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## DIGITAL LITERACY, PRIVACY VIOLATION EXPERIENCE AND THE IMPACT ON ONLINE PURCHASE INTENTION

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### ABSTRACT

The purpose of this study is to explain the effect of digital literacy and consumer privacy violation experience on the online repurchase intention of millennial consumer groups in Denpasar City and Badung Regency, Bali. The population in this study is a group of millennial consumers in Denpasar City and Badung Regency who have shopped online. The sample size used was 200 respondents by purposive sampling method. The analysis technique used is descriptive statistical analysis and moderated regression analysis (MRA). The results of this study indicate that digital literacy has a positive and significant effect on Online Repurchase Intention, while the privacy violation experience has a negative and significant effect on Online Repurchase Intention. Privacy violation experience moderates (in this study weakens) the effect of digital literacy on online repurchase intention among millennial consumer groups in Denpasar City and Badung Regency.

### KEY WORDS

Digital literacy, privacy violation experience, online repurchase Intention.

Current technological developments are very closely related to the internet. The internet can provide changes in social life in society, how people communicate and different business opportunities (Arumsari, 2017). The presence of large e-commerce and marketplaces with enormous capital for industry sizes in Indonesia, such as Shopee, Tokopedia, and JD.ID, Lazada, Blibli, and Bukalapak are examples of the many large marketplaces that have been established in Indonesia. The recent phenomenon is not only large marketplaces that have sprung up but also many e-commerce players who use personal accounts on social media as their business activities, such as Instagram, Facebook, TikTok and Twitter. Companies can be said to be successful when they can create repurchase intentions in the minds of consumers so that repeated and continuous purchases occur.

Repurchase intention is defined as a consumer's assessment of repurchasing the same, similar or different products from an e-commerce platform (Wanga et al, 2018). A consumer who gets a positive response to past actions will be strengthened by having positive thoughts about the actions he has received, enabling individuals to make repeated purchases (Pujiati et al, 2016). Hellier et al. (2003) stated that repurchase intention is a person's planned decision to repurchase a service, taking into account a situation that will occur and accompanied by a level of preference. According to Thamizhvanan and Xavier (2013), online shopping intention is a desire in consumers to make transactions online. Repurchase has various properties according to the level of resistance that the product has (Ndubisi and Moi, 2005).

In online shopping activities, repurchase intention is largely determined by the digital literacy of consumers. Digital literacy is understood as an audience skill in consuming information. Higher digital literacy and lower privacy violation experience should increase consumer online repurchase intention. However, several previous empirical studies have stated that consumers' concerns about privacy do not have consistent behaviour. This discrepancy is referred to as paradoxical privacy, this can be caused by a lack of consumer knowledge about procedures for protecting privacy or a lack of sensitivity to various threats or privacy distortions (Ananda Dwitha and Widodo A.S, 2018).



With this phenomenon, this research was conducted to explain the influence of digital literacy which consists of Familiarity with technical aspects, awareness of practices carried out by e-commerce, and understanding of privacy policies on online repurchase intention and explaining the influence of consumer privacy violation experience in moderating digital literacy aspects of online repurchase intention for millennial consumer groups in Denpasar City and Badung Regency, Bali.

Based on the phenomenon and theoretical studies, the research hypothesis is as follows:

- H1: Familiarity with technical aspects has a positive and significant effect on online repurchase intention;
- H2: Awareness of e-commerce practices has a positive and significant effect on online repurchase intention;
- H3: Understanding of privacy policies has a positive and significant effect on online repurchase intention;
- H4: Privacy violation experience has a negative and significant effect on online repurchase intention;
- H5: Privacy violation experience weakens the influence of Familiarity with technical aspects that influences online repurchase intention;
- H6: Privacy violation experience weakens the influence of awareness of e-commerce practices on online repurchase intention;
- H7: Privacy violation experience weakens the influence of understanding about the privacy policy on online repurchase intention.

## **METHODS OF RESEARCH**

The type of this research is associative research. The locations chosen for this study were the city of Denpasar and Badung district because these two locations could reflect the activities of Balinese people in general with different socio-economic backgrounds, such as understanding and using online transactions that are quite intense, so that they are considered to have digital literacy and privacy violation experience in carrying out these online shopping activities.

The subjects in this study were people who had done online shopping on sites such as Lazada, Shopee and other similar sites, while the object of this research is digital literacy and privacy violation experience and consumer online shopping behavior.

In this study the independent variables are Familiarity with technical aspects (X1), Awareness of practices carried out by e-commerce (X2), and Understanding of Privacy Policy (X3), the dependent variable is online shopping behaviour (Y), the moderating variable is consumer privacy violation experience (Z). In this study used data types grouped according to their nature, namely qualitative data and quantitative data. The data sources used in this study are primary and secondary, so the data are in the form of primary data and secondary data.

The population in this study is a group of millennial consumers in the city of Denpasar and Badung regency, Bali, who have shopped on online sites such as Lazada and the like. This study used a survey method, namely using a sample to reflect the state of the population being observed. Based on certain considerations, in this study the number of samples used was 200 respondents by taking samples using the Non Probability Sampling technique with purposive sampling method.

The data collection method in this study was by distributing questionnaires online using the Google form. This study uses descriptive statistics and inferential statistics, namely: moderated regression analysis (MRA).

## **RESULTS AND DISCUSSION**

The results of the validity test of the research instruments presented in Table 4.2 show that all indicators have a Pearson Correlation greater than 0.30 so that all of these indicators



meet the data validity requirements. Testing the reliability of the instrument shows that the reliability value of each variable tested has a Cronbach's Alpha coefficient greater than 0.60 so that the statements in the questionnaire are reliable.

Table 1 – Validity and Reliability Test Results

| No. | Variable                           | Item | Validity      |             | Reliability      |             |
|-----|------------------------------------|------|---------------|-------------|------------------|-------------|
|     |                                    |      | r Correlation | Information | Cronbach's Alpha | Information |
| 1   | Familiarity with technical aspects | X1.1 | 0.759         | Valid       | 0.781            | Reliable    |
|     |                                    | X1.2 | 0.641         | Valid       |                  |             |
|     |                                    | X1.3 | 0.606         | Valid       |                  |             |
|     |                                    | X1.4 | 0.851         | Valid       |                  |             |
|     |                                    | X1.5 | 0.793         | Valid       |                  |             |
| 2   | Ecommerce Practice Awareness       | X2.1 | 0.812         | Valid       | 0.707            | Reliable    |
|     |                                    | X2.2 | 0.849         | Valid       |                  |             |
|     |                                    | X2.3 | 0.772         | Valid       |                  |             |
| 3   | Consumer Privacy                   | X3.1 | 0.829         | Valid       | 0.646            | Reliable    |
|     |                                    | X3.2 | 0.893         | Valid       |                  |             |
| 4   | Privacy violation experience       | M1   | 0.615         | Valid       | 0.761            | Reliable    |
|     |                                    | M2   | 0.650         | Valid       |                  |             |
|     |                                    | M3   | 0.811         | Valid       |                  |             |
|     |                                    | M4   | 0.661         | Valid       |                  |             |
|     |                                    | M5   | 0.821         | Valid       |                  |             |
| 5   | Online Repurchase Intention        | Y1   | 0.800         | Valid       | 0.780            | Reliable    |
|     |                                    | Y.2  | 0.821         | Valid       |                  |             |
|     |                                    | Y.3  | 0.881         | Valid       |                  |             |

Source: Data processed, 2022.

Table 2 – Results of Moderating Regression Analysis

| Model                       | Unstandardized Coefficients |            | Standardized Coefficients | T       |
|-----------------------------|-----------------------------|------------|---------------------------|---------|
|                             | B                           | Std. Error | Beta                      |         |
| 1 (Constant)                | 4.647                       | .043       |                           | 107.166 |
| technical aspects           | .108                        | .032       | .221                      | 3.391   |
| Ecommerce Practice          | .093                        | .030       | .191                      | 3.077   |
| Consumer Privacy            | .090                        | .028       | .184                      | 3.250   |
| Privacy violation           | -.068                       | .031       | -.139                     | -2.204  |
| technical*Privacy violation | -.070                       | .033       | -.175                     | -2.108  |
| E-com*Privacy violation     | -.027                       | .038       | -.061                     | -.728   |
| Privacy*Privacy violation   | -.048                       | .037       | -.103                     | -1.313  |

Source: Data processed, 2022.

Based on the results of the MRA analysis as presented in Table 2, the following equation can be made:

$$Y = 4,647 + 0,108 X_1 + 0,093X_2 + 0,090X_3 - 0,068Z - 0,070X_1Z - 0,027 X_2Z - 0,048X_3Z$$

This shows that the variables of technical aspects, knowledge of e-commerce practices and understanding of Consumer Privacy have a positive and significant effect on Online Repurchase Intention, while the consumer's privacy violation experience has a negative and significant effect on Online Repurchase Intention. The interaction effect of technical aspect variables with privacy violation experience, the interaction of knowledge variables about e-commerce practices with privacy violation experience and the interaction between understanding privacy and privacy violation experience has a negative effect on online repurchase intention.

Based on the results of Table 3 it can be explained that the influence of technical aspect variables, knowledge of e-commerce practices, understanding of Consumer Privacy and privacy violation experience as well as the interaction of technical aspect variables with privacy violation experience has a significant effect on Online Repurchase Intention, while the interaction effect of knowledge about e-commerce practices with privacy violation



experience and the interaction effect of understanding privacy with privacy violation experience has no significant effect on Online Repurchase Intention.

Table 3 – Significance value of Moderating Regression Analysis results

| Model                       | Sig. | Collinearity Statistics<br>Tolerance | VIF   |
|-----------------------------|------|--------------------------------------|-------|
| 1 (Constant)                | .000 |                                      |       |
| technical aspects           | .001 | .592                                 | 1.688 |
| Ecommerce Practice          | .002 | .650                                 | 1.538 |
| Consumer Privacy            | .001 | .787                                 | 1.270 |
| Privacy violation           | .029 | .629                                 | 1.589 |
| technical*Privacy violation | .036 | .364                                 | 2.745 |
| E-com*Privacy violation     | .467 | .361                                 | 2.774 |
| Privacy*Privacy violation   | .191 | .406                                 | 2.460 |

Source: Data processed, 2022.

Based on Table 3 it is also found that the variable that most influences consumers' Online Repurchase Intention is Familiarity with technical aspects because it has a beta standardized coefficient value that is greater than the other variables, which is equal to 0.221.

Table 4 – Normality Test Results

|                                  |                | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N                                |                | 200                     |
| Normal Parameters <sup>a,b</sup> | Mean           | .0000000                |
|                                  | Std. Deviation | .28459283               |
| Most Extreme Differences         | Absolute       | .040                    |
|                                  | Positive       | .040                    |
|                                  | Negative       | -.036                   |
| Test Statistic                   |                | .040                    |
| Asymp. Sig. (2-tailed)           |                | .200 <sup>c,d</sup>     |
| Exact Sig. (2-tailed)            |                | .901                    |
| Point Probability                |                | .000                    |

Source: Data processed, 2022.

Based on the analysis results in Table 4 significance value of 0.200 is obtained which is greater than 0.05.

Table 5 – Heteroscedasticity Test Results

| Model                       | Unstandardized Coefficients |            | Standardized Coefficients |        |      |
|-----------------------------|-----------------------------|------------|---------------------------|--------|------|
|                             | B                           | Std. Error | Beta                      | t      | Sig. |
| 1 (Constant)                | .215                        | .021       |                           | 10.254 | .000 |
| technical aspects           | 7.671E-5                    | .015       | .000                      | .005   | .996 |
| Ecommerce Practice          | .003                        | .015       | .015                      | .171   | .865 |
| Consumer Privacy            | .008                        | .013       | .049                      | .620   | .536 |
| Privacy violation           | .003                        | .015       | .202                      | .200   | .842 |
| technical*Privacy violation | -.004                       | .016       | -.026                     | -.226  | .821 |
| E-com*Privacy violation     | .013                        | .018       | .081                      | .690   | .491 |
| Privacy*Privacy violation   | .002                        | .018       | .015                      | .134   | .893 |

Source: Data processed, 2022.

In Table 5 it can be seen that the significance value of the technical aspect variable is 0.996, the significance value of e-commerce practices is 0.865 and Understanding of Consumer Privacy is 0.536 so, there is no influence between the independent variables on the absolute residual. Thus, the model created does not contain symptoms of heteroscedasticity.

The test results in Table 6 give the result that the adjusted R<sup>2</sup> (adjusted coefficient of determination) is 0.517. This means that online repurchase intention is significantly



influenced by digital literacy variables consisting of technical aspects, e-commerce knowledge and understanding of consumer privacy by 51.7 percent, while the remaining 48.3 percent is explained by other factors not explained in the research model.

Table 6 – Test Results for the Coefficient of Determination (R<sup>2</sup>)

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .719 <sup>a</sup> | .517     | .500              | .34543                     |

Source: Data processed, 2022.

Table 7 – F test result

| Model        | Sum of Squares | Df  | Mean Square | F      | Sig.              |
|--------------|----------------|-----|-------------|--------|-------------------|
| 1 Regression | 24.556         | 7   | 3.508       | 29.400 | .000 <sup>b</sup> |
| Residual     | 22.910         | 192 | .119        |        |                   |
| Total        | 47.465         | 199 |             |        |                   |

Source: Data processed, 2022.

The F-test results show a significance value of less than  $\alpha = 0.05$  with a P-value of 0.000, indicating that the model used in this study is feasible. This result means that all independent variables can predict or explain the phenomenon of the dependent variable. In other words, digital literacy and consumer experience of privacy violation variables simultaneously influence online repurchase intentions. This means that the model can be used for further analysis. In other words, the fit is good with a significance value of 0.000, so the model can be used for extrapolation.

The effect of each digital literacy and privacy violation experience variable on online repurchase intention was tested using the t test. The test criteria to explain the interpretation of the influence between each variable is that if the significance value is  $<0.05$  then  $H_0$  is rejected and  $H_1$  is accepted. On the other hand, if the significance value is  $> 0.05$ , then  $H_0$  is accepted and  $H_1$  is rejected. Based on Table 4.9, it can be seen that the digital literacy and privacy violation experience variables have a significance value of  $<0.05$ , meaning that partially the digital literacy variable consists of Familiarity with technical aspects, knowledge of e-commerce practices and understanding of Consumer Privacy positively and significantly influences online repurchase intention. These results indicate that the higher the level of consumer literacy, the higher the online repurchase intention on online shopping sites. The results of the analysis also show that the moderating variable, in this case the privacy violation experience, negatively and significantly influences online repurchase intention. These results indicate that the higher the level of consumer privacy violation experience on online shopping sites, the lower the online repurchase intention on these online shopping sites. From the results of the MRA analysis in Table 4.9 it can also be concluded that the variable privacy violation experience in this study is a pure moderator because of the influence of Z (privacy violation experience) on Y (online repurchase intention) in the first output and the interaction effect of  $Z \times X_1$  (interaction of digital literacy variables with privacy violation experience) on the second output, one of which is significant. Thus it can be said that the privacy violation experience has proven to weaken or reduce online repurchase intention among millennial consumer groups even though they realize that online repurchase intention provides a lot of practicality considering that this consumer group has a good understanding of digital literacy, especially in terms of familiarity with technical aspects. The results of this analysis also support all the hypotheses formulated previously.

## CONCLUSION

Digital literacy which consists of the dimensions of Familiarity with technical aspects, knowledge of e-commerce practices and understanding of Consumer Privacy has a positive and significant effect on online repurchase intention on online shopping sites. This indicates



that the higher the digital literacy of the people in Denpasar City and Regency, the higher the community's intention to carry out online repurchase intentions on online sites. Privacy violation experience has a negative and significant effect on online repurchase intention on online shopping sites. This indicates that the more often the people of Denpasar City and Badung Regency experience privacy violations, it will reduce people's intention to carry out online repurchase intentions on online shopping sites. The interaction effect of technical aspect variables with privacy violation experience, the interaction of knowledge variables about e-commerce practices with privacy violation experience and the interaction between understanding privacy and privacy violation experience has a negative effect on online repurchase intention. This means that the consumer's privacy violation experience will reduce consumers' online repurchase intention even if they have good digital literacy. Privacy violation experience is a pure moderator, namely moderating the influence of digital literacy on online repurchase intention.

Based on the results of the analysis and conclusions, the suggestions that can be given to those in need are as follows: Online shopping sites are also expected to carry out intense socialization related to e-commerce practices and understanding privacy so that it will strengthen people's desire to carry out online repurchase intentions. Online shopping sites protect consumer data security. It is hoped that the government will be more intense and aggressive in working to protect consumer data, especially the millennial group, considering that this group will determine the country's future capabilities.

## REFERENCES

1. Abdillah, W., & Jogiyanto. (2015). Partial least Ananda Dwitha Y, Widodo A.S (2018). Literasi Privasi dalam Perilaku Belanja Daring (Survei tingkat literasi Privasi online konsumen Generasi y urban Jabodetabek dan Surabaya terhadap kemampuan bersikap proteksi yang dimoderasi oleh Pengalaman pelanggaran privasi Ketika belanja melalui E-Commerce di Indonesia).
2. Arumsari, R., dan Maya. A. (2017). The Effect of Electronic Word of Mouth, Brand Image, Customer Trust and Customer Satisfaction Towards Repurchase Intention at PT. GO-JEK Indonesia. *International Journal of Science and Research*. 6 (7).
3. Bao, J. (2015). The Impacts of E-service Quality on Customers' Repurchase Intention in Platform Online Retailing: An Empirical Investigation. *Fourteenth Wuhan International Conference on E-Business*, 298–306.
4. Cahya Putra, F. K., & Farida, N. (2021). Pengaruh Nilai Pelanggan dan Promosi Penjualan Terhadap Repurchase Intention Melalui Kepuasan Pelanggan (Studi pada Konsumen Alfa Cell di Semarang). *Jurnal Ilmu Administrasi Bisnis*, 10(2), 1121–1134.
5. Collste, Goran. *Global ICT-Ethics: The Case of Privacy*, 1992. <https://doi.org/10.1108/14779960810866819>.
6. Hellier, P.K., Geursen, G.M., Carr, R.A. and Rickard, J.A. (2003). Customer Repurchase Intention A general structural equation model. *European Journal of Marketing*, 37(11/12), pp.1762-1800.
7. Hiselius, Patrik. *ICT / Internet and the Right to Privacy*, 2010.
8. Kotler, P and Kevin, L. K. (2016). *Marketing Management, Global Edition*. Unite State: Pearson Education, Inc.
9. Kurnia, N., & Astuti, S. I. (2017). Peta gerakan literasi digital di Indonesia : studi tentang pelaku, ragam kegiatan, kelompok sasaran dan mitra. *Informasi*, 47(2), 149–166.
10. Kurniawati, J., & Baroroh, S. (2016). Literasi Media Digital Mahasiswa Universitas Muhammadiyah Bengkulu. *Jurnal Komunikator*, 8(2), 51–66.
11. Pujiati, S.S., Andi, T. H., dan Patricia, D. P." Faktor- Faktor Yang Mempengaruhi Loyalitas Pelanggan Pada Ahyana Collections dengan Minat Beli Ulang Sebagai Variabel Intervening, 2 (2).
12. Rahmawan, D., Mahameruaji, J. N., & Anisa, R. (2019). Pengembangan konten positif sebagai bagian dari gerakan literasi digital. *Jurnal Kajian Komunikasi*, 7(1), 31–43.



13. Rastini, Nurcaya(2021). Anteseden Kepercayaan dan Sikap konsumen dan dampaknya terhadap online repurchase Intention
14. Razak, N. S. A., Ahmad, A. H., & Marimuthu, M. (2016). the Effect of Website Quality on Repurchase Intention in Travel Agency'S Website in Malaysia. Asia Pacific Institute of Advanced Research, 22–30.
15. Setyorini, R., and Nugraha, R. P. (2017). The Effect of Trust Towards Online Repurchase Intention with Perceived Usefulness As An Intervening Variable: A Study on KASKUS Marketplace Customers. Jurnal Internasional, 9(1), pp. 1-7.
16. Sukarno, G., Mulyaningsih, S., Nirawati, L., & Adiwaty, M. R. (2018). Trio ABG Model and Competitive Advantages in Growing Creative Industry in East Java. Nusantara Science and Technology Proceedings, 227-231.
17. Sumartini, A. R., Martini, N. P. R., & Mandasari, I. A. C. S. (2021). The Role of Brand Trust in Mediating The Correlation Between The Use of Celebrity Endorsers and Online Consumer Purchase Intentions. Russian Journal of Agricultural and Socio-Economic Sciences.
18. Thamizhvanan, A. dan Xavier, M.J., 2013. Determinants of customers' online purchase intention: an empirical study in India. Journal of Indian Business Research, 5(1), pp.17-32.
19. Tjiptono, F. 2019. Strategi Pemasaran. Yogyakarta: ANDI.