The Adoption of Social Commerce among Micro Enterprise in Malaysia: A Conceptual Framework

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ABSTRACT

Social media is used by diverse demographics for a variety of purposes. It is a huge contributor to the 24-hour news cycle, a forum for conversation about any topic, a platform for organization and a place for businesses to connect with clients. The extended usage of this platform for business purposes is called social commerce. This research aims to study the adoption of social commerce in micro small and medium enterprises (micro-SMEs) in Malaysia by using the collaborative model of the Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB) and Information Systems (IS) Success Model. This study will investigate the phenomenon of low social commerce adoption among micro-SMEs. A total of 450 questionnaires will be equally distributed to business owners in Klang Valley, Penang, and Johor Bahru. The collected data will be analysed using Structural Equation Modelling (SEM) technique. The outcome of this study is expected to have important implications for theory by extending the body of knowledge in terms of research framework through the integration of TAM, TPB and IS Success Model with the adoption of three extended elements, Trust, (T) Cost (C) and Readiness (R). The implication for practice is that it should offer insights for improving national digital policies and strategies to improve the s-commerce adoption among micro-SMEs.

Keywords: Social Commerce, Social Commerce Adoption, Technology Acceptance Model, Micro Enterprise, Theory of Planned Behaviour, Information System Success Model

INTRODUCTION

Social media, such as Twitter, Facebook, Instagram, and LinkedIn are defined as a group of Internet-based applications built on the ideological and technological foundations of Web 2.0 which allow the creation and exchange of user-generated (Hashim et al., 2017; Kaplan, 2015; Rauniar et al., 2014). It connects people and allows them to have fun through open feedbacks and unlimited sharing within a confined space and shortest time (Adam et al., 2016; Ali et al., 2019; Yahia et al., 2018). Other than that, social media is not only a communication tool for amusement but also a vital marketing tool in business (Syaifullah et al., 2021), though it was initially used to facilitate virtual interactions among virtual organizations, but now it has emerged as an important element in communications by opening more opportunities for business-to-business (B2B) and business-to-customer (B2C) (Adam et al., 2016). When used successfully, social media allows firms to improve several business activities. These may

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include, for example, relationships with trading partners, sharing information, and managing communications and logistics across supply chains (Ahmad et al., 2018).

It is well established that small-to-medium enterprises (SMEs) can benefit from the use of social media (Ainin et al., 2015; Dahnil et al., 2014; Ghezzi et al., 2016; McCann & Barlow, 2015; Wamba & Carter, 2014). Herein, the social media tools have benefited and enhanced the e-commerce, e-marketing, and e-shopping usage behaviours by allowing users to obtain information about any offered commodities in the easiest, fastest, and most familiar way, (Foltz et al., 2016), thereby increasing retail profit. The growing importance of social media and e-commerce applications has resulted in new purchasing patterns, where businesses and customers make more successful transactions by optimising the use of social network (Ali et al., 2019). Progressively, the usage of social media and social networking platforms evolved, spawning a new e-commerce division known as social commerce (s-commerce) (Adam et al., 2016; Ali et al., 2019; Hidayatulloh, 2018; Sheikh et al., 2019). S-commerce is considered as a subset of e-commerce (Adam et al., 2016; Ali et al., 2019; Hidayatulloh, 2018; Sheikh et al., 2019) and known as "a term that often used to describe new online retail models or marketing strategies that incorporate established social networks and/or peer-to-peer communication to drive sales" (Bamansoor et al., 2020, p. 101). Now, it is one of the vital fields and one of the fastest-growing areas within high-tech sector, particularly in trading and commercial environments (Bamansoor et al., 2020; Sheikh et al., 2019).

Despite the advantages reported above, according to studies conducted by SME Corp Malaysia, the usage of e-commerce and social media is still low (Adam et al., 2016). Although many Malaysians have begun to buy and sell via social media, there are still limited studies on s-commerce. As most of the previous studies focused on studying consumer's shopping behaviour in the domain of s-commerce (Al-Arfaj et al., 2019; Zhou, 2019; Aydin, 2019; Sun et al., 2019), this study will take a similar approach but shift the focus to micro-SMEs using s-commerce with social media platform as an enabler.

This paper is structured as follows: the subsequent section presents an overview of s-commerce amongst micro-SMEs in Malaysia, and reviews of the theories used. The research methodology is discussed next with the final section providing concluding remarks by highlighting the potential implications of the study for theory and practice.

LITERATURE REVIEW

Adopting information technology (IT) in an enterprise is a difficult and time-consuming procedure that must be completed successfully (Wang et al., 2019). IT adoption is linked to organisational conditions that help or impede IT adoption. Individuals, associations, and interconnected organisations are all adopters of IT. There are several models commonly applied for IT recognition and adoption (Johny & Bhasi, 2015; Samarasinghe & Silva, 2019). Recent studies showed that TAM and TPB serve as the foundation of technology adoption studies within various contexts (Koul & Eydgahi, 2017; Pouti et al., 2020). DeLone and McLean (1992) suggested, but did not empirically verify, a concept of information system (IS) performance built on a systematic review of past literature inclusive of six constructs namely system quality, information quality, usage, user satisfaction, individual influence, and organisational impact (Lacap et al., 2019; Sabherwal et al., 2006). Many researchers have adopted, adapted, and extended the IS success model to assess e-commerce achievement (Sura & Ahn, 2019).

Social Commerce

Social commerce (s-commerce) is a variation evolving from e-commerce by capitalizing on the usage of large reservoirs of social capital and interaction data inherent in widespread social media. The s-commerce is built upon the usage of e-commerce (Gibreel et al., 2018).

Electronic commerce (e-commerce) refers to businesses conducted online (Wang & Zhang, 2012; Hashim et al., 2020; Lim et al., 2019; Mohamad et al., 2020; Nik Hashim et al., 2019; Omar et al., 2020). Turban et al. (2010) provided a more precise description of e-commerce, stating that e-commerce is the process of buying, selling, transferring, or exchanging products, services and/or information using computer networks mostly the Internet and intranets. E-commerce can be divided into four main categories namely business-to-business (B2B), business-to-consumer (B2C), consumer-to-business (C2B), and consumer-to-consumer (C2C).

Since the advent of Amazon.com in 1995, thousands of businesses have taken up residence on websites. The history of e-commerce is unthinkable without Amazon and eBay, which were among the first Internet companies to make electronic transactions available. Currently, e-commerce has become the primary approach in conducting business (Zulkiffli et al., 2020). The E-Commerce Consumers Survey 2018 (ECS 2018) released by the Malaysian Communications and Multimedia Commission (MCMC) in June 2019 revealed that 51.2% of Malaysians use e-commerce platforms to shop and sell online in the past 12 months. The e-commerce market in Malaysia has shown a positive trend, with gross value added contributing 6.3% to gross domestic product (GDP) in 2017. Furthermore, value-added for e-commerce increased from RM75.0 billion in 2016 to RM85.8 billion in 2017 (MCMC, 2018). As shown in Figure 2.11, Statista (2019) reported that revenues gained by Malaysia's e-commerce market is approximately USD3 billion.

Figure 1: Revenue in E-Commerce Market in Malaysia
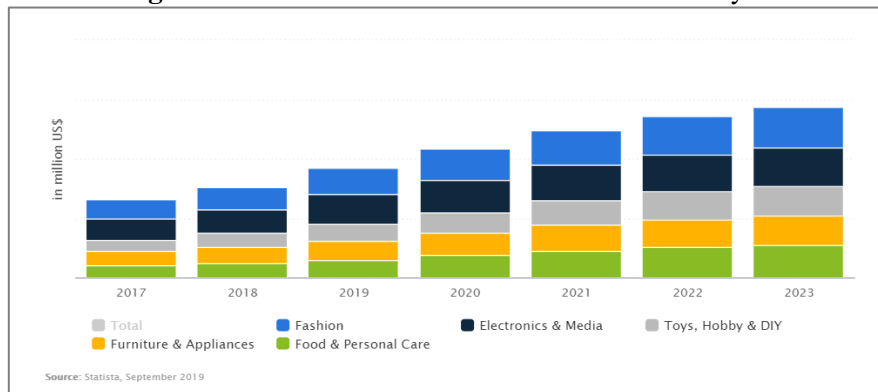
Social media is described as a collection of Internet-based applications based on the theory and technologies of Web 2.0 that allow the development and sharing of ideas (Kaplan, 2015). Social media has evolved as a medium for people to communicate and have fun by providing open reviews and exchanging an abundance of information in a brief period of time (Adam et al., 2016; Ali et al., 2019). It provides an unparalleled platform for people to disseminate knowledge through a wide range of applications such as blogs, Wikipedia, and websites (Hashim et al., 2017; Hocevar et al., 2014). The presence of millions of users on social media sites is exciting for businesses as social media platforms are much more effective in

providing diverse opportunities to SMEs for interacting with consumers and other important stakeholders such as suppliers and employees (Rauniar et al., 2014; Sangi et al., 2020).

Social media, which initially facilitated interactions among virtual organizations, has emerged as an important element in communications, where it has opened more opportunities for B2B and B2C businesses and the country's economy in general (Adam et al., 2016; Cham et al., 2021). In regard to this, Facebook is one of Malaysia's most famous social networking sites due to the fact that nearly all people prefer Facebook to other social networking platforms. As illustrated in Figure 2.12, a study conducted by the Malaysian Communications and Multimedia Commission (2020) titled Internet Users Survey 2020 showed that Facebook is used by 91.7% of Malaysian social network users. The current trend shows that social media has been used for business transactions in which is considered as an innovation in e-commerce. Hence, social media must actively be used by businesses to boost revenues and engage with customers.

Micro-Small-and-Medium Enterprises (micro-SMEs)

SME Corp. Malaysia (2021) defines micro-SMEs (micro-enterprises) in Malaysia as businesses establishments with sales turnover of less than RM300,000 or employees of less than five. Based on the statistics reviewed, 98.5% businesses established in Malaysia are SMEs with 76.5% of the SMEs being micro-SMEs (SME Corp, 2018). Figure 2 illustrates the profile of SMEs in Malaysia divided by size and sector. SME Contributes 38.9% (RM552.3 billion) of Malaysia's GDP in 2019. The services sector continuously dominates the SMEs activities with a contribution of 63.3%, and the SMEs GDP of services sector augmented to 42.7%, predominantly by wholesale and retail trade, food and beverages, and accommodation sub-sector (SME Corp, 2020).

Figure 2: Profile of SMEs in Malaysia
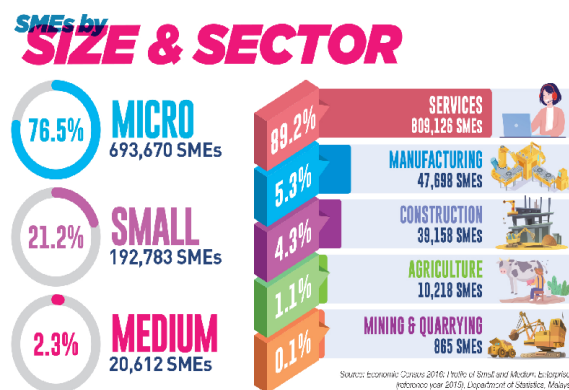
Malaysia can offer wide opportunities for these micro-SMEs to establish their businesses online.

HYPOTHESIS DEVELOPMENT

Based on the reviewed literatures, a total of 14 hypotheses, eight with direct relationship and six with indirect relationship, developed in this study. Six independent variables are perceived ease of use (PEOU), perceived usefulness (PU), subjective norm (SN), trust (T), cost (C), and readiness (R), one moderator which is user experience (UE), and three dependent variables which are attitude towards s-commerce (A), user satisfaction (US) and usage loyalty (UL).

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is the most used model for s-commerce adoption. (Koul & Eydgahi, 2017; Lai, 2017; Sarker et al., 2019). It has been adopted, adapted, and extended in a wide range of contexts. TAM is used to research user preferences for social features on e-commerce websites, s-commerce drivers, and the analysis of different e-commerce variables (Sarker et al., 2019). The independent variables for TAM are PEOU and PU (Chatterjee & Kumar, 2020).

Perceived Ease of Use (PEOU)

PEOU appears in the TAM, advanced by Davis et al. (1989). If a consumer believes that the application of technology or system is not difficult but can be done easily, the user will not refuse to use the technology or system as it is otherwise useful (Venkatesh et al., 2012). This conviction is synonymous with the notion that it is vital for an individual to extend certain initiatives in order to utilise a device or technology (Chatterjee & Kumar, 2020). PEOU is often thought to affect micro-SMEs' acceptance and usage of e-commerce (Cho & Son, 2019). It has been shown that if an advancement makes it easy for users to use, users are more likely to adopt that invention (Ware, 2018). This demonstrates that PEOU has a favourable relationship with the application of modern technologies. As a result, if Malaysian micro-SMEs believe that using a technology like s-commerce is not synonymous with uncertainty, the micro-SMEs will not think twice about using and implementing s-commerce. This leads to the formulation of the following hypothesis.

H1: *There is a positive relationship between Perceived Ease of Use (PEOU) and Attitude towards s-commerce (A).*

Perceived Usefulness (PU)

PU is an intangible measure in which a user believes that using a device can help the users improve overall efficiency (Davis et al., 1989). If the users believe that using s-commerce can significantly increase entrepreneurial competitiveness, users will not hesitate to use the technology (Maia et al., 2018). The use of e-commerce will improve the efficiency of SMEs (Sullivan & Koh, 2019; Fatima & Bilal, 2019). Several studies showed that PU has important ties with users' intentions to adopt new technology, such as using s-commerce (Othman et al., 2019). It has been discovered that PU has a positive relationship with the overall deployment of new technologies (Kim & Chiu, 2019; Solangi et al., 2019). PU variable is also perceived to have a significant impact on s-commerce acceptance. For these inputs, the following hypothesis is proposed:

H2: *There is a positive relationship between Perceived Usefulness (PU) and Attitude towards s-commerce (A).*

Theory of Planned Behaviour (TPB)

TPB is frequently used to predict the change of behaviour, particularly the behaviour linked to technology use (Ajzen, 2020). Subjective norm in TPB reflects one's perception of others' relevant opinions on one's decision to perform a behaviour (Ajzen & Fishbein, 1980). In the context of s-commerce, gaining social support from others is one of the most important reasons for online social interaction (Hajli et al., 2015). A supportive SN is said to lead to the formation of a favourable attitude to the extent that people believe they can execute the behaviour in question (Ajzen, 2020). Therefore, the following hypothesis is formulated:

H3: *There is a positive relationship between Subjective Norm (SN) and Attitude towards s-commerce (A).*

Trust (T), Cost (C), Readiness (R)

In the process of s-commerce adoption, several variables affect their behavioural intention to adopt the system, including trust (Moser et al., 2017; Abed, 2018; Al-Arfaj et al., 2019), cost (Rahayu & Day, 2015; Al-Saedi et al., 2020; Sutomo et al., 2020) and readiness (Mohammed et al., 2013; Jamali et al., 2015; Awa et al., 2015). Trust (T) is one of the most key success indicators influencing the implementation of a modern information system (Al-Saedi et al., 2020). Cost (C) relates to the degree to which companies assume that implementing technologies would be prohibitively expensive (Al-Saedi et al., 2020). Individuals are more inclined to utilise s-commerce as they may profit from reduced prices, in addition to how they find s-commerce to be useful and simple to use (Noh et al., 2013). Readiness (R) is defined as managers' understanding and assessment of the extent to which they believe their companies possess the awareness, resources, dedication, and power to implement s-commerce (Tan, et al., 2007). One with higher degree of readiness will be more inclined to use e-commerce (Yeni & Yasri, 2020). Based on the foregoing, this study assumes the following:

H4: *There is a positive relationship between Trust (T) and Attitude towards s-commerce (A).*
H5: *There is a negative relationship between Cost (C) and Attitude towards s-commerce (A).*
H6: *There is a positive relationship between Readiness (R) and Attitude towards s-commerce (A).*

Attitude (A), User Satisfaction (US), Usage Loyalty (UL)

Ajzen (2020) claimed that supportive subjective norm and favourable attitudes lead to the formation of favourable behavioural intentions to the extent where people believe that they can perform the behaviour. DeLone and McLean (2003) posited that variability in the quality and intensity of a system is likely to have a significant impact on the realization of the benefits of a system, which is more likely to enhance user satisfaction. Although some researchers replaced the intention to use, DeLone and McLean (D&M) IS success model with PU dimension (Mun et al., 2010; Alhulail, et al., 2018; Nistah et al., 2019), DeLone and McLean (2003) believed that system usage is an appropriate measure of user satisfaction in most cases. The relationship between the uses and user satisfaction of a system is interrelated (DeLone & McLean, 2003). Besides, it has been suggested that there is a strong relationship between satisfaction and loyalty (Alhulail et al., 2018). Researchers have also investigated the relationship between satisfaction and loyalty in the B2C e-commerce context (Zatalini & Pamungkas, 2017). Faraoni et al. (2019) found satisfaction to have a positive impact on loyalty. Thus, the following hypotheses are formulated:

H7: *There is a positive relationship between Attitude towards s-commerce (A) and User Satisfaction (US).*

H8: *There is a positive relationship between User Satisfaction (US) and Usage Loyalty (UL).*

User Experience (UE)

In research conducted on the use of Internet of things (IoT) in China by Dong et al. (2017), it was discovered that experience has a significant influence upon the perception of usefulness. Researchers also highlighted that user experience has become an interesting topic where different frameworks, factors and facets of the concept have been developed. Shi and Chow (2015) discovered that customers' prior transaction experience with a company does not contribute to their trust in the company's brand page in s-commerce website, indicating that customers' prior experience could moderate the trust transfer process. Kumar et al. (2017) learned that user experience changes user behaviour to use government services electronically rather than through conventional government channels in India.

A study by Wang and Law (2019) revealed that prior Internet experience moderates the relationship between website usability and booking intention in making hotel room reservation. Web users who have mastered the necessary skills in navigating the Internet are prone to purchase online frequently compared to those with less Internet experience. Park et al. (2012) stated that online firms should maintain a good reputation with their customers if they wish to hold their trust. Alhulail et al. (2018) found that positive user experience encourages users to overcome difficulties and barriers they may face when using the system. In addition, Adam et al. (2016) believed that prior experience in using technology can moderate the relationship between the influential factors and attitude towards s-commerce. According to Al-Adwan and Kokash (2019), s-commerce constructs, familiarity and user experience have a positive influence on the PU and PEOU of s-commerce. Therefore, user experience is included in this study and the following hypotheses is formulated:

H9: *The positive relationship between Perceived Ease of Use (PEOU) and Attitude towards s-commerce (A) will be stronger when User Experience (UE) is higher.*

H10: *The positive relationship between Perceived Usefulness (PU) and Attitude towards s-commerce (A) will be stronger when User Experience (UE) is higher.*

H11: *The positive relationship between Subjective Norm (SN) and Attitude towards s-commerce (A) will be stronger when User Experience (UE) is higher.*

H12: *The positive relationship between Trust (T) and Attitude towards s-commerce (A) will be stronger when User Experience (UE) is higher.*

H13: *The positive relationship between Cost (C) and Attitude towards s-commerce (A) will be stronger when User Experience (UE) is higher.*

H14: *The positive relationship between Readiness (R) and Attitude towards s-commerce (A) will be stronger when User Experience (UE) is higher.*

The conceptual framework of the study is developed based on the reviewed literature as illustrated in Figure 3.

Figure 3: Conceptual Framework

Conceptual Framework
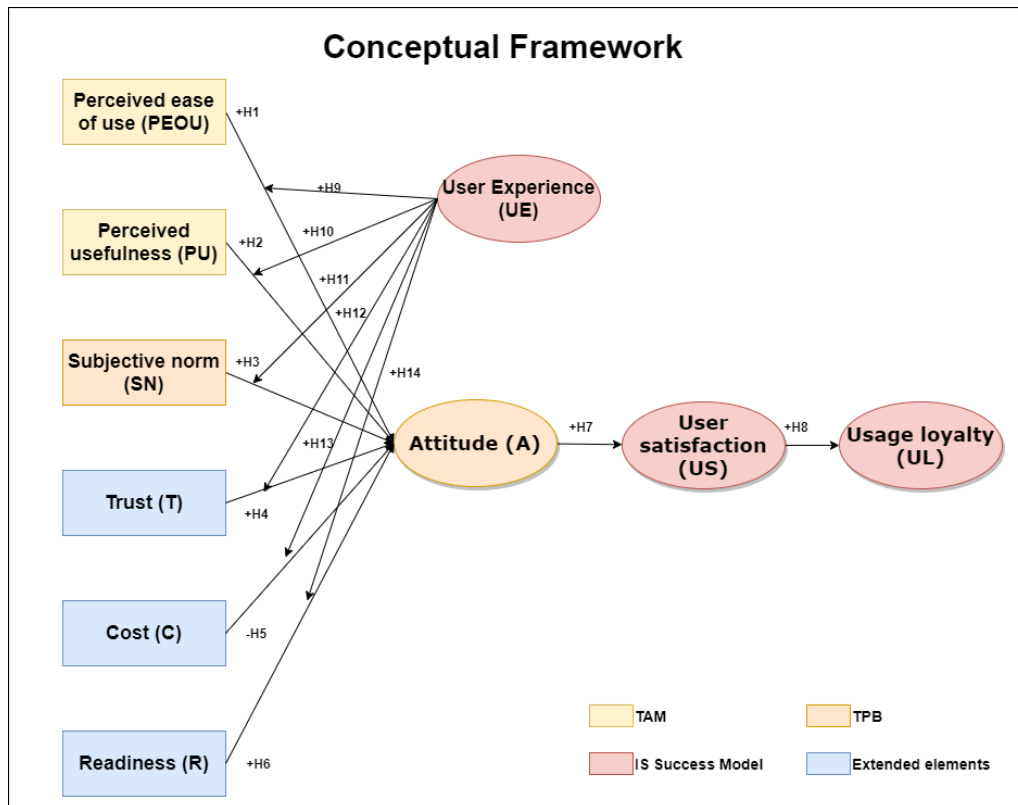
RESEARCH METHODOLOGY

This study will proceed with data collection with micro-SME owners being the unit of analysis. Survey questionnaire items will be adopted from prior related studies with good reliability and validity. The statistical software used in this study is the Partial Least Squares – Structural Equation Modelling (PLS-SEM), using SmartPLS 3.0. Structural Equation Modelling (SEM) is a family of statistical models that seek to explain the relationships between multiple variables because SEM has the ability to estimate multiple and interrelated dependence relationships, represent unobserved concepts in these relationships, account for measurement error in the estimation process, and define a model to explain the entire set of relationships (Hair et al., 2017; Schumacker & Lomax, 2016; Kline, 2016; Wetson & Gore Jr., 2006). In general, it investigates the structure of interrelationships expressed in a series of equations, which is analogous to a series of multiple regression equations. These equations show all of the relationships between the constructs (both dependent and independent variables) in the analysis.

DISCUSSIONS, IMPLICATIONS AND FUTURE RESEARCH

In this study, the researchers set out to build the conceptual framework based on TAM, TPB and IS Success Model. These features were integrated and a pilot study using 30 respondents will be conducted to ascertain the reliability and validity of the items used to set the stage for a robust data collection that will enable the researchers to evaluate the structural model

Theoretical Implications

The study provides theoretical implications in terms of developing a research framework by integrating and adopting key elements in the established technology acceptance theories. The study integrates the extended TAM with TPB and IS success model to better understand the behaviour and motivation behind technology adoption. The findings will provide empirical evidence for the conceptual framework proposed by this study.

Managerial Implications

It is crucial for the local sellers to understand the importance of the adoption of s-commerce. Micro-SME owners would benefit through the adoption of s-commerce as it opens another door for businesses to expand their business online and possibly reach the global market. This study will provide insights to micro-SME owners in terms of the need to balance the factors and barriers in the s-commerce adoption to enhance the firm performance.

Future Research Directions

In conclusion, this study will set out to investigate social commerce adoption to accommodate the growing influence of social commerce adoption among micro-SMEs in Malaysia. This study will identify the factors influencing the adoption of s-commerce among micro-SMEs owners and assess the relationships of these factors towards attitude, satisfaction and usage loyalty of s-commerce among them. In future, the study may also be replicated in other settings such as different platforms, as well as different populations.

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