

Will Hong Kong consumers embrace mobile payments? Exploring the early adopter's intention to use mobile payment platforms

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Abstract

Hong Kong boasts one of the highest mobile phone penetration rates in the world, yet its mobile payment market is still in its infancy. The new mobile payment platforms such as NFC based Apple Pay and Android pay, and the QR code encrypted Alipay and WeChat Pay, gradually entered the Hong Kong market in the past three years. However, most of the Hong Kong local consumers are still hesitating to embrace these innovative mobile payments. It is therefore a need to understand the factors or considerations of the early adopters to accept the innovative “alternative” payment methods. In this study, we borrowed the Innovation Diffusion Theory and the UTAUT2 to develop an integrated conceptual model, which includes five innovation characteristics (relative advantage, compatibility, complexity, trialability, and observability), four factors from UTAUT2 (hedonic motivation, facilitating conditions, social influence, and alternative payment habit), and three security related factors (trust, perceived security, and perceived privacy risk). The rationale to include and exclude certain factors influencing behavioral intention from the past theories and literature are discussed. As a research-in-progress paper, we are currently in the process of conducting a pilot test via a focus group study and interviews.

Keywords: Mobile payments, technology adoption, Hong Kong

Introduction

Mobile payments were defined as “payments for goods, services and bills with a mobile device by taking advantage of wireless and other communication technologies (Dahlberg, et al., 2008).” Before the use of mobile payments, Hong Kong consumers mainly rely on the traditional payment methods, such as cash, credit card and contactless card payment system (Octopus card) to finish online and offline transactions. Taking Octopus card as an example, the Octopus card system is the second contactless smart card system in the world. Since its first launch in 1997, Octopus card has permeated almost every aspect of Hong Kong people’s lives, e.g., paying for parking, convenient store, transportation and restaurant. At the same time, Hong Kong also possesses a very mature and reliable credit card system and financial infrastructure, which allow consumers to finish transactions safely via any Point-of-Sales machine (SCMP, 2017a). In such a mature, stable and even saturated payment environment, one has to wonder: “Why an alternative payment method is needed?”

Forrester Research divides mobile payments into three categories: in-personal mobile payments, such as proximity payments; remote mobile payments; and peer-to-peer mobile payments (eMarketer, 2017). This research sets its scope with the first category where consumers could use Near Field Communication (NFC) technology and Quick Response (QR) code encryption to conduct in-store transactions. Hong Kong has a relatively short mobile payments history. The first mobile payment platform – Tap & Go was launched in late 2015; and other NFC enabled payment options such as Apple Pay, Android Pay, Samsung Pay emerged quickly in 2016. With the entry of Alipay and WeChat pay in 2017, a mobile payment war among major operators heats up (SCMP, 2017b). Although witnessing high competition among major market occupiers and over 248% penetration rate of mobile devices (OCA, 2018), the mobile payments adoption rate in Hong Kong is still low. A recent Google whitepaper found that 30 percent of Hongkongers surveyed did not know what peer-to-peer payments were, and only 56 percent had experience with mobile payments (SCMP, 2017a). Moreover, Hong Kong is lagging far behind China where a handful of cities such as Hangzhou have been in transition to cashless societies (Ejinsight, 2017).

According to a recent study by the Chinese University of Hong Kong (2018), nearly 80% of the respondents “seldom” (19.8%) or “never” (59.9%) paid through mobile devices, and 11.4% used it sporadically and only 7.9% used it regularly. In addition, mobile payments were used more frequently by the younger (those below 30) than by other age groups. Based on these statistics, we could affirm that Hongkongers are still at a very early stage of mobile payments adoption; and the youngsters become the early adopters of the new payment methods. According to Roger (2003), early adopters make up roughly 13.5% of the total population. They are usually the opinion leaders who embrace new products, services and technologies before most other people do. This study therefore focus on the current stage of mobile payments adoption in Hong Kong, especially the early adopters (youngsters)’ intention to accept mobile payments.

From a theoretical perspective, many previous studies have used the well-developed Information Systems (IS) adoption theories or the combination of theories to explain the factors influencing users’ intention to adopt mobile payments. These theories vary from early models such as Technology Acceptance Model (TAM) (Davis, 1989), Theory of Planned Behavior (TPB) (Ajzen, 1985), Innovation Diffusion Theory (IDT) (Rogers, 1983), to the recent theories such as the Unified Theory of Adoption and Use of Technology (UTAUT) (Venkatesh, et al., 2003) and UTAUT2 (Venkatesh, et al., 2012). The traditional IS adoption models (TAM and TPB) were considered as inappropriate to explain mobile payments adoption since they were developed to predict

end-user acceptance of IS within organization (Venkatesh, et al., 2003), and thus have limited ability or flexibility in explaining adoption of new Information and Communication Technology (ICT) by general consumers (Jung, 2014). As an extension of UTAUT, UTAUT2 includes more contextual factors suitable to explain consumers' intention to adopt new ICT. The typical factors are social influence, facilitating conditions, hedonic motivation and habit. Meanwhile, the traditional IDT also depicts the exact nature of innovation characters in the consumers' market, which is deemed suitable for the present research. Oliveira et al. (2016) is the only work so far that has used the combination of these two theories in explaining consumers' adoption intention of mobile payments. Their work, however, did not include critical contextual factors such as trust, privacy, more dimensions of innovation characters (besides compatibility) and alternative payment habit. Given the urgent practical need and short of comprehensive theoretical model, this research aims to fill in the gap in the adoption literature and to explain the unique and specific consumers' mobile payments intention in Hong Kong. Specifically, we combine the strengths of two well-established theories (IDT and UTAUT2) with additional factors such as trust, perceived security and privacy and alternative payment habit in one research model. This design also echoes to Dahlberg et al. (2015)'s call for investigating the contextual meaning of mobile payments adoption factors.

Based on the above discussion, the research questions of the present study are summarized as below: (1). What are the innovation characteristics that influence the early adopters' intention to adopt mobile payments? (2). Will social influence, facilitating conditions, and hedonic motivation from UTAUT2 influence early adopters' intention to adopt mobile payments? (3). Will trust, perceived security, and perceived privacy risk significantly influence early adopters' intention to adopt mobile payments? (4). What will be the role of alternative payment habit?

The rest of the paper is structured as follows. In the next section, we describe the literature review and the theoretical background of mobile payments. We will then introduce the theoretical model and hypotheses. In the following section, the research method and the pilot test via focus group and interviews will be presented. A short conclusion will be drawn at the end of this paper.

Literature review and theoretical background

Technology adoption models for mobile payments

In the literature, mobile payments adoption has been broadly discussed by using various acceptance and adoption theories. TAM (Davis, 1989) is among the first. TAM is derived from Fishbein and Ajzen (1975)'s Theory of Reasoned Action (TRA), and consists of perceived ease of use, perceived usefulness, attitude, behavioral intention, and actual system use. TAM as a robust theory has been employed by numerous empirical studies to predict actual IS adoption (e.g., Moores, 2012; Venkatesh and Bala, 2008) and mobile payments adoption in particular (e.g., Shankar and Datta, 2018; Matemba and Li, 2018). TAM2 and TPB extend the original TAM model by including subjective norms as a determinant of perceived usefulness and intention (respectively). The direct use of these theories (e.g., Püschel et al., 2010) is, however, rare in the field of mobile payments context. In 2003, Venkatesh et al. (2003) developed UTAUT based on a thorough review of user adoption literature and eight prominent models. The key constructs include performance expectancy, effort expectancy, social influence, and facilitating conditions.

Despite the popularity, the above models have been under constant criticism. First, TAM, TAM2, TPB and UTAUT were originally built for ease managing IS activities

in the workplace (Venkatesh and Davis, 2000) and the focus remained confined to understanding adoption process within organizational settings (Yang, et al., 2012). For example, the social influence is used to assess a kind of normative forces in compliance with organizational goals (Lu, et al., 2005), instead of the social pressures that an individual consumer faces in a free adoption choice context. Second, the TAM related model is not able to comprehensively explain the specifics and contextual factors in consumers' technology adoption market (Benbasat and Barki, 2007; Dahlberg et al., 2015). Such criticism provided opportunities for the reconceptualization of theories. In 2012, UTAUT was further modified to include more contextual factors, such as price value, hedonic motivation and habit, thus forming UTAUT2 (Venkatesh et al., 2012). UTAUT2 represents a comprehensive theoretical framework, and is applied specially in the consumer adoption market. It allows for augmenting or removing constructs to capture aspects of adoption that are task-environment specific (Morosan and DeFranco, 2016). UTAUT2 has been used in the NFC based mobile payment context such as in hotels (Morosan and DeFranco, 2016) and restaurants (Khalilzadeh, et al., 2017). Based on these, we believe UTAUT2 is a suitable theoretical lens to understand mobile payment adoption in the current study.

Another important work on technology acceptance is the IDT (Rogers, 2003). IDT has been validated by a large number of studies in both organizational settings and individual settings (Choudhury and Karahanna, 2008; Kim et al., 2010). It was also chosen as the only theoretical framework when it comes to mobile payment adoption (Mallat, 2007; Johnson, et al., 2018). Since mobile payments are considered as disruptive technologies in Hong Kong, knowing the nature and characteristics of the innovation become essential. We adopted IDT as the second theoretical lens in the present study as IDT focuses on consumers and provides flexibility in the repackaging of empirical studies to obtain higher levels of generalization (Rogers, 2003).

Innovation characteristics and early adopter

IDT defines innovation characteristics as well as different types of adopters. Regarding to the innovation characteristics, Rogers (1983) indicated that five innovation characteristics influence new technology adoption. They are relative advantage, compatibility, complexity, trialability and observability. In addition to Roger (1983)'s five characteristics, Moore and Benbasat (1991) further included three new attributes (voluntariness, image and result demonstrability) in the organizational context. For instance, image means the degree to which use of an innovation is perceived to enhance one's image or status in the company; and voluntariness means the degree to which use of the innovation in the company is perceived as being voluntary or of free will. Moore and Benbasat (1991)'s three attributes were not considered in the current research, because mobile payment itself is a voluntary behavior among adopters in the consumer market, and there is basically no need to "demonstrate" results as what will happen in the organizational settings.

2.2.1 Innovation characteristics

Relative advantage is the degree to which an innovation is perceived as being better than the idea it supersedes. It was found to be one of the strongest predictors of an innovation's rate of adoption (Rogers, 1983). In this research, relative advantage is defined as the degree to which mobile payments are perceived as being better than the other traditional payment methods. Mobile payments enjoy obvious benefits over traditional payment services in terms of convenience, efficiency and ubiquity (Yang, et al., 2012). Previous studies have found that relative advantage has positive influence on behavioral intention in using mobile technology (Kim, et al., 2010) and mobile payments in particular (Johnson, et al., 2018).

Compatibility is the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters (Rogers, 1983). Whether consumers could integrate mobile payments into their daily lives is an important aspect of compatibility. Compatibility was found to have a positive impact on healthcare professional's intention to adopt the mobile healthcare systems (Wu et al., 2007), a significant determinant of mobile technology and service adoption (Teo and Pok, 2003), and an important contributor to mobile payment intention in Mallat (2007) and Yang et al. (2012)'s work.

Complexity is the degree to which an innovation is perceived as relatively difficult to understand and use, it may not be as important as relative advantage or compatibility for many innovations, but for some new ideas, especially new IS adoption, complexity is a very important barrier (Rogers, 2003). Complexity and problems with usability have contributed to the low adoption of a variety of payment systems, including smart cards and mobile banking (Laukkanen and Lauronen, 2005). It is also taken as an equivalent of perceived ease of use in the TAM model (Moore and Benbasat, 1991), and affects consumer's adoption of mobile payment services (Johnson, et al., 2018). Given that mobile payment services represent an alternative to entrenched payment methods such as credit cards, debit cards, cash, and Octopus card, it is crucial that mobile payment methods are free from additional efforts and easy to use.

Trialability is the degree to which an innovation may be experimented with on a limited basis (Rogers, 2003). In this research context, it can be regarded as the extent to which potential adopters perceive that they have the opportunity to experiment with the mobile payments prior to making a usage commitment (Moore and Benbasat, 1991). The ability to try an innovation prior to making a commitment can help the user become more comfortable with the mobile payment and overcome concerns related to usability, performance and security (Johnson, et al. 2018). In addition, early innovation researchers like Ryan (1948) has mentioned that earlier adopters of an innovation perceive trialability as more important than do later adopters. We therefore believe trialability is another important determinant of early adopter's intention in this study.

Observability is the degree to which the results of an innovation are visible to others. Some ideas are easily observed and communicated to other people, whereas other innovations are difficult to observe or to describe to others. We believe mobile payment methods like Apple Pay and Alipay are quite salient and easily observable by the adopters and potential adopters. Though prior research has excluded observability as an innovation characteristic (e.g., Ali, 2017) by arguing that observability is indirectly captured by the constructs of subjective norm and social influence, this research tend to keep this sub-dimension as an independent factor in affecting the adoption intention. The reason is that subjective norm and social influence are used to measure the perceived social pressure to an individual user (typically in the organizational setting) to perform or not to perform a certain behavior (Ajzen, 1991). They focus more on the social or psychological aspects of technology adoption, whereas observability tends to describe the feature of the technology itself.

2.2.2 Early adopter

Besides the five major characteristics of innovation diffusion, another important dimension in Rogers (2003)'s work is types of adopters. Different adopters have different approaches toward an innovation. Some adopters will use it as soon as they receive it, while others will wait and see until they feel comfortable with them (Chakravarty and Dubinsky, 2005). Having observed the differences, Rogers (2003) identified five categories of adopters: innovators, early adopters, early majority, late majority and laggards. At one end of the spectrum are innovators and early adopters

who may occupy 2.5% and 13.5% of the total population. They are typically well educated, risk seeking, and sometimes opinion leaders in a certain social society; they can also trigger the critical mass when they adopt an innovation (Rogers, 2003). Due to this, understanding early adopter's intention to adopt new technologies in mobile payments becomes critical. As mentioned earlier, Hong Kong is in the initial stage of mobile payments adoption, only less than 20% of the people have tried mobile payments before (CUHK, 2018). We therefore map these people, especially the youngsters as early adopters of mobile payments in Rogers (2003)' IDT.

2.3 Hedonic motivation, facilitating conditions, social influence and alternative payment habit

Most technology acceptance models including UTAUT, are developed for organizational contexts, which result in a neglect of consumer-related variables (Aldás-Manzano et al., 2009). As a result, Venkatesh et al. (2012) introduced the UTAUT2 as an extension of the original UTAUT to accommodate pertinent constructs for consumer adoption contexts. Besides utility and economy factors, the most important contributors in UTAUT2 are psychological or social factors such as hedonic motivation, social influence and habit. Performance expectancy from UTAUT2 is not included because it is defined as benefits to consumers in performing certain activities, which is related to the relative advantage in IDT. Effort expectancy, the ease associated with consumers' use of technology is also not considered, since it duplicates the concept of complexity in IDT. Moreover, price value is not relevant, since it mainly refers to the monetary cost, while mobile applications and NFC technology for payment are free in most cases (Day, 2014).

2.3.1 Hedonic motivation

Hedonic motivation is defined as the fun or pleasure derived from using a technology (Venkatesh, et al., 2012). In the consumer context, hedonic motivation has been found to be an important determinant of technology acceptance and use (e.g., Brown and Venkatesh, 2005), and a more important driver (than performance expectancy) of consumers' mobile usage intention (Venkatesh, et al., 2012). The positive relationship between hedonic motivation (as an intrinsic motivation) and IS usage intention has also been validated in the short message adoption (Kim, et al., 2008) and m-commerce adoption (Yang, 2010) context. When it comes to mobile payments, Morosan and DeFranco (2016) and Khalilzadeh, et al. (2017) claimed that the consumers' user interface are designed with hedonic elements, e.g., display the credit cards on the screen as they appear in real life, thus increase the fun of NFC based mobile payments. What is more, the peer-to-peer payment of WeChat Pay enables a red-packet function, which bring more happiness and enjoyment among friends and family members during the traditional Chinese holidays. Therefore, we believe hedonic motivation is an important determinant of mobile payment adoption intention especially in a culture of Hong Kong.

2.3.2 Facilitating conditions

Facilitating conditions refer to consumers' perceptions of the resources and support available to perform a behavior (Brown and Venkatesh, 2005). In UTAUT, facilitating conditions was hypothesized to influence technology use directly; while in UTAUT2, facilitating conditions was proved to influence both intention and behavior (Venkatesh, et al., 2012). The facilitation in the environment available to consumers varies from government (Lu, et al., 2003) and application operators (vendors) (Teo and Pok, 2003) to the on spot help from other customers and cashiers or self-learning via online tutorials (Venkatesh, et al., 2012). The positive relationship between facilitating conditions and mobile technology adoption intention has been verified in Baptista and

Oliveira (2015) and Morosan and DeFranco (2016).

2.3.3 Social influence

Social influence happens when consumers' behavior is influenced by others. It is the extent to which consumers perceive that important others (e.g., family and friends) believe they should use a particular technology (Venkatesh, et al., 2012). Social influence plays an important role in technology adoption, especially in the early adoption stage, because the users may lack of reliable information about the innovation in detail (Dahlberg, et al., 2008). In the consumer market, consumers may be influenced by the information they received from the social environment, which in turn shapes their confidence in using the system (López-Nicolás, et al. 2008). Consumers may also tend to interact in the social environment for consultation and for reducing their anxiety, which arises due to uncertainty from adopting an innovation (Karahanna, et al., 1999). Based on UTAUT, many prior studies on mobile technology adoption verified the direct and indirect relationship between social influence and adoption intention (e.g., Gu, et al., 2009, Hong and Tam, 2006). The positive relationship was also confirmed in the mobile payment adoption context (e.g., Yang, 2012; Morosan and DeFranco, 2016).

2.3.4 Alternative payment habit

Habit has been defined as the extent to which people tend to perform behaviors automatically because of learning (Limayem, et al., 2007). It reflects an individual's tendency to repeat automatic behaviors that were developed in the past (Limayem and Hirt, 2003). Habit was included in continuance intention models to explain the IT usage behavior (Limayem, et al., 2007; Hsiao, et al., 2016). In the current study, since we tend to investigate the initial intention to adopt mobile payment (instead of continuance intention), where the habit of using mobile device for daily transaction has yet to be formed, alternative payment habit will be examined instead. The alternative payment habit refers to the automatic payment behavior other than using mobile devices. The alternative payment methods include cash, credit cards, debit cards, and contactless cards (e.g., Octopus card). As mentioned by Johnson et al. (2018), alternatives to mobile payment services are familiar to the consumer and have the advantage of a well-established infrastructure, especially with respect to proximity payment services, where the traditional payment methods have been well entrenched. Due the payment habit, consumers in Hong Kong are more likely to repeat behaviors that are effortless and cognitively easier than other payment behaviors (Lankton, et al., 2010). We therefore believe that alternative payment habit will be negatively related to behavioral intention.

Trust, perceived security and perceived privacy risk

UTAUT2 was proved to be deficient in fully capturing specific task environment, similar with other researchers (e.g., Baptista and Oliveira, 2015), we augment UTAUT2 with additional constructs. Trust, perceived security and perceived privacy risk are highly related and are therefore grouped together as such additional constructs to influence behavioral intention in this study.

Trust

In general, trust reflects a willingness to be vulnerable based on the positive expectation towards another party's future behavior (Mayer, et al., 1995). Trust in mobile payment is the willingness that users perform payment transaction over the mobile internet and expect the payment platform fulfilling its obligations, irrespective of users' ability to monitor or control mobile payment platform's actions (Cao, et al., 2018). Trust is crucial in situations that involve transactional buyer-seller relationships, especially in situations that include an element of risk when interacting with an electronic vendor (Gefen, et al., 2003), such as electronic commerce and mobile commerce. In the context of mobile payment, there are several layers of trust from

consumers: (1). trust in the mobile service provider (e.g., Tencent), who provide mobile payment application and technology; (2). trust in the telecommunication operator (e.g. China Mobile), who help to monitor the stability of the network; (3). trust in the merchants or retailers, who provide the QR code or contactless payment platform; and (4). trust in financial institutions, who guarantee a safe transaction with the customers' existing bank accounts (Chavda, 2018). Trust itself is a broad area of research, in this study, since our purpose is to investigate the major determinants of behavioral intention, we would not discuss trust in more details.

In the past, trust has been identified to be an important determinant of behavioral intention to IS use (e.g., Lee, et al., 2015), especially in the context of online shopping (Liu, et al., 2004). Trust has also been proved to be a significant influencer of continuance intention to use mobile payments (Gao, et al., 2015; Cao, et al., 2018). In a critical review of mobile payments research among 188 articles, Dahlberg, et al. (2015) found trust was cited by 22 articles and was ranked number 3 in terms of occurrence frequency. We therefore believe trust will also play an important role in the current study, where mobile payments adoption is still in an initial stage.

Perceived security

Besides trust, security is another important prerequisite for adoption and use of mobile payments. Consumers' concerns about the security and privacy of mobile payments are commonly related to authentication and confidentiality issues as well as to concerns about secondary use and unauthorized access to payments and user data (Dewan and Chen, 2005). In Dahlberg et al. (2015)'s review, from mobile technology perspective, security and security related paper occupied 75% of the articles on mobile payments published between 2007 and 2014. Perceived security is defined as the degree to which a customer believes that using a particular mobile payment procedure will be secure (Shin, 2009). In the IS literature, perceived security is based on individual's subjective perceptions of security rather than on the objective metrics (technology aspects). For example, Shin and Kim (2008) show that the feeling of security is largely determined by the user's feeling of control of the interactive system. Cheong et al. (2002) examined barriers to mobile payment adoption and reported that the lack of subjective security is the most frequent reason for a refusal to use. For the specific relationship between perceived security and behavioral intention, Shin (2009) found perceived security as the most important determinant of user intention for mobile wallet service; Oliveira et al. (2016) and Johnson, et al. (2018) also reported very significant influence on perceived security on intention to adopt mobile payments. Based on these, we believe that the more secure the consumer believes mobile payment services to be, the more likely that they will tend to adopt that technology.

Perceived privacy risk

Perceived privacy risk refers to the concern an individual would have regarding the potential compromise of their personal information (Johnson et al., 2018). Such concerns are mostly related to the secondary use and unauthorized access to the users' personal data (Dewan and Chen, 2005). The risks may come from not only the invaders but also the service providers (Yang, et al., 2012), and the private information involve not only consumers' personal data and financial data, but also locational information (Gao, et al., 2015). When consumers do not have the ability to protect these data or the security situation is out of control, they may perceive potential privacy risk. The negative relationship between perceived privacy risk and mobile payment intention has been verified in Yang et al. (2012) and Morosan and DeFranco (2016).

The current study adopts the UTAUT2 and extends it by incorporating the five innovation characteristics from IDT as well as the security related constructs (e.g., trust,

perceived security and privacy risk) to investigate early adopter's intention toward mobile payments. Our contribution to the mobile payment adoption literature is summarized as follows. First, our study is among the early work (e.g., Oliveira, et al., 2016) that combine multiple theories applicable in consumer adoption market and use the integrated model to investigate consumers' intention to accept mobile payments. Second, this study is among the few studies (e.g., Kim, et al., 2010) that examine a specific category of adopters (early adopters) in IDT. Early adopters are usually opinion leaders and pioneers whose perception of new technology is critical for the dissemination of mobile payments (Van Eck et al., 2011). Third, we echo to the call from Dahlberg et al. (2015) to include more specific and contextual factors that could capture the exact scenario of mobile payments in Hong Kong. Particularly, we considered trust in several dimensions (e.g., trust in the third-party payment platform – Alipay from China), and alternative payment habit as a new construct to understand the reasons of mobile payments adoption intention at a deeper level. In sum, although prior studies in the literature have provided considerable theoretical underpinnings and empirical insights to examine mobile payment adoption, few efforts have been made to integrate the appropriate theories and provide a holistic view to understand the key factors leading to the mobile payment adoption intention in a special market of Hong Kong.

Research model and hypotheses

The research model is shown in Figure 1. The model combines innovation characteristics from IDT, relevant factors in UTAUT2, and also contextual factors such as trust, perceived security, perceived privacy risk, and alternative payment habit. The combination of theories is made based on the assumption that consumer acceptance of a new technology is a complicated phenomenon that requires more than a single model (Shen, et al, 2010) and more causal mechanisms underlying the relationships will be obtained with an integrative view (Jackson, et al., 2013).

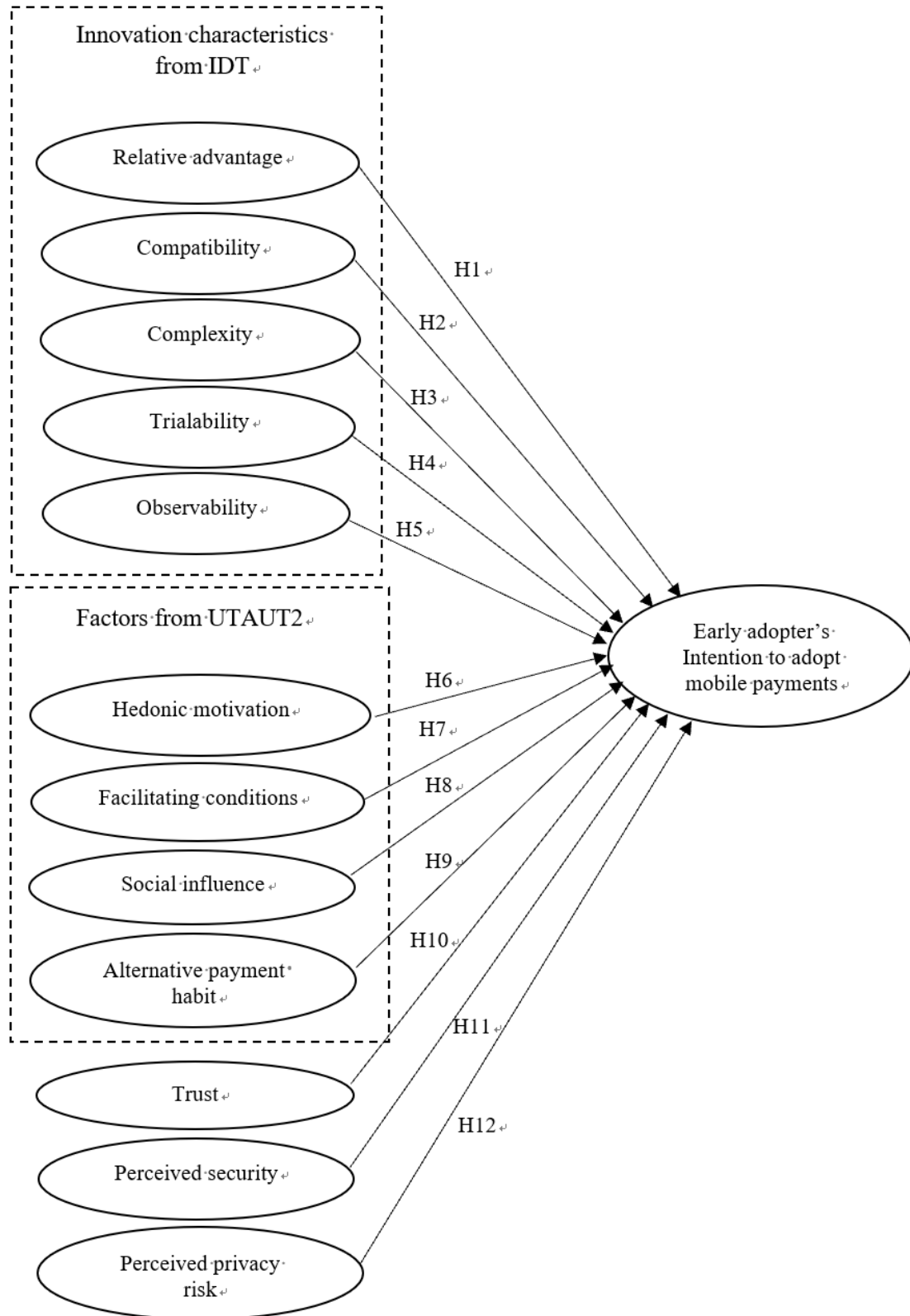


Figure 1. Research model

Based on the above discussions, this research postulates the following hypotheses.
 H1. Relative advantage positively influences early adopter's intention to use mobile payments.

H2. Compatibility positively influences early adopter's intention to use mobile

payments.

H3. Complexity negatively influences early adopter's intention to use mobile payments.

H4. Trialability positively influences early adopter's intention to use mobile payments.

H5. Observability positively influences early adopter's intention to use mobile payments.

H6. Hedonic motivation positively influences early adopter's intention to use mobile payments.

H7. Facilitating conditions positively influences early adopter's intention to use mobile payments.

H8. Social influence positively influences early adopter's intention to use mobile payments.

H9. Alternative payment habit negatively influences early adopter's intention to use mobile payments

H10. Trust positively influences early adopter's intention to use mobile payments.

H11. Perceived security positively influences early adopter's intention to use mobile payments.

H12. Perceived privacy risk negatively influences early adopter's intention to use mobile payments.

Research method

A pilot test was conducted via one focus group study with the early adopters of mobile payments in Hong Kong, and two interviews with the retailers, which support the new mobile payment platforms. By doing this, we could understand an overall picture of the adopter's intention from both consumers' and the shops' perspectives. For the focus group, we recruited 11 Hong Kong youngsters aged 18-30, they are all currently mobile payment users. For the interviews, Starbucks and Uniqlo were chosen as the target companies, since they are among the first to offer in-store proximity payment methods to Hong Kong consumers. This is a research-in-progress paper, and we are currently in the data collection and data analysis stage. We planned to finish the qualitative analysis first and then test the model with a survey study in the future.

Conclusion

Mobile payments offer many advantages over traditional payment services, such as convenience and time saving; however, the adoption rate remains low in Hong Kong, where the penetration rate of mobile devices is ironically high. Researchers and practitioners are rather unclear whether the innovative payment methods in Hong Kong will trigger a long anticipated large-scale adoption (as that in China). In this study, we present a theoretical model based on the Innovation Diffusion Theory and an extension of UTAUT2 to investigate the factors influencing early adopters' intention to use mobile payments in Hong Kong.

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