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INTEGRATION OF SOCIAL MEDIA MARKETING IN TAM MODEL IN SME LANDSCAPE

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Abstract

Small and medium-sized businesses (SMEs) must adapt their business sustainability in light of the current circumstances if they hope to survive the epidemic. Building businesses that expose consumers to a new path for opportunity and growth is made possible by expanding the usage of technology. Similarly, online social media marketing has become increasingly important in the present business niche. However, social media marketing is still underutilised by SMEs. Social media marketing boosts revenue and competition advantage. Social media marketing is a potent tool that business management may use to aid in marketing and sales to draw people to make online purchases. To analyse the social media marketing impacting customers' purchases online, hence, the objective of this study is to propose an innovative framework by including social media marketing into the Technology Acceptance Model (TAM). These social and technological play a crucial role in advancing to start up the economic recovery as we shift to the endemic phase. The present study employs convenience sampling, a non-probability sample technique, to gather responses from Malaysian online users through a questionnaire survey. This study utilised the Partial Least Square Structural Equation Modelling (PLS-SEM) approach. A total of 392 respondents' usable questionnaires were obtained consequently. The study's findings indicated that all relationships significantly influence purchase intention on social commerce websites. Besides, the discovery of TAM revealed its role as a partial mediator between the relationships. The study emphasises the role of social media marketing to guide measuring the effectiveness of marketing technology.

Keywords: Purchase intention, social media marketing, TAM, trust

1. Introduction

Social media played an important role in curbing these challenges. Social media is a strong influencer in the world of e-commerce (Haque et al., 2009). It gives a great platform to share and recommend products and services that can serve to raise brand awareness, build buyer confidence, and boost sales. According to HubSpot, 71% of shoppers are more inclined to make a buy after seeing it on social media. Currently, SMEs are slowly recovering from the initial economic hardship caused by the COVID-19 outbreaks. Employment numbers and revenues continue to increase but remain below pre-pandemic levels. Through social media, SMEs can improve their access. The various platforms enable SMEs to not only directly establish their customers, but also to build a company voice and tone that is vital to anything they want to promote. With the transition of businesses to digital platforms, small and medium-sized enterprise (SME) owners acknowledge the significance of social media in effectively adjusting and competing in the era of the New Normal. Nevertheless, numerous organisations find themselves navigating unfamiliar terrain when it comes to utilising social media for small-scale enterprises.

The increasing prevalence of social commerce in recent years illustrates how the success of internet technology enhances customers' personal, social, and professional lives. When examining client behaviour in the context of social commerce, it is evident that purchasing habits are mostly driven by personal motivations and are largely voluntary (Rauniar et al., 2014). The Technology Acceptance Model (TAM) developed by Davis in 1989 is a widely recognized paradigm for examining the behavioural patterns of consumers while adopting new technology. This study aims to analyse the possible connections between factors associated with social media marketing and Technology Acceptance Model (TAM). Specifically, we will investigate the influence of trust on the relationship between perceived ease of use and purchase intention, as well as the impact of perceived usefulness on purchase intention. These findings will provide insights into the effects on Small and Medium Enterprises (SMEs). Although TAM is considered robust, antecedents of social media marketing integrated with TAM have been neglected, thus the relationship is deemed for the study.

2. Problem Statement

The COVID-19 pandemic has been a global issue. Governments worldwide have endeavoured to address the situation by implementing stringent legislation to restrict the transmission of the virus. These measures include advising individuals to carry out activities within their homes (such as work, study, and religion) and implementing a strategy of physical or social distance. Consequently, businesses, especially SMEs, have experienced a decline in demand (Nicola et al., 2020). SMEs encounter challenges in responding to risks and covering the expenses associated with a decrease in business activity. These challenges include a lack of financial resources, liquidity, workforce, customers, and the adoption of new technologies (Bayramov et al., 2023; Sumiati, 2020). Although previous studies have investigated TAM, however, antecedents of social media marketing have been neglected, thus reinforcing the need to study the contribution of social media marketing to consumer purchase intention s. Different authors tried to explain the phenomenon of social media marketing from different perspectives. Limited studies had

integrated between social media marketing to TAM. This study aims to address this research gap by examining the interaction between social media marketing and TAM from a comprehensive perspective.

3. Research Questions

The interest in the research begins with the questions, "What are the factors that affect purchase intention in the SME landscape?" and "Does trust play a significant role as a mediator between TAM constructs and purchase intention?" As there is a dearth of research in the SME setting, it is critical to integrate the social media marketing and technology acceptance model which was previously ignored by past researchers.

4. Aims of the Study

In this respect, the research aims to examine factors determinants purchase intention in the SME landscape. Besides, the research proposes a new model by integrating social media marketing into the Technology Acceptance Model TAM.

5. Research Methods

The present study was created based on previous studies and applied a quantitative approach with non-probability convenience sampling. The questionnaire pursues to gather valid information from consumers regarding social media marketing purchase intention. The survey was conducted by using a self-administered questionnaire survey. Before the data collection, the study used a pre-test that involved three experts in the field of social media marketing as recommended by Hawkins et al. (2014). About 392 respondents participated and these analyses are depicted below.

5.1. Instrument Development

The present study measured five (5) constructs namely social media marketing, perceived ease of use, perceived usefulness, trust, and purchase intention. The respondents only qualified for those who have social media accounts. The questionnaire contained close-ended questions using The Likert scale ranging from 1 to 7, with 1 representing strong disagreement and 7 representing strong agreement. Lewis (1993) confirmed that the 7-point Likert scale is the highest scale that can give a stronger correlation with a good t-test value.

5.2. Data Collection

The data were obtained via a self-administered survey. This study targeted users on social media accounts as they are consistently using the platforms for various activities. After all, there were a total of 392 respondents participated in the survey. Kline (1998) stated "it is generally accepted that a sample size of fewer than 100 is considered small. A sample size ranging from 100 to 200 is categorised as a medium, while a sample size over 200 is classified as large". Meanwhile, Comrey and Lee (1992) justified the sample size as 50. It has a significant lack of quality. while 100 is poor, whereas 200 is fair, furthermore,

300 is good and 500 is very good also 1000 is excellent". Therefore, the present study followed the rule of thumb by Kline 1998 which indicated above 200 sample size considered as large. For this study, the sample size was identified as a total of 392 respondents. As a result, detailed respondents were comprised of 131 males and 261 females. Moreover, academic qualifications were reported with 91 respondents a Diploma, 91 a bachelor's degree, and 210 a master's degree and higher. Besides, the age of respondents ranged between 25 to 29.

6. Findings

The present study used the PLS-SEM technique of Structural Equation Modelling. The suitability of PLS-SEM across diverse fields of study was extensively demonstrated in various studies (Henseler et al., 2015), such as studies on information systems (Dibbern et al., 2004), e-business (Pavlou & Chai, 2002), organisational behaviour (Higgins et al., 1992), and consumer behaviour (Reinartz et al., 2004). Further, PLS-SEM can analyse the model with a reflective or even formative measurement model (Henseler et al., 2015). Given the abovementioned, PLS-SEM was deemed for the present study.

6.1. Measurement Model Assessment

To establish and confirm the hypotheses testing, the present study was tested to establish convergent and discriminant validity by determining that the identified constructs are unrelated. The convergent validity was assessed by three (3) measures namely, (i) Composite Reliability - CR, (ii) Average Variance Extracted - AVE, and (iii) outer loadings. For convergent validity, the CR values of perceived ease of use, PU, purchase intention, social media marketing, and Trust are above 0.9 meanwhile, the values of AVE for perceived ease of use, perceived usefulness, purchase intention, social media marketing, and Trust were above 0.6 and the loading was above 0.6. Hence, the results of all the criteria fit the rule of thumb (Hair et al., 2014). For the discriminant validity results, the Heterotrait-Monotrait HTMT was imposed for the ratio of correlation. The HTMT is one of the power methods to achieve high-level sensitivity rates between range (97% up to 99%) indicating the uniqueness of each of the constructs is uncorrelated. Table 1 shows that all of the correlation values were lower than the square root of AVE. Consequently, there are no concerns regarding the discriminant validity of the measuring model used in the research.

Table 1. Discriminant validity results

	PEOU	**PU**	**PI**	**SMM**	**TRUST**
PEOU					
PU	**0.741**				
PI	0.586	**0.42**			
SMM	0.59	0.433	**0.513**		
TRUST	0.425	0.431	0.503	**0.337**	

Notes: PI = Purchase intention; SMM = Social media marketing; PU = Perceived usefulness; PEOU = Perceived ease of use

6.2. Structural Model Assessment

The examination of the structural model was conducted using a measurement approach to the hypotheses in the research model of the one-tailed test type. Overall, the results were significant with the estimated strong path coefficients. The study revealed the impact of social media marketing on the perception of ease of use as significant with t-statistics of 13.775 (p=0.000) meanwhile, the correlation between social media marketing and perceived usefulness was found with t-statistics of 8.454 (p=0.000) besides, the perceived ease of use with trust identified as substantial with the t-statistics of 2.763 (p=0.000) also, the perceived usefulness with trust found as t-statistics of 3.338 and for the relationship between trust and purchase intention reported as significant with the t-statistics 10.491 (p=0.000). Therefore, the hypotheses of H1 and up to H5 were supported. The summarization hypotheses table is presented in Table 2 below. Besides, Figure 1 tabulated the bootstrapping structural model.
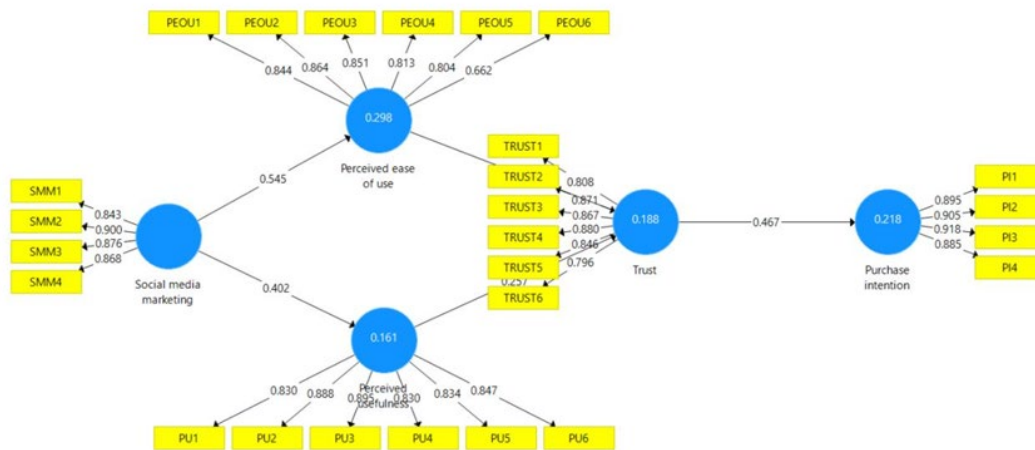

Figure 1. Results of bootstrapping of the structural model

6.3. Mediation Analysis

The descriptive statistics are presented in Table 1. For the mediation analysis, the present study measured trust within the constructs of perceived ease of use and purchase intention H6 and for the perceived usefulness and purchase intention H7. The present study used the bootstrapping approach followed by the rule of thumb (Preacher & Hayes, 2008). The result proved that there is a significant value on both mediating results as the trust value between perceived ease of use and purchase intention with the t-statistic of 2.522 (p=0.006) meanwhile, perceived usefulness and purchase intention with the t-statistic of 3.077 (p=0.001). Therefore, the mediating relationship was identified as partial mediation for both results. Table 2 below depicts a summary of the mediation hypotheses and Figure 2 illustrates bootstrapping for mediation analyses.
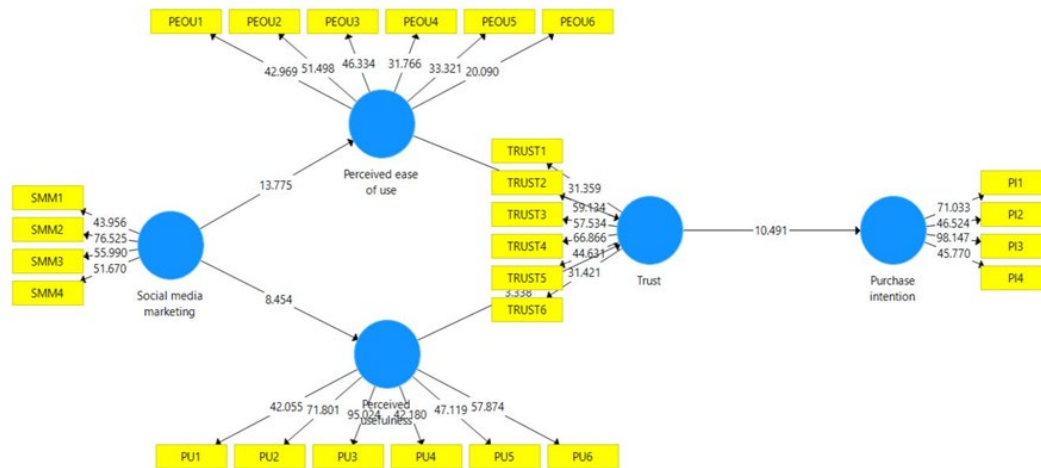
Figure 2. Results of bootstrapping procedure for mediation effect

Table 2. The summary of the model relationship

Hypotheses	Path	T- Statistics	P-values	Results
H1	Social media marketing → perceived ease of use	13.775	0.000***	Supported
H2	Social media marketing → PU	8.454	0.000***	Supported
H3	Perceived ease of use → Trust	2.763	0.000***	Supported
H4	Perceived usefulness → Trust	3.338	0.000***	Supported
H5	Trust → purchase intention	10.491	0.000***	Supported
H6	Perceived ease of use → Trust → purchase intention	2.522	0.006***	Supported
H7	Perceived usefulness → Trust → purchase intention	3.077	0.002***	Supported
***p<.001, **p<.05, *p<.01				

7. Conclusion

The current study's objective is to analyse which factors are most significant toward consumers' purchase intention on social media platforms. The study also aims for trust as a mediating function between both relationships as shown in the model. Hence, the present study has extended the technology acceptance model with social media marketing to measure at the consumers' level how consumers are influenced by technological and social environmental factors. The finding of this analysis contributes to the high significance of all the relationships. H1 and H2 which are social media marketing significantly influence both perceived ease of use and perceived usefulness. Up to the researcher's knowledge, a lack of studies has measured such relationships. Thus, this study has confirmed the existence of both relationships. Meanwhile, H3 and H4 proposed that perceived ease of use, and perceived usefulness had a significant effect on trust thus, consistent with the previous studies (Liao et al., 2021; Manis & Choi, 2019; Tarofder et al., 2023). Meanwhile, connections between trust and purchase intention H5 reported highly significant findings hence, supported by the previous studies (Harrigan et al., 2021). Thus, all the relationships support H1 up to H5. Besides, for the mediation analysis, and found that the perceived ease of use, perceived usefulness, and purchase intention are full mediation via trust. Thus, the finding is

similar to the previous studies which found full mediation between the relationship (Harrigan et al., 2021; Nangin et al., 2020; Syaharani & Yasa, 2022). Based on the area of this study, perceived ease of use, PU will improve the efficiency of the system website enhance consumers' trust, and lead to purchase intention. The consumers specifically, investigate trust concerns when buying products on the internet. Consumers may be reluctant to engage in any websites to purchase if they distrust the website (Nangin et al., 2020). Previous literature by Kusyanti et al. (2018) posits that perceived usefulness and perceived ease of use are the most influential to information system acceptance. The integration of trust with TAM perceived ease of use and perceived usefulness are important assessments by consumers before they can purchase online. Therefore, the mediating effect of trust increases TAM constructs, and purchase intention is deemed to be accepted.

In conclusion, SMEs are encouraged to build a strong social media presence by having an active social media community such as Facebook, LinkedIn, Twitter, Telegram, and YouTube. Active social media marketing would contribute to the perceived ease of use and perceived usefulness of customers. When customers find that social media marketing is easy to use, and useful, it builds the trust of using the platform. Capitalizing on the power of social media marketing by SMEs would contribute to purchase intention through trust.

The present study is not without limitations, which opens a new strategy for upcoming researchers and practices. First, this study is only focusing on the consumers level, future research could generalize to SME companies. Second, this study has not focused on one social media platform; therefore, future research should focus on one single platform. Third, this study underlines with TAM model, and that is possible that future research may integrate with other theories and variables. Hence, the future study should fill the loops by exploring new factors that affect the relationship in the model.

References

Bayramov, S. V., Kookueva, V., Kolobov, A., & Tsvetkova, L. (2023). Innovative Business Models in the Context of Organizational Culture Transformation in the COVID-19 Pandemic. *Public Organization Review, 23*(1), 365-387. https://doi.org/10.1007/s11115-022-00688-9

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd Ed.). Lawrence Erlbaum Associates, Inc.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340. https://doi.org/10.1016/S0305-0483(98)00028-0

Dibbern, J., Goles, T., Hirschheim, R., & Jayatilaka, B. (2004). Information systems outsourcing: a survey and analysis of the literature. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems, 35*(4), 6-102. https://doi.org/10.1145/1035233.1035236

Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review, 26*(2), 106-121. https://doi.org/10.1108/ebr-10-2013-0128

Haque, A., Tarofder, A. K., Rahman, S., & Raquib, A. (2009). Electronic transaction of internet banking and its perception of Malaysian online customers. *Afriican Journal of Business Management*, *3*(6), 248–259. https://doi.org/10.5897/AJBM09.036

Harrigan, M., Feddema, K., Wang, S., Harrigan, P., & Diot, E. (2021). How trust leads to online purchase intention founded in perceived usefulness and peer communication. *Journal of Consumer Behaviour*, *20*(5), 1297–1312. https://doi.org/10.1002/cb.1936

Hawkins, R. J., Swanson, B., Kremer, M. J., & Fogg, L. (2014). Content Validity Testing of Questions for a Patient Satisfaction With General Anesthesia Care Instrument. *Journal of PeriAnesthesia Nursing, 29*(1), 28-35. https://doi.org/10.1016/j.jopan.2013.05.011

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

Higgins, C., Linda, D., & Catherine, L. (1992). *Balancing work and family : a study of Canadian private sector employees*. National Centre for Management Research and Development, Western Business School. University of Western Ontario.

Kline, R. (1998). *Principles and practice of structural equation modelling*. Guilford Press.

Kusyanti, A., Puspa, H., Rahma, D., & April, Y. (2018). Teen's Social Media Adoption: An Empirical Investigation in Indonesia. *International Journal of Advanced Computer Science and Applications, 9*(2). https://doi.org/10.14569/ijacsa.2018.090252

Lewis, J. R. (1993). Multipoint scales: Mean and median differences and observed significance levels. *International Journal of Human-Computer Interaction, 5*(4), 383-392. https://doi.org/10.1080/10447319309526075

Liao, S.-H., Hu, D.-C., Chung, Y.-C., & Huang, A.-P. (2021). Risk and opportunity for online purchase intention - A moderated mediation model investigation. *Telematics and Informatics, 62*, 101621. https://doi.org/10.1016/j.tele.2021.101621

Manis, K. T., & Choi, D. (2019). The virtual reality hardware acceptance model (VR-HAM): Extending and individuating the technology acceptance model (TAM) for virtual reality hardware. *Journal of Business Research, 100*, 503-513. https://doi.org/10.1016/j.jbusres.2018.10.021

Nangin, M. A., Barus, I. R. G., & Wahyoedi, S. (2020). The Effects of Perceived Ease of Use, Security, and Promotion on Trust and Its Implications on Fintech Adoption. *Journal of Consumer Sciences, 5*(2), 124–138. https://doi.org/10.29244/jcs.5.2.124-138

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery, 78*, 185-193. https://doi.org/10.1016/j.ijsu.2020.04.018

Pavlou, P. A., & Chai, L. (2002). What Drives Electronic Commerce across Cultures? A Cross-Cultural Empirical Investigation of the Theory of Planned Behavior. *Jounal of Electronic Commerce Research, 3*(4), 240–253. https://doi.org/10.1.1.144.1549

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal of Enterprise Information Management, 27*(1), 6–30. https://doi.org/10.1108/JEIM-04-2012-0011

Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The Customer Relationship Management Process: Its Measurement and Impact on Performance. *Journal of Marketing Research, 41*(3), 293-305. https://doi.org/10.1509/jmkr.41.3.293.35991

Sumiati, S. (2020). Integrating entrepreneurial intensity and adaptive strategic planning in enhancing innovation and business performance in Indonesian SMEs. *Management Science Letters, 10*(16), 3941-3948. https://doi.org/10.5267/j.msl.2020.7.016

Syaharani, D. P., & Yasa, N. N. K. (2022). The Role of Trust as Mediation between Perceived Usefulness and Perceived Ease of Use on Repurchase Intention. *European Journal of Development Studies, 2*(3), 36–40. https://doi.org/10.24018/ejdevelop.2022.2.3.91

Tarofder, A. K., Raisal, I., Zunirah Binti, M. T., Adiza, A. M., & Lim, A. (2023). Instant messenger (IM) adoption in the organizational setting; empirical evidence of the communication means for knowledge creation and group performance. http://ir.lib.seu.ac.lk/handle/123456789/6705