

The Impact of Perceived Ease of Use and Perceived Usefulness Towards Purchase Decision through the Consumer's Intention of Engagement with Game Application on the Marketplace Consumers



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ABSTRACT: Nowadays, people around the world are living side by side with their digital devices, thus making them an integral part of their daily life. People all around the world, including in Indonesia, have made a lot of online purchasing (shopping). Digital media has great potential as a marketing device. One of the example of digital media as a marketing device is the use of the digital game as a part of marketing campaign. Game is able to penetrate demography and different age group and create an interactive platform as a communication device with one another that is unable to be done by traditional media. But on the other hand, game online has a negative effect. Children (especially elementary students) are addicted to games and start to lose the importance of studying at school. The purpose of this study is to analyse and discuss the impact of perceived ease of use and perceived usefulness towards purchase decisions through the intention of engagement with the game application on the marketplace consumers. This research is a conclusive research. Respondents that are used in this research are the marketplace consumers (Shopee). The methods that are used are judgemental sampling and snowball sampling with 100 respondents as the samples. The instrument of the research that is used in this research is questionnaire. And then, the collected data is calculated using alternative method of PLS (Partial Least Square). The result of the study shows that the variable of ease of use is not giving impact to the intention of engagement, while the variable of usefulness mediates ease of use towards intention of engagement and variable of intention of engagement towards purchase decision gives positive impact.

KEYWORDS- Perceived ease of use, perceived usefulness, the intention of engagement, buying decision.

I. INTRODUCTION

People around the world, including in Indonesia, are making lots of online purchasing (online). According to the survey conducted by Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), there are 93.9% of people in Indonesia that are using the internet on their smartphones as a daily basis. According to the fact that a lot of people are using smartphone as their part of life, the usage of digital media as a marketing device has great potential. One of the digital media that can be used as a marketing device is digital game as a part of marketing campaign. Marketers that understand the behaviour of the consumers are able to predict how the consumers will react to the acquired information. Therefore, it makes the marketers adapt, anticipate, and develop a correct marketing strategy (Sumarwan, 2014). Thus, online business needs to develop and apply a correct strategy in order to engage the potential consumers that never do online shopping to do an online shopping while maintaining the current consumers to stay in that online business. Understanding the consumer behaviour beforehand could help to develop a correct strategy.

The negative paradigm of games in the case of elementary students starts to show some horrible effects. One of the examples is the one that is being reported by kompas.com, a kid that is already addicted to the game, starting to hit their own head to the wall when the internet is down. There are 4 negative disorders that could be happening because of playing game online too much, addiction, visual impairment, obesity, and Quervain syndrome.

But on the other hand, as a marketing and advertising device, game has great potential. One of the potentials of the game is the ability to penetrate the demography and different age groups and create an interactive platform as a communication device with one another that is unable to be done by traditional media. Businessmen must have heard, seen, or even participated in

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the special program that is made by many big and famous brands. Whether it is a quiz or a simple game where the winner could get an interesting prize, this type of program is still used now as one of the strategies of marketing by many famous brands. This type of strategy is called gamification. Gamification is a process or method to add the elements of game or gaming sector to the activity of advertisement or marketing. In this case, just like game, gamification with multimedia is able to have a special characteristic between the users, which makes it more alive and closer to the users than any other media. Moreover, gamification is easier and more efficient for marketers to produce and place their brand to the target in process (Yang et al., 2017).

Because of the rising numbers of marketplace that use game as the point of attraction, it creates a competition to engage the potential consumers tighter. According to Kompas, Shopee stands at the highest position among all other marketplaces for the number of visitors in Southeast Asia. Until now, Shopee has 197.8 million visitors each month (Galuh Putri Riyanto, 2021). Other than that, Shopee is also the most downloaded android marketplace or e-commerce in Indonesia. Even though the size of the application is quite big if compared to other applications, that is 98.75 Mb, the number of the downloaded applications of Shopee reaches more than 100 million downloads, counted from the date it was released on June 4th, 2015.

The usage of gamification to set the brand that is targeted needs some preparation. In line with the previous studies, the result shows that TAM is a valid theory to be used, not only in the context of system information adoption but also in the context of marketing system evaluation. On the TAM model, the behaviour toward technology is the main factor in whether the person is going to use the technology or not. This behaviour is supported by 2 assumptions that are perceived usefulness and perceived ease of use (Fred D. Davis, 1986). Jogiyanto (2007:115) explains that perceived ease of use is the extent to which a person believes that using technology will be effortless. According to that explanation, it concludes that the component of perceived ease of use is the belief toward the activity that will lead to a decision. Jogiyanto (2007:115) also adds that perceived usefulness is the extent to which a person believes that using technology will improve his or her performance.

The engagement of consumers toward a brand cannot be separated from the trend that keeps developing. This development brings gamification to be the new trend. A lot of brands in the world of marketing use this new trend, gamification, to engage the consumers to stay in the application for a long time. This will improve the engagement of consumers toward the application and the online store that is provided by the company. Apart from the developing trend and the engagement potential of gamification, marketing literature still doesn't have an exact model that explains the use of gamification specifically and its relation to information technology systems.

According to the explained background above, thus this research is focusing on "The Impact of Perceived Ease of Use and Perceived Usefulness towards Purchase Decision through the Consumer's Intention of Engagement with Game Application on the Marketplace Consumers".

II. METHOD

This research is using conclusive research design. The population is 100 consumers of Shopee as the respondents with nonprobability sample. The samplings that are used in this research are judgemental sampling and snowball sampling.

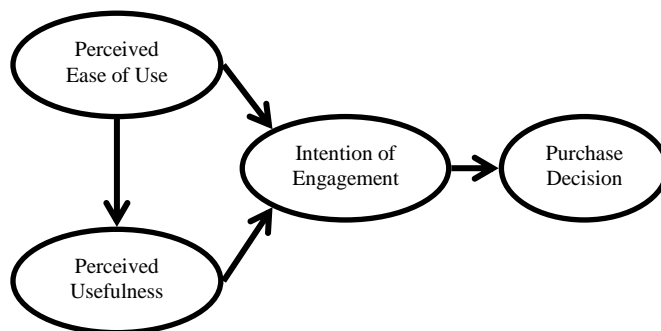


Figure 1: Research Design

The variables in this research are perceived ease of use (X_1), perceived usefulness (X_2), intention of engagement (Z_1), and purchase decision (Y_1). The method that is used to collect the data is Likert scale with 5 points and then processed with PLS method (Partial Least Square).

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III. RESULTS AND DISCUSSION

Evaluation of measurement model Outer Model)

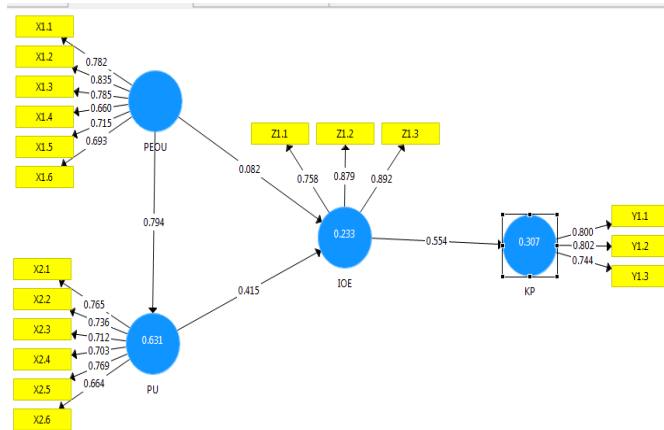


Figure 2: Convergent Validity

The indicator can be assessed as valid if it has a value of correlation of more than 0.70. But, for the first stage researcher, a loading value between 0.50 and 0.60 is enough (Chin in Ghozali, 2014:39).

Variable	Composite Reliability
Perceived ease of use	0,883
Perceived usefulness	0,870
Intention of engagement	0,882
Purchase desicion	0,826

Table I: Composite Reliability

Composite Reliability can be assessed as good if the value is more than 0.70. According to the table above, all of the values of composite reliability from all variables are higher than 0.70. Therefore, the model variables fulfil the composite reliability or have good reliability.

Variable	Cronbach's Alpha
Perceived Ease of Use	0,840
Peceived Usefulness	0,820
Intention of Engagement	0,797
Purchase Decision	0,684

Table II: Cronbach's Alpha

According to the table above, the results show that the value of Cronbach's alpha for every construct is more than 0.50. Therefore, the variable model above fulfils Cronbach's alpha or has strong reliability.

Relation between Variables	Original sample	T-Statistics	Annotation
Perceived Ease of Use towards Intention of Engagement	0,082	0,443	t tabel 5% = 1,96
Perceived Usefulness towards Intention of Engagement	0,415	2,561	t tabel 5% = 1,96

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Perceived Ease of Use towards Usefulness	0,794	11,985	t tabel 5% = 1,96
Perceived ease of use mediated by perceived usefulness towards intention of engagement	0,329	2,584	t tabel 5% = 1,96
Intention of Engagement towards Purchase Decision	0,554	6,906	t tabel 5% = 1,96

Table III: Path Coefficient Result

According to the table above, the result can be explained as:

The value of parameter 0.082 means that there is positive impact of perceived ease of use towards intention of engagement. The higher the value of perceived ease of use means the value of intention of engagement will rise as well. After calculation, the value shows 0.443 which is not significant (T table significance 5% = 1.96) for the value of T statistic is lower than the T table, 1.96.

The value of parameter 0.415 means that there is positive impact of perceived usefulness towards intention of engagement. The higher the value of perceived usefulness means the value of intention of engagement will rise as well. After calculation, the value shows 2.561 which is significant (T table significance 5% = 1.96) for the value of T statistic is higher than the T table, 1.96.

The value of parameter 0.794 means that there is positive impact of perceived ease of use towards perceived usefulness. The higher the value of perceived ease of use means the value of usefulness will rise as well. After calculation, the value shows 11.985 which is significant (T table significance 5% = 1.96) for the value of T statistic is higher than the T table, 1.96.

The value of parameter 0.329 means that there is positive impact of perceived ease of use that is mediated by perceived usefulness towards intention of engagement. There is full mediation of perceived usefulness for perceived ease of use and intention of engagement. After calculation, the value shows 2.584 which is significant (T table significance 5% = 1.96) for the value of T statistic is higher than the T table, 1.96.

The value of parameter 0.554 means that there is positive impact of intention of engagement towards purchase decision. The higher the value of intention of engagement means the value of purchase decision will rise as well. After calculation, the value shows 6.906 which is significant (T table significance 5% = 1.96) for the value of T statistic is higher than the T table, 1.96.

IV. CONCLUSIONS

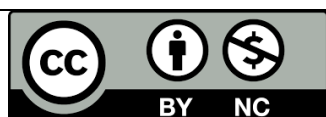
According to the results, the conclusion that can be drawn is that perceived ease of use does not give a significant impact towards intention of engagement while perceived usefulness gives a significant impact towards intention of engagement. Perceived ease of use gives positive impact towards perceived usefulness and intention of engagement gives purchase decision positive impact as well.

REFERENCES

- 1) Aguiar-Castillo, L., Clavijo-Rodriguez, A., De Saa-Perez, P., & Perez-Jimenez, R. (2019). Gamification as an approach to promote tourist recycling behavior. *Sustainability (Switzerland)*, 11(8), 1–18. <https://doi.org/10.3390/su11082201>
- 2) Aparicio, M., Costa, C. J., & Moises, R. (2021). Gamification and reputation: key determinants of e-commerce usage and repurchase intention. *Heliyon*, 7(3), e06383. <https://doi.org/10.1016/j.heliyon.2021.e06383>
- 3) Bramantoro, T. (2020). Advergame Sebagai Tools Dalam Kampanye Pemasaran. <https://www.tribunnews.com/tribunners/2020/02/13/advergame-sebagai-tools-dalam-kampanye-pemasaran?page=3>
- 4) Chen, Y. R. R. (2017). Perceived values of branded mobile media, consumer engagement, business-consumer relationship quality and purchase intention: A study of WeChat in China. *Public Relations Review*, 43(5), 945–954. <https://doi.org/10.1016/j.pubrev.2017.07.005>
- 5) Fred D. Davis, J. (1986). Tissue culture studies of the human lymphocyte. *Science*, 146(3652), 1648–1655. <https://doi.org/10.1126/science.146.3652.1648>

The Impact of Perceived Ease of Use and Perceived Usefulness Towards Purchase Decision through the Consumer's Intention of Engagement with Game Application on the Marketplace Consumers

- 6) Galuh Putri Riyanto. (2021). Daftar 10 Marketplace Online Paling Ramai Pengunjung di Asia Tenggara. Kompas.Com, 1–3. <https://tekno.kompas.com/read/2021/05/10/15270037/daftar-10-marketplace-online-paling-ramai-pengunjung-di-asia-tenggara?page=all>
- 7) Ginee. (2021). Jumlah Pengunjung Aktif Marketplace Indonesia dari Omnichannel dengan Sistem All-in-One Jumlah Download Marketplace di Indonesia Pengguna Aktif Marketplace di Indonesia. 1–7. <https://ginee.com/id/insights/jumlah-pengguna-marketplace-android/>
- 8) Herzig, P., Strahinger, S., & Ameling, M. (2012). Gamification of ERP systems - Exploring gamification effects on user acceptance constructs. *Multikonferenz Wirtschaftsinformatik 2012 - Tagungsband Der MKWI 2012*, 793–804.
- 9) Iriani, S. S., & Andjarwati, A. L. (2020). Analysis of perceived usefulness, perceived ease of use, and perceived risk toward online shopping in the era of Covid-19 pandemic. *Systematic Reviews in Pharmacy*, 11(12), 313–320. <https://doi.org/10.31838/srp.2020.12.50>
- 10) Jogiyanto. (2010). *Sistem Informasi Keperilakuan*. Yogyakarta: Andi Offset.
- 11) Jogiyanto. 2007. *Sistem Informasi Keperilakuan*. Yogyakarta: Andi
- 12) Kamboj, S., Rana, S., & Drave, V. A. (2020). Factors Driving Consumer Engagement and Intentions with Gamification of Mobile Apps. *Journal of Electronic Commerce in Organizations*, 18(2), 17–35. <https://doi.org/10.4018/jeco.2020040102>
- 13) Lee, M., & Faber, R. J. (2007). Effects of product placement in on-line games on brand memory: A perspective of the limited-capacity model of attention. *Journal of Advertising*, 36(4), 75–90. <https://doi.org/10.2753/JOA0091-3367360406>
- 14) Prentice, C., Han, X. Y., Hua, L. L., & Hu, L. (2019). The influence of identity-driven customer engagement on purchase intention. *Journal of Retailing and Consumer Services*, 47(November 2018), 339–347. <https://doi.org/10.1016/j.jretconser.2018.12.014>
- 15) Rodrigues, L. F., Oliveira, A., & Costa, C. J. (2016a). Does ease-of-use contribute to the perception of enjoyment? A case of gamification in e-banking. *Computers in Human Behavior*, 61, 114–126. <https://doi.org/10.1016/j.chb.2016.03.015>
- 16) Rodrigues, L. F., Oliveira, A., & Costa, C. J. (2016b). Playing seriously - How gamification and social cues influence bank customers to use gamified e-business applications. *Computers in Human Behavior*, 63(April 2018), 392–407. <https://doi.org/10.1016/j.chb.2016.05.063>
- 17) Taylor, D. G., & Levin, M. (2014). Predicting mobile app usage for purchasing and information-sharing. *International Journal of Retail and Distribution Management*, 42(8), 759–774. <https://doi.org/10.1108/IJRDM-11-2012-0108>
- 18) Venkatesh, V., & Davis, F. D. (2000). 2000(2)_MS_Venkatesh_Davis.pdf. *Management Science*, 46(2), 186–204. [http://vvenkatesh.us/Downloads/Papers/fulltext/pdf/2000\(2\)_MS_Venkatesh_Davis.pdf](http://vvenkatesh.us/Downloads/Papers/fulltext/pdf/2000(2)_MS_Venkatesh_Davis.pdf)
- 19) Wen, M. H. (2017). Applying gamification and social network techniques to promote health activities. *Proceedings of the 2017 IEEE International Conference on Applied System Innovation: Applied System Innovation for Modern Technology, ICASI 2017*, 531–534. <https://doi.org/10.1109/ICASI.2017.7988474>
- 20) Yang, Y., Asaad, Y., & Dwivedi, Y. (2017). Examining the impact of gamification on intention of engagement and brand attitude in the marketing context. *Computers in Human Behavior*, 73, 459–469. <https://doi.org/10.1016/j.chb.2017.03.066>
- 21) Yoo, C., Kwon, S., Na, H., & Chang, B. (2017). Factors affecting the adoption of gamified smart tourism applications: An integrative approach. *Sustainability (Switzerland)*, 9(12), 1–21. <https://doi.org/10.3390/su9122162>



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