Influence of trust in information system: Understanding user's satisfaction of e-campus usage

Fahmi Zaidi Abdul Razak¹, Ahmad Effat Mohktar², Asmadi Abdul Rahman² and Mohd Zawawi Zainal Abidin³

¹Research and Innovation Department, Sultan Ahmad Shah Pahang Islamic University College (KUIPSAS)
²Faculty of Islamic Studies, Sultan Ahmad Shah Pahang Islamic University College (KUIPSAS)

Email: fahmizaidi@kuipsas.edu.my

Abstract. Online teaching aids are becoming prevalent among higher-learning institutions. It requires a significant amount of investment, however, and if users do not use it, the investment would not benefit and would be deemed a failure. The objective of our research has been to test the role of trust in predicting continuance intention to use e-campus. Data were collected from 500 undergraduate and postgraduate students from private university in Kuantan, Malaysia using a validated set of questionnaires. Simple linear regression statistics has been performed to answer the research question. The results show that trust was positively related to the continued intention to use e-campus, which explained a total variance of 53%. Implications from these results are further discussed.

1. Introduction

Trust is an important aspect of a relationship[1]. A trust-based relationship will ensure its continuity. This argument is supported by [2] which says that strong trust between the service provider and the customer can be expected to have a long-term relationship. Likewise, in the information system research, trust dimension has always been a concern for researchers in the sense of information systems research because of its significance in the provision of information system facilities. However, the element of trust in the use of information systems among students is less emphasised. Study by[3] found that B2C e-commerce loyalty to consumers in Saudi Arabia is highly influenced by customer satisfaction but weakly influenced by consumer trust. These finding indicates that more research is needed to determine the impact of trust on the success of an information system in different setting. Therefore, the aim of our research is to study the influence of trust on student satisfaction of using e-campus.
2. Literature review

2.1. Trust on satisfaction

Study by [4] found that there is positive and significant relationship between trust and satisfaction in using smartphone banking services. While study by [5] shows that there is positive and significant relationship between trust and satisfaction towards company. While study by [6] also found positive and significant relationship between trust and satisfaction in the Telecommunications Multiple-play Service Market context. Study by [7] found that trust significantly affects customer satisfaction. Another study by [8] found that trust in public e-service positively influences satisfaction in government to-business online service. Study by [9] indicate that trust is positively associated with customer satisfaction towards internet banking usage. Study by [10] found that trust has a positive impact on m-commerce customer satisfaction. Another study by [11] found that experiential trust positively influences experiential satisfaction in the context of Islamic banks. Study by [12] found that trust positively affects user satisfaction with M-wallet usage. Study by [13] found that perceived trust has a significant and positive effect on satisfaction in mobile commerce services.

![Figure 1. Research model](image)

3. Methodology

Survey is the principal research technique for the analysis. Research model construct are measured using multi-item scales. Items have been developed using a multi-stage approach. In the first stage, nine questionnaire items were generated on the basis of a comprehensive literature review. The variables were measured using the 5-point Likert Scale, with 5 being ‘Strongly Agree’ and 1 being ‘Strongly Disagree’, except for actual usage which was measured using a 5-rank scale.

4. Data analysis

The data in this study was analysed using the statistical package for the social sciences (SPSS). The reliability coefficient (Cronbach alpha) was used to examine the reliability of the construct. Pearson correlational analysis was used for establishing the nomological validity and multiple regression analysis was performed to test the study’s hypotheses. Table I presented the results of the two construct (satisfaction and trust) which demonstrated an acceptable reliability (0.92 and 0.91) respectively (see Table 1). [14] as cited in [15] suggest that a construct exhibits adequate nomological validity if it is strongly correlated to an antecedent or consequent construct. Accordingly, we suggest that the research model exhibits adequate nomological validity (see Table 2). The hypothesis testing results indicate that trust (β = 0.726, p < 0.001) were positively related to satisfaction explaining a total of 53.1% variance. (see Table 3)
Table 1. Reliability analysis

| Construct  | Cronbach α | Remark  |
|------------|------------|---------|
| Satisfaction | 0.92       | Acceptable |
| Trust      | 0.91       | Acceptable |

Table 2. Nomological validity

|                      | Trust       | satisfaction |
|----------------------|-------------|--------------|
| Trust                | Pearson Correlation | .726**       |
| Sig. (2-tailed)      | .000        | 1            |
| N                   | 315         | 315          |
| satisfaction         | Pearson Correlation | .726**       |
| Sig. (2-tailed)      | .000        | 1            |
| N                   | 315         | 315          |

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3. Hypothesis testing

| Hypothesis       | Beta coefficient | t-value | p-value | remark   | Variance explained |
|------------------|------------------|---------|---------|----------|--------------------|
| Trust – satisfaction | .726***          | 18.683  | 0.001   | supported | 0.53               |

***p<0.001

5. Discussion

The goal of the present study was to examine the role of trust as predictor of satisfaction. The findings from this study corroborate the importance of trust in predicting e-campus continuance intention. Such results indicate that if a person believes in a system, he or she is satisfied with such a system and customer satisfaction is the culmination of a successful business. On the other word, trust will increase user’s satisfaction, which in turn would lead to continuance intention to the system. This finding is in agreement with [4] findings which showed that trust exerts significant impact on user satisfaction in using smartphone banking.

6. Conclusion

The findings of the present study have several implication for research as well as practice. First, this study provides empirical evidence for the validity of trust as a predictor for satisfaction in higher education context. This study implies that trust can be applied to higher education context. Practically, service provider therefore, should increase users’ trust since it can enhance the e-campus satisfaction.
Acknowledgments
This research is supported by grants from the Sultan Ahmad Shah Islamic University College (KUIPSAS) (Project No. Y201636043).

References

[1] E. Garbarino and M. S. Johnson, “The different roles of satisfaction, trust, and commitment in customer relationships,” J. Mark., vol. 63, no. 2, pp. 70–87, 1999.

[2] T. T. Kim, W. G. Kim, and H.-B. Kim, “The effects of perceived justice on recovery satisfaction, trust, word-of-mouth, and revisit intention in upscale hotels,” Tour. Manag., vol. 30, no. 1, pp. 51–62, 2009.

[3] M. I. Eid, “Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia,” J. Electron. Commer. Res., vol. 12, no. 1, p. 78, 2011.

[4] A. Susanto, Y. Chang, and Y. Ha, “Determinants of continuance intention to use the smartphone banking services: An extension to the expectation-confirmation model,” Ind. Manag. Data Syst., 2016.

[5] E. Park, K. J. Kim, and S. J. Kwon, “Corporate social responsibility as a determinant of consumer loyalty: An examination of ethical standard, satisfaction, and trust,” J. Bus. Res., vol. 76, pp. 8–13, Jul. 2017.

[6] A. Carrizo Moreira, P. M. Freitas, and V. M. Ferreira, “The effects of brand experiences on quality, satisfaction and loyalty: an empirical study in the telecommunications multiplex service market,” Innovar, vol. 27, no. 64, pp. 23–36, Apr. 2017.

[7] H. Setiawan and A. J. Sayuti, “Effects of Service Quality, Customer Trust and Corporate Image on Customer Satisfaction and Loyalty: An Assessment of Travel Agencies Customer in South Sumatra Indonesia,” IOSR J. Bus. Manag., vol. 19, no. 05, pp. 31–40, May 2017.

[8] A. A. Pinem, I. M. Immanuella, A. N. Hidayanto, K. Phusavat, and Meyliana, “Trust and its impact towards continuance of use in government-to-business online service,” Transform. Gov. People, Process Policy, 2018.

[9] O. K. Simpe, B. Henry, O. A. Feehi, and G. Igor, “Examining customers’ continuance intentions towards internet banking usage,” Mark. Intell. & Plan., vol. 35, no. 6, pp. 756–773, Jan. 2017.

[10] V. Marinkovic and Z. Kalinic, “Antecedents of customer satisfaction in mobile commerce,” Online Inf. Rev., vol. 41, no. 2, pp. 138–154, Apr. 2017.

[11] H.-C. Wu, C.-C. Cheng, and A. S. Hussein, “What drives experiential loyalty towards the banks? The case of Islamic banks in Indonesia,” Int. J. Bank Mark., vol. 37, no. 2, pp. 595–620, Apr. 2019.

[12] A. Kumar, A. Adlakaha, and M. Mukherjee, “The effect of perceived security and grievance redressal on continuance intention to use M-wallets in a developing country,” Int. J. Bank Mark., vol. 36, no. 7, pp. 1170–1189, Oct. 2018.

[13] Z. Kalinić, V. Marinković, A. Djordjevic, and F. Liebana-Cabanillas, “What drives customer satisfaction and word of mouth in mobile commerce services? A UTAUT2-based analytical approach,” J. Enterp. Inf. Manag., vol. 33, no. 1, pp. 71–94, Oct. 2019.

[14] D. H. McKnight, V. Choudhury, and C. Kacmar, “Developing and validating trust measures for e-commerce: An integrative typology,” Inf. Syst. Res., vol. 13, no. 3, pp. 334–359, 2002.

[15] L. Liu, C. Li, and D. Zhu, “A new approach to testing nomological validity and its application to a second-order measurement model of trust,” J. Assoc. Inf. Syst., vol. 13, no. 12, p. 4, 2012.