



WHY CONSUMERS RESIST MOBILE PAYMENT? A CONCEPTUAL MODEL

**Aik-Chuan Teo, Universiti Tunku Abdul Rahman, Malaysia,
Faculty of Business and Finance
teoac@utar.edu.my**

**Ching-Mun Cheah, Universiti Tunku Abdul Rahman, Malaysia,
Faculty of Business and Finance
cheahcm@utar.edu.my**

**Keng-Boon Ooi, Linton University College, Malaysia, Chancellery Division
ooikengboon@gmail.com**

**Jessica C.J. Wong, Linton University College, Malaysia, Chancellery Division
jessicawcj@gmail.com**

ABSTRACT

The fast pace of wireless networks and mobile technologies development has created vast opportunities for financial service providers to render their services via the mobile platform. However, the acceptance of financial mobile services, particularly the mobile payment is still marginally adopted. While most of the research efforts focus on the positive determinants that influence such innovation, however, little attention has been given to understand why Malaysian consumers resist mobile payment services. Acknowledging that mobile payment still meet consumer resistance, this paper aims to examine the barriers that may inhibit the adoption of mobile payment. The study provides a thorough understanding for the service providers to overcome the resistance of mobile payment service.

Keywords: Mobile Payment, Innovation Resistance, Adoption Barriers, Malaysia

INTRODUCTION

M-payment refers to making payment for goods, services, and bills via mobile phone using wireless technology (Dahlberg et al., 2008). Acknowledging the high penetration rate of mobile devices, Yang et al. (2012) foresee mobile payments as important platform for performing financial transactions and also known as the most significant drivers for successful future of m-commerce. As a matter of fact, Juniper research (2010) reported that the worldwide payment values via mobile devices would reach \$630 billion in 2014. Thus, it is not surprising that many companies have substantially invested in rendering m-payment services with the aims of higher profits.

A review of the extant literature of m-payment shows that many studies mainly focused on the driving factors of adoption (Yang et al., 2012; Kim et al., 2010; Mallat, 2007). Meanwhile, Sheth (1981) commented that the innovation research suffered from pro-change bias presuming that every innovation is good and should be used by every consumer. In fact, several researches asserted that many innovations are still likely to meet consumers'

resistance (Garcia & Atkin, 2002; Molesworth & Suortti, 2002). In the m-payment context, several researchers found that the adoption is still marginally adopted (Chandra et al., 2010; Dahlberg et al., 2008; Mallat and Tuunainen, 2008). Despite the low adoption of m-payment, the scholar further commented that the reality looks quite different and the circumstance often de-motivate m-payment service providers in rendering the m-payment service (Schierz et al., 2010). The scenario has led to the question as to why consumers resist m-payment.

Hence, this conceptual paper adopts the Theory of Innovation Resistance (Ram & Sheth, 1989) to understand why consumers resist mobile payment services. The conceptual paper begins with the introduction, followed by the review of literatures, proposed research model and hypothesis development. Lastly, the paper ends with the conclusion and implications of the study.

LITERATURE REVIEW

Theory of Innovation Resistance

The main cause of innovation failure is the consumer resistance (Ram & Sheth 1989). Acknowledging that consumers' resistance to innovations has received relatively little from research attention (Szmigin & Foxall, 1998), the theory of innovation resistance plays an important role to explain why users resist innovations. Based on the theory, Ram & Sheth (1989) suggested two barriers to innovation adoption, namely functional and psychological barriers. The functional barriers consisting of usage barriers, value barriers, and risk barriers, whilst, the psychological barriers consisting of tradition barriers and image barriers.

Theory of Innovation Resistance

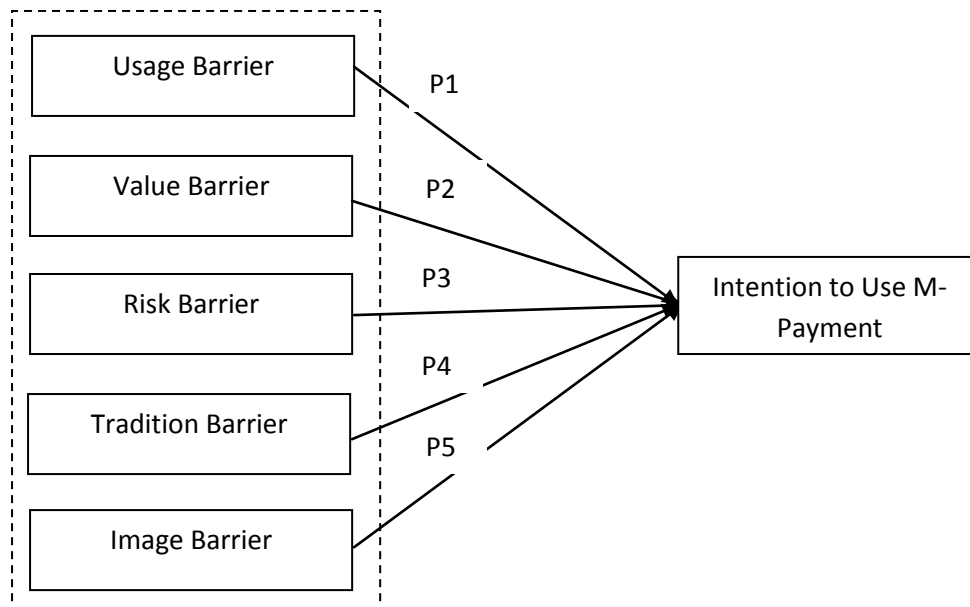


Figure 1: Conceptual Research Framework

HYPOTHESIS DEVELOPMENT

Usage barrier occurs when an innovation is not in lines with user's current workflows, practices and habits which generally lead to consumer innovation resistance (Ram and Sheth, 1989; Sheth and Ram, 1987). In the context of m-payment, compatibility signifies one's ability to integrate the service with their existing behavioral patterns (Lee et al., 2003). In view of slow data transmission and user interface, Laukkanen and Lauronen (2005) commented that making payment through mobile phone is too complex and time consuming. Value barrier, according to Ram and Sheth (1987) refers to performance-to-price value. Compared to alternative solutions, this simply implies that if m-payment services does not offer a strong performance-to-price compared to conventional payment method such as cash and credit card, consumers may not feel motivated to adopt the service. Mallat (2007) also illustrated that the users resist of mobile payment because of its 'premium pricing' The additional charges may be incurred from mobile payment compared to payment by cash. Acknowledging uncertainty inherent in innovations, innovations often lead to certain level of perceived risk (Ram and Sheth, 1989). In view of the wireless setting, the fear of security breaches, identity theft and passive confidentiality are often discouraging users from using the service (Zhou, 2011). "The more risk adverse a subject is, the lower its acceptance and longer the diffusion will take" (Dunphy &Herbig, 1995, pp.203). Tradition barrier simply implies that the change an innovation may affect one's routines. In another words, the high tradition barrier will exist when the innovation is contrary to one's societal, social norms, and family values (Ram & Sheth, 1987; Ram & Sheth, 1989). Fain & Roberts (1997) further illustrated that the tradition barrier will occur when performing financial activities through electronic modes are contrary to the way uses used to pay bills. This is particularly true when users opt to have interaction in their payment transaction. Each innovation attains a certain identity from its origins (i.e., product category, country of origin, and the brand). The image barrier comes into place when one's has stereotyped thinking of internet and m-payment services. Thus, we postulated the following propositions:

- P1: Usage barrier has significant impact towards use of m-payment.
- P2: Value barrier has significant impact towards use of m-payment.
- P3: Risk barrier has significant impact towards use of m-payment.
- P4: Tradition barrier has significant impact towards use of m-payment.
- P5: Image barrier has significant impact towards use of m-payment.

CONCLUSION AND IMPLICATIONS

In sum, the conceptual paper focused on the barriers that inhibit m-payment in Malaysia. Whilst most of the IS studies have concentrated on the reasons for promoting adoption, innovation resistance has been neglected in IS research. Hence, the conceptual paper bridge the gap by adopting the 5 constructs of Theory of Innovation Resistance by Ram and Sheth (1989), specifically usage barrier, value barrier, risk barrier, tradition barrier and image barrier to understand what inhibits the adoption of m-payment in Malaysia. As high investment involved in developing m-payment infrastructures, therefore, it is crucial to assure that the targeted users are essentially use the service. Hence, the paper also provides companies a bigger picture of the rationale in resistance of m-payment services. This enables companies to formulate wining strategies to yield higher level of m-payment acceptance.

REFERENCES

1. Chandra, S., Srivastava, S. C., and Theng, Y. L. (2010), "Evaluating the role of trust in consumer adoption of mobile payment systems: an empirical analysis", *Communications of the Association for Information Systems*, Vol. 27 No. 1, pp. 561-588.
2. Dahlberg, T., Mallat, N., Ondrus, J., and Zmijewska, A. (Summer, 2008), "Past, present and future of mobile payments research: a literature review", *Electronic Commerce Research and Applications*, Vol. 7 No. 2, pp. 165-181.
3. Dunphy, S., and Herbig, P. A. (1995), "Acceptance of innovations: the customer is the key!", *The Journal of High Technology Management Research*, Vol. 6 No. 2, pp. 193-209.
4. Fain, D., and Roberts, M. L. (1997), "Technology vs. consumer behaviour: the battle for the financial services customer", *Journal of Direct Marketing*, Vol. 11 No.1, pp. 44-54.
5. Garcia, R., and Atkin, T. (2005), "Coo-petition for the diffusion of resistant innovations: a case study in the global wine industry", *Northeastern University Institute for Global Innovation Management Working Paper 05 – 002*, Institute for Global Innovation Management, Northeastern University, Boston.
6. Juniper Research (2008), "Global m-commerce revenue projections for 2009", *ePaynews.com Website*, available at: <http://www.paynews.com/statistics/mcommstats.html> [accessed 12 April 2013].
7. Kim, C., Mirusmonov, M., and Lee, I. (2010), "An empirical examination of factors influencing the intention to use mobile payment", *Computers in Human Behavior*, Vol. 26, pp. 310-322.
8. Ram, S., and Sheth, J. N. (1989), "Consumer resistance to innovations: the marketing problem and its solutions", *Journal of Consumer Marketing*, Vol. 6 No. 2, pp.5 – 14.
9. Laukkanen, T., and Lauronen, J. (2005), "Consumer value creation in mobile banking services", *International Journal of Mobile Communications*, Vol. 3 No. 4, pp. 325-338.
10. Lee, M. S. Y., McGoldrock, P. J., Keeling, K. A., and Doherty, J. (2003), "Using ZMET to explore barriers to the adoption of 3G mobile banking services", *International Journal of Retail & Distribution Management*, Vol. 31 No. 6, pp. 340-348.
11. Mallat, N. (2007), "Exploring consumer adoption of mobile payments – a qualitative study", *Journal of Strategic Information Systems*, Vol. 16 No. 4, pp. 413-432.
12. Mallat, N., and Tuunainen, V. K. (2008), "Exploring merchant adoption of mobile payment systems: an empirical study", *e-Service Journal*, Vol. 6 No. 2, pp. 24 – 57.
13. Molesworth, M., and Suortti, J. P. (2002), "Buying cars online: the adoption of the web for high-involvement, high-cost purchases", *Journal of Consumer Behaviour*, Vol. 2 No. 2, pp. 155-168.
14. Schierz, P. G., Schilke, O., and Wirtz, B. W. (2010), "Understanding consumer acceptance of mobile payment services: an empirical analysis", *Electronic Commerce Research and Applications*, Vol. 9, pp.209-216.
15. Sheth, J. N., and Ram, S. (1987), "Bringing innovation to market: how to break corporate and customer barriers", *Wiley*.
16. Szmigin, I., and Foxall, G. (1998), "Three forms of innovation resistance: the case of retail payment methods", *Technovation*, Vol. 18 No. 6, pp. 459-468.
17. Yang, S., Lu, Y., Gupta, S., Cao, Y., and Zhang, R. (2012), "Mobile payment services adoption across time: an empirical study of the effects of behavioral beliefs, social influences, and personal traits", *Computers in Human Behavior*, Vol. 28 No. 1, pp. 129-142.



**Proceedings of 2013 International Conference on
Technology Innovation and Industrial Management
29-31 May 2013, Phuket, Thailand**

18. Zhou, T., Lu, Y., and Wang, B. (2010), “Integrating TTF and UTAUT to explain mobile banking user adoption”, *Computers in Human Behavior*, Vol. 26 No. 4, pp. 760-767.