



Understanding the influence of trust on mobile payment systems adoption: A literature review

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Abstract

Trust plays an essential role in the adoption of a new payment system and it is at the core of any payment method. People need to trust in each other in order to validate any monetary system created. With the evolution of the payment methods, shifting from paper-based to electronic-based, build consumer trust has become a vital element for the success of businesses in the payment systems. In this sense, despite the rapid growth of the mobile technology and the new means of payment, trust in the mobile payment systems (MPS) is not unanimous among users. The aim of this paper is to provide a scoping review of the relevant literature and point out which factors, according to the various authors' studies, have impact on trust and, in turn, have influence on mobile payment systems (MPS) adoption.

Key words: Trust, mobile payments, MPS adoption, intention, influencing factors

Introduction

For any payment method to become acceptable, individuals need to trust that the prevailing currency, or to put it simply, money, is represented and recognised by all parts involved. As 'money is an abstraction built on trust' (Chakravorti and Mazzotta 2013, p.3), 'people must feel confident that a currency will be held in the right esteem by others' (Vigna and Casey 2015, p.15). In this sense, cash can be considered as one of the most tangible forms of money in so far as the whole society need to trust in this paper-based payment to exchange for goods and services. However, over the past decades, this traditional payment method has been affected by new means of payments.

The emergence of the Internet and the evolution of the technology have been increasing the willingness of users to avoid paper-based payments (cash and cheques) and try new ways to make payments. Also, with the advent of e-commerce, the behaviour of consumers has been changing in so far as they can now buy goods and services from their homes. In this context, online banking activities have emerged as an evolutionary path to the payment process in order to respond to this growth in electronic transactions, as well as to make more convenient for consumers the experience of purchasing goods and services without leaving their homes (Fondeson 2014, p.4). In other words, despite payment systems 'are as old as humanity, the implementation and use of modern payment systems has modified the economical and business scenario' (Liébana-Cabanillas, Sánchez-Fernández and Muñoz-Leiva 2014, p.473) in order to attend the growing demand for online services.

At this point, it is worth mentioning that mobile devices have added more convenience to the users in so far as 'the structural change to mobility allows for real-time access to the same information, resources, previously only available from a stationary desktop computer' (Kalakota & Robinson 2001 as cited in Hillman and Neustaedter 2017, p.12). Furthermore, the ubiquity of mobile devices have changed the way users access their bank accounts and make payments across the planet in so far as they can now use their gadgets to purchase, transfer money, and pay bills online or at point-of-sale (POS) from anywhere at any time.

Yet notwithstanding the rapid growth of the mobile technology and the new means of payment, trust in the mobile payment systems (MPS) is not unanimous among users. Over the past years, several studies have been focusing on different aspects of the consumers, merchants, banks and providers in order to comprehend what factors could have an impact on trust and this in turn, on people's acceptance of MPS.

Literature Review

Over the past decades, the impact of trust on users' acceptance of new payment systems has been the focus of various studies. Several academics have been aiming their researches on the impact of trust on users' adoption of the new payment systems, including the mobile payment systems (MPS). Xin, Techatassanasoontorn and Tan (2013, p.1), for instance, stated that trust is a fundamental element that has impact on consumers' intention to use the MPS. Duane, O'Reilly and Andreev (2014, p.318) suggested that the strongest element that affects the intention of people to utilise their smartphones to make payments is trust. Cao, Dang and Nguyen (2016, p.117) affirmed that among all factors that have influence on users' intention to adopt the MPS, perceived trust is the most significant one. Finally, Gong et al. (2016, p.1) indicate that 'emotional trust in MP has a much stronger effect on consumers' intention to use, while cognitive trust in MP has both direct and indirect effects on intention to use'.

However, despite the importance of trust in MPS adoption, various authors have been suggesting that trust has influence on MPS adoption when it is associated with other factors. Killian and Kabanda (2017, p.1), for instance, highlighted that 'trust, risk and habitual use were factors that significantly affected intention to adopt mobile payment by South African middle class citizens'. Lwoga and Lwoga (2017, p.1) stated that 'm-payment knowledge, trust and compatibility predicted perceived ease of use of m-payment services. Chen and Li (2016, p.1) pointed out that 'institutional-based trust shows a positive impact on post-adoption perceived usefulness and a negative impact on post-adoption perceived risk'. Yang et al. (2015, p.9) have shown that 'in the current stage of China's online payment, consumers have built up trust first as an antecedent of their perceived risks'. Gao and Waechter (2015, p.1) suggested that 'initial trust positively affects perceived benefit and perceived convenience, and these three factors together predict usage intention'. Finally, Zhou (2015, p.56) emphasised that 'switch intention may be affected by the enablers, which include trust, satisfaction and flow'.

On the flip side, several authors suggested that trust is influenced by many factors. Wu and Zhang (2017, p. 363) stated that reputation and reference groups both have impact on trust. Yan and Yang (2015, p.117) indicated that 'perceived ease of use, perceived usefulness, structure assurance and ubiquity have significant effect on users' trust, which further affect user usage intention'. Abidin et.al (2017, p.5) pointed out that 'perceived risk has a negative direct influence on behavioural intention, and a negative indirect effect through trust'. Finally, Shuhaiber (2016, p.II) has shown that 'customers' uncertainty avoidance is the most negatively influential factor on trust, followed by perceived privacy risks associated with m-payments'.

Thus, as it can be seen, trust has impact and it is influenced by several factors, and the relationship among these variables constitutes a crucial factor on MPS adoption. In this sense, understand consumers' needs in order to build trust has become a crucial factor for merchants to improve their services and users' satisfaction in so far as the relationship with customers is more difficult to maintain due to the fact that there are less face-to-face contacts (Bourreau and Valetti 2015, p.31). Moreover, it is essential for service providers 'build users' initial trust in order to facilitate their usage of mobile payment' (Zhou 2014, p.1519).

In this sense, organisations involved in the payment sector, especially in MPS, need to provide to the consumers that the measures taken to protect customers' information are fully functional. Xin (2013, p.vi) suggested that 'consumers develop their trust through the reputation of the mobile service provider and mobile payment vendor, structural assurance and perceived environmental risk'. Zhou (2013, p.1085) stated that 'service quality is the main factor affecting trust'. In addition, the concerns about security and privacy that have a significant influence on trust, was highlighted by Shaw (2014). However, this was contested by Teoh et al. (2013) who revealed that trust and security have insignificant results on consumers' perception towards e-payment.

Other authors have suggested that users need to have experience or at least understand how the mobile payment systems work. Slade et al. (2015, p.860) pointed out that the 'inclusion of MP knowledge as a moderating variable revealed that there was a significant difference in the effect of trust on behavioural intention for those who knew about MP than for those who did not'. In addition, Hillman et al. (2014, p.253) suggested that 'users experience challenges ... [could be solved by] designing a better mobile payment experience through the incorporation of users' routines and behaviours, gamification and trust mechanism development'.

Conclusion and recommendations

The ubiquity of mobile devices has been changing how users can access real-time information, as well as how they make payments for goods and services received. Consumers can now access their banking accounts from anywhere at any time to make payments. Mobile payment systems (MPS) allow users to purchase, transfer money, and pay bills online or at point-of-sale (POS) by accessing banking accounts from their smartphones.

In this sense, MPS can provide various benefits to the users in so far as they do not need to carry their physical wallets to make payments. The advances in mobile technology and the ongoing process of improvement of the security measures have been driven more users to rely on mobile payment systems (MPS). In addition, the evolution of the mobile technology has been increasing the users' confidence to use their mobile devices to make payments. However, trust itself affects and it is affected by several different factors and this may have influence on MPS adoption.

In order to increase rates of mobile payment adoption, organisations need to foster best practices that may increase trust levels among users. It is fundamental for companies provide security measures that protect customers' information, promote the spread of knowledge among all parts involved.

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