The Impact of Trust on Students' Behavior Towards Blog During Pandemic Era

Ari Kusyanti[(✉)], Nurudin Santoso, Harin Puspa, and Ayu Catherina

Universitas Brawijaya, Malang, Indonesia
`ari.kusyanti@ub.ac.id`

Abstract. Blog is one of the media that can develop one's abilities and ideas through writing. Blog is also used as a strategic learning media to improve the active and interactive learning process for students. During this pandemic, the existence of blogs facilitate the students to find information that they need to support their online class. Apart from the benefits, there are hidden risks that might occur such as losses caused by using blogs that are related to how accurate and reliable the information contained in the blog. The main purpose of this research is to analyze the factors that influence the user's trust in the information provided by a blog and their behavior intention in using blog. Data were collected from 297 students as respondents who were active blog users. Data from respondents were analyzed using the Structural Equation Modeling (SEM) model. The results of this study indicate that the factors that influence students to trust in the information provided by a blog are source credibility, site credibility, perceived information quality, social influence and technical trustworthiness. Trust in one of factors that influence using a blog apart from perceive ease of use and perceived usefulness.

Keywords: Blog · SEM · Source Credibility · Site Credibility · Perceived Information Quality

1 Introduction

Technological advances make students intentionally or unintentionally interact with technology. Electronic media as a result of technological development, gets a place and considerable attention for students and its influence on the development of education. The benefits of learning activities caused by the advancement of science and technology so that students can search for themselves and directly experience the learning process. An important stage in learning is choosing or determining lecture material. Another thing related to lecture material is choosing the source where the lecture material is obtained. Until now there has been a tendency that learning resources are focused on books. Though many sources of teaching materials other than books can be used [1].

Blogs are one of the media that can develop student's abilities and ideas through writing. In 2014, the number of blog users around the world reached 200 million users [2]. Whereas in Indonesia, in 2017 the number of blog users reached 3 million users or around 3.8% of the total active internet users in Indonesia [3].

During this pandemic, blogs can be used as a tool that can improve the ability of students to support the studying process. In a blog there are facilities that can support the potential of each student in developing class material. Someone who writes something in a blog can be seen immediately by all Internet users. Through blogs, relevant material sources can be published throughout the world so that they can be accessed by anyone. Thus the difficulties of students in gathering information resources needed in the learning process can be overcome. Therefore, blogs are one of the strategic learning media to improve the active and interactive learning process.

Behind many benefits gained by using blogs as a means to obtain information, there are disadvantages caused by using blogs that are related to how accurate and reliable the information contained in the blog. In 2014, a study conducted by a research team from Campbell University and other research teams published in the Journal of Osteopathic Association found that 90% of health articles contained false information that could not be justified [4]. This study uses a model from a study conducted by Cosenza et al. [5] entitled "Credibility in the blogosphere: A study of measurement and influence of wine blogs as an information source" that examines the trustworthiness of users of wine blogs by using 6 construct, namely: source credibility, site credibility, credibility, trust, following recommendations, word-of-mouth and continued blog participation. In addition, this study is also adapted from the research conducted by Yi et al. [6] which uses 5 constructs namely argument quality, source expertise, perceived information quality, perceived risk, and trust.

Data is collected from active users of the blog which aims to analyze the factors that influence the user's trust in the blog as a source of various information needed by the user. This section will discuss the definition of source credibility, site credibility, trust credibility, following recommendations, word-of-mouth, continued blog participation, argument quality, source expertise, perceived information quality, perceived risk, and trust.

2   Methods

Data was collected from 297 students as respondents who acted as active blog users as the source of the information they needed. The data is obtained using a questionnaire as an instrument used to obtain data from respondents.

The sample characteristics of the respondents include gender, age and frequency of usage of blog. To take measurements and analyze the factors that influence users' trust in the information contained in a blog, the questionnaire was designed and adjusted to study using questionnaire items from previous research studies [5, 6].

The reliability of the instrument was determined using Cronbach's alpha coefficient to measure the internal consistence of the variables. The data collected can be said to be reliable and can be used in further analysis if the value is more than 0.6 [39].

The reliability of the measurement items can be assessed by calculating the coefficient of the construct reliability. Construct reliability can be said to be good if it has a value of more than 0.60 [19]. In this study, it can be seen that construct reliability ranges from 0.829 (for Continued Blog Participation) to 0.853 (for behavioral intention). Meanwhile, the AVE value can be said to be good if it has a value of more than 0.50 [19]. In this

study, it can be seen that construct reliability ranges from 0.548 (for Continued Blog Participation) to 0.601 (for behavioral intention).

Measurement model fit is to determine the manifest variable (indicator) actually has a relationship with the latent variable (construct). This test is done by using Confirmatory Factor Analysis (CFA) method. Based on the results, all values in this study meets the specified criteria. It can be said that the test can be continued at the structural model fit stage.

Structural fit model is used to determine whether there is a significant relationship between exogenous variables and endogenous variables. The results present the significance p-values for every path in the model. The results show that H1 (p-value = 0.033) is accepted which can be interpreted that Message Credibility plays significant role towards Trust. H2 is accepted p-value = .021) that highlights a significant relationship between Site Credibility and Trust. H3 is rejected (p-value = 0.433) which postulate that Technical Trustworthiness does not relate to Trust. Whilst, H4 is supported (p-value = ***) that Information Quality has a significant effect towards Trust. Social Influence does not support Trust that is shown by H5 with p-value = 0.756. For hypotheses that influenced by trust, only Following Recommendation that is not supported as in H6 with p-value = 0.673. While other two variables, i.e. Word-of-Mouth and Continued Participation shows a significant result with both p-value = ***. H9, H10 and H11 are all accepted with p-value = *** and 0.016 respectively that support the notion that Perceived Ease of Use, Perceived Usefulness, and Trust influence the Behavioral Intention.

3   Result and Discussion

This study is seeking to evaluate the use of blog during this pandemic. There are 11 hypotheses are examined through model built. Trust is a variable that plays central role, since it is influenced by 5 other factors, namely Message Credibility (MSG), Site Credibility (STE), Perceived Information Quality (PIQ), Social Influence (SI) and Technical Trustworthiness (TTW). Among those variables, there are 3 variables that support the notion of Trust (TRUST), which leads to interpretation that respondents trust the blog since they evaluate its credibility and information quality it contained. Respondents assume that the content of the information contained in the blog with high credibility can be trusted. Respondents also assume that the topic of the content of information contained in the blogs they use is interesting, accurate and relevant to science that is currently developing. In addition, respondents also assume if the content of information contained in a blog has an interesting topic, it can add to the uniqueness of the blog. So that makes the respondents have a high sense of trust in the blog. Similarly, Cosenza et al. [5] argues that if a blog has the characteristics of the content or message contained in the blog that is accurate and relevant, then it can produce a high level of trust from users who use the blog. Similarly, site credibility (STE) has a significant effect on trust (TRUST). Respondents assume that the design and aesthetics contained in the blogs they use can be easily used by those respondents. Respondents also assume the layout or layout contained in the blog has a beautiful design hence it adds trust to the respondents. In addition, respondents also assumed that the appearance and design of the blog they were using looked very professional so that respondents feel easy and did not require

much effort in its use. Therefore, users have a high sense of trust in the. Cosenza et al. [5] also present the same result that suggests that if a blog has a look and aesthetics that are friendly and easy to use by its users then it can increase the trust of its users to use the blog. Furthermore, Perceived information quality (PIQ) has a significant effect on trust (TRUST), which shows that respondents assume that the quality of the information provided by the blogs they use has high credibility and can be trusted. Respondents also assumed that the information provided by the blog used by respondents provided accurate and complete information. In addition, respondents also assumed that there were no mistakes in compiling the information provided by the blog and that the blog provided or displayed information in accordance with what was needed by the respondent. Yi et al. [6] agreed on the result which states that when a blog can provide or display the quality of information accurately then indirectly it will make users have a high sense of trust in every information that is loaded by the blog. However, there are 2 factors that does not support trust, namely Technical Trustworthiness and Social Influence.

Apart from influenced by 5 factors, Trust also influencing 3 other factors, namely Following recommendation, Word-of-Mouth and Continued Participation. However, Trut does not show significant effect towards Following Recommendation. While two other factors are supported by Trust. Respondents assumed that the information contained in the blog they used to use was interesting, so that it made respondents have an interest in the information provided by the blog. Respondents also think that there were benefits that could be felt when using the blog, which made the respondents more often read the information provided by the blog and those respondents would often comment on the blog. This shows that in this study technical trustworthiness (TTW) has a significant effect on continued blog participants (CBP). The results of this study are similar to the results of a study conducted by Cosenza et al. [5] which suggests that when a user has a high level of trust in a blog, the user will tend to be active in participating in the blog. Likewise, respondents will say positive things about blogs that they normally use to others. Respondents will also recommend a blog that they normally use to others if the person asks and needs advice from the respondent. In addition, respondents will also encourage their friends and relatives to search for information using blogs that the respondents used to use. So that makes users have a high sense of trust in the blog to continue to recommend the blog to be used by people around these respondents. This shows that this study of technical trustworthiness (TTW) has a significant effect on word-of-mouth (WOM). The results of this study are the same as the results of research conducted by Wu [44] which says that when a user has trusted an application, the user will tend to spread the positive things contained in the application and will recommend the application to be used by people around them.

The last part of the model, behavioral Intention (BI) in using blog, are affected by 3 factors i.e. Trust (TRUST), Perceived Ease of Use (PEU) and Perceived Usefulness (PU), in which all of them indicate significant effect towards Behavioral Intention (BI). Respondents have a high level of trust in the information provided or posted on the blog. Respondents also confident that the information provided on the blog had high credibility. In addition, respondents also assume that the accuracy of the information contained in a blog is very high. Therefore, respondents have a high sense of trust in the blog and have the intention to continue to use the blog as a source of information they

need. This shows that in this study trust (TRUST) has a significant effect on behavioral intention (BI). The results of this study are the same as the results of research conducted by Shin [45] from a user in the use of an application, the greater the interest of the user to use the application. Respondents assume that when they decide to use a blog as a source of information, they need can improve their effectiveness and performance in supporting their activities or work. Respondents also felt that through the blog they got the information they used. In addition, respondents also feel that the existence of these blogs can make them faster in getting the information they need. This shows that in this study perceived usefulness (PU) has a significant effect on behavioral intention (BI). The results of this study are similar to the results of a study conducted by Venkatesh, Morris and Ackerman [47] suggesting that if an individual uses an application and the individual feels that the application can provide benefits and can improve performance in his work, then the individual will tend to have intentions to continue using the application. Respondents assume that to interact with blogs that they normally use is not an easy thing. Respondents also felt that to operate the facilities or features contained in the blog requires a lot of effort. In addition, respondents also assumed that the way to use the blog was not easy to learn. So that makes the respondent feel that using the blog is not an easy thing and this makes the respondent does not have intention to use the blog. This shows that the study of perceived ease of use (PEU) does not have a significant effect on behavioral intention (BI). The results of this study are the same as the results of a study conducted by Oroh et al. [46] when users feel an application or service is not easy to use and requires a lot of effort to use so it will tend to reduce the intention of the user to continue using the application or service.

4 Conclusion

Based on the results of the research that has been done, it can be seen that there are 5 factors that influence the trust of users in using information that is available on the blog, namely: source credibility, site credibility, message credibility, perceived inf Among those variables, there are 3 variables that support the notion of Trust, which leads to interpretation that respondents trust the blog since they evaluate its credibility and information quality it contained. Once they trust the blog, they will continue to use the blog as their resource and also influence other to use it. Nevertheless, they do not necessarily follow the recommendation provided by the blog. Furthermore, trust also plays significant role toward behavioral intention. Trust in one of factors that influence using a blog apart from perceive ease of use and perceived usefulness. Respondents can get the benefit from using blog and also how easy they can use the blog. This study shed the light on how blog can be resourceful during this pandemic era.

References

1. Depdiknas. 2006. Peraturan Menteri Pendidikan Nasional Republik Indonesia, Nomor 23 tahun 2006, tentang Standar Kompetensi Lulusan untuk Satuan Pendidikan Dasar dan Menengah. Jakarta: Depdiknas.
2. Handayani, R. 2014. New Media 2014. https://www.slideshare.net/Missrika/new-media-2014

3. Tea, R. 2017. Jumlah #Blogger di Indonesia Saat Ini, Termasuk Anda?. https://www.romelt eamedia.com/2017/09/jumlah-blogger-di-indonesia-saat-ini.html

4. Ningrum, D. W. 2014. Studi: 90% Artikel di Wikipedia Tidak Akurat. https://www.liputan6. com/tekno/read/2056369/studi-90-artikel-di-wikipedia-tidak-akurat

5. Cosenza, T., R., Solomon, M., R., Kwon, W., S. 2014. Credibility in the blogosphere: A study of measurement and influence of wine blogs as an information source. Journal of Consumer Behaviour.

6. M.Y. Yi, F.D. Davis, Untangling the antecedents of initial trust in Web-based health information: The roles of argument quality, source expertise, and user perceptions of information quality and risk, Information Systems Research 14 (2013).

7. Austin EW, Dong Q. 1994. Source v. content effects on judgment of news believability. Journalism Quarterly 71(4): 973–983.

8. Newhagen J. 1997. The role of feedback in the assessment of news. Information Processing & Management 33(5): 583–594.

9. Fogg BJ, Soohoo C, Danielson D. 2002. How do people evaluate a Web site's credibility? Results from a large study.

10. David A, Glore P. 2010. The impact of design and aesthetics on usability, credibility, and learning in an online environment. Online Journal of Distance Learning Administration 13(4).

11. Slater MD, Rouner D. 1996. How message evaluation and source attributes may influence credibility assessment and belief change. Journalism and Mass Communications Quarterly 73 (4): 974–991.

12. Bart Y, Shankar V, Sultan F, Urban GL. 2005. Are the drivers and role of online trust the same for all web sites and consumers? A large-scale exploratory empirical study. Journal of Marketing Research 69(4): 131–152.

13. Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D. 2003. "User Acceptance of Information Technology: Toward a Unified View," MIS Quarterly (27:3), pp. 425–478

14. Abdulwahab & Dahalin (2010). A Conceptual Model of Acceptance and Use of Technology (UTAUT) Modification with Management Effectiveness and Program Effectiveness in Context of Telecentre. African Scientist. Vol. 11 (4), 267–275

15. A.I. Nicolaou, D.H. McKnight, Perceived information quality in data exchanges: effects on risk, trust, and intention to use, Information Systems Research 17 (4) (2006) 332–351.

16. Gefen, E. Karahanna, and D. W. Straub. 2003. Trust and TAM in online shopping: An integrated model," MIS Quarterly, Igbaria M,.1994. "An Examination of the factors contributing to Micro Computer technology acceptance". Journal of Information system, Elsiever Science, USA. vol. 27, No.1, pp. 51–90

17. Haas C, Wearden ST. 2003. E-credibility: building common ground in Web environments. L1 Educational Studies in Language and Literature 3: 169–184.

18. Kiecker R, Cowles D. 2001. Interpersonal communications and personal influence on the Internet: a framework for examining online word-of-mouth. Journal of Euromarketing 11(2): 71–88.

19. Alexander JE, Tate MA. 1999. Web Wisdom: How to Evaluate and Create Information Quality on the Web. Lawrence Erlbaum: Hillsdale, NJ.

20. Johnson TJ, Kaye BK, Bichard SL, Wong WJ. 2007. Every blog has its day: politically interested Internet users' perceptions of blog credibility. Journal of Computer Mediated Communication 13(1): 100–122.

21. P. Keen, G. Ballance, S. Chan, S. Schrump, Electronic Commerce Relationships: Trust by Design, Prentice Hall PTR, Upper Saddle River, NJ, 2000.

22. K.I.M. Giffin, The contribution of studies of source credibility to a theory of interpersonal trust in the communication process, Psychological Bulletin 68 (2) (1967) 104–120.

23. D.H. McKnight, A.I. Nicolaou, Perceived information quality in data exchanges: effects on risk, trust, and intention to use, Information Systems Research 17 (4) (2006) 332–351.

24. V.-W. Mitchell, Consumer perceived risk: conceptualizations and models, European Journal of Marketing 33 (1/2) (1999) 163–195.

25. Akter, S., D'Ambra, J., and Ray., P. 2011. Trustworthiness in mhealth information services: an assessment of a hierarchical model with mediating and moderating effects using partial least squares (PLS). Journal of the American Society for Information Science and Technology, 62 (1), 100–116.

26. Colquitt, A. J., Scott, B. A., LePine J. A. (2007). Trust, Trustworthiness, and Trust Propensity: A Meta-Analytic Test of Their Unique Relationships with Risk Taking and Job Performance, Journal of Applied Psychology, Vol. 92, No. 4, 909–927

27. Newton, K. (1997). Social Capital and Democracy. American Behavioral Scientist, 40(5), 575–586.

28. Fukuyama, F. (1995). Trust: The Social Virtues and the Creation of Prosperity. NY: Free Press.

29. Wang C-C, Chien H-Y. 2012. Believe or skepticism? An empirical study on individual's attitude to blog product review. International Journal of Innovation, Management and Technology 3(4): 343–348.

30. Wu W-L, Lee Y-C. 2012. The effect of blog trustworthiness, product attitude, and blog involvement on purchase intention. International Journal of Management & Information Systems 16(3): 265–275.

31. Chu S-C, Kim Y. 2011. Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. International Journal of Advertising 30(1): 47–75.

32. Hsu C, Lin JC. 2008. Acceptance of blog usage: the roles of technology acceptance, social influence and knowledge sharing motivation. Information and Management 45: 65–74.

33. Grazioli, S., & Jarvenpaa, S. L. (2000). Perils of internet fraud: An empirical investigation of deception and trust with extesting experienced internet. IEEE

34. Alsaleh, D. 2017. Understanding the Role of Blogger Recommendations on Consumer Purchasing Behavior. The Journal of Business Inquiry 2017, 17, Issue 1 (Special Issue), 23–40.

35. Van der Heijden, H. (2004). User Acceptance of Hedonic Information Systems. MIS Quarterly, 28 (4), 695–704.

36. Davis, F. D., Bagozzi, R. P. and Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. Journal of Applied Social Psychology, 22 (14), 1111–1132.

37. Davis, F. D., Bagozzi, R. P. and Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. Management Science, 35 (8), 982–1003.

38. Bhattacherjee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. MIS Quarterly, 25 (3), 351–70.

39. Hair Joseph F. Jr., Black William C., Babin Barry J., Anderson Rolph E. & Tatham Ronald L. 2006. Multivariate Data Analysis, 6th edn, Pearson Prentice Hall, Pearson Education, Inc., Upper Saddle River, New Jersey 07458.

40. Meyers, L. S., Gamst, G., dan Guarino, A. J. 2005. *Applied Multivariate Research: Design and Interpretation.* Thousand Oaks, Sage.

41. Field, A., 2009. Discovering statistics using spss. 3rd ed. [e-book]. Sage Publications.

42. Santhanamery, T. and Ramayah, T. 2016. The Effect of Trust in the System and Perceived Risk in Influencing Continuance Usage Intention of an E-Government System. J. Appl. Environ. Biol. Sci., 6(3S)7–18, 2016.

43. Chin, A. J., Wafa, S. A.W. S. K., Ooi, A-Y. 2009. The Effect of Internet Trust and Social Influence towards Willingness to Purchase Online in Labuan, Malaysia. International Business Research.

44. Wu, M.S-F. 2017. A Study on the Effects of Word-of-Mouth on Brand Trust in Tourism Industry. Eurasia Journal of Mathematics, Science and Technology Education.

45. Shin, D.H., (2010) The effects of trust, security and privacy in social networking: A security-based approach to understand the pattern of adoption. Vol. 22 No. 5, pp 428–438.
46. Oroh, C. R and Rumokoy, F. S. 2015. The Influence of Perceived Ease of Use, Perceived Usefulness and Trust On Repurchase Intention of Lion Air E-Ticket. Jurnal EMBA Vol.3 No.3 Sept. 2015.
47. Venkatesh, V., Davis, F. and Morris, M. (2007), "Dead or alive? The development, trajectory and future of technology adoption research", *Journal of the Association for Information Systems*, Vol. 8 No. 4.