

Factors Influencing Online Purchase Intention: The Mediating Role of Customer Trust (a Study Among University Students in Jakarta)

Agus Rahayu, M. Saparudin*, R. Hurriyati
Universitas Pendidikan Indonesia
Bandung, Indonesia
*mohamadsaparudin@upi.edu

Abstract—The growth of e-commerce market in Indonesia rises rapidly. With the number of internet users reaching 143.26 million people or about 54.68 % of the total population in Indonesia in 2017, it becomes potential market for the future. Because of these significant numbers of users, it is important to understand factors affecting consumers purchase intention in online shopping. The previous study indicated that trust was considered a key factor affecting consumers purchase intention. This study explored the influence of perceived risk and reputation on perceived trust and consumer purchase intention. The empirical result obtained in a sample of 152 users that had previously visited several online vendor websites indicated that online purchase intention was influenced positively by perceived risk and perceived trust, perceived trust was positively influenced by perceived risk and perceived reputation and trust mediated the relationship between perceived risk and perceived reputation to purchase intention.

Keywords—Online Purchase Intention; Online shopping; Customer Trust

I. INTRODUCTION

The rapid growth of e-commerce market in Indonesia is no doubt. With the number of Internet users based on survey APJII 2016 showed 132.7 million, and in 2017 rose to 143.26 million or 54.68% of Indonesian population. It becomes potential market for the future. Not surprisingly, the current online business in Indonesia is growing rapidly nowadays. This change of shopping from offline to online has caused consumers to have worries such as online fraud, un-successful delivery and so forth.

Trust is a crucial factor to succeed in this online business [1], [2], [3], [4]. Most people who will conduct online transactions will be very careful, because the level of uncertainty of an online transaction is higher than in the traditional way because consumers do not have direct control over the actions from the vendor. Lack of degree of trust in online business is the main reason why consumers do not want to get involved with online transactions [5] therefore, the consumer's trust is an important factor in considering an online purchase. Trust is the consumer's belief in the ability, honesty and goodness of the supplier in the web and it shows their confidence to the supplier's behavior.

There are many factors affect consumers' online trust, one of them is perceived risk [6]; [7]. Perceived risk represents consumer trust in the potential for unexpected negative outcomes from online transactions [8]. Risk perception is the main reason why people are reluctant to shop online, so trust is the first and fore-most thing that online shop owners have to build. Online trust is generated through the consumer's positive interaction with the online vendor's website. When consumers feel comfortable interacting with websites, they tend to develop trust in websites, and trust is a key strategy to overcome uncertainty and fear [4]. In addition to the perceived risk. The reputation of a website can attract online customers to trust the web-based store [9], people prefer to buy more from reputable websites than from unknown stores [10]. When customers browse the websites, the decision to buy is based on the information on the site. If the information is considered positive, it is likely that consumers will make a purchase [11]. Einwiller verify that the website's reputation is one of the important antecedents of online trust [9]. When customers find electronic commerce websites trustworthy, they have a strong intention to shop on the web site [11] in other words, the intention of online purchase is a consequence of trust.

Studies related with the role of trust in mediating perceived risk and perceived reputation to purchase intention have been conducted for example [12], [13], [14]. The studies had mix result.

II. METHODOLOGY

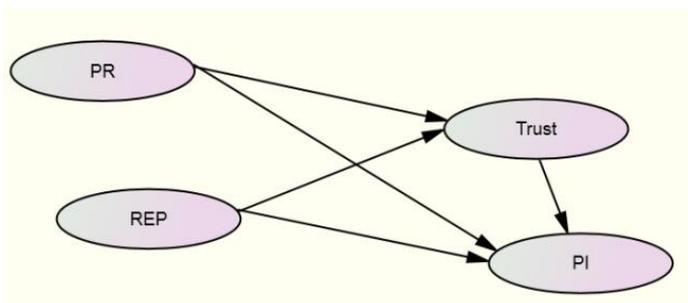


Figure 1. Conceptual model.

The participant of the survey were 152 undergraduate students who were randomly selected at 5 universities in East Jakarta. This study was quantitative, it was aimed to examine the relationship between variables proposed. This study assessed the effect of perceived risk, perceived reputation and trust to the online purchase intention in Jakarta, directly or indirectly. We used SEM in order to analyze the data collected and test the research model. We tested the model using Partial least square.

A survey questionnaire was designed to measure research construct under consideration in this study. The construct of perceived risk was adopted from the work of Kim et al. [8] which proposed three indicators; financial risk, product risk and information risk.

The construct of reputation was taken from the work of Doney & Cannon [15] consisting of three indicators: honesty, fairness and trust. The construct of trust was adopted from Meyer et al. [16] who proposed three indicators: benevolence, Ability and Integrity [17]. The construct of online purchase intention was taken from Van der Heijden et al [18] with 4 indicators: plan to return, consider purchase in a short term, consider purchase in a long term and likely to buy from this web-site.

III. RESULTS AND DISCUSSION

A. Measurement model assessment

The result of reliability test showed that all compo-site reliability and cronbach’s alpha values exceeded 0.7 except Cronbach alpha for perceived risk and perceived intention. In addition, all the AVE values exceeded the cut-off value of 0.5. It meant that all the questionnaire items were deemed reliable. The result of convergent validity test indicated all items had loading factor greater than 0.5. It could be con-cluded that all the indicators used in each variable were able to measure the construct.

B. Evaluation of the structural model goodness of fit

Based on the coefficient of determination test the value of R square for trust was 0.293, which meant that variation of perceived trust could be explained by perceived reputation and perceived risk by 29.3% while the remaining 70.7% influenced by other variables. R square value for purchase intention was 0.304, which meant that the variable of purchase intention could be explained by the perceived trust of 30.4%, while the remaining 69.6% influenced by other variables. Evaluation of the first inner and second models is good enough in explaining the perceived trusts and purchase intention.

Table 1. Research result.

	Sampl e (O)	Mea n (M)	(STDEV)	T Statistic s	P Valu e	Remark
PR - > PT	0260	0264	0076	3.418	0001 **	significan t

	Sampl e (O)	Mea n (M)	(STDEV)	T Statistic s	P Valu e	Remark
PR - > PI	0272	0279	0088	3099	0002 **	significan t
PT - > PI	0227	0233	0077	2958	0003 **	significan t
REP - > PT	0387	0383	0077	5005	0000 **	significan t
REP - > PI	0206	0202	0114	1809	0071 *	not significan t
PR - > PT - > PI	0059	0060	0025	2..62	0019 **	significan t
REP - > PT - > PI	0088	0090	0037	2.404	0017 **	significan t

C. The influence of perceived risk on consumer trust

There were many factors affected trust, one of which was perceived risk. The study showed the path coefficient of path parameters obtained from the influence of perceived risk on perceived trust was 0,260 with p value of 0.0001. It could be concluded that perceived risk positively affected perceived trust. This was in line with research conducted by Chang & Chen [19] and Pappas et al. [20].

D. Effect of perceived reputation on consumer trust

A good reputation is a signal of consumer belief of the vendor. Therefore reputation is an important factor that contributes to consumer trust in the organization sales [15], [21]. The results of this study indicated that the path parameter coefficients obtained from variable influence on perceived reputation on perceived trust was 0.387 with p-value 0.0000 meaning that there was a positive and significant effect of perceived reputation on perceived trust. This supported previ-ous studies [22] [4].

E. Effect of perceived risk on purchase intention

Perceived risk is one of the critical barriers for con-sumers who considered making an online purchase [23], [24], [8]. The results of study concluded that perceived risk effected on purchase intention. It could be seen from parameters coefficient obtained, it had the value of 0.272 with p-value of 0.00002. These results were in line with the studies conducted by [8], [23], [24], [25].

F. Effect of perceived reputation on the online purchase intention directly

Reputation is one important factor that can influence consumers to buy. Therefore the company should manage its reputation well. The results of this study showed that the

perceived reputation had no effect on consumers' online purchase intention. This can be seen from the p-value which had less than 0.05. This contrasts with a study conducted by [26], [27].

G. The relationship between trust and online purchase intention

Online trust is related with consumer purchase intention particularly trusting belief [17] [28] the higher the consumer trust, the higher the influence of purchase intention [13]. The results showed that there was a positive and significant effect of perceived trust on purchase intention. This was indicated by coefficient parameters obtained. The coefficient parameter value of 0.227 meant the higher the consumer trust the higher the purchase intention will be [15] [27] [29].

H. The indirect effect of perceived reputation and risk on purchase intention mediated by trust

The study indicated that perceived trust mediated the relationship between both perceived reputation and perceived risk on online purchase intention. It could be seen from the p-value of both variables which had values less than 0.05 (0.0019 and 0.0017). This was in line with studies conducted by [30] [12]

IV. CONCLUSION

The findings revealed that perceived risk, and trust affected on purchase intention directly but not on purchase reputation. Trust mediated the relationship between both perceived risk and reputation to purchase intention. Trust must be considered in the business of e-commerce because trust significantly affected online purchase intention. Vendors should continue building strong consumer trust to survive in online business competition and thus encourage the development of the online business market. In addition, vendors should provide assurance for the products they sell in accordance with what they show on their web either by increasing quality of web design, product specifications, or service.

We realized that this study had limitations in the sample. Student respondents made it less realistic than when actual consumers were employed so we could say that it could not represent consumers in a wider area. Besides, it is necessary to add other factor which affect such as advertisement or ease of use technology for further research.

REFERENCES

[1] Kim, J. & Park, J. 2007. The effects of internet shoppers' trust on their purchasing intention in China. *JISTEM-Journal of Information Systems and Technology Management* 4(3): 269-286.

[2] Chen, H. 2012. The impact of comments and recommendation system on online shopper buying behaviour. *Journal of Networks* 7(2): 345.

[3] Grabner-Kräuter, S. & Kaluscha, E.A. 2003. Empirical research in online trust: A review and critical assessment. *International Journal of Human Computer Studies* 58(6): 783-812.

[4] Jarvenpaa, S.L., Tractinsky, N. & Vitale, M. 2000. Consumer trust in an internet store. *Journal of Information Technology Management* 1: 45-71.

[5] Wang, Y.D. & Emurian, H.H. 2005. An overview of online trust: Concepts, elements, and implications. *Computers in Human Behavior* 21(1): 105-125.

[6] Sims, J. & Xu, L. 2012. Perceived risk of online shopping: Differences between the UK and China (201). *UK Academy for Information Systems Conference Proceedings* 25.

[7] Dai, B., Forsythe, S. & Kwon, W. S. 2014. The impact of online shopping experience on risk perceptions and online purchase intentions: Does product category matter?. *Journal of Electronic Commerce Research* 15(1): 13-24.

[8] Kim, D.J., Ferrin, D.L. & Rao, H.R. 2008. A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems* 44(2): 544-564.

[9] Einwiller, S. 2003. When reputation engenders trust: An empirical investigation in business-to-consumer electronic commerce. *Electronic Markets* 13(3): 196-209.

[10] Kotha, S., Rajgopal, S. & Rindova, V. 2001. Reputation building and performance: An empirical analysis of the top-50 pure internet firms. *European Management Journal* 19(6): 571-586.

[11] Eroglu, S.A., Machleit, K.A. & Davis, L.M. 2003. Empirical testing of a model of online store atmospherics and shopper responses. *Psychology and Marketing* 20(2): 139-150.

[12] Hong, I.B. & Cha, H.S. 2013. The mediating role of consumer trust in an online merchant in predicting purchase intention. *International Journal of Information Management* 33(6): 927-939.

[13] Ling, K.C., Chai, L.T. & Piew, T.H. 2010. The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Business Research* 3(3): 63.

[14] Featherman, M.S. & Pavlou, P.A. 2003. Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human Computer Studies* 59(4): 451-474.

[15] Doney, P.M. & Cannon, J.P. 1997. An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing* 61(2): 35.

[16] Meyer, R.C., Davis, J.H. & Schoorman, F.D. 1995. An integrative model of organizational trust. *Academy of Management Review* 20(3): 709-734.

[17] Mcknight, D.H., V. Choudhury. & C.J.K. 2002. Developing and validating trust measure for e-commerce: An integrative typology. *Information System Research* 13(3): 334-359.

[18] Van der Heijden, H., Verhagen, T. & Creemers, M., 2003. Understanding online purchase intentions: Contributions from technology and trust perspectives. *European Journal of Information Systems*, 12(1): 41-48.

[19] Chang, H.H. & Chen, S.W. 2008. The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review* 32(6): 818-841.

[20] Pappas, I.O., Kourouthanassis, P.E., Giannakos, M.N. & Chrissikopoulos, V. 2016. Explaining online shopping behavior with fsQCA: The role of cognitive and affective perceptions. *Journal of Business Research* 69(2): 794-803.

[21] Ganesan, S. 1994. Determinants of long-term in buyer-seller orientation relationships. *The Journal of Marketing*, 58(April): 1-19.

[22] Ha, H.Y. 2004. Factors influencing consumer perceptions of brand trust online. *Journal of Product & Brand Management* 13(5): 329-342.

[23] Bhatnagar, A., Misra, S. & Rao, H.R. 2000. On risk, convenience, and Internet shopping behavior. *Communications of the ACM* 43(11): 98-105.

[24] Forsythe, S.M. & Shi, B. 2003. Consumer patronage and risk perceptions in internet shopping. *Journal of Business Research* 56(11): 867-875.

[25] Koufaris, M. & Hampton-Sosa, W. 2004. The development of initial trust in an online company by new customers. *Information and Management* 41(3): 377-397.

[26] Kim, J. & Lennon, S.J. 2013. Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention:

- Based on the stimulus-organism-response model. *Journal of Research in Interactive Marketing* 7(1): 33-56.
- [27] Hsu, S.H. 2012. Factors influencing on online shopping attitude and intention of Mongolian consumers. *The Journal of International Management Studies* 7(2): 167-176.
- [28] Chen, Y.H. & Barnes, S. 2007. Initial trust and online buyer behaviour. *Industrial Management & Data Systems* 107(1): 21-36.
- [29] Ling, K.C., bin Daud, D., Piew, T.H., Keoy, K.H. & Hassan, P. 2011. Perceived risk, perceived technology, online trust for the online purchase intention in Malaysia. *International Journal of Business and Management*, 6(6): 167-182.
- [30] Tangmanee, C. & Rawsena, C. 2016. Direct and indirect effects of perceived risk and website reputation of purchase intention: A mediating role of online trust. *International Journal of Research in Business and Social Science* 5(6): 1-11.