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To cite this article: Jonny and Kriswanto 2021 *IOP Conf. Ser.: Earth Environ. Sci.* **729** 012015

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Modelling the use of social network marketing in Indonesia

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Abstract. This study focused on modelling the use of social network marketing in Indonesia. This platform was currently widely used as a means of trading among sellers and buyers so that they did not have to go to many stores to get their necessities. However, several studies showed that there was still a lack of trust, causing buyers to be reluctant to use the platform. Thereby, the objective of this study was to investigate what factors contribute to their reluctance to use the platform. Therefore, a quantitative methodology was applied to model the use of social network marketing using PLS-SEM (Partial Least Square Structural Equation Modelling). After conducting purposive questionnaires to about 250 various buyers in Jakarta, Smart PLS was run to get a robust and accurate model (Goodness of Fit = 0.72). The result indicates that 1) Behavioural Intention is effected mainly by Perceived Usefulness ($r=0.80$), Awareness ($r=0.67$), Perceived Ease of Use ($r=0.63$), and Perceived Credibility ($r=0.37$), 2) Perceived Usefulness is effected mainly by Perceived Ease of Use ($r=0.78$) and Computer Self-Efficacy ($r=0.56$), 3) Perceived Ease of Use is effected by Computer Self-Efficacy ($r=0.61$), 4) Perceived Credibility (PC) is effected by Awareness ($r=0.44$) and Computer Self-Efficacy ($r=0.28$), and 5) Awareness is effected by Computer Self-Efficacy ($r=0.32$). Therefore, the implication of this study indicates that in order to promote the behavioral intention of buyers, sellers should mainly promote the perceived ease of use of their platforms and their buyers' computer self-efficacy, followed by other remaining factors.

Keywords: social network, marketing, buyers, sellers, PLS-SEM

1. Introduction

Nowadays, the productivity of people's activities is increasing from decade to decade, thanks to the industrial revolution. This revolution is mainly caused by the improvement of technology used by people in their activities. Through these decades, at least, four revolutions have happened in this world. In the first revolution, the phenomenon in the industry is characterized by the invention of mechanization. This invention has been widely used by industries in their production activities. By using various types of machinery tools, the employee's productivity is increasing. This incremental of productivity certainly gives many benefits for society, which can increase the quality of life.

As technology has improved during times, the industrial revolution enters into the second period. In this age, the use of electricity was widely used in the industries. This phenomenon, of course, increases more productivity to the employee's productivity. Besides that, this has reduced the emission caused by the previous period. After the use of mechanization and electricity has been passed, the next industrial revolution is due to the use of computerization. In this period, there are so many companies



or organizations using computers in their activities. This increases more productivity for people's activities.

Nowadays, the fourth industrial revolution has been coming into our society. This period was marked with many digitalization initiatives from many organizations and companies. These initiatives are taken in order to make them closer to their customers so that they can get many insights from customers in order to improve their products and services. Actually, besides this fourth industrial revolution, there is another revolution named society 5.0. In this era, the use of artificial intelligence will be explored to its peak. This, of course, will be more smoothing people's activities.

This study focuses on the fourth industrial revolution. In this era, almost all activities are improved by the use of digitalization. One of the digitalization platforms used in trading is the use of social network marketing [2]. In the social network marketing platform, customers and companies can do trading activities without any obstacles between them. By using this platform, customers do not need to go to many stores in order to get their necessities. However, previous studies have shown that there is a lack of trust for the customers in order to do trading using social network marketing [4]. Due to this condition, of course, it will jeopardize any trading activity between buyer and seller.

Therefore, many sellers are curious about what factors affect the use of social network marketing from the buyers' perspectives. This condition may have been the urgency of this study in order to shed light on how sellers should anticipate their buyers. Although this may be the problem for sellers, however, the trading volume through this platform is increasing and promising both at the international and national levels [19]. This study is proposed to develop a model of the use of social network marketing. By this model, it can help any marketer to improve the quality of marketing strategy so that it can contribute to companies for smoothing the trading activities through social network marketing.

2. Literature review

Social network marketing has been revolutionizing the marketing way so that a large number of buyers can be contacted by sellers instantly [2]. Using this platform, many sellers can offer their goods to those buyers, which was previously impossible without this platform [1]. Because of its usefulness compared to the traditional one, nowadays, many sellers have used this platform for their trading activities with buyers [8]. Therefore, both buyers and sellers have treated this platform as an alternative channel for them to meet each other and do trading activities together besides traditional stores [5].

Since then, this platform has been widely used among buyers and sellers in the world [3]. This phenomenon has attracted many researchers to conduct various researches regarding why buyers select social network marketing rather than stores as their buying channel using the technology acceptance model [12],[14]. This model is applied in many studies regarding user acceptance on the IT platform [7]. Firstly, reference [13] includes Perceived Use and Perceived Ease of Use, Behavioural Intention, and Actual Use by reference [6]. However, the model has been revised, as depicted in Figure 1, used by this study [15].

Figure 1 is applied to evaluate the impact of Computer Self-Efficacy on Use of Social Network Marketing. It covers four factors: 1) Perceived Usefulness, 2) Perceived Ease of Use, 3) Perceived Credibility, and 4) Awareness. This model shows that Behavioural Intention is driven by Perceived Usefulness and Perceived Ease of Use [9]. Then, Perceived Usefulness correlates with Perceived Usefulness. Finally, Computer Self-Efficacy correlates with Perceived Usefulness and Perceived Ease of Use and indirectly correlates with Perceived Credibility and Behavioural Intention [16].

3. Methodology

3.1 Data collection

In order to generate a model of the use of social network marketing for marketers, the questionnaire needs to be developed for buyers related to social network marketing [17]. This questionnaire has been constructed based on previous studies. It includes six factors: 1) Computer Self-Efficacy, 2) Perceived

Usefulness, 3) Perceived Ease of Use, 4) Perceived Credibility, 5) Awareness (AWN), and 6) Behavioural Intention (BI) [12].

Among these factors, five factors are correlated either directly or indirectly with Behavioural Intention. Responses are marked on a Likert scale ranging from strongly disagrees (1) to strongly agree (5) covering several reversal measurements [10]. Marketing experts are asked to evaluate this instrument as content validity during pretesting questionnaires. Many suggestions were covered and readjusted as instructed by those experts [11].

Those efforts have contributed to the conceptual model of the use of social network marketing for Indonesian buyers, as shown in Figure 1.

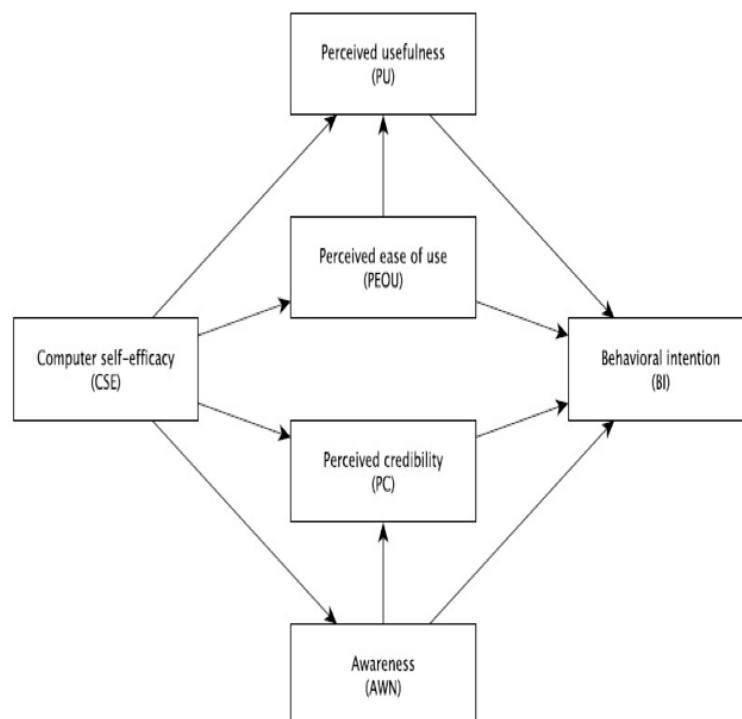


Figure 1. The Use of SNM Conceptual Model

From Figure 1, it can be seen that there are two kinds of variables used to develop the model of the use of social network marketing for Indonesian buyers, such as observed and latent variables. Those factors are latent variables being evaluated by their observed variables.

Among those latent variables, there are several hypotheses to be tested for its fitness for Indonesian buyers. In this matter, Computer Self-Efficacy would be tested its contribution to Perceived Usefulness, Perceived Ease of Use, Perceived Credibility, and Awareness. Then, Perceived Ease of Usefulness would be evaluated as to its contribution to Perceived Usefulness. Meanwhile, Awareness would be tested its impacts on Perceived Credibility. Finally, this Perceived Usefulness, Perceived Ease of Use, Perceived Credibility, and Awareness would be simultaneously evaluated their contributions to Business Intention.

3.2. Sampling

The study population was huge; therefore, contacts with the respondents had to be made in different locations. Because there are about six factors to be tested, the number of sampling should be at least 200 respondents [11]. Indonesian buyers that are surveyed ranged from early adopters to late adopters [18].

Out of 250 questionnaires have been thoroughly distributed, and 25 of them were returned incorrect or incomplete.

3.3. Data analysis

The questionnaire was pre-tested among Indonesian buyers. It is designed to obtain information on 1) Computer self-efficacy, 2) Perceived Usefulness, 3) Perceived Ease of Use, 4) Perceived Credibility, 5) Awareness, and 6) Behavioural Intention.

Data were subjected to a comprehensive and detailed analysis. Partial Least Square - Structural Equation Modelling (PLS-SEM) was used to determine whether the model is robust and accurate based on data collection in order to test its hypotheses. The use of PLS-SEM is especially intended to predict the causal relationship among six factors affecting the use of social network marketing. The structural model analysis has been simplified by calculating the value of goodness of fit index through a software of SmartPLS.

Using the software, all responses are to be entered into the program as raw data, then the conceptual model, as shown in Figure 1, is drawn into the program as a path diagram. After that, the program is run with the specification inputted in the data to test whether the model has a good fit by criteria of more than 0.67. From the program report, Goodness of Fit is to be examined. This value should be greater than 0.67 in order to indicate that the model is robust and accurate.

4. Results and discussions

After conducting questionnaires, data are collected and inputted into the software of SmartPLS. Then, a path diagram was drawn and run using the software. The result of this activity is presented in Figure 2.

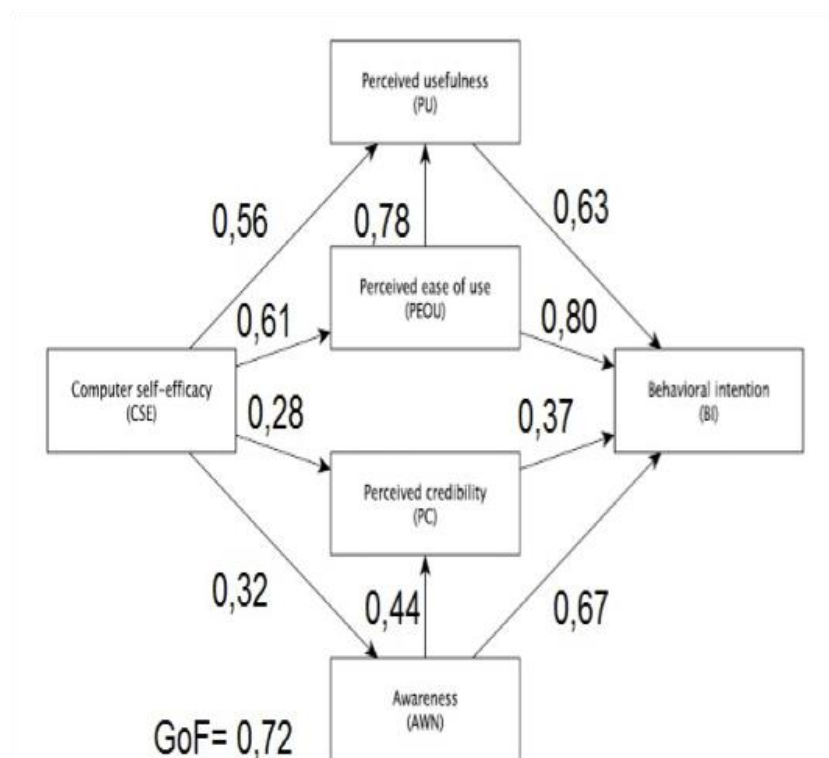


Figure 2. The Result of SmartPLS

Figure 2 shows that the model is robust and accurate because its Goodness of Fit, which is 0.72, is larger than required 0.67; thus, it can be claimed as a good fit model. This means the model is robust and accurate; therefore, an in-depth analysis can be conducted in order to gain maximum understanding of the model.

From the result as shown in figure 2, it can be seen that all factors can be integrated into a robust and accurate model covering 1) Computer self-efficacy, 2) Perceived Usefulness, 3) Perceived Ease of Use, 4) Perceived Credibility, 5) Awareness, and 6) Behavioural Intention. It also shows that Computer Self-Efficacy has impacted to Perceived Usefulness ($r=0,56$), Perceived Ease of Use ($r=0,61$), Perceived Credibility ($r=0,28$), and Awareness ($r=0,42$). Then, Perceived Ease of Use impacted Perceived Usefulness ($r=0,78$). Meanwhile, Awareness impacted Perceived Credibility ($r=0,44$). Finally, these Perceived Usefulness ($r=0,63$), Perceived Ease of Use ($r=0,80$), Perceived Credibility ($r=0,37$) and Awareness ($r=0,67$) simultaneously impacted to Behavioural Intention.

From the result session, it can be understood that 1) Behavioural Intention is effected mainly by Perceived Ease of Use ($r=0.80$), Awareness ($r=0.67$), Perceived Usefulness ($r=0.63$), and Perceived Credibility ($r=0.37$), 2) Perceived Usefulness is effected mainly by Perceived Ease of Use ($r=0.78$) and Computer Self-Efficacy ($r=0,56$), 3) Perceived Ease of Use is effected by Computer Self-Efficacy ($r=0.61$), 4) Perceived Credibility (PC) is effected by Awareness ($r=0.44$) and Computer Self-Efficacy ($r=0.28$), and 5) Awareness is effected by Computer Self-Efficacy ($r=0.32$). Among those factors, the importance of perceived credibility is also supported by other studies conducted in Indonesian buyers. It gives the importance of trust an indicator of credibility in promoting buyers' purchase decisions while using e-commerce [20].

In order to promote the behavioral intention of Indonesian buyers, while using the platform of social network marketing, sellers should mainly promote the ease of use of the platform, followed by promoted computer self-efficacy. Meanwhile, for South African buyers, the promotion of behavioral intention should be mainly promoted by the seller's credibility supported by promoted computer self-efficacy. Although the factors may rank in a different order, both studies show the same importance regarding computer self-efficacy as the catalyst in using social network marketing. Therefore, sellers need to invest their time to promote their buyers in order to promote buyers' computer efficacy, which is still challenging among Indonesian buyers [20].

5. Conclusion

Form the discussion section, it can be seen that there are at least six factors that buyers should pay attention to promote the use of social network marketing. This signifies new principles that buyers should pay attention to when promoting the use of social network marketing. These principles cover 1) Computer self-efficacy (CSE), 2) Perceived Usefulness (PU), 3) Perceived Ease of Use (PEOU), 4) Perceived Credibility (PC), 5) Awareness (AWN), and 6) Behavioural Intention (BI). In which for Indonesian buyers as well as South-African buyers, Computer Self-Efficacy may play an important role as a catalyst to motive the use of Social Network Marketing.

Furthermore, as shown in the result and discussion section, a model is developed in order to integrate these factors. From this model, it can be understood that in order to motivate buyers to use the platform of Social Network Marketing in their trading activity, sellers should be able to promote CSE in order to promote PU, PEOU, PC, and AWN. Then, PEOU promotes PU; meanwhile, AWN promotes a PC. Finally, these PU, PEOU, PC, and AWN simultaneously promote BI. However, this study has limitations regarding the location of buyers as respondents of this study. Therefore, for future research, researchers may add various types of respondents' location in order to gain more understanding on this matter.

Acknowledgments

The author would like to thank those who have participated in the research so that the intended result can be generated.

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