An Empirical Examination of Users’ Switch from Online Payment to Mobile Payment

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ABSTRACT

As an emerging service, mobile payment has not been widely adopted by users. Integrating both perspectives of enablers and inhibitors, this research examined user switch from online payment to mobile payment. Enablers include trust in mobile payment, flow and satisfaction, whereas the inhibitor is switching costs. Flow represents an optimal experience associated with using mobile payment. The results indicated that user switch receives a dual influence from both enablers and inhibitors. Among them, flow has the largest effect on switch intention. The results imply that service providers need to consider both aspects of enablers and inhibitors in order to facilitate user switch from online payment to mobile payment.

Keywords: Flow, Mobile Payment, Online Payment, Switch Intention, Trust

INTRODUCTION

The application of third and fourth generation mobile technologies has triggered mobile internet development. According to a report issued by China Internet Network Information Center (CNNIC) in July 2014, the number of mobile internet users in China has reached 527 million, accounting for 83.4% of its internet population (632 million) (CNNIC, 2014). Faced with the great market, service providers have released a variety of mobile services, such as mobile instant messaging, mobile news, mobile games and mobile payment. These services can be categorized into four types: communication, information, entertainment and transaction. A few services related to communication, information and entertainment have been popular among users. For example, about 87.1% of users have ever used mobile instant messaging (CNNIC, 2014). In comparison, as a basic transactional service, mobile payment has received low adoption among users (38.9% of adoption rate). Nevertheless, mobile payment has been attached great importance by enterprises. For example, Alipay, which is the largest online payment service provider in China, has released its mobile payment product: Zhifubao wallet. Tencent, a leading social networking service provider, has developed WeChat payment. Telecommunication service providers such as China Mobile also offered mobile payment services, which enable users to pay bus fees and subway fees with their mobile phones. Considering the low adoption rate of mobile payment, service providers need to understand

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the factors affecting user behavior, and take effective measures to facilitate user usage of mobile payment.

With the help of mobile networks and devices, mobile payment enables users to check account balances, transfer money, pay bills and conduct financial management at anytime from anywhere. This provides great convenience to users and may facilitate their usage. However, mobile payment also involves great uncertainty and risk. For example, mobile networks are vulnerable to hacker attack and information interception. Mobile devices such as smart phones may also be infected by viruses and Trojan horses. Users need to build trust in order to mitigate their perceived risk. In addition, due to the constraints of mobile devices such as inconvenient input and slow responses, users may have a poor experience associated with using mobile payment. This may inhibit their adoption of mobile payment.

Extant research has been concerned with user adoption of mobile payment (Chandra et al., 2010; Kim et al., 2010; Schierz et al., 2010; Lu et al., 2011), and identified the effects of trust, perceived usefulness and perceived ease of use on user usage. However, it has seldom examined user switch from online payment to mobile payment. Compared to mobile payment, online payment has been more popular among users. If users have been locked into the relationship with online payment, they cannot easily switch to mobile payment because of the high switching costs. This may affect their adoption and usage of mobile payment. The purpose of this research is to examine user switch from online payment to mobile payment. We will consider the effects of both enablers and inhibitors on switch intention. On one hand, switch intention may be affected by the enablers, which include trust, satisfaction and flow. On the other hand, switch intention may be affected by the inhibitor: switching costs. We also investigate the effect of trust in online payment on user perceptions of mobile payment.

LITERATURE REVIEW

Mobile Payment User Adoption

As an emerging service, mobile payment user adoption has received attention from researchers. Information systems theories such as the technology acceptance model and innovation diffusion theory are often used as the theoretical bases. Kim et al. (2010) suggested that individual differences and mobile payment system characteristics affect perceived usefulness and perceived ease of use, both of which further affect usage intention of mobile payment. Chandra et al. (2010) stated that mobile service provider characteristics and mobile technology characteristics affect user trust, which in turn affects perceived usefulness, perceived ease of use and adoption intention. Lu et al. (2011) noted that relative advantage, compatibility, image and trust have effects on the behavioral intention to use mobile payment. Schierz et al. (2010) found that perceived compatibility is the main factor determining mobile payment usage intention. Mallat (2007) conducted a qualitative study and identified the effects of relative advantage, compatibility and trust on user adoption of mobile payment.

As evidenced by these studies, they have focused on mobile payment user adoption, and have seldom examined user switch from online payment to mobile payment. This research tries to fill the gap and identify the factors affecting user switch.

Trust

Trust reflects a willingness to be in vulnerability based on the positive expectation toward another party’s future behavior (Mayer et al., 1995). As a broad concept, trust has been viewed differently by various disciplines. Psychology focused on dispositional trust. Sociology focused on institutional trust. Social psychology focused on interpersonal trust (McKnight et al., 2002). In this research, we focused on a user’s trust in mobile payment service providers. Trust has been examined extensively in the e-commerce
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