The Role of Social Factors in Purchase Journey in the Social Commerce Era

This research examines the influence of information sharing amongst consumers on e-commerce platforms. On this basis, we develop a model for predicting consumers' purchase decisions on social commerce platforms. We use PLS-SEM to analyse online and paper surveys from 310 consumers. The findings suggest that social commerce information sharing increases consumer perceptions of familiarity, perceived ease of use, and perceived usefulness of social commerce platforms. Consumer learning and training of social commerce systems also increased their stated intention to purchase using the platform. We theorise the rise of the hyper-informed consumer that conducts pre-purchase product and shopping platform research to improve purchasing outcomes and as a form of socialising. The authors explain the theoretical contributions and practical implications at the end of the paper.

Keywords: Social Commerce; social commerce information sharing; familiarity; learning and training.

Introduction

Social commerce is still an increasingly common form of e-commerce shopping. The defining feature of social commerce systems is their 'forum for consumer-to-consumer communication.' The afforded social interaction and learning is the key differentiator between social commerce and traditional e-commerce [1]. Consumers are social beings that enjoy shopping in groups and learning from more experienced consumers. Social commerce systems facilitate social interaction amongst consumers similar to social networking systems (SNSs); however, the addition of the shopping cart, payment and delivery methods can evolve SNSs to become social commerce platforms. SNSs enable rapid content creation, distribution and consumption by individuals on social technology platforms [2, 3], facilitating social interaction, creating and maintaining social relationships amongst consumers, and mutual support. Especially in the current COVID-19 economy, where 'couch shopping' is prevalent and consumers crave more social interaction, the research into the information sharing capabilities of social commerce systems has increased in importance.

Consumers support each other online in the social commerce environment by sharing their information and knowledge about products and services [4, 5]. The consumer-to-consumer informational social support found in social commerce platforms improves the shopping process adding value for both businesses and consumers. Consumers can interact with other consumers and learn tremendous amounts or diagnostic information about products and their experienced benefits, the consumption process, the consumption experience, and the related consumption emotions. This research further examines this social shopping phenomenon and discusses the emergence of the 'hyper-informed consumer' that increasingly relies on product insight from more experienced shoppers. We contend that the emergence of hyper-informed consumers is driving the usage of social commerce systems and the increased reliance on consumer-generated information to gather information regarding decision criteria.

Although emerging technologies such as big data analytics and artificial intelligence bring new opportunities to the market [6, 7], social commerce is still an important aspect of the current market. The present research examines different elements persuading consumers to transact on social commerce platforms. Specifically, we look at social commerce information sharing operationalised as ratings, reviews, recommendations, and interactions in online communities and their impact on purchase decisions [1, 8].

Familiarity with social commerce platforms and consumer learning and training are also investigated for their influence on consumer e-commerce platform choice and consumption behaviours. Finally, we integrate the information sharing, familiarity, and learning and training phenomenon into the base technology acceptance model (TAM) [9] that records consumer beliefs of the utility (perceived usefulness) and experience (ease of use) of e-commerce systems. The motivation for the study is to increase our understanding of social, technological, business, and information-sharing aspects of social commerce and their effects on consumer behaviour and purchase decision-making.

A comprehensive model reflecting the influence of the experienced social commerce design features on product evaluations (such as the e-commerce platform's perceived ease of use and usefulness) can provide a better understanding of social commerce system evaluation and behavioural influences and processes of social-commerce shopping. However, research into the influence of social commerce design features on consumer behaviour, decision-making, intention to use, and intention to buy remains limited (Yusuf et al., 2018; Tajvidi et al., 2018; Lin et al., 2019). The exploratory research is grounded in the robust yet parsimonious TAM, which has proven useful in predicting and explaining the behaviour of technology users [e.g., 10]. The research question driving this study asks to what extent social commerce information sharing influences consumer evaluations of a shopping channel and decisions on whether to use it.

Examining the influence of information sharing in e-commerce is one of the main theoretical contributions of this research. The research model measures the importance of information on social commerce platforms. This paper, therefore, adds to the literature that purports that social commerce is different from traditional commerce and is organised as follows: a review of the literature and theoretical background leads us to the study's hypotheses. We discuss the research methodology and research model results, then discuss findings and their theoretical and business implications.

Literature review and theoretical background

The following sections briefly discuss the existing literature and theoretical background for the constructs that make up the research model.

The emergence of social commerce

Social commerce (s-commerce) is a new type of e-commerce where social media accelerate consumer-to-consumer information sharing, which is used to generate social interaction on e-commerce platforms [4]. S-commerce integrates e-commerce elements, social media and social networking elements onto a single platform. Accordingly, s-commerce can be understood as the use of social media and networking strategies in online buying and selling products and services [1]. Over time, s-commerce is transforming online businesses from seller-centric to user-centric due to consumers' effective utilisation of information sharing (Lin et al., 2019; Bussalim & Hussin, 2016; Hajli & Sims 2015). In addition, the study of social commerce is vital as consumers are increasingly using sharing economy platforms [11].

Consumers enjoy and value the information they can receive directly from more experienced consumers. Social commerce, therefore, supports a collaborative and cooperative

approach amongst consumers in the process of online buying and selling (Yusuf et al., 2018; Tajvidi et al., 2018; Lin et al., 2019).

The study of social commerce systems draws on multi-disciplinary research and includes basic tenets from prior marketing, information systems, psychology, and sociology literature [8, 12] and highlights the commercial value of social media and SNSs [13]. Social commerce is positioned as a new paradigm in e-commerce [14] that gives a greater voice to consumers, encouraging consumers to be hyper-informed [15] about their consumption choices and to engage with brands [16]. Furthermore, the growing popularity of social media has been claimed to democratise the Internet to the extent that non-vendor entities can post a product information, breaking the prior control that vendors enjoyed regarding disseminating information about their product offerings [17].

The use of social commerce features such as online forums, communities, ratings, reviews, and recommendations to facilitate the social interaction of consumers are fundamental aspects of social commerce. The defining feature of social commerce systems is the usage of social media technologies to interconnect consumers on e-commerce shopping platforms (Hajli, 2015; Bussalim & Hussin, 2016; Lin et al., 2019). The Facebook social networking system, for example, enables commercial activities through advertisements and shopping services (Facebook commerce or F-Commerce). Amazon.com similarly allows consumers to provide ratings and reviews for all product categories. It is also possible for an e-vendor to develop their shopping platform by adding and supporting online forums, where consumers (and the vendor) can interact and exchange their knowledge about a product or service. Thus, social commerce information sharing is the central activity and defining feature of social commerce and is, therefore, the focus of the current research.

The emergence of the hyper-informed consumer

Consumers differ greatly in their information acquisition processes and diligence. For example, consumers buying a set of headphones for listening to music while running might read the product information on several e-commerce sites. Hyper-informed consumers, however, do not prefer to rely on vendor and rating systems; they seek unbiased product evaluations because they know that some product ratings are 'paid advertising'. The hyper-informed consumer could post questions on running forums or blogs and receive feedback, insight, and advice. They could also read about the experiences and recommendations from prior consumers. The hyper-informed consumer may follow links to a social commerce site posted by another runner with the suggestion to evaluate specific brands and models [5]. Following discussions with other runners on the social commerce site that have purchased similar products, the consumer can make a very well-informed choice about which brand and model to buy based on the reviews, recommendations, and suggestions they received from trustworthy sources.

Technology Acceptance Model

Fishbein and Ajzen [18] introduced the Theory of Reasoned Action (TRA) to explain factors affecting the decision to perform behaviours in the future. TRA suggests that a person who intends (decides) to take action is likely to perform the behaviour. So, the question then became what beliefs of the positive and negative outcomes of performing the behaviour affect the decision to perform the behaviour? The beliefs of the positive and negative outcomes result from performing the behaviour form the attitude towards the behaviour. Other external variables that influence the attitude toward the behaviour – purchasing a product or adopting an information system – are examined in greater detail in the technology acceptance model (TAM). It is based on TRA and refined for the technology adoption decision [19]. TAM, in particular, describes how users decide to accept and use technology. TAM is continually updated and extended to improve the understanding of phenomena [e.g., 20]. Many researchers

have tested the validity and reliability of TAM and demonstrated its ability to explain consumer and employee technology acceptance [21-25].

Identifying relevant predictors and mechanisms is vital to provide a rich understanding of the research phenomenon in specific contexts, thus extending theories [26]. The central aspect of social commerce is information sharing, which we expect affects consumer evaluations of the ease of use and usefulness (a form of utility) of a shopping platform. While the use of UTAUT [27, 28] and UTAUT2 [26] will undoubtedly increase in coming years, TAM still needs to be updated to incorporate the influence of information sharing, which is important for increasingly hyper-informed consumers. Furthermore, with the popularity of SNSs and social commerce, there is the opportunity to study the behaviour of individuals using social media for commerce. Therefore, this study builds a TAM-based research model for the social commerce era.

Research model and hypothesis development

Our research model is grounded in the technology acceptance model (TAM) but focuses on several social commerce phenomena we believe to be inherent to social commerce. The research model is shown in Figure 1, and we justify each hypothesised model relationship in the following section.

Insert Figure 1 here

As proposed by Venkatesh & Davis (1996, 2000), the traditional TAM hypothesised model relationships are formally measured and therefore hypothesised here. The hypothesised relationships have been examined frequently; therefore, the cautious reader is asked to refer to prior studies to learn more about them. This research focuses on the new hypothesised

relationships of the research model, driven by the differences in the social commerce context. Therefore, we hypothesise:

H1. Customers' perceived ease of use of social commerce positively affects their perceived usefulness of social commerce,

H2. Customers' perceived ease of use of social commerce positively affects their intention to buy using social commerce,

H3. Customers' perceived usefulness of social commerce positively affects their intention to buy using social commerce.

The Influence of Social commerce information sharing

During the pre-purchase product evaluation phase of e-commerce shopping, many consumers read and evaluate the ratings and reviews posted by other consumers. Social commerce information sharing is designed to measure the importance and influence of this information sharing process. Consumers who mostly need diagnostic product information are increasingly relying on co-consumer content. Consumers may even be more trusting of the information posted by consumers rather than vendor advertising.

Consumers enjoy sharing pictures of their product and service consumption experiences and reviewing other customers' comments and experiences. What is new about social commerce is that the IT platforms are so easy to use on ubiquitous smartphones that the information shared can be extremely current. For example, a hungry consumer standing outside the restaurant row can see recent customer reviews. Many new online forums for like-minded individuals, such as Reddit, enable consumers to share knowledge, experience, and suggestions. Consumer usage of the information shared by other consumers may make the shopping experience seem easier. Thus, we hypothesise:

H4: Social commerce information sharing affects perceived ease of use by customers using social media.

Further, social sharing posts commonly include pictures and videos of products and product consumption and usage episodes. The images and consumption of emotion shared (both positive and negatively valenced) are experienced cognitively, emotionally, and socially. We expect that the time-harried consumers seeking product information on social networking/friendship platforms are appreciative (and, thus, see value) of the shared diagnostic information. Furthermore, we surmise that consumers conducting s-commerce are thankful that a fellow community member took the time to answer a question or made a more general attempt to aid like-minded consumers.

The social appreciation of informational support is a differentiating factor of s-commerce that deserves to be measured in a variety of s-commerce settings. Information sharing can be experienced as social support, such as when a customer has a question about how to use a purchased product and receives helpful ideas and guidance. This phenomenon has been referred to as social sharing (Hidalgo et al., 2015). The social sharing of information in social commerce settings is likely to communicate product information differently than traditional vendor advertising. Vendor-provided product information often lacks diagnosticity and detail [1, 29].

We expect that social commerce, which enables collaborative shopping and cooperative consumer communities tied together by branded product experiences, will gain in popularity resulting in an evolution in online commerce activities and perhaps shifting in e-commerce platform loyalties. The online retailers that create compelling, easy to use shopping experiences (i.e., VR), rich with high-pixel product usage imagery, will be experienced as the most useful shopping app.

Consumers are likely to value and ascribe high utility (i.e., perceived usefulness) to information received from other customers. Indeed, in the current COVID-19 economy, the social sharing of product consumption has become a welcome form of communication. Thus,

social commerce information sharing will likely make the e-commerce channel more useful. Therefore, we hypothesise:

H5: Social commerce information sharing affects perceived usefulness by customers using social media.

Prior research reports that reviews on Amazon.com and similar e-commerce platforms are now the main sources of information that consumers read and evaluate in their e-commerce shopping [30]. Consumers are providing each other with a much-needed perspective on branded products. Consumer-generated product information adds value for consumers when it provides customer reviews that are not edited by the e-commerce platform [31]. Consumer testimonials describing product delivery and usage are often highly diagnostic and can communicate a strong sense of familiarity with e-commerce shopping platforms and the delivery process. When a consumer views a consumer-generated video of a tourist destination, they can begin to perceive the destination as knowable and familiar. Suppose a consumer watches ten consumer-generated videos reviewing the tourism destination through vicarious consumption. In that case, a consumer can become very familiar with this tourism destination, even though they have not yet travelled there. We predict a similar effect on product purchases and social commerce platform usage. A consumer that views positive consumption experiences is likely to feel more comfortable and familiar with the social commerce platform. Thus, we hypothesise:

H6: Social commerce information sharing affects familiarity for customers using social media.

Familiarity

Awareness, knowledge and information about a particular aspect can be defined as familiarity [32]. Studies suggest that familiarity with Internet vendors, their processes, and trust in the

intermediaries and vendors can increase consumer intentions to purchase (Gefen, 2000; Mittendorf, 2018). The importance of familiarity is recognised in prior e-commerce studies that theorise and demonstrate that familiarity is an antecedent to trust formation (Gefen, 2000, Hajli et al., 2017; Sharma et al., 2017). According to Gefen (2000), "familiarity deals with an understanding of the current actions of other people or of objects, for example [to shop on Amazon familiarity refers to] a specific activity-based cognisance based on previous experience or learning of how to use a software's interface". Familiarity builds a framework for understanding an environment and online vendors in an e-commerce environment [33]. Thus, familiarity is an important factor influencing s-commerce processes and decision-making.

Consumer feelings of ambiguity and uncertainty in online e-transacting contexts are reduced by familiarity [34-36]. When evaluating whether to use an e-commerce website or app, consumers consider how knowledgeable and experienced they are with similar shopping websites [37]. Social commerce platforms facilitating information sharing amongst consumers should help shoppers develop familiarity with new shopping channels. We contend that consumers value what they are familiar with; thus, familiarity with an e-commerce shopping app or channel can increase perceptions of utility, measured here as s-commerce usefulness. In social commerce, the feeling that you are familiar with a product, brand, or shopping channel may often contribute to beliefs that using the e-commerce system is useful, therefore;

H7. Customers' familiarity with social commerce positively affects their perceived usefulness using of using social commerce.

Learning and training

Learning and training in e-commerce research measure the consumer readiness and experience with performing the task being researched (in the current research, e-transacting using an e-commerce website or smartphone application). Learning and training on social

commerce platforms have significantly impacted the adoption process and purchase intentions (Chen et al., 2017; Friedrich, 2016). Learning and training have also been identified as major issues affecting e-commerce transaction levels (Han & Trimi, 2017).

Consumers that have successfully received delivery of products purchased on e-commerce platforms are more understanding of the benefits of e-commerce shopping [38]. We interpret consumers' learning about e-commerce shopping and delivery outcomes as a form of self-training. Learning and training have been shown to increase user acceptance of various technologies [39]. Computer training sessions (e.g., at a consumer expo or corporate training) have similarly been shown to increase the adoption of technologies [40, 41].

Learning and training about an e-commerce platform (by experience or observation) may similarly influence consumer intent to buy on that e-commerce platform. Consumers that gain training and understanding of a technology system should become more adept at deciding whether they want to use the technology system for their tasks. In our e-commerce setting, we contend that consumers with higher levels of learning (perhaps vicarious) experience and prior training with e-commerce processes will be more likely to e-transact in the future. Therefore, we hypothesise:

> *H9. Customers' learning and training of social commerce systems positively affect their intention to buy using social commerce systems.*

E-commerce consumers are continually evaluating the reliability, security, and ease of use of (or conversely level of frustration caused by) e-commerce and the supply chain delivery systems. Social media and information sharing were reported to improve the learning of technology products (Hamid et al., 2010). Similarly, we expect that consumers remembering their ease of transacting (or conversely difficulties and frustrations e-shopping and e-transacting) will influence the consumers' level of learning about the e-commerce platform and

its usages and outcomes. Therefore, learning and training will proceed earlier if social commerce is perceived as being easy to use. Consequently, we hypothesise:

> *H8. Customers' perceived ease of use of social commerce positively affects their learning and training using social commerce.*

Research methodology

Survey research and structural equation modelling were utilised to estimate the hypothesised relationships of the research model. This section delineates the overall research methodology and specifically the measurement approach, instrument development, and aspects of survey administration.

Measurement and instrument development

All but one of the scales used to measure the research constructs have been adopted from existing studies and previously validated for e-commerce research. Best practices for information systems research recommends that new research models should utilise prior scales whenever possible, to improve the content and construct validity [42]. Accordingly, the scale to measure social commerce information sharing was adopted from a prior study of social sharing through online forums, communities, ratings, reviews, recommendations, and referrals [1]. Scales to measure perceived ease of use, perceived usefulness, and intention to buy are adopted from prior technology acceptance research [37, 42]. An original scale to measure consumer learning and training in e-commerce systems was generated. All constructs and the survey items are available in the appendix, Table 4.

Both qualitative and quantitative methods were utilised in the scale development and overall scale modification. In the qualitative approach, the study invited third parties without prior knowledge to check the survey items and overall structure. The external review identified

a few item ambiguities, which the authors clarified. Once the preliminary version of the questionnaire was deemed suitable for data collection, two research experts reviewed the questionnaire, and further item refinement was performed. These steps describe a qualitative assessment of the scales, which increase face validity and content validity [43, 44]. A substantial literature review of the area also supported the qualitative validity improvement of the study. Validity and reliability are also addressed quantitatively using average variance extracted (AVE), composite reliability, and construct validity, which are discussed below.

Data collection: Survey administration and subject

To collect data, a paper questionnaire was distributed in the UK. Subjects were screened to ensure they were familiar with different e-commerce shopping platforms and had e-transacted, paid by credit card, and received delivery of their e-commerce purchase within the prior six months. Individuals with no recent e-commerce shopping transacted were not included in the sample.

The authors increased survey responses by sending survey invitations to Facebook, LinkedIn, and Twitter online communities. In addition, several mailing lists were employed to invite individual participation. A total of 900 survey requests (through emails and paper questionnaires) were made, out of which 330 responses were received and 310 surveys were screened to be completed and usable. The combined acceptance rate of 34.4% comprised 59% male and 41% women. Eighty-six percent of respondents were university graduates, and 97% of participants were members and regular users of social networking sites such as Facebook, LinkedIn, Twitter, or TripAdvisor.

Data analysis and results

PLS-SEM was used for model estimation. Prior research establishes the validity of using PLS-SEM for performing path analytic modelling, factor analysis, and measuring the construct and model reliability and validity (Gefen, et al., 2000; Chin, 1998). PLS has been described as a suitable method for causal models [45], and efficient for estimating path relationships for small sample sizes (Gefen et al., 2000). PLS-SEM is also considered the most suitable tool when the theory is emerging, the data is rich, and the emphasis is on prediction (Gefen et al., 2011). According to Gefen and Straub (2004), "PLS combines a factor analysis with multiple linear regressions to estimate the parameters of the measurement model (item loadings on constructs) together with those of the structural model (regression paths among the constructs) by minimising residual variance." Accordingly, this research employs structural equation modelling (SEM) as this approach has several advantages over other traditional methods, specifically using Smart-PLS software to estimate the model's paths and test the research hypotheses.

Instrument validation

Scale Reliability and Validity

Results reported in Table 1 below suggest that each research scale exhibited sufficient composite reliability. In addition, all constructs have a value higher than 0.70 in both composite reliability and Cronbach's alpha, which indicates that the scales have good reliability [46]. The upper part of Table 1 shows the reliability test.

Insert Table 1 here

Evidence of construct validity is provided by measures of convergent validity and discriminant validity. All constructs have an AVE higher than 0.55, which has been considered adequate for information systems research [47, 48]. For discriminant validity, the latent variable correlations

should be less than the square root of AVE (the centre diagonal of Table 1), and the minimum value of the square root of AVE should be 0.70 [49]. Besides, multicollinearity results are presented in the appendix, Table 5. Variance inflation factor scores (VIF) were each less than 2, except for a mild cross-loading of familiarity and perceived usefulness VIF = 3.2. Therefore, multicollinearity is not considered a major concern for this study. Furthermore, all variable correlations are less than the square root of the AVE, suggesting discriminant validity.

Further evidence of item discriminant validity is evidenced by the low item cross-loadings presented in Table 2. It was recommended that the factor loadings of an indicator to its factor need to be greater than with any other factor [49, 50]. No significant cross-loadings were found.

Insert Table 2 here

Common method bias

In order to check the common method bias, we applied the method of Podsakoff, MacKenzie, Lee, & Podsakoff (2003). According to this method, we have adopted most of our scales from previous research and improved them by showing them to experts familiar with this type of study. We also mixed the survey items for all research variables such that successive items measured different research variables. The next step to rule out common method bias was to run a factor analysis. An unrotated exploratory factor analysis indicated six factors, explaining 53% of the total variance. According to Chin, Thatcher, & Wright (2012), these results reject the likelihood of only one general factor emerging from the data; thus, common method bias was ruled out for the current sample.

Structural model

Figure 2 and Table 3 report the PLS estimated paths of the research model. The results show that each path of the research model is positive and significant at the 0.05 level. The research

model exhibited strong predictive validity and explained 56% of the variance of perceived usefulness (PU); 25% of the variance in perceived ease of use (PEOU); 16% of the variance in familiarity (F); and 15% of the variance in learning and training (L&T). Overall, the research model was able to explain 35% of the variance in intention to buy (IB) and, thus, exhibited significant explanatory power.

Insert Figure 2 here

Table 3 below reports the PLS estimated paths of the research model. Results indicate that perceived usefulness, perceived ease of use, and learning and training each has a positive and significant effect on consumers' intention to buy (supporting H3, H2, and H9). The effect of PEOU on consumer purchase intent was most pronounced (β=.50). PEOU also supports H8 by its positive and significant effect on learning and training. Similarly, social commerce information sharing contributed to higher levels of PEOU, PU, and familiarity (supporting H4, H6, and H5). Social commerce information sharing contributed to positive perceptions of the shopping channel as recorded by higher levels of PEOU, familiarity, and perceived usefulness.

These results indicate that the social interaction of users in social commerce systems leads to increased perceptions of familiarity, shopping system ease of use, and the usefulness of using social commerce systems. Model estimates also suggest that familiarity and PEOU have both a positive and significant effect on PU. Therefore, the corresponding hypotheses H7 and H1 are supported. The path coefficient analysis shows that familiarity has a much higher effect than PEOU (50% vs 13%), highlighting that greater familiarity provides greater perceived usefulness for social commerce users. Perhaps consumers are creatures of habit; once they find an e-commerce system that has performed to their expectations, their familiarity with the

system drives continued 'loyalty and interest' with the system, as measured by elevated perceptions of the social commerce systems' usefulness.

Insert Table 3 here

Discussion

The Covid-19 pandemic has encouraged consumers to purchase more of their products using e-commerce shopping and supply chain systems as an alternative to in-store shopping. We have observed that consumers are expanding e-purchases from packaged goods into more complex and varied product and service categories (i.e., meals, furniture, contractor services, vehicles, mortgages). We expect that consumers will continue to utilise e-commerce platforms, specifically social commerce platforms, to research and purchase a wider set of products because of increasing levels of consumer-to-consumer product information. To reduce the chance of purchase failures, consumers want to make purchases based on various information inputs. Traditional e-commerce systems predominantly display vendor-crafted messages of product details and consumption emotions. Findings presented here suggest that consumers will increasingly shift product evaluation and purchases to social-commerce systems that facilitate rich consumer-to-consumer information support.

Due to the changing nature of what products and services can be researched and purchased online, we expect consumers to seek more diagnostic product information and spend more time pre-purchase to learn about the risks, benefits, and likely outcomes from the product consumption. In the current COVID-19 economy, to replace in-store shopping as a form of entertainment and diversion, we expect consumers to spend more hours shopping online and learning directly from more experienced consumers. This consumer quest to become more knowledgeable about product purchases has been termed the 'hyper-informed consumer'. As a

form of social interaction and perhaps a demonstration of social status, consumers generate large amounts of content to share their knowledge and consumption experience with other consumers. This information-rich environment has developed some e-commerce platforms into social commerce platforms. The current research generated and tested an original research model to investigate the impact of this consumer interconnectivity on e-commerce purchasing behaviours.

Using PLS-SEM to analyse the research model, this research confirms the TAM-based relationships. It provides evidence that familiarity has a greater effect on the perceived usefulness of a shopping platform than its perceived ease of use. Consumers expect that e-commerce systems are easy to use; therefore, the reduced amount of variance in e-commerce platform PEOU may be reducing its influence on evaluations of the usefulness of a shopping platform. Our research model demonstrates that consumers base evaluations of the usefulness of an e-commerce platform largely on the familiarity it provides, which is based on the prior (perhaps vicarious) shopping experience.

Results presented here also prove that learning and training significantly affect the intention to buy. Consumers that learn about an e-commerce platform are more likely to use it in the future. This finding suggests the importance of new shopping channels to utilise different training mechanisms to inform consumers that their e-commerce platform is robust. An original contribution of this research is the finding of social commerce information sharing (the defining aspect of social commerce systems): it is shown to have a significant effect on the perceived ease of use, perceived usefulness, and familiarity of using the e-commerce platform. Social commerce information sharing is ratings, reviews, recommendations, and referrals of consumers in an online context. Results suggest that consumers factoring information learned from other consumers into these e-commerce system evaluations. Further, the positive impact that social commerce information sharing, familiarity and learning and training have upon

perceived usefulness and intention to buy suggests that the popularity of s-commerce may be due to users' perception that they are easy to use and familiar forms of e-shopping.

In particular, the results reveal that the usefulness of e-commerce systems is improved by consumer information sharing. In addition, the social commerce information sharing made possible through online forums, communities, ratings, reviews, and recommendations act to increase consumer perceptions that it is easier to acquire information about the products and services, leading them to believe social commerce systems are easier to use and are more useful. Results also indicate that increasing consumer familiarity with an e-commerce system forms the believe that the system is more useful.

Theoretical and practical implications of this research

The first theoretical contribution presented is the empirical evidence that social commerce information sharing improves consumer evaluations of e-commerce systems (specifically, beliefs that an e-commerce channel is easy to use and useful). As an influence of beliefs that an e-commerce system is useful, the information sharing capability of an e-shopping platform was reported as being just as important as the platform's ease of use. This finding is used to demonstrate the impact of social commerce information sharing on the current phenomenon of the hyper-informed consumer. By modelling the influence of social commerce information sharing on important factors used to evaluate technology, this research provides a better understanding of consumer behaviour and explains the increasing attraction of consumers to social commerce platforms. Consumers appear to find great utility in reading product information from other consumers and observing the consumption experience, including the consumption emotion. In the COVID-19 era of reduced disposable income, consumers greatly value the information they can glean from more experienced consumers.

Another theoretical contribution is the inclusion of consumer learning, training, and familiarity measures into a technology adoption research model. The findings suggest that familiarity with an e-commerce platform greatly increases beliefs about its usefulness. Moreover, higher levels of consumer learning and training about the e-commerce platform affect an individual's decision to use the e-commerce platform. The results suggest that for social commerce, the influence of information sharing on familiarity with products and the shopping experience and outcomes increases consumer beliefs of the benefits of system usage and decisions to use the social commerce channel. Though there are various studies using trust along with other constructs in evaluating consumer behaviour and purchase intentions (Hajli, 2015; Bussalim & Hussin, 2016; Lin et al., 2019; Sharma et al., 2017), the concept of familiarity, which is considered as one of the antecedents of trust, has not been used in the majority of prior social commerce studies.

Limitations and future research

The study asked participants to evaluate their usage of e-commerce systems and any social commerce features they had. Future research should further identify new social media features and capabilities and ask more specific questions about which social media features are most valued (e.g., reading reviews vs viewing video clips) to discover which aspects of information sharing are providing the benefits recorded here. Similarly, future research can examine when consumers value short textual reviews versus professionally produced videos that are designed to increase web traffic. Another suggestion for future research is examining which information type (positive review vs negative rant) is most influential to consumers performing their pre-purchase evaluation.

Further scale development can help identify which technology features are being utilised and which types or formats of product information are most diagnostic and valued. The

research model can also be extended to include trust and/or vendor credibility to identify which aspect of social media information sharing increases consumer trust or vendor trustworthiness in a product or shopping platform. Finally, the types of information shared in social communities are changing and are likely to be different on social networking or social commerce sites. For example, consumers may visit a set of websites to gain diagnostic product information and a different set of websites to see images and videos of the consumption experience and consumption. The types of information (i.e., lacking emotion vs portraying the consumption emotion) will influence consumer shopping and assessments differently and is an interesting avenue to investigate. Some types of information can be informative and diagnostic but not elicit purchase transactions, while other types of information content may drive consumption behaviours.

Conclusion

This research provides a model of how consumers decide to transact on social commerce platforms. The addition of measures of information sharing, learning and training, and familiarity offers insight into the e-commerce context and the influence of social commerce features on consumer evaluations of the technology platform. We contend that the COVID-19 climate is creating the emergence of a new consumer classification; the hyper-informed consumer is e-shopping for entertainment and social interaction. For this emerging class of consumers, social commerce features are becoming increasingly important such that e-shopping platforms and apps can further differentiate their shopping experience by providing a unique twist on the consumer-to-consumer interaction. Results reported here suggest that social commerce information sharing can influence consumer product and platform evaluations and resultant e-transaction activity. With the accelerating switch to contactless e-commerce, continued research into the social aspects of e-commerce shopping is increasingly important.

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Figures

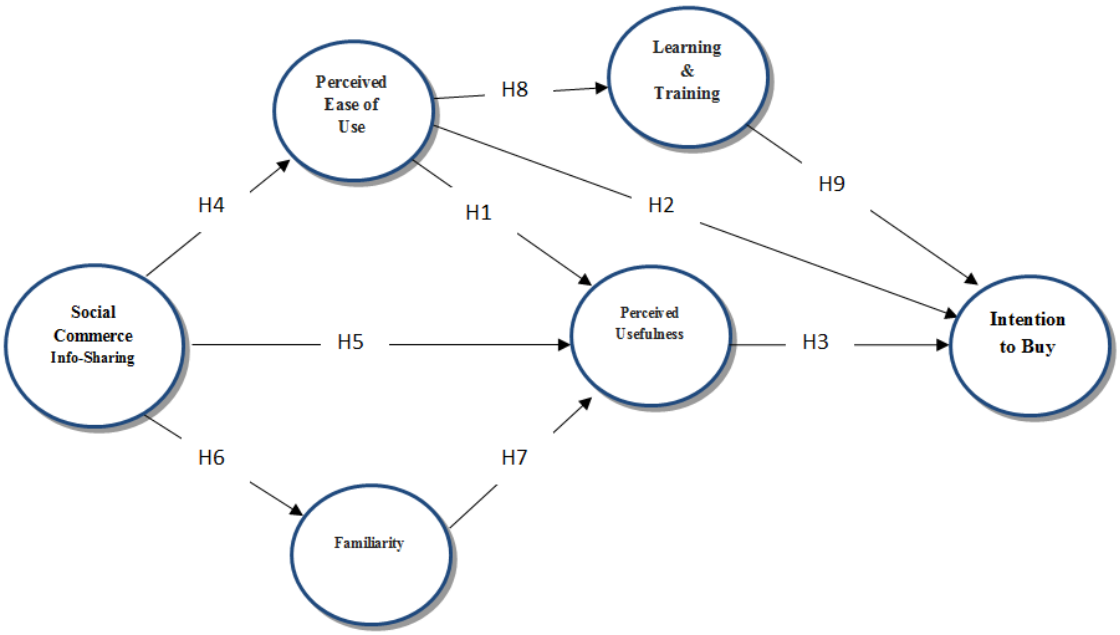
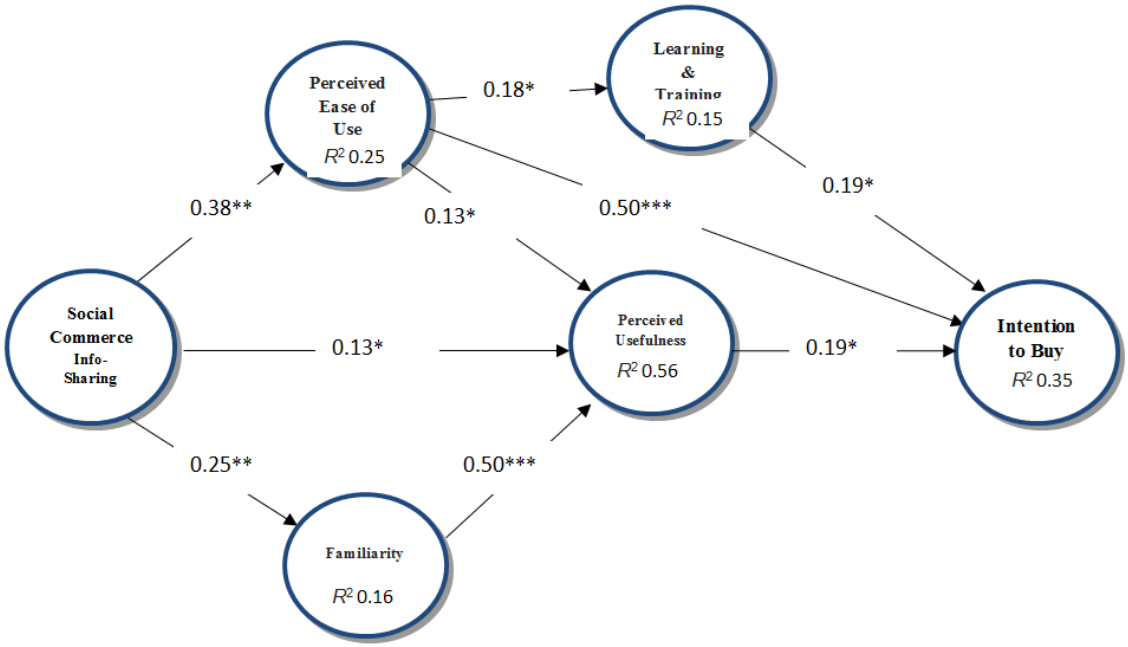


Figure 1: Research model



* p <.05; ** p <.01; ***p <.001.

Figure 2: Results of the PLS Analysis

Tables

Constructs	1	2	3	4	5	6
1. Familiarity	0.90					
2. Intention to buy	0.26	0.76				
3. Learning & Training	0.18	0.31	0.82			
4. Perceived ease of use	0.409	0.52	0.18	0.75		
5. Perceived usefulness	0.69	0.40	0.25	0.42	0.83	
6. Social commerce information sharing	0.25	0.30	0.33	0.38	0.33	0.76
AVE	0.87	0.57	0.70	0.56	0.69	0.59
Composite Reliability	0.93	0.72	0.82	0.84	0.87	0.81
Cronbach's Alpha	0.85	0.71	0.71	0.74	0.77	0.71

Note: The values in diagonal are square root of average variance extracted (AVE)

Table 1: Reliability and square of correlation between constructs

	Familiarity (FA)	Social commerce information sharing (SCIS)	Intention to buy (IU)	Learning & Training (L)	Perceived ease of use (PE)	Perceived usefulness (PU)
FA1	0.92	0.22	0.20	0.16	0.35	0.61
FA2	0.94	0.24	0.27	0.16	0.38	0.67
SCIS1	0.09	0.70	0.24	0.27	0.16	0.22
SCIS2	0.29	0.87	0.20	0.24	0.36	0.26
SCIS3	0.14	0.81	0.28	0.27	0.30	0.26
IU1	0.02	0.16	0.70	0.27	0.26	0.14
IU2	0.30	0.27	0.88	0.22	0.48	0.41
L1	0.25	0.21	0.17	0.74	0.14	0.26
L2	0.08	0.32	0.31	0.91	0.15	0.17
PE1	0.37	0.29	0.34	0.14	0.73	0.24
PE2	0.34	0.31	0.38	0.08	0.76	0.31
PE3	0.27	0.27	0.45	0.15	0.75	0.39
PE4	0.22	0.25	0.36	0.16	0.74	0.29
PU1	0.64	0.26	0.35	0.26	0.33	0.87
PU2	0.64	0.33	0.35	0.14	0.40	0.89
PU3	0.39	0.21	0.29	0.23	0.32	0.71

Table 2: Cross Loadings

Hypothesis	Relationships	Path Coefficient	Results
H1	Perceived ease of use → Perceived usefulness	0.13	YES
H2	Perceived ease of use → Intention to Buy	0.50	YES
H3	Perceived usefulness → Intention to Buy	0.19	YES
H4	Social commerce info-sharing → Perceived ease of use	0.38	YES
H5	Social commerce info-sharing → Perceived usefulness	0.13	YES
H6	Social commerce info-sharing → Familiarity	0.25	YES
H7	Familiarity → Perceived usefulness	0.50	YES
H8	Perceived ease of use → Learning & Training	0.18	YES
H9	Learning & Training → Intention to Buy	0.19	YES

Table 3.0 Overview of Results

Appendix Table 4.0

Codes	Scales	Factor Loadings
Intention to Buy - Adopted from Gefen et al. [37]		
IU1	Q1. I am very likely to continue providing the online vendor with the information it needs to better serve my needs.	0.70
IU2	Q2. I will continue to purchase from online vendors using my credit card.	0.89
Perceived Usefulness - Adopted from Gefen et al. [37]		
PU1	Q6. Searching and buying on e-commerce platforms is helpful to me.	0.87
PU2	Q5. Searching and buying on the Internet makes my life easier.	0.90
PU3	Q7. E-commerce websites enable me to search and buy materials faster	0.72
Familiarity - Adopted from Gefen [34]		
FA1	Q3. I am familiar with searching and shopping for products on the Internet.	0.93
FA2	Q4. I am familiar with buying products using e-commerce websites.	0.94
Social commerce information sharing - Adopted from Hajli (Hajli, 2015)		
SC1	Q9. When shopping online I use online forums and communities for acquiring product information.	0.70
SC2	Q11. I usually view people's product ratings and reviews when e-commerce shopping.	0.87
SC3	Q12. I usually rely on people's recommendations when shopping and buying online.	0.81
Perceived Ease of Use - Adopted from Gefen et al. [37]		
PE1	Q8. It is easy to become skillful at using the e-commerce web site.	0.73
PE2	Q10. Learning to operate the e-commerce Web sites is easy.	0.76
PE3	Q13. The e-commerce site that I use for my online shopping is flexible to interact with.	0.76
PE4	Q14. My interaction with e-commerce sites is clear and understandable.	0.75
Learning and Training – New scale		
L1	Q16. I have learned to use the Internet to shop online and make purchases.	0.93
L2	Q15. My technology skills enable me to easily conduct online shopping.	0.94

Appendix Table 5: VIF (1 divided by 1 minus R-square)

Constructs	1	2	3	4	5	6
1. Familiarity						
2. Intention to buy	1.3					
3. Learning & Training	1.2	1.4				
4. Perceived ease of use	1.6	2.0	1.2			
5. Perceived usefulness	3.2	1.6	1.3	1.7		
6. Social commerce information sharing	1.3	1.4	1.5	1.6	1.5	