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Information Quality for Mobile Application Development to Assists Pilgrims: A Theoretical Model

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Abstract

Providing users with quality information is essential for the success of mobile application development. Hajj mobile application development is complex due to user satisfaction level, age and cultural difference, lack of interactivity, and the efficiency of the Hajj mobile application. Thus, in order to solve these problems, we intent to examine the effect of mobile information quality as the independent variables: a) content, b) contextual, and c) interaction on the effectiveness of the mobile application as the dependent variables: a) usability, and b) interactivity among user with different cultural and age range. This study identifies essential information quality dimensions which reflect to the characteristics of mobile application development in order to increase pilgrim satisfaction. There are total of 180 users selected randomly from pilgrims to validate the hypothesized model. The results show that some information quality factors are more essential than others in increasing user satisfaction and reflect the effective characteristics in mobile application development. © 2023 IEEE.

Author Keywords

Effectiveness; Information quality; Mobile application development; Pilgrim

Index Keywords

Information analysis; Effectiveness, Information quality, Interactivity, Level difference, Mobile application development, Mobile applications, Pilgrim, Quality information, Theoretical modeling, User satisfaction levels; Mobile computing

References

- Trakulmaykee, N.
(2015) *Determinants of Users ' Intention to Use Mobile Information Technologies*, pp. 3726-3734.
- Trakulmaykee, N., Baharudin, A.S., Rafie, M., Arshad, M.
(2013) *Effects of Mobile Design Quality and Innovation Characteristics on Intention to Use Mobile Effects of Mobile Design Quality and Innovation Characteristics on Intention to Use Mobile Tourism Guide*,
May 2014
- Omer Delialioglu, Y., Alioon
Student Preferences for M-Learning Application Characteristics
(2014) *Int. Conf. Mob. Learn. no. ii*, pp. 59-65.
- Huang, Y., Kuo, Y., Lin, Y., Cheng, S.
(2008) *Toward interactive mobile synchronous learning environment with context-awareness service*, 51, pp. 1205-1226.
- Yang, Z., Jun, M.
Consumer Perception of EService Quality: From Internet Purchaser and Nonpurchaser Perspectives
(2008) *J. Bus. Strateg.*, 25 (2), pp. 59-84.
- Chae, M., Choi, Y., Kim, H., Yu, H., Kim, J.
(1998) *Premier Pas of Mobile Internet Business: A Survey Research on Mobile Internet*,

- Chae, M., Kim, J., Kim, H., Ryu, H.
Information Quality for Mobile Internet Services: A Theoretical Model with Empirical Validation
(2002) *Electron. Mark.*, 12 (1), pp. 38-46.
- Huang, K., Lee, Y., Wang, R.
(1998) *Quality information and knowledge*,
- Strong, D.M., Lee, Y.W., Wang, R.Y.
(1979) *data quality in context*, 40 (5), pp. 103-110.
- Wang, R.Y.
A product perspective on total data quality management
(1998) *Commun. ACM*, 41 (2), pp. 58-65.
- Khan, E.A., Shambour, M.K.Y.
An analytical study of mobile applications for Hajj and Umrah services
(2017) *Appl. Comput. Informatics*, 14 (1), pp. 37-47.
- Zamzami, I., Mahmud, M.
User Satisfaction on Smart Phone Interface Design, Information Quality Evaluation
(2012) *2012 Int. Conf. Adv. Comput. Sci. Appl. Technol.*, pp. 78-82.
- Hoehle, H., Venkatesh, V.
Mobile Application Usability: Conceptualization and Instrument Development
(2015) *MIS Q.*, 39 (2), pp. 435-435A12.
- Sulaiman, S., Mohamed, H., Arshad, M.R.M., Rashid, N.A., Yusof, U.K.
Hajj-QAES: A knowledge-based expert system to support hajj pilgrims in decision making
(2009) *ICCTD 2009-2009 Int. Conf. Comput. Technol. Dev.*, 1, pp. 442-446.
- Hasimah, M.A., Mohamed, H.J., Rafie, M., Mohd Arshad, H.J.
(2016) *M-HAJJ DSS: A Mobile Decision Support System for Hajj Pilgrims M-HAJJ DSS: A Mobile Decision Support System for Hajj Pilgrims*, pp. 132-136.
- Abdelazeez, M.A.
(2016) *Pilgrim Communication Using Mobile Phones*, 4 (1), pp. 59-62.

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