EasyChair Preprint

№ 5733

Mobile Payment Adoption: Barriers for Baby Boomers in Malaysia

U Hao Lao, Lai Ee Lee, Di Kang Lew, Lian Sien Loo, Sze Xiong Ooi, Voon Hsien Lee, Xiu Ming Loh and Garry Wei Han Tan

June 6, 2021

Mobile Payment Adoption: Barriers for Baby Boomers in Malaysia

Lau U Hao[1], Lee Lai Ee[1], Lew Di Kang[1], Loo Lian Sien[1], Ooi Sze Xiong[1], Lee Voon Hsien[1], Loh Xiu Ming[1], Garry Tan Wei Han[2].

[1] Universiti Tunku Abdul Rahman, 31900 Kampar, Malaysia
[2] UCSI University, 56000 Cheras, Malaysia

Abstract. Mobile payment has been defined by many as the employment of wireless and other such technologies to pay for goods, services, and bills through mobile devices. While this method of payment has increased in popularity in Malaysia, its adoption rate among Malaysians categorized as baby boomers has not been as promising even though this group of people have high levels of spending. Unfortunately, the adoption of such payment methods has been the prime focus of many recent studies in this area, and this has consequently caused many scholars to overlook resistance. Hence, this study addresses the gap by utilizing an extended Innovation Resistance Theory. With this theory, variables such as usage, value, risk, tradition, image, as well as information barriers are used to comprehensively examine the behavioral intention of baby boomers to adopt mobile payment. A survey was conducted and 310 usable responses were collected from baby boomers across Malaysia. These participants had very limited to no experience with mobile payment. The data was then analyzed and it was found that barriers included in this study have significant relationships with the behavioral intention of baby boomers in Malaysia to adopt mobile payment. The present study provides contributions to a number of stakeholders to encourage Malaysian baby boomers to use mobile payment services.

Keywords: Mobile Payment, Mobile Commerce, Innovation Resistance Theory, Baby Boomers.

1 Introduction

Evolving from traditional payment methods that utilized credit cards, the development and growth of technology has enabled customers to make payments using mobile devices. In particular, mobile payment is defined as the utilization of mobile devices to pay for tangible products, services, and bills (Loh et al., 2020). Mobile payment is classified into two types which are proximity and remote. More specifically, proximity mobile payment refers to the close interaction between the consumers' mobile device with the merchant's point of sale terminal. On the other hand, remote mobile payment refers to the non-direct interaction between the consumers' mobile device with the merchant's point of sale terminal (Slade et al., 2013).

In Malaysia, there are numerous mobile payment systems that consumers can choose from. For example, Boost, Grabpay, Touch n' Go eWallet, and many others (Lew et al., 2020). Even with these various systems in place, it was found that only around 10% of payments made in Malaysia were through mobile means; indicating that this method of payment is still sparingly used (Golingai, 2019). This is because cash still plays the dominant role as the most preferred payment method despite the Malaysian government's actions to transform the country into a cashless one (Nielsen, 2019). Hence, a gap is present in terms of understanding the barriers that affect the behavioral intention of baby boomers to adopt mobile payment.

In view of the above-mentioned gap, this study utilizes the Innovation Resistance Theory as the foundation of the research model. This is because the focus is to look into the barriers rather than the motivators that affect the behavioral intention of baby boomers to adopt mobile payment. As such, other frameworks, for instance the Mobile Technology Acceptance Model (Ooi & Tan, 2016), is not suitable for this study. Furthermore, this study extends the theory to include "information barrier" given its importance with the context of this study. Overall, the research objectives are to determine (1) the barriers that determine the behavioral intention of baby boomers to adopt mobile payment as well as (2) the robustness of incorporating "information barrier" into the Innovation Resistance Theory in relation to mobile payment resistance.

In general, this study is posited to contribute to a number of novel findings and insights. Practically, various stakeholders, such as government officials and business operators, can collectively gain significant value through this study. Theoretically, the present research extends the existing knowledge pool of mobile payment resistance from the perspective of a developing nation.

2 Literature Review

2.1 Innovation Resistance Theory

The Innovation Resistance Theory examines consumers' negative response towards a certain innovation; caused either by the potential changes it brings to the existing status quo that evoke functional barriers, or its mismatch with the consumer's belief structure which results in psychological barriers (Ram & Sheth, 1989). These negative responses are categorized as active resistance because they are the attitudinal outcomes developed by consumers as a result of negative product evaluation. Functional barriers are represented by usage barrier, value barrier, and risk barrier whereas psychological barriers include tradition barrier and image barrier (Ram & Sheth, 1989). The application of this theory is in several research areas in the mobile context such as mobile payment (Leong et al., 2020) and mobile website purchasing (Nel & Boshoff, 2020).

It has been posited that there are other barriers present beyond those contained in the Innovation Resistance Theory. In particular, innovation adoption can be hindered by limited information as these innovations require new users to invest substantial of learning effort (Laukkanen et al., 2007). As such, information barrier is integrated into this study's research model. Past studies have also shown that information barrier has a debilitating effect on the intention to adopt mobile services; further justifying this integration (Joachim et al., 2018). According to Kuerbis et al. (2017), service providers' failure to deliver comprehensive guidance will cause adults to become disoriented and lack knowledge. Consequently, they will be unwilling to adopt such technologies. Hence, this research extends the Innovation Resistance Theory with information barrier to examine the behavioral intention of baby boomers to adopt mobile payment.

3 Hypotheses Development

3.1 Usage Barrier

According to Ram and Sheth (1989), usage barrier arises when a certain innovation is incongruous with a consumer's preset lifestyle, habits, or practices. The form of barrier have been shown by several past studies to have negative influences on the adoption of mobile services. Sun et al. (2017) explained that in the process of adopting mobile financial services, users tend to face complications in the form of a small screen. Usage barriers relating to mobile services also happens due to visual difficulty and the lack of keying in sensitive information (Kuerbis et al., 2017). Thus, the following hypothesis was developed:

H1: Usage barrier has a significantly negative relationship with the behavioral intention of baby boomers to adopt mobile payment.

3.2 Value Barrier

When a consumer perceives that the cost of learning is outweighed by the performance-to-price value, a certain resistance, known as value barrier, is formed towards the usage of the product or services (Rammile & Nel, 2012). Several past studies have contributed empirical evidence that show the significant effects of value barrier on the adoption in mobile services. Joachim et al. (2017) discovered the existence of a significantly negative relationship between value barrier and innovation adoption. This situation is also similar when it comes to mobile services (Awasthi & Sangle, 2013). Therefore, the following hypothesis was developed:

H2: Value barrier has a significantly negative relationship with the behavioral intention of baby boomers to adopt mobile payment.

3.3 Risk Barrier

The level of uncertainty and unpredictable side effects that an innovation may bring due to its built-in characteristics is commonly known as risk barrier (Ram & Sheth, 1989). These risks can come in the form of physical, economic, functional, and social. A number of past studies have proven that risk barrier is a significantly negative determinant of behavioral intention. For example, Makanyeza (2017) found that when adopting mobile technology, individuals become hesitant when they realize that there are unpredictability and unfavorable outcomes resulting from its adoption. Specifically in mobile services, these risks can come in terms of privacy and security of a consumer's personal information (Yu & Chantatub, 2016). Therefore, the following hypothesis was developed:

H3: Risk barrier has a significantly negative relationship with the behavioral intention of baby boomers to adopt mobile payment.

3.4 Tradition Barrier

When an innovation contradicts a user's existing values, norms, and past experiences, tradition barrier is induced (Ram & Sheth, 1989). Its significance as a barrier in mobile services adoption has been empirically proven by past studies. These past studies include those that were conducted on mobile shopping in India (Gupta & Arora, 2017) and mobile banking in Finland (Laukkanen, 2016). It is further postulated that this situation is such because consumers prefer sticking with the status quo when performing financial transactions (Leong et al., 2020). Hence, the following hypothesis was developed:

H4: Tradition barrier has a significantly negative relationship with the behavioral intention of baby boomers to adopt mobile payment.

3.5 Image Barrier

As the name suggests, image barrier is formed when a consumer perceives a certain product or service, its image, the company stature, and the country of origin negatively (Cruz et al., 2010). Many studies have empirically proven that image barrier has significant negative influences on behavioral intention. For example, Laukkanen (2016) concluded that older individuals are not as prone to adopt mobile banking as their younger counterparts. This is because they perceive that the application provided are not user friendly. This situation is aligned with the findings of Priya et al. (2018). Hence, the following hypothesis was developed:

H5: Image barrier has a significantly negative relationship with the behavioral intention of baby boomers to adopt mobile payment.

3.6 Information Barrier

Information barrier is present because of the limited information about a new product or service (Laukkanen & Kiviniemi, 2010). The significantly negative effect of information barrier on behavioral intention has been shown by numerous past studies. Kuerbis et al. (2017) argued that service providers who fail to deliver comprehensive guidance will cause older adults to become disoriented due to the lack the knowledge required. In general, consumers reported that they felt discouraged to adopt mobile banking services on the grounds of insufficient information and unfamiliarity towards these services (Yang et al., 2015). Thus, the following hypothesis was developed:

H6: Information barrier has a significantly negative relationship with the behavioral intention of baby boomers to adopt mobile payment.

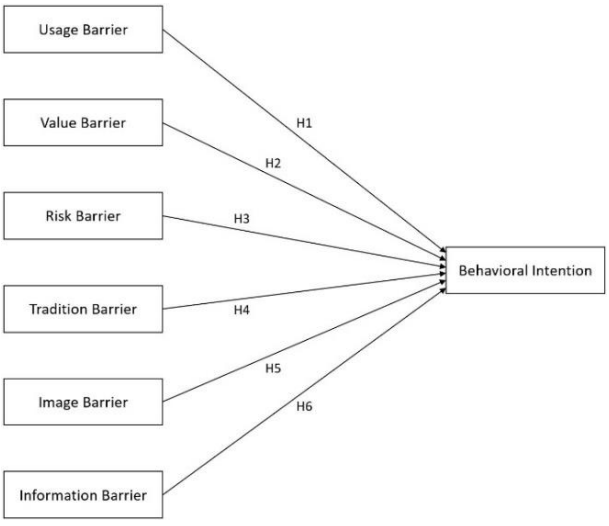

Fig. 1. Proposed Conceptual Model.

4 Methodology

Given the focus of this study, baby boomers in Malaysia who are new to mobile payment and have little to no experience with it were the target respondents for this study. Non-probability sampling was employed because there is no sampling frame of baby boomers with little to no experience with using mobile payment in Malaysia available. Hence, this study utilized purposive sampling as the respondents would have to possess certain attributes (Loh et al., 2019). More specifically, they have to be within the age range of a baby boomer (born between 1946 and 1960) and have little to no experience with using mobile payment.

The responses were collected via a survey. This survey has three sections which are (1) cover page, (2) demographic, and (3) measurement items (Foo et al., 2018; Ooi et al., 2018; Leong et al., 2019). The demographic section covered the age, gender and other personal characteristics of the respondents. The measurement items section was for the constructs of usage barrier (four items), value barrier (four items), risk barrier (five items), tradition barrier (five items), image barrier (four items), information barrier (four items), and behavioral intention (five items). Overall, the 31 questionnaire items were mainly derived from Laukkanen et al. (2007) as well as Ooi and Tan (2016) which is shown in Appendix A. All measurement items were assessed through a seven-point Likert scale that ranges from (1) strongly disagree to (7) strongly agree. Subsequently, the minimum sample size was calculated via the ratio of 1 item to 4 responses (Hinkin, 1998). Hence, the minimum sample size was established at 124 responses. Overall, 288 responses were obtained from the study which were then analyzed.

5 Analysis

5.1 Demographic Profile

Based on Table 1, a majority of the participants never used mobile payment services before, are female, between the ages of 57-61 years old, and possess a primary / secondary school level of education.

Table 1. Descriptive Analysis.

Characteristics	Description	Count	Percentage
Experience with Mobile Payment	Never used it before	253	87.85
	Used it once or twice	35	12.15
Gender	Male	107	37.15
	Female	181	62.85
Age	57-61 years old	169	58.68
	62-66 years old	87	30.21
	67-71 years old	31	11.11
Highest Level of Education	Primary / Secondary School	189	65.62
	Diploma / Advanced Diploma	47	16.32
	Bachelor / Professional Qualification	41	14.24
	Master / PhD	11	3.82

5.2 Reliability, Multicollinearity, and Normality

According to Table 2, all constructs are reliable as the Cronbach's alpha values are all above the threshold of 0.7 (Loh et al., 2019; Ooi et al., 2020; Hew et al., 2019; Hew et al, 2020). In addition, given that all the values for variance inflation factor are less than 5, this indicates that multicollinearity is not an issue (Hew et al., 2018; Tan et al., 2018; Lee et al., 2020; Wong et al., 2020a; Wong et al., 2020b). Furthermore, the data is found to be normally distributed as all values for skewness and kurtosis are within ±3 and ±10 respectively (Saunders et al., 2019).

Table 2. Reliability, Multicollinearity, and Normality.

Construct	Cronbach's Alpha	Variance Inflation Factor	Measurement Item	Skewness	Kurtosis
Usage Barrier	0.816	1.381	UB1	-0.002	-0.767
			UB2	0.097	-0.672
			UB3	0.024	-0.867
			UB4	-0.220	-0.165
Value Barrier	0.791	1.275	VB1	0.203	-0.278
			VB2	0.275	0.399
			VB3	0.369	-0.305
			VB4	0.804	1.668
			VB5	0.024	-0.330
Risk Barrier	0.864	1.230	RB1	-0.694	-0.021
			RB2	-0.303	-0.206
			RB3	-0.260	0.278
			RB4	-0.761	0.625
			RB5	-0.439	0.719
Tradition Barrier	0.713	1.256	TB1	0.504	1.200
			TB2	0.080	-0.348
			TB3	0.366	0.043
			TB4	0.103	-0.338
Image Barrier	0.766	1.266	IMB1	0.489	1.567
			IMB2	0.258	-0.177
			IMB3	0.018	-0.646
			IMB4	0.318	0.944
Information Barrier	0.818	1.289	INB1	0.235	0.689
			INB2	-0.298	1.338
			INB3	-0.071	1.250
			INB4	-0.486	1.026
Behavioral Intention	0.890		BI1	-0.315	-0.561
			BI2	-0.187	-0.666
			BI3	-0.127	-0.443
			BI4	-0.176	-0.443
			BI5	-0.126	-0.286

5.3 Multiple Linear Regression

According to Table 4, usage barrier (p=<0.001), value barrier (p=<0.001), risk barrier (p=0.0140), tradition barrier (p=0.001), image barrier (p=0.026), and information barrier (p=<0.001) all have significant relationships with behavioral intention as the p-values are all below 0.05. Moreover, all antecedents have a negative influence on behavioral intention whereby usage barrier (β=-0.355) has the greatest effect, followed by value barrier (β=-0.221), information barrier (β=-0.171), tradition barrier (β=-0.169), image barrier (β=-0.106), and risk barrier (β=-0.094). Thus, all six hypotheses are supported with an R^2 of 0.5766. In other words, 57.66% of the dependent variable's variation can be accounted for by all six independent variables.

Table 3. Parameter Estimates.

Hypothesis	Construct	Parameter Estimates	Standardized Estimates	T-value	p-value
	(Constant)	8.663		31.12	<0.001
H1	Usage Barrier → Behavioral Intention	-0.355	-0.408	-8.94	<0.001
H2	Value Barrier → Behavioral Intention	-0.221	-0.201	-4.58	<0.001
H3	Risk Barrier → Behavioral Intention	-0.094	-0.106	-2.47	0.014
H4	Tradition Barrier → Behavioral Intention	-0.169	-0.141	3.23	0.001
H5	Image Barrier → Behavioral Intention	-0.106	-0.098	-2.24	0.026
H6	Information Barrier → Behavioral Intention	-0.171	-0.162	-3.68	<0.001

Overall, the equation of multiple linear regression is as follows.

$$BI = 8.663 – 0.355(UB) – 0.221(VB) – 0.094(RB) – 0.169(TB) – 0.106(IMB) – 0.171(INB)$$

6 Discussion

The results indicate that usage barrier is the most significant inhibitor on the behavioral intention to utilize mobile payment. This could be attributed to the complexity of using mobile payment as there are several technical jargons involved, including purchase authorization code and card code verification. Moreover, other significant barriers in this area are value barrier, risk barrier, and tradition barrier. These results show that people would still prefer to use traditional methods of payment as they have reservations regarding the risks and value that mobile payment will bring to their lives. In addition to that, behavioral intention to adopt mobile payment is also significantly influenced by image barrier. This is attributed to the perception that baby boomers who use mobile payment would be seen as different and stand out among others. Furthermore, information barrier has a significantly negative association with the behavioral intention to adopt mobile payment. This might be due to the insufficient or unclear information provided by the mobile payment service providers to baby boomers.

In line with the aforementioned analysis, several implications can be drawn by mobile payment service providers to look into overcoming the barriers affecting baby boomers to adopt mobile payment. Firstly, mobile payment service providers should look into designing their system in such a way that it is easy for baby boomers to understand and use. This can be in terms of navigation and readability. Additionally, in their marketing campaign, mobile payment service should inform the public by highlighting the key benefits and safeguards implemented to eliminate any risks of using mobile payment. This can be in the form of education videos such as step-by-step tutorials. Moving on to the theoretical implications, this research has proven that the addition of "information barrier" into the Innovation Resistance Theory when studying mobile payment resistance is robust. Not only was "information barrier" found to be a significant inhibiting factor in the area of this study, it also better explains mobile payment adoption.

This study does not discount its limitations. Firstly, as this study was only carried out in Malaysia, the findings may not correctly indicate the state of mobile payment resistance in other countries. With this in mind, future researchers should look into conducting cross-country studies which will help to overcome this limitation. In addition, this study looked into mobile payment from a general perspective. As such, future studies can focus on a specific type of mobile payment or its applications in a particular sector (Yan et al., 2020).

References

Awasthi, P., S. Sangle, P.: The importance of value and context for mobile CRM services in banking. Business Process Management Journal, 19(6), 864-891 (2013).

Cruz, P., Neto, L. B. F., Munoz-Gallego, P., Laukkanen, T.: Mobile banking rollout in emerging markets: Evidence from Brazil. International Journal of Bank Marketing, 28(5), 342-371 (2010).

Foo, P. Y., Lee, V. H., Tan, G. W. H., Ooi, K. B.: A gateway to realising sustainability performance via green supply chain management practices: A PLS–ANN approach. Expert Systems with Applications, 107, 1-14 (2018).

Golingai, P.: Going cashless at a snail's pace (2019). https://www.thestar.com.my/opinion/columnists/one-mans-meat/2019/01/26/going-cashless-at-a-snails-pace-malaysians-through-force-of-habit-are-still-very-reliant-on-cash-whi

Gupta, A., Arora, N.: Understanding determinants and barriers of mobile shopping adoption using behavioral reasoning theory. Journal of Retailing and Consumer Services, 36, 1-7 (2017).

Hew, J. J., Leong, L. Y., Tan, G. W. H., Ooi, K. B., Lee, V. H.: The age of mobile social commerce: An Artificial Neural Network analysis on its resistances. Technological Forecasting and Social Change, 144, 311-324 (2019).

Hew, J. J., Wong, L. W., Tan, G. W. H., Ooi, K. B., Lin, B.: The blockchain-based Halal traceability systems: A hype or reality? Supply Chain Management: An International Journal (2020).

Joachim, V., Spieth, P., Heidenreich, S.: Active innovation resistance: An empirical study on functional and psychological barriers to innovation adoption in different contexts. Industrial Marketing Management, 71, 95-107 (2018).

Kuerbis, A., Mulliken, A., Muench, F., Moore, A. A., Gardner, D.: Older adults and mobile technology: Factors that enhance and inhibit utilization in the context of behavioral health. Mental Health and Addiction Research, 2(2), 1-11 (2017).

Laukkanen, T., Kiviniemi, V.: The role of information in mobile banking resistance. International Journal of Bank Marketing, 28(5), 372-388 (2010).

Laukkanen, T., Sinkkonen, S., Kivijärvi, M., Laukkanen, P.: Innovation resistance among mature consumers. Journal of Consumer Marketing, 24(7), 419-427 (2007).

Laukkanen, T.: Consumer adoption versus rejection decisions in seemingly similar service innovations: The case of the Internet and mobile banking. Journal of Business Research, 69(7), 2432-2439 (2016).

Lee, V. H., Hew, J. J., Leong, L. Y., Tan, G. W. H., Ooi, K. B.: Wearable payment: A deep learning-based dual-stage SEM-ANN analysis. Expert Systems with Applications (2020).

Leong, L. Y., Hew, T. S., Ooi, K. B., Tan, G. W. H.: Predicting actual spending in online group buying–An artificial neural network approach. Electronic Commerce Research and Applications, 38 (2019).

Leong, L. Y., Hew, T. S., Ooi, K. B., Wei, J.: Predicting mobile wallet resistance: A two-staged structural equation modeling-artificial neural network approach. International Journal of Information Management, 51 (2020).

Lew, S., Tan, G. W. H., Loh, X. M., Hew, J. J., Ooi, K. B.: The disruptive mobile wallet in the hospitality industry: An extended mobile technology acceptance model. Technology in Society, 63, (2020).

Loh, X. M., Lee, V. H., Tan, G. W. H., Hew, J. J., Ooi, K. B.: Towards a cashless society: The imminent role of wearable technology. Journal of Computer Information Systems, (2019).

Loh, X. M., Lee, V. H., Tan, G. W. H., Ooi, K. B., Dwivedi, Y. K.: Switching from cash to mobile payment: What's the hold-up? Internet Research, (2020).

Makanyeza, C.: Determinants of consumers' intention to adopt mobile banking services in Zimbabwe. International Journal of Bank Marketing, 35(6), 997-1017 (2017).

Nel, J., Boshoff, C.: Status quo bias and shoppers' mobile website purchasing resistance. European Journal of Marketing, 54(6), 1433-1466 (2020).

Nielsen.: Cash or cashless? Malaysia's shifting payment landscape (2019). https://www.nielsen.com/my/en/insights/article/2019/cash-or-cashless-malaysias-shifting-payment-landscape/

Ooi, K. B., Foo, F. E., Tan, G. W. H., Hew, J. J., Leong, L. Y.: Taxi within a grab? A gender-invariant model of mobile taxi adoption. Industrial Management & Data Systems (2020).

Ooi, K. B., Lee, V. H., Tan, G. W. H., Hew, T. S., Hew, J. J.: Cloud computing in manufacturing: The next industrial revolution in Malaysia? Expert Systems with Applications, 93, 376-394 (2018).

Ooi, K. B., Tan, G. W. H.: Mobile technology acceptance model: An investigation using mobile users to explore smartphone credit card. Expert Systems with Applications, 59, 33-46 (2016).

Priya, R., Gandhi, A., Shaikh, A.: Mobile banking adoption in an emerging economy. Benchmarking: An International Journal, 25(2), 743-762 (2018).

Ram, S., Sheth, J.N.: Consumer resistance to innovations: The marketing problem and its solutions. Journal of Consumer Marketing, 6(2), 5-14 (1989).

Saunders, M. N. K., Lewis, P., Thornhill, A.: Research methods for business students. 8th edn. Pearson, London (2019).

Slade, E. L., Williams, M. D., Dwivedi, Y. K.: Mobile payment adoption: Classification and review of the extant literature. The Marketing Review, 13(2), 167-190 (2013).

Sun, B., Sun, C., Liu, C., Gui, C.: Research on initial trust model of mobile banking users. Journal of Risk Analysis and Crisis Response, 7(1), 13-20 (2017).

Tan, G. W. H., Lee, V. H., Hew, J. J., Ooi, K. B., Wong, L. W.: The interactive mobile social media advertising: An imminent approach to advertise tourism products and services? Telematics and Informatics, 35(8), 2270-2288 (2018).

Wong, L. W., Tan, G. W. H., Hew, J. J., Ooi, K. B., Leong, L. Y.: Mobile social media marketing: a new marketing channel among digital natives in higher education? Journal of Marketing for Higher Education (2020a).
Wong, L. W., Tan, G. W. H., Lee, V. H., Ooi, K. B., Sohal, A.: Unearthing the determinants of Blockchain adoption in supply chain management. International Journal of Production Research, 58(7), 2100-2123 (2020b).
Yan, L. Y., Tan, G. W. H., Loh, X. M., Hew, J. J., Ooi, K. B.: QR code and mobile payment: The disruptive forces in retail. Journal of Retailing and Consumer Services, 58, (2020).
Yang, Y., Liu, Y., Li, H., Yu, B.: Understanding perceived risks in mobile payment acceptance. Industrial Management & Data Systems, 115(2), 253-269 (2015).
Yu, C. S., Chantatub, W.: Consumers' resistance to using mobile banking: Evidence from Thailand and Taiwan. International Journal of Electronic Commerce Studies, 7(1), 21-38 (2016).

Appendix A (Questionnaire Items)

Construct	Measurement Item
Usage Barrier	UB1: I find that mobile payment is difficult to use.
	UB2: I find that mobile payment is inconvenient to use.
	UB3: I find that mobile payment is inefficient compare to paying in cash.
	UB4: I find that instruction provided on the mobile payment platform is unclear.
Value Barrier	VB1: For me, using mobile payment is uneconomical.
	VB2: For me, using mobile payment does not help to increase the ability to control my own financial matters.
	VB3: For me, using mobile payment services does not offer any extra benefits when compared to cash payment.
	VB4: For me, using mobile payment does not eliminate the constraint of time when conducting the transactions.
	VB5: For me, mobile payment is not a good substitute for traditional cash payment.
Risk Barrier	RB1: I am afraid of making any mistakes in the process of using mobile payment.
	RB2: I am afraid of entering wrong information during the payment process.
	RB3: I am afraid of the exposure of private information by using the mobile payment platform.
	RB4: I am afraid of any unreasonable or fraudulent charges if using the mobile payment services.
	RB5: I am afraid of faultiness in the functions of mobile payment.
Tradition Barrier	TB1: I feel impatient with the mobile payment applications.
	TB2: I prefer to face-to-face communication with the seller to purchase goods and services that I want.
	TB3: I prefer to use physical forms of payment for my transactions.
	TB4: I prefer to make payment through a computer rather than using mobile phones or tablets
Image Barrier	IMB1: Mobile payment projected a very negative image.
	IMB2: Mobile payments are perceived to be difficult to use.
	IMB3: New technologies are always too complicated to use.
	IMB4: The reputation of mobile payment service providers is not so good.
Information Barrier	INB1: I think it is difficult to get enough information about mobile payment services.
	INB2: I think the information available on mobile payment services is unclear and unhelpful.
	INB3: I think there is not enough guidance from service providers in relation to mobile payment service.
	INB4: The information available concerning mobile payment services is not overwhelming.
Behavioral Intention	BI1: I will use mobile payment services in the near future.
	BI2: I will use mobile payment services if the opportunity arises.
	BI3: It is likely that I will use mobile payment services in the future.
	BI4: I am planning to use mobile payment services.
	BI5: I intend to learn how to use mobile payment services to carry out my transactions.