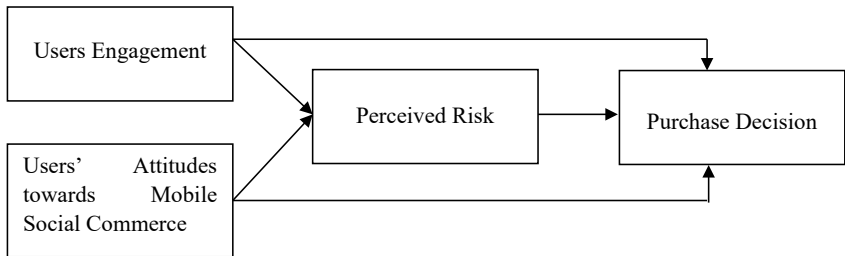

Figure 1: The Proposed Research Framework

CONCLUSION

The adoption of mobile social commerce has changed the way consumers' decisions are made and what influences those decisions. The nature of mobile social commerce engagement formed the initial stage of decision making by diminishing geographical limitations and allowing interactions among users and companies. With the mass penetration of mobile phones, socialising and technology has emerged hence making the presence of users more obvious and increasing the control over their purchasing decisions. Although online businesses have flourished in the past decade and become more popular during the COVID-19 pandemic, there are still consumers with lower risk tolerance who are sceptical with the idea and reluctant to perform online purchases. The unique characteristics of mobile social networks provide the ease and flexibility for the users to engage with the user generated content and knowledge sharing. This has resulted in the reinforcement of positive attitudes towards mobile social commerce. The examination of consumer purchasing decisions through users' engagement, attitudes towards mobile social commerce and the mediating effects of perceived risks provide new insights on how consumers manage risks before arriving at a purchasing decision. The research is expected to collect data from

respondents from Sabah, Sarawak and Wilayah Persekutuan Labuan, and that users' engagement and user's attitude towards mobile social commerce will display significant influence on consumers' purchasing decisions. For future studies, the research may include the mediating effect of trust and involvement of more independent variables to form a more comprehensive and multidimensional model of consumer purchasing decisions in mobile social commerce.

REFERENCES

Al-Adwan, A. S., Alrousan, M., Al-Soud, A., and Al-Yaseen, H. (2019). Revealing the black box of shifting from electronic commerce to mobile commerce: the case of Jordan. *Journal of Theoretical and Applied Electronic Commerce Research, 14*(1), 51–67. DOI: 10.4067/S0718-18762019000100105

Ahuja, V. and Khazanchi, D. (2016). Creation of a conceptual model for adoption of mobile apps for shopping from e-commerce sites - an Indian context. *Procedia Computer Science, 91,* 609–616. DOI: 10.1016/j.procs.2016.07.152

Ajzen, I. and Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological Bulletin, 82*(2), 261–277. DOI: 10.1037/h0076477

Akman, I. and Mishra, A. (2017). Factors influencing consumer intention in social commerce adoption. *Information Technology & People, 30*(2), 356-370. DOI: 10.1108/ITP-01-2016-0006

Ali, F. (2019). US ecommerce sales grow 15.0% in 2018. Retrieved September 29, 2019, from https://www.digitalcommerce360.com/2019/03/13/us-ecommerce-sales-grow-15-0-in-2018/

Benedict, J. and Raju, M. S. (2019). Mediating role of perceived risk on relationship between perception towards online luxury shopping and online purchase intention: A study with reference to young professional in India. *Asian Review of Social Sciences, 8*, 36-41.

Bernama. (2019). Malaysia ranks top five globally in mobile social media penetration, highest in region. Retrieved November 16, 2019, from https://www.nst.com.my/lifestyle/bots/2019/01/456119/malaysia-ranks-top-5-globally-mobile-social-media-penetration-highest.

Bianchi, C. and Andrews, L. (2012). Risk, trust, and consumer online purchasing behaviour: A Chilean perspective. *International Marketing Review, 29*(3), 253–275. DOI:10.1108/02651331211229750

Brodie, R. J., Ilic, A., Juric, B., and Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research, 66*(1), 105-114. DOI: 10.1016/j.jbusres.2011.07.029

Chao, C. W., Reid, M., and Mavondo, F. (2013). Global consumer innovativeness and consumer electronic product adoption. *Asia Pacific Journal of Marketing and Logistics, 25*(4), 614–630. DOI: 10.1108/APJML-02-2013-0025

Chhonker, M. S., Verma, D., and Kar, A. K. (2017). Review of technology adoption frameworks in mobile commerce. *Procedia Computer Science, 122*, 888–895. DOI: 10.1016/j.procs.2017.11.451

Cho, E. and Son, J. (2019). The effect of social connectedness on consumer adoption of social commerce in apparel shopping. *Fashion and Textiles, 6*(1), 1-17. DOI: 10.1186/s40691-019-0171-7

Chong, A. Y. L., Chan, F. T. S., and Ooi, K. B. (2012). Predicting consumer decisions to adopt mobile commerce: Cross country empirical examination between China and Malaysia. *Decision Support Systems, 53*(1), 34–43. DOI: 10.1016/j.dss.2011.12.001

Di Gangi, P. M., and Wasko, M. M. (2016). Social media engagement theory: Exploring the influence of user engagement on social media usage. *Journal of Organizational and End User Computing (JOEUC), 28*(2), 53-73. DOI:10.4018/JOEUC.2016040104

E-Commerce Malaysia. (2019). Retrieved November 10, 2019, from https://www.statista.com/outlook/243/122/ecommerce/malaysia#market-globalRevenue.

Filieri, R., Alguezaui, S., and McLeay, F. (2015). Why do travellers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tourism Management, 51*, 174–185. DOI: 10.1016/j.tourman.2015.05.007

Hajli, N., Shanmugam, M., Powell, P., and Love, P. E. (2015). A study on the continuance participation in on-line communities with social commerce perspective. *Technological Forecasting and Social Change, 96,* 232-241. DOI: 10.21219/jitam.2016.23.1.001

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, 71*, 133–141. DOI: 10.1016/j.jbusres.2016.10.004

Hanafizadeh, P., and Khedmatgozar, H. R. (2012). The mediating role of the dimensions of the perceived risk in the effect of customers' awareness on the adoption of Internet banking in Iran. *Electronic Commerce Research, 12*(2), 151-175. DOI: 10.1007/s10660-012-9090-z

Hoyer, W. D., MacInnis, D. J., and Pieters, R. (2016). *Consumer Behaviour* (7th ed). USA: Cengage Learning.

Kapoor, R. and Madichie, N. (2012). *Consumer Behaviour.* Noida, India: Tata McGraw-Hill.

Kemp, S. and Moey, S. (2019). Digital 2019 spotlight: e-commerce in Malaysia. Retrieved November 10, 2019, from https://datareportal.com/reports/digital-2019-ecommerce-in-malaysia.

Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior, 66,* 236–247. DOI: 10.1016/j.chb.2016.09.024

Kim, Y. H., Kim, D. J., and Wachter, K. (2013). A study of mobile user engagement (MoEN): Engagement motivations, perceived value, satisfaction, and continued engagement intention. *Decision Support Systems, 56*(2013), 361–370. DOI: 10.1016/j.dss.2013.07.002

Kucukcay, I. E. and Benyoucef, M. (2014, September). Mobile social commerce implementation. Paper presented at MEDES 2014 - 6th International Conference on Management of Emergent Digital EcoSystems, Proceedings, Buraidah Al Qassim Saudi Arabia. DOI: 10.1145/2668260.2668276

Kusumasondjaja, S., Shanka, T., and Marchegiani, C. (2012). Credibility of online reviews and initial trust: The roles of reviewer's identity and review valence. *Journal of Vacation Marketing, 18*(3), 185–195. DOI: 10.1177/1356766712449365

Lam, T., and Li, C. (2019). China retail & e-commerce quarterly. Retrieved September 29, 2019, from https://www.fbicgroup.com/sites/default/files/CREQ_10.pdf.

Li, M., Dong, Z. Y., and Chen, X. (2012). Factors influencing consumption experience of mobile commerce. *Internet Research, 22*(2), 120-141. DOI: 10.1108/10662241211214539

Liébana-cabanillas, F., Villarejo-ramos, Á. F., and J, Manuel Franco, S. (2014, September). Mobile social commerce acceptance model: Factors and influences on intention to use S-Commerce mobile social commerce acceptance model. Paper presented at Congreso Nacional de Marketing AEMARKAt: Elche-Alicante, Spain.

Lipsman, A. (2019). Global Ecommerce 2019. Retrieved May 24, 2020, from https://www.emarketer.com/content/global-ecommerce-2019.

Madan, K. and Yadav, R. (2016). An exploration of factors affecting m-commerce adoption in India. *Advances in Economic and Business Management, 3*(1), 1–6.

Malthouse, E. C., Calder, B. J., Kim, S. J., and Vandenbosch, M. (2016). Evidence that user-generated content that produces engagement increases purchase behaviours. *Journal of Marketing Management, 32*(5–6), 427–444. DOI: 10.1080/0267257X.2016.1148066

Marsden, P. and Chaney, P. (2012). *The Social Commerce Handbook: 20 Secrets for Turning Social Media into Social Sales*. New York, NY: McGraw-Hill

Maziriri, E. T. and Chuchu, T. (2017). The conception of consumer perceived risk towards online purchases of apparel and an idiosyncratic scrutiny of perceived social risk: a review of literature. *International Review of Management and Marketing, 7*(3), 257–265.

McCole, P., Ramsey, E., and Williams, J. (2010). Trust considerations on attitudes towards online purchasing: The moderating effect of privacy and security concerns. *Journal of Business Research, 63*(9–10), 1018–1024. DOI: 10.1016/j.jbusres.2009.02.025

Munzel, A. (2016). Assisting consumers in detecting fake reviews: The role of identity information disclosure and consensus. *Journal of Retailing and Consumer Services, 32*, 96–108. DOI: 10.1016/j.jretconser.2016.06.002

Pappas, N. (2016). Marketing strategies, perceived risks, and consumer trust in online buying behaviour. *Journal of Retailing and Consumer Services, 29,* 92–103. DOI: 10.1016/j.jretconser.2015.11.007

Parumasur, S. B., and Roberts-Lombard, M. (2012). *Consumer Behaviour* (2nd ed.). Cape Town: Juta & Company Ltd.

Prodanova, J., Martin, S. S., and Jiménez, N. (2017). Can ubiquity moderate m-banking resource-related negative effects? XXIX Congreso de Marketing Aemark 2017. Sevilla: ESIC. Retrieved from https://idus.us.es/handle/11441/78049

Shaik, A. A. and Gupta, G. K. (2014). M-commerce recommendation with mobile cloud architecture. *International Journal of Application or Innovation in Engineering and Management, 3*(11), 347–351.

Shen, X. L., Li, Y. J., Sun, Y., Chen, Z., Zhang, K. Z. K., and Zhao, S. J. (2017, January). How to increase users' social commerce engagement? A technology attractiveness model. Paper presented at Proceedings of the 50th Hawaii International Conference on System Sciences, Hawai. DOI:10.24251/HICSS.2017.102

Singha, M., and Shukla, A. (2012). Implementation of location based services in Android using GPS and web services. *International Journal of Computer Science Issues (IJCSI), 9*(1), 237.

So, K. K. F., King, C., Sparks, B. A., and Wang, Y. (2016). The role of customer engagement in building consumer loyalty to tourism brands. *Journal of Travel Research, 55*(1), 64-78. DOI: 10.1177/0047287514541008

Sözer, E. G. (2019). The effect of dynamic pricing on holiday purchase intentions: Moderated mediation role of perceived risk. *Advances in Hospitality and Tourism Research (AHTR), 7*(1), 57-84. DOI: 10.30519/ahtr.508933

Stephen, A. T. and Toubia, O. (2010). Deriving value from social commerce networks. *Journal of Marketing Research, 47*(2), 215-228. DOI: 10.1509/jmkr.47.2.215

Sun, Q. and Xu, B. (2019). Mobile social commerce: Current state and future directions. *Journal of Global Marketing, 32*(5), 306–318. DOI: 10.1080/08911762.2019.1620902

Taleb, T., Mada, B., Corici, M. I., Nakao, A., and Flinck, H. (2017). PERMIT: Network slicing for personalized 5G mobile telecommunications. *IEEE Communications Magazine, 55*(5), 88–93. DOI: 10.1109/MCOM.2017.1600947

Thakur, R. and Srivastava, M. (2015). A study on the impact of consumer risk perception and innovativeness on online shopping in India. *International Journal of Retail and Distribution Management, 43*(2), 148–166. DOI: 10.1108/IJRDM-06-2013-0128

Turban, E., King, D., Lee, J., Ting, P. L. and Turban, D. (2012). *Electronic Commerce 2012: A Managerial and Social Networks Perspective* (7th ed.). USA: Person Education.

Ward, S. J., Schlechter, C., and Boshoff, C. (2011). Consumers' perceived risks associated with purchasing on a branded web site: The mediating effect of brand knowledge. *South African Journal of Business Management, 42*(1), 45-54. DOI: 10.4102/sajbm.v42i1.488

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, 27*(4), 311–323. DOI: 10.1016/j.intmar.2013.09.001

Ye, P. H., and Liu, L. Q. (2017, October). Influence factors of users' satisfaction of mobile commerce-an empirical research in China. 3rd Annual 2017 International Conference on Management Science and Engineering (MSE 2017). Atlantis Press. DOI: 10.2991/mse-17.2017.50

Yim, M. Y. C., Chu, S. C., and Sauer, P. L. (2017). Is augmented reality technology an effective tool for e-commerce? An interactivity and vividness perspective. *Journal of Interactive Marketing, 39*, 89–103. DOI: 10.1016/j.intmar.2017.04.001

Yu, T. K., Lu, L. C., and Liu, T. F. (2010). Exploring factors that influence knowledge sharing behavior via weblogs. *Computers in Human Behavior, 26*(1), 32–41. DOI:10.1016/j.chb.2009.08.002

Zhang, Y. (2016). Analysing mobile social media communications to fashion pure-play retailers. UoM administered PhD dissertation, University of Manchester.

Zheng, X. B., Cheung, M. K. C., Lee, K. O. M., Liang, L. L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology & People, 28*(1), 90-106. DOI: 10.1108/ITP-08-2013-0144