Understanding Malaysian Users'
Switching Intention to Mobile Payment

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Abstract

Mobile payment (M-payment) in Malaysia is still considered to be in its infancy stage due to its relatively low adoption among Malaysians. Even though the Malaysian government allocated RM450 million in 2020 to promote M-payment, many Malaysians still prefer to rely on the traditional method of paying with cash. In addition, M-payment switching intention in developing countries has also received little attention from researchers. The objective of this study is to examine the factors influencing M-payment switching intention in Malaysia. This study also attempts to integrate Unified Theory of Use of Technology 2 (UTAUT2) and Information System Success Model (ISSM) in the effort to resolve the limitations of the current literature on M-payment switching intention. A total of 205 usable datasets were collected and analysed using the Structural Equation Modelling technique. The results of this study show that habit has a significant influence on Malaysians in determining their switching intention to M-payment. On the contrary, system quality, service quality, performance expectancy and effort expectancy are not the factors that would lead to the intention to switch. The results also show that effort expectancy has a positive effect on performance expectancy while performance expectancy has a positive impact on habit. The results are valuable to policymakers and participants as they provide insights into the overall efficiency of implementation of M-payment systems and the development of a cashless society. In addition, this study also fills the literature gap of M-payment switching intention in Malaysia.

Keywords: M-payment, switching intention, habit, system quality, service quality

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Introduction

Mobile payment (M-payment) plays an important role in mobile commerce transactions. It is a new form of payment method through mobile devices. M-payment has brought many benefits to consumers, such as quick and convenient payments, checking financial balances, transferring money, paying for utilities and other financial activities, where all these activities can be undertaken regardless of the time and place where the consumers are (Zhou, 2014). Prior to the Covid-19 pandemic, M-payment services in Malaysia were not well-developed and the adoption of M-payment services among Malaysians was still low (Loh et al., 2020). Despite the efforts taken by the government in promoting M-payment, many Malaysian consumers are still reluctant to adopt M-payment. A study conducted among Malaysians found that though 63% of them owned debit cards, 93% of them preferred to pay cash for goods and drinks, while 90% of them would pay cash for purchases, 89%

would use cash for public transport, 81% would use cash at petrol stations and lastly, 81% would use cash to pay for taxi services (Lau, 2019). This suggests that consumers were more likely to use cash in their day-to-day financial payment activities, with only 8% of Malaysians using M-payments before the Covid-19 pandemic (Digital news Asia, 2019). Although M-payments increased significantly during the Covid-19 pandemic, the rate of growth is still lagging far behind compared to other payment methods (see Figure 1). Therefore, the study of consumers' switching intention is vital to the successful implementation of M-payment in Malaysia.

The majority of M-payment studies have focused on consumer use/adoption and continue to use intention (Fan et al., 2020), with little attention paid to M-payment switching intention (Song et al., 2018; Wang et al., 2019; Wang, 2018). Besides, various studies exclude affective factors, while some overlook system quality and service quality, which are required conditions for the

Figure 1

Users by Segment (Statista, 2022)
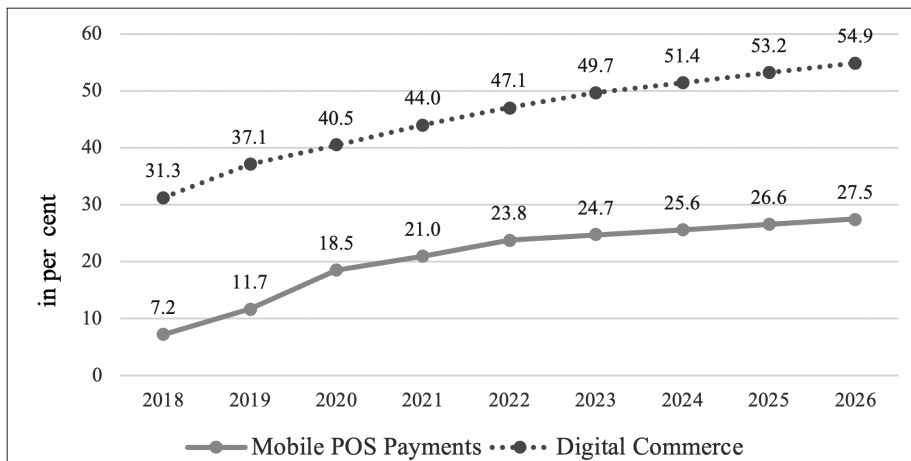
success of information systems in influencing consumers' switching intention (Abrahão et al., 2016; Oliveira et al., 2016). Therefore, this study proposes to integrate UTAUT2 and Information System Success Model (hereafter, ISSM) to investigate the influencing factors of M-payment switching intention.

The renewed UTAUT2 includes habit as one of the factors to explain new technology adaption. Habit refers to automatic responses. According to Limayem et al., (2007), habit has a direct effect on intention and thus influences behaviour intention. This study argues that habit is a repetitive behaviour. When the use of technology becomes a habit, the old habit would fade and behaviour intention of switching is formed. However, in the literature on new technology adoption, habit has not received much attention (Limayem et al., 2007). Besides, the impact of habit on M-payment in Malaysia has not been fully investigated in previous studies. Furthermore, to the best of the researchers' knowledge, there are only a few studies on consumers' M-payment switching intention in Malaysia. This suggests the need to fill the gaps left by these studies. The findings of this study may aid in the establishment of a cashless society in Malaysia as well as assisting the country's transformation to a digital economy.

Literature Review

Unified Theory of Use of Technology 2 (UTAUT2)

Unified Theory of Use of Technology (UTAUT) model is used to explain user intention to use an information system and subsequent usage. Performance expectancy, effort expectancy, social influence and facilitating condition are the four key predictors. Performance expectancy is the

degree to which one may benefit from using information systems to conduct certain activities, whereas effort expectancy is the degree of perceived ease in adopting an information system. Facilitating condition is the belief that infrastructural assistance is available to help people to use information systems. Lastly, social influence is present when a user feels that a particular individual who is important to him or her believes that he or she should utilise that information systems. According to UTAUT, age, gender, voluntariness of usage and experience are the moderators moderating the four key predictors in influencing behaviour and intention to use technology. It has been commonly used to examine information systems adoption, for example in mobile commerce adoption (Tarhini et al., 2019), online banking (Martins et al., 2014) and M-payment (Tang, Aik & Lim, 2021; Tang et al., 2021). However, the model has been criticised for focusing more on the organizational intention and use of new technology prediction while ignoring the factors influencing decision-making by consumers. To compensate for this limitation, UTAUT was revised by adding predictors such as hedonic motivation, price value and habit (Venkatesh et al., 2012). Based on the UTAUT2 model, hedonic motivation means that technology acceptance and usage would be determined by the pleasure of adopting a technology (Venkatesh et al., 2012). According to Venkatesh et al., (2012), price value is the trade-off between the consumers' perceived advantages of the technology and the monetary cost of using them. Meanwhile, habit is the learned behavioural sequences of acts (Cai et al., 2019). It is always referred to as the degree to which people tend to conduct behaviours automatically as a result of learning (Limayem & Hirt, 2003). Besides,

since UTAUT2 is intended to apply to the consumer context, Venkatesh et al., (2012) remove voluntariness of use as a moderator by assuming that consumers' use of the technology is voluntary (Moorthy et al., 2020; Slade et al., 2013).

Information System Success Model (ISSM)

DeLone and McLean developed the Information System Success Model (ISSM) to measure information systems success. ISSM is widely applied in identifying consumer adoption of information systems. For instance, ISSM has been utilised to investigate the effects of system quality, information quality and service quality in mobile commerce relating to ride-hailing services (Nguyen & Trang, 2018), mobile banking adoption (Baabdullah et al., 2019) and measuring e-commerce success (Imtiaz Ali et al., 2018). However, ISSM is rarely applied in the context of M-payment.

According to ISSM, system quality, service quality and information quality influence intention to use and user satisfaction, and both of these factors influence individual net benefits (DeLone & Mclean, 2014; Slade et al., 2013). System quality measures the capability of an information system to satisfy consumer needs such as ease of use, reliability, functionality and performance. Information quality is the desirable characteristic of an information system output which are effectiveness and efficiency of information delivery (DeLone & Mclean, 2003; Imtiaz Ali et al., 2018; Kuo, 2020). High quality of service quality is achieved if the information system provides reliable and responsive support and personalised service to end-users (Kuo, 2020). User satisfaction refers to consumers' emotion and belief that arise from the usage of a particular information

system (Imtiaz Ali et al., 2018). It is the level of satisfaction described by users of the system. The net benefit is the extent to which an information system can contribute to its success or the overall benefits obtained from using or executing the system (DeLone & Mclean, 2003).

Consumers' Switching Intention

Consumer switching intention is the opposite of retaining or continuing existing usage. Therefore, it is about a decision to be made by a consumer to discontinue a service or product. Wang (2018) refers to consumers' switching intention as the choice made by the consumer to freely switch to a substitute service or product partially or completely if his needs can be satisfied. A strong switching intention could be due to a desire for a new service or product, or an unsatisfactory or unfavourable outcome from the existing service or product provider (Kim, 2019), which would lead to a switch to an alternative service provider. In the context of payment, switching intention relates to the availability of choice of different payment methods and that consumers are gradually moving from the payment method which they have been using to an alternative payment method (Fan et al., 2021).

Relationship Between Service Quality and Switching Intention to M-payment

Service quality is a key factor for customers to make a choice between competing service providers and to decide whether to increase usage of the service (Baabdullah et al., 2019). It can also help companies to secure a larger piece of the market share and meet customer satisfaction (Parasuraman et al., 1985; Zeithaml, 2000). Service quality also means that the support and system have been distributed to the consumer contributing

to the success of the information system (Balaban et al., 2013). Consumers perceive the performance of the service before they use it and would evaluate whether the service meets their normative expectations after using it, thus providing ratings to the quality of service (Parasuraman et al., 1988). In the M-payment context, service quality would include issues such as whether the mobile payment services are able to provide a service quality guarantee, responsive, reliable and the extent that the service is personalised to the needs of its users (Kuo, 2020; Zhou, 2013).

Service quality affects consumers' decisions to switch (Fan et al., 2021; Kuo, 2020; Tweneboah-Koduah et al., 2017). When service providers have a high capability to provide quality services to their customers, they can attract more customers (Zhou, 2013). Likewise, Choi et al., (2020) claim that a good service quality of M-payment can reduce dissatisfaction of customers and the possibility of change of their preferences. In addition, Srivastava and Sharma (2013) and Liao et al., (2019) assert that a high service quality offered by competitors helps to attract people's switching intention.

H1: There is a significant relationship between service quality and switching intention to M-payment.

Relationship Between System Quality and Switching Intention to M-Payment

System quality refers to system performance attributes (Zaied, 2012). It involves the evaluation of the information processing system which includes data processing abilities, react time, ease of use, system trustworthiness and visual design (Balaban et al., 2013; Zhou, 2016). System quality is also determined by characteristics such as data quality, ease of use, flexibility, capability and reliability (DeLone & Mclean, 2003). System quality in this study means the functionality of the M-payment system, i.e. the system is reliable, able to generate a fast response and is easy to use and navigate (Kuo, 2020; Nguyen & Trang, 2018).

Baabdullah et al., (2019) argue that consumers are highly motivated in using technology if it meets their expectation. Zhou (2016) finds that system quality significantly influences switching intention. If the alternative information system is easy to use, has a good interface design and navigation and is responsive, consumers will perceive that the system is of high quality, well developed and offer them a well-functioning system, and accordingly they would switch to the alternative system (Fan et al., 2021; Zhou, 2016).

H2: There is a significant relationship between system quality and mobile payment switching intention.

Relationship Between Effort Expectancy and Switching Intention to M-Payment

Effort expectancy is one of the variables in the UTAUT2 model (Venkatesh et al., 2012) which has been extensively used in various studies to validate the adoption of new technology. Effort expectancy refers to the degree of perceived ease of use with which people adopt an information system and technology. Therefore, effort expectancy and perceived ease of use are interchangeable (Rampersad et al., 2012). Effort expectancy refers to the energy put into a particular work, the achievement gained from the energy expenditure and the benefits gained from the effort (Ghalandari, 2012). Hence, effort expectancy is a belief that lesser efforts are

required in using a new technology (Legris et al., 2003).

Consumers tend to adopt user-friendly technologies that offer flexibility, functionality and ease of use (Nyesiga et al., 2017; Wang, 2018). Besides, a technology that is easy to learn and use would easily attract new users. A study conducted by Liu and Tai (2016) finds that effort expectancy had a positive impact on Vietnamese intention to use M-payment. Meanwhile, numerous studies have shown that effort expectancy significantly affects switching intention (Chang & Hsu, 2019; Marseto et al., 2019; Singh et al., 2020).

H3: There is a significant relationship between effort expectancy and mobile payment switching intention.

Relationship Between Performance Expectancy Switching Intention to M-Payment

Performance expectancy refers to the degree to which an individual, with the help of technology, gains benefit or improves his work performance when performing certain activities (Venkatesh et al., 2012). It is the advantage or superiority of using a new technology (Liu & Tai, 2016). The impact of performance expectancy on intention to use and the continuous use of M-payment has been confirmed in various studies (Liu & Tai, 2016; Singh et al., 2020; Wu et al., 2016). Likewise, extensive studies on information systems have found that performance expectancy plays a significant role in influencing switching intention (Malik et al., 2014; Wirth & Maier, 2017; Ye et al., 2008). For example, Xu et al., (2017) find that there is a significant positive relationship between performance expectancy and consumer switching intention to cloud storage services (Quoquab et al., 2018) and in mobile telecommunications services.

Meanwhile, de Luna et al., (2019) also find that performance expectancy has a significant impact on Spanish consumers' M-payment use intention.

H4: There is a significant relationship between performance expectancy and mobile payment switching intention.

Relationship Between Habit and Switching Intention to M-Payment

Limayem et al., (2007) define habit as the automatic responses that can be developed quickly, or through repetition. Once a habit is formed, the behaviour will be automatically performed with little mental effort and conscious attention (Limayem et al., 2007). Habit is the kind of mindset that prevents one from adopting others (Limayem et al., 2007; Loh et al., 2020). Consumers are less likely to switch to another alternative due to their habit (Amoroso & Chen, 2017; Hsiao et al., 2016). On the contrary, this study argues that habit is a recurrent behaviour through the usage of a payment system over period of time due to the benefits and expectations gained.

Limayem et al. (2007) define a habit as the extent to which an information system is used automatically which is effortless and efficient. Habit produces a favourable feeling towards a particular behaviour (Hsiao et al., 2016). Therefore, in this study, the researchers adopt habit as the favourable behaviour performed automatically with little conscious attention and effort. As such, habit is an automatic response and individuals tend to switch to M-payment methods as habit increases (Limayem et al., 2007). Xu et al. (2017) claim that there is a significant association between habit and switching intention. Similarly, Marseto et al. (2019) find that habit influences the switching intention from e-commerce to social commerce. The quality of payment

services has improved in recent years and the advantages offered by these services have influenced the consumers' payment habit. Prior research in M-payment shows that habit affects consumers' continuous use intention (Amoroso & Lim, 2015; Wilson et al., 2010). Apart from this, de Luna et al. (2019) argue that the relationship between consumer and money is personal; payment habit can change over time though the change would take place slowly. Once the habit of using M-payment is accepted, the impact of this habit on consumers' behaviour will last for a long time, thus it is likely for them to switch to M-payment (Yen & Wu, 2016).

H5: There is a significant relationship between habit and mobile payment switching intention.

Relationship Between Effort Expectancy, Performance Expectancy and Habit

Liu et al., (2019) and Williams (2018) argue that performance expectancy is the antecedent and is directly affected by effort expectancy. Cui et al. (2019) claim that a user-friendly system will increase performance efficiency. When M-payment possesses high effort expectancy (i.e., easy to use and easy to learn), consumers are more likely to increase their perceived high-performance expectancy of the M-payment (i.e., more beneficial and useful) (Cimperman et al., 2016). This argument is consistent with the results of a study conducted by de Luna et al. (2019) which show that effort expectancy has significantly affected Spanish consumers' M-payment adoption.

Similarly, frequent repetition and practices are critical to the formation of habits

(Limayem et al., 2007). Therefore, habit is the customs that have become a regular part of an individual's daily life. Limayem et al. (2007) assert that consumers will not turn the use of technology into a habit if its performance does not meet their requirements. Therefore, a service or product's performance such as its usefulness is the antecedent of habit formation.
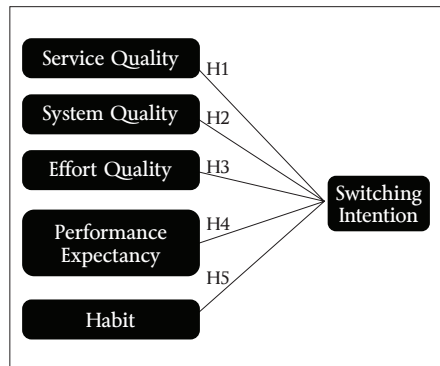
H6: There is a significant relationship between effort expectancy and performance expectancy.

H7: There is a significant relationship between performance expectancy and habit.

Conceptual Model

Figure 2

Conceptual Framework

The conceptual model of this research is developed based on the UTAUT2 model and is expanded by integrating variables from ISSM (see Figure 2). System quality and service quality from ISSM are the factors that attract consumers to have the intention to adopt M-payment (Zhou, 2016), while performance expectancy, effort expectancy and habit are adopted from UTAUT and these are the

cognitive factors that attract consumers to M-payment. Besides, performance expectancy and effort expectancy have been identified as the key factors in influencing the adoption and future usage of information technologies.

Habit may facilitate or hamper mobile payment switching intention (Cheng et al., 2019). The price value is found not to be relevant in this study because no cost is incurred in a financial transaction conducted via M-payment. Moorthy et al., (2020) argue that for M-payment, consumers use a mobile phone and Internet data plan which they already have. There is no financial support and service charge provided by the banks. Therefore, in this conceptual framework, price value as a factor is excluded. Similarly, the hedonic and demographic moderators from UTAUT2 are also excluded. The demographic moderator which has a lesser effect on an individual's switching intention is also excluded from the conceptual framework (Moorthy et al., 2020).

Research Methodology

Research Design and Data Collection

This study adopted the positivism and deductive approach to investigate factors affecting Malaysians' switching intention to M-payment. The unit of analysis of this study was restricted to Malaysians who reside in the Klang Valley, Malaysia. The rationale behind this decision is due to the high population density and smartphone penetration in the Klang Valley. This research utilised convenience sampling method and online self-administered questionnaires for data collection.

This study adopted Kline's suggestion to estimate the minimum sample size for data analysis, i.e., more than 200 cases were required. We take statistic power into account, thus G*Power tool was used to determine sample size (Memon et al., 2020). The findings reveal that the minimal sample size is 102 at an effect size of 0.15 (medium effect), 0.05 alpha and a power of 0.80. Prior to data collection, a pre-test and a pilot test were carried out. A total of 270 samples were collected. However, after data cleaning, only 205 samples were usable for data analysis. The conceptual framework was analysed using the SEM technique with IBM AMOS 24.

Test of the Measurement Model

It can be seen from Table 1 that the measurement model of this study has a good model fit indices. Other than the GFI value of 0.872, all the other indices meet the requirements of 0.9 or above. The RMSEA is 0.065 and x2/df is 1.858 which is below the threshold and indicating a high goodness fit. Overall, all six constructs achieve high alpha coefficients which is above 0.8. This indicates that all the variables are highly reliable and

Table 1
Goodness-of-Fit Statistics for the CFA Model

Model Tested	$x2/df$	GFI	CFI	TLI	NFI	RMSEA
Criterion for goodness of fit	< 5	≥ 0.9	>=0.90	≥ 0.90	≥ 0.90	≤ 0.08
Model performance	1.858	0.872	0.952	0.942	0.902	0.065

Table 2

Factor Loading, Average Variance Extracted and Construct Reliability

Construct	Items/ Indicators	Cronbach 's Alpha	Factor Loading	CR	AVE
System Quality	SQ2	0.815	0.731	0.821	0.605
	SQ5		0.750		
	SQ6		0.848		
Service Quality	ServQ1	0.846	0.800	0.848	0.651
	ServQ2		0.781		
	ServQ3		0.839		
Performance Expectancy	PE1	0.895	0.775	0.896	0.683
	PE2		0.830		
	PE3		0.816		
	PE4		0.882		
Effort Expectancy	EE1	0.924	0.806	0.925	0.754
	EE2		0.893		
	EE3		0.887		
	EE4		0.885		
Habit	Habit1	0.901	0.748	0.902	0.699
	Habit2		0.863		
	Habit3		0.863		
	Habit4		0.862		
Switching Intention	SI1	0.873	0.838	0.873	0.697
	SI2		0.857		
	SI3		0.808		

are internally consistent. Table 2 shows the result of confirmatory factor analysis (CFA) and Table 3 shows the Average Variance Extracted (AVE) and squared correlation coefficient of the variables. All the factor loadings and Composite Reliability (CR) value are above the threshold value of 0.7 and the Average Variance Extracted (AVE) is greater

Table 3

Squared Correlation Coefficient for Study Instruments

Construct	1	2	3	4	5	6
System Quality	0.778					
Service Quality	0.767***	0.807				
Performance Expectancy	0.775***	0.743***	0.827			
Effort Expectancy	0.731***	0.701***	0.780***	0.868		
Habit	0.298***	0.457***	0.391***	0.229**	0.836	
Switching Intention	0.487***	0.534***	0.501***	0.435***	0.549***	0.835

Note. Bold values indicate the square root of AVE of each construct. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$
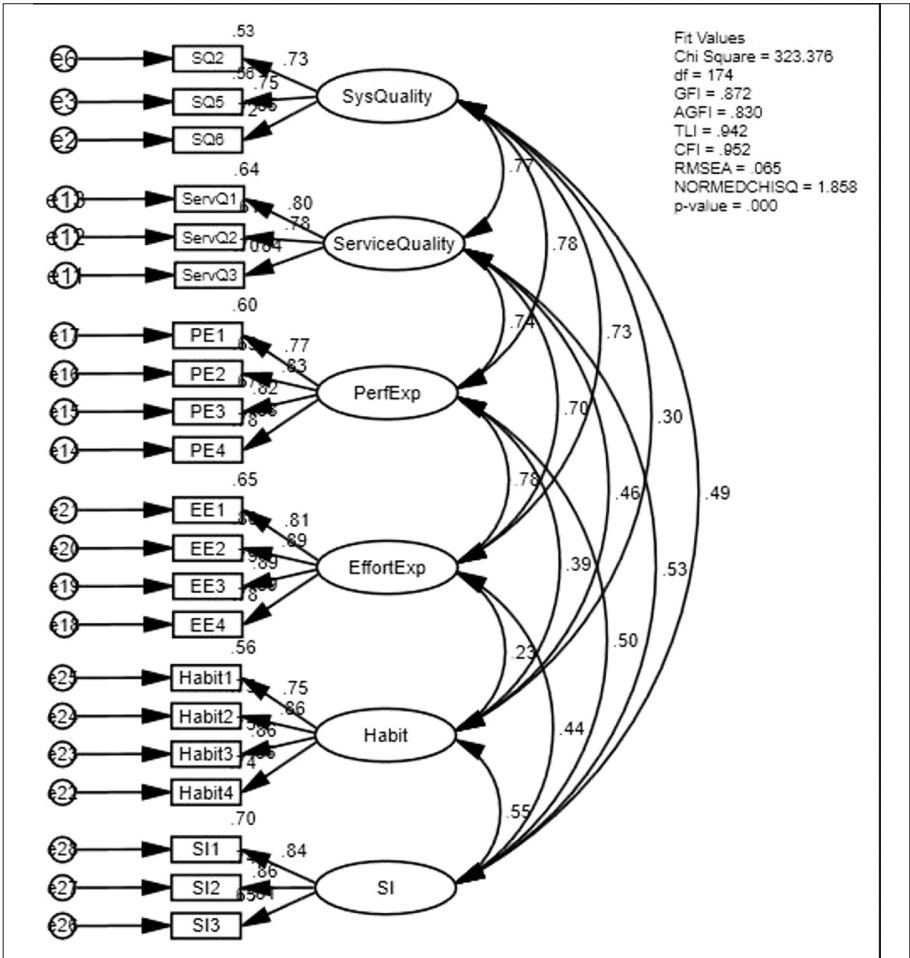
Table 4

HTMT Analysis

Construct	1	2	3	4	5	6
System Quality						
Service Quality	0.759					
Performance Expectancy	0.790	0.764				
Effort Expectancy	0.738	0.717	0.780			
Habit	0.326	0.479	0.443	0.270		
Switching Intention	0.480	0.532	0.500	0.431	0.562	

than 0.5. Three indicators from the system quality construct (SQ1, SQ3, and SQ4) were eliminated owing to poor factor loading. Table 4 shows that the results of the Heterotrait-Monotrait Ratio of Correlations (HTMT) criterion for discriminant validity is valued below HTMT.85. This indicates that there is no discriminant validity and convergent validity issue. Harmon's single-factor analysis test was performed to treat Common Method Bias (CMB). The results show that the zero constraints test is insignificant (p-value=1.000), where the constrained model is the same as the unconstrained model. This demonstrates that no common method bias is detected in this model.

Figure 3

Measurement Model

Data Analysis and Results

Respondents' Demographic Profile

Table 5 summarizes the demographics of the respondents in this study. A total of 205 respondents participated in the survey, including 111 males (54.1%) and 94 females (45.9%). Most of the respondents were between the ages of 25 and 31 and had a bachelor's degree or a professional qualification. Students also formed a substantial portion of respondents in this study. Table 6 shows the mean values of the constructs and the deviation between each construct and its mean value.

Table 5
Summary of Respondents' Profile (N = 205)

Demographic		Frequency	Percentage
Gender			
	Male	111	54.1
	Female	94	45.9
Age			
	18 – 24 years old	8	3.9
	25 – 31 years old	173	84.4
	32 – 38 years old	17	8.3
	39 – 45 years old	6	2.9
	46 years old and above	7	0.5
Educational Qualification			
	Primary or secondary education	13	6.3
	Certificate / Diploma	22	10.7
	Bachelor's degree / professional qualification	157	76.6
	Postgraduate	12	5.9
	Others	1	0.5
Employment Status			
	Student	155	75.6
	Employed	37	18.0
	Self-Employed	8	4.0
	Unemployed	5	2.4

Table 6

Descriptive Statistics

| Model Tested	N	Mean	Std Deviation
Service Quality	205	3.4959	0.04958
System Quality	205	3.6878	0.04713
Effort Expectancy	205	3.7305	0.05411
Performance Expectancy	205	3.8439	0.05546
Habit	205	2.9244	0.06335
Switching Intention	205	3.3659	0.05118

Test of Structural Model

The results of structural equation modelling (SEM) are reported in Table 7. SEM results show that hypotheses H1, H2, H3 and H4 are not significant, suggesting that service quality (B=0.131, p>0.05), system quality (B=204, p>0.05), effort expectancy (B=0.078, p>0.05), and performance expectancy (B=0.077, p>0.05) have no impact on M-payment switching intention in Malaysia. Meanwhile, H5 (habit) (B=379, p<0.05) is the only factor that has a direct positive impact on switching intention to M-payment. The present study also reveals that H6 (the

Table 7

Results of SEM on Effect of Predictors on Switching Intention to M-Payment

	Model Tested	Estimate	S.E.	C.R.	P	β	Lower	Upper
H1	Service Quality → Switching Intention	0.131	0.135	0.977	0.329	0.129	-0.164	0.474
H2	System Quality → Switching Intention	0.204	0.180	1.132	0.258	0.159	-0.226	0.739
H3	Effort Expectancy → Switching Intention Performance	0.078	0.161	0.483	0.629	0.078	-0.296	0.452
H4	Performance Expectanc → Switching Intention	0.077	0.130	0.593	0.553	0.075	-0.291	0.415
H5	Habit → Switching Intention	0.379	0.071	5.371	***	0.411	0.183	0.589
H6	Effort Expectancy → Performance Expectancy	0.783	0.078	10.026	***	0.803	0.617	0.972
H7	Performance → Expectancy Habit	0.420	0.088	4.796	***	0.379	0.238	0.585

Figure 4

Structural Model of the Conceptual Framework
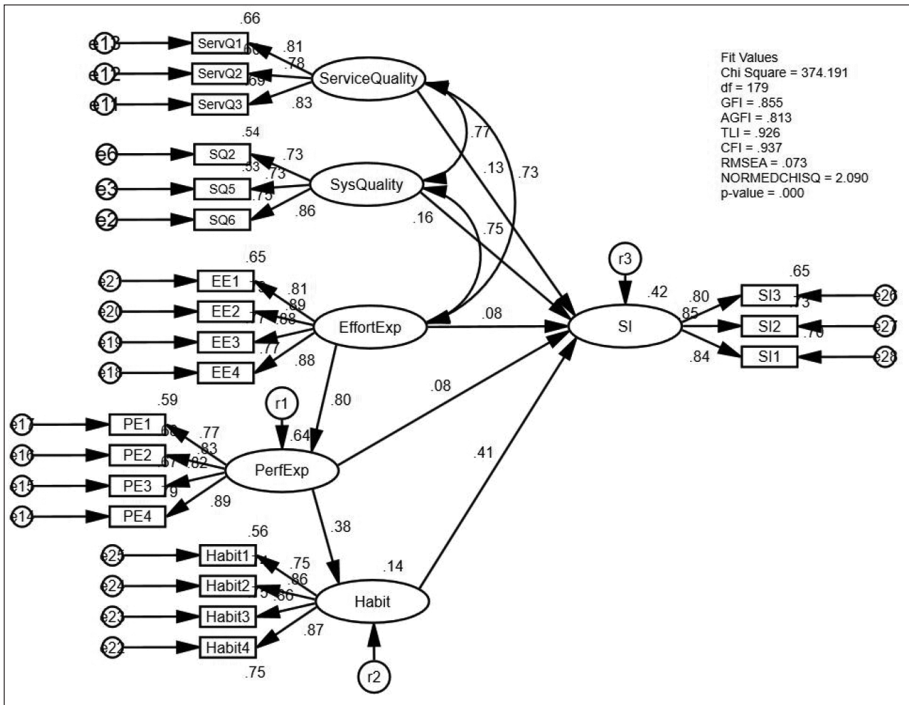
relationship between effort expectancy and performance expectancy) (B=783, p<0.05) and H7 (the relationship between performance expectancy and habit) (B=0.420, p<0.05) are significant in this study.

Discussion

The results of this study differ greatly from the results of other studies. The results show that hypothesis H1 to H4 (service quality, system quality, effort expectancy and performance expectancy) do not have a significant impact on switching intention to M-payment in Malaysia. Meanwhile, H5

to H7 are found to be significant. Various studies have shown that service quality has a positive impact on switching intention. However, the results of this study show that switching intention is not influenced by service quality, which contradicts the findings of the study conducted by Zhou (2016). This suggests that consumers may not switch to M-payment because of the quality of service offered by service providers. Although H1 is insignificant, this finding is consistent with the findings of previous studies by Quoquab et al. (2018), which state that there is no direct relationship between service quality

and switching intention in Malaysia mobile telecommunications service. The possible explanation for this result is that Malaysians do not consider service quality to be the main factor in their M-payment intention, nor do they consider it to be a valid reason to switch to M-payment.

The system quality of M-payment is reflected in the system reliability, fast response, ease of use and navigation of the system, which increases consumers' satisfaction and leads them to decide to switch to M-payment. This study proves that system quality has no impact on Malaysians' switching intention to M-payment. This might be due to the fact that consumers are more familiar with cash payment and are generally biased against M-payment that causes them to have concerns over m-payment. For instance, they might have a perception that it is unpleasant to use M-payment and such perception deters them from switching to M-payment.

In most studies on technology adoption and switching intention, effort expectation plays an important role in influencing consumers' behaviour. Previous studies argue that if consumers believe that M-payment is easy to use and requires lesser time and effort, there is a higher chance of them switching to M-payment (Sivathanu, 2019; Ye et al., 2008). However, a similar study conducted by Liébana-Cabanillas et al., (2020) also found that effort expectancy has no significant impact on the adoption of M-payment in Spain. This insignificant result can be explained by the fact that consumers still feel more comfortable and convenient with cash payment.

Performance expectancy has been found in many studies to be the most critical factor in motivating consumers to switch to an alternative due to the advantages offered (de Luna et al., 2019; Liébana-Cabanillas et al., 2020; Sivathanu, 2019). This is not surprising as according to the social cognitive theory, consumers are motivated by favourable outcomes (Bandura, 1989). Interestingly, the results of this study find that performance expectancy has no significant relationship with M-payment switching intention. Zhou (2018) also obtained a similar result in a study conducted in China. The plausible reason is there is no difference in the skills required to utilise these two types of technology. In addition, cash has been used as the conventional payment method for thousands of years. Malaysians are still holding cash for convenience, reliability and emergency. They have yet to appreciate the advantages of M-payment as an alternative payment method compared to cash in various payment and financial transactions.

Habit is the only factor that has a direct impact on switching intention to M-payment. Habit is an unconscious and effortless past behaviour that influences the consumers' evaluation of their switching decisions (Cheng et al., 2019). A similar study conducted by Sivathanu (2019) finds that habit has significantly impacted the behavioural intention of adoption of M-payment services in India. The result of this study suggests that the more frequently consumers use M-payment services to the extent that it becomes a routine and habit, the more likely the cognitive process of automatic use of M-payment is to occur. Another explanation is that when a person develops a strong habit of using M-payment services, they will develop a strong memory representation of using M-payment during the process of making payments (Cai et al., 2019). As a result, recalling the memory representation of M-payment is simpler.

Tan et al. (2014) assert that the formation of performance expectancy is due to the influence of effort expectancy. This study also finds that effort expectancy has a positive significant effect on consumers' performance expectancy. The result is consistent with the study by de Luna et al. (2019) who find that effort expectancy has an impact on performance expectancy of Spanish consumers' M-payment usage. Similarly, Tang et al., (2021) reveal that effort expectancy has a significant positive impact on the performance expectancy of Malaysians in terms of their intention to use M-payment. When consumers find that M-payment is user-friendly and is easy to operate, they are more likely to conclude that this payment method is useful to them.

When consumers believe that a new technology meets their performance expectancy, they will accept and develop an intention to continue using it (Tang et al., 2021). Therefore, performance expectancy is a pre-requisite for getting into the habit of using a new technology. In the context of M-payment, consumers would switch and continue to use M-payment only when it becomes a habit of theirs (Ye & Potter, 2011). The results of this study support this argument.

Conclusions and Implications

Although the current M-payment technology design exhibits all the components that cash has, people still prefer cash as the main payment method (Eveleth, 2015). One possible reason is that people generally have an irrational sense towards ownership of money. They have a higher sense or feeling of ownership if the money (cash) is in a tangible form (Eveleth, 2015). From a theoretical standpoint, this study seeks to fill the gaps in the literature by integrating UTAUT2 and ISSM to investigate Malaysians' switching intention to M-payment. The results show that habit is a significant factor that influences switching intention to M-payment. Cash payment is still the dominant method among Malaysians. They perceive cash payment is convenient and is widely accepted in the community. This has shaped Malaysians' spending habit which makes them still very heavily dependent on cash (Philip, 2019).

From a managerial perspective, understanding the choice of payment methods is important for both policy-makers and businesses. Simatele and Mbedzi (2021) claim that the cost of retail payment can be as high as 1% of the Gross Domestic Product (GDP), with nearly 50% of this cost coming from retail payments. They also state that the choice of payment method by consumers also affects the overall efficiency of the payment system. The influence of habit has been overlooked in much research on M-payment. Since the results of this study show that habit is the only influencing factor that could lead to switching intention to M-payment among Malaysians, policymakers are urged to revisit the strategies of developing and promoting M-payment in order to drive the country towards a more effective payment system.

The findings of this study offer some insights into assessing their strength and weaknesses and developing strategies in attracting new consumers. For M-payment services providers such as GrabPay and Touch 'n Go, these results would benefit their system and marketing strategy development. Habit is found to be one of the significant factors in M-payment switching intention. It is suggested that M-payment service providers should concentrate on promoting M-payment,

increase resources and encourage consumers to try and to continue to use M-payments. Once the average time spent on M-payment increases, consumers would develop the habit of using M-payment.

Limitations and Future Study

One limitation of this study is that it only targeted at Malaysian respondents who live in the Klang Valley, Malaysia. Secondly, this study applied web survey-based research to collect data. Therefore, individuals such as the elderly who do not use the internet could not participate in this survey. These are the biases built-in in the majority of web survey-based research.

It is proposed that existing models should be merged with a pull-pushing and mooring framework in future investigations. Consumers' M-payment switching intentions are likely to be influenced by the push factors of perceived insecurity and poor levels of satisfaction. Furthermore, the research should go beyond switching intentions to actual behaviour, allowing for a better understanding of M-payment switching intentions and uptake ∎

References

Abrahão, R. de S., Moriguchi, S. N., & Andrade, D. F. (2016). Intention of adoption of mobile payment: An analysis in the light of the Unified Theory of Acceptance and Use of Technology (UTAUT). *RAI Revista de Administração e Inovação 13*, 3, 221–230. https://doi.org/10.1016/j.rai.2016.06.003

Afandi, M. A., & Muta'ali, A. (2019). Will traditional bank's customers switch to FinTech lending? Proceedings of the 2019 11th International Conference on Information Management and Engineering, 38–43. https://doi.org/10.1145/3373744.3373752

Amoroso, D. L., & Chen, Y. A. N. (2017). Constructs affecting continuance intention in consumers with mobile financial apps : A dual factor approach. *Journal of Information Technology Management, XXVIII*(3), 1–24.

Amoroso, D. L., & Lim, R. A. (2015). Exploring the personal innovativeness construct: The roles of ease of use, satisfaction and attitudes. *Asia Pacific Journal of Information Systems, 25*(4), 662–685.https://doi.org/10.14329/apjis.2015.25.4.662

Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Kizgin, H., & Patil, P. (2019). Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model. *International Journal of Information Management, 44*, 38–52. https://doi.org/10.1016/j.ijinfomgt.2018.09.002

Balaban, I., Mu, E., & Divjak, B. (2013). Development of an electronic portfolio system success model: An information systems approach. *Computers and Education, 60*(1), 396–411. https://doi.org/10.1016/j.compedu.2012.06.013

Bandura, A. (1989). Human agency in Social Cognitive Theory. *American Psychologist, 44*(9), 1175–1184. http://psycnet.apa.org/buy/1990-01275-001

Bansal, H. S., & Taylor, S. F. (1999). The service provider switching model (SPSM): A model of consumer switching behavior in the services industry. *Journal of Service Research, 2*(2), 200–218. https://

doi.org/10.1177/109467059922007

Cai, X., Qi, C., & Li, C. (2019). From traditional payment to mobile payment – Examining the antecedents and consequences of Hongkonger' s mobile payment habit. Twenty-Third Pacific Asia Conference on Information Systems, China.

Chang, Y. W., & Hsu, P. Y. (2019). An empirical investigation of organizations' switching intention to cloud enterprise resource planning: A cost-benefit perspective. *Information Development, 35*(2), 290–302. https://doi. org/10.1177/0266666917743287

Cheng, S., Lee, S.-J., & Choi, B. (2019). An empirical investigation of users' voluntary switching intention for mobile personal cloud storage services based on the push-pull-mooring framework. *Computers in Human Behavior, 92*, 198–215. https:// doi.org/10.1016/j.chb.2018.10.035

Choi, H., Park, J., Kim, J., & Jung, Y. (2020). Consumer preferences of attributes of mobile payment services in South Korea. *Telematics and Informatics, 51*, 101397. https://doi.org/10.1016/j. tele.2020.101397

Cimperman, M., Makovec Brenčič, M., & Trkman, P. (2016). Analyzing older users' home telehealth services acceptance behavior-applying an Extended UTAUT model. *International Journal of Medical Informatics, 90*, 22–31. https://doi. org/10.1016/j.ijmedinf.2016.03.002

Cui, Y., Mou, J., Cohen, J., & Liu, Y. (2019). Understanding information system success model and valence framework in sellers' acceptance of cross-border e-commerce: A sequential multi-

method approach. *Electronic Commerce Research, 19*(4), 885–914. https://doi. org/10.1007/s10660-019-09331-0

de Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019). Mobile payment is not all the same: The adoption of mobile payment systems depending on the technology applied. *Technological Forecasting and Social Change, 146*, 931–944. https://doi. org/10.1016/j.techfore.2018.09.018

Delone, W. H., & Mclean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems, 19*(4), 9–30. https://doi.org/10 .1080/07421222.2003.11045748

Digital news Asia. (2019). Nielsen sees security concerns as main barrier to e-wallet adoption. https://www.digitalnewsasia. com/digital-economy/nielsen-sees-security-concerns-main-barrier-e-wallet-adoption

Eveleth, R. (2015). The truth about the death of cash. BBC Future. https://www.bbc. com/future/article/20150724-the-truth-about-the-death-of-cash

Fan, L., Zhang, X., Rai, L., & Du, Y. (2021). Mobile payment: The next frontier of payment systems? - An empirical study based on Push-Pull-Mooring framework. *Journal of Theoretical and Applied Electronic Commerce Research, 16*(2), 155–169. https://doi.org/10.4067/S0718-18762021000200111

Ghalandari, K. (2012). The effect of performance expectancy, effort expectancy, social influence and facilitating conditions on acceptance of e-Banking services in Iran: The moderating role of age and gender. *Middle-East Journal of Scientific Research, 12*(6), 801–807. https://doi.org/10.5829/idosi.mejsr.2012.12.6.2536

Hsiao, C.-H., Chang, J.-J., & Tang, K.-Y. (2016). Exploring the influential factors in continuance usage of mobile social Apps: Satisfaction, habit, and customer value perspectives. *Telematics and Informatics, 33*(2), 342–355. https://doi.org/10.1016/j.tele.2015.08.014

Imtiaz Ali, N., Samsuri, S., Sadry Abu Seman, M., Ali Brohi, I., & Shah, A. (2018). Measuring e-commerce success in Malaysia: Modified Delone Mclean Model with trust and privacy. *International Journal of Engineering & Technology, 7*(4.15), 524–529. https://doi.org/10.14419/ijet.v7i4.15.26325

Keaveney, S. M. (1995). Customer wwitching behavior in service industries: An exploratory study. *Journal of Marketing, 59*(2), 71–82. https://doi.org/10.2307/1252074

Kim, S. (2019). Investigating the mediating effect of switching barriers in the relationship between social service quality and switching intention. *Asian Journal of Human Services, 16*, 87–100. https://doi.org/10.14391/ajhs.16.87

Kuo, R.-Z. (2020). Why do people switch mobile payment service platforms? *An empirical study in Taiwan. Technology in Society, 62*, 101312. https://doi.org/10.1016/j.techsoc.2020.101312

Lau, K. (2019). *Why is Malaysia struggling to go cashless?* http://afc.ibonus.net/?p=489

Legris, P., Ingham, J., & Collerette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management*, 40(3), 191–204. https://doi.org/10.1016/S0378-7206(01)00143-4

Liao, Y.-W., Huang, Y.-M., Huang, S.-H., Chen, H.-C., & Wei, C.-W. (2019). Exploring the switching intention of learners on social network-based learning platforms: A perspective of the Push–Pull–Mooring Model. *EURASIA Journal of Mathematics, Science and Technology Education, 15*(9).https://doi.org/10.29333/ejmste/108483

Liébana-Cabanillas, F., García-Maroto, I., Muñoz-Leiva, F., & Ramos-de-Luna, I. (2020). Mobile payment adoption in the age of digital transformation: The case of apple pay. *Sustainability (Switzerland), 12*(13), 1–15. https://doi.org/10.3390/su12135443

Limayem, Hirt, & Cheung. (2007). How habit limits the predictive power of intention: The case of information systems continuance. *MIS Quarterly, 31*(4), 705. https://doi.org/10.2307/25148817

Limayem, M., & Hirt, S. (2003). Force of habit and information systems usage: Theory and initial validation. *Journal of the Association for Information Systems, 4*(1), 65–97. https://doi.org/10.17705/1jais.00030

Liu, G.-S., & Tai, P. T. (2016). A study of factors affecting the intention to use mobile payment services in Vietnam. *Economics World, 4*(6), 249–273. https://doi.org/10.17265/2328-7144/2016.06.001

Liu, Z., Ben, S., & Zhang, R. (2019). Factors affecting consumers' mobile payment behavior: a meta-analysis. *Electronic Commerce Research, 19*(3), 575–601. https://doi.org/10.1007/s10660-019-09349-4

Loh, X.-M., Lee, V.-H., Tan, G. W.-H., Ooi, K.-B., & Dwivedi, Y. K. (2020). Switching from cash to mobile payment: What's the hold-up? *Internet Research, 31*(1), 376–399. https://doi.org/10.1108/INTR-04-2020-0175

Malik, S., Mahmood, S., & Rizwan, M. (2014). Examining customer switching behavior in cellular industry. *Journal of Public Administration and Governance, 4*(2), 114[– 128. https://doi.org/10.5296/jpag.v4i2.5840

Marseto, F., Handayani, P. W., & Pinem, A. A. (2019). Push, Pull, and Mooring evaluation of user switching intention from social commerce to e-commerce. *2019 International Conference on Information Management and Technology (ICIMTech), 1*(August), 575–580. https://doi.org/10.1109/icimtech.2019.8843841

Martins, C., Oliveira, T., & Popovi, A. (2014). Understanding the internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management, 34*(1), 1–13. https://doi.org/10.1016/j.ijinfomgt.2013.06.002

Memon, M. A., Ting, H., Cheah, J.-H., Ramayah, T., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: Review and recommendations. *Journal of Applied Structural Equation Modeling, 4*(2), i–xx.

Moorthy, K., Loh, C. T., Kwomh, C. Y., Ang, W. H., Lee, J. I., Poon, C. F., & Tan, J. Y. (2020). What drives the adoption of mobile payment? A Malaysian perspective. *International Journal of Finance & Economics, 25*(3), 349–364. https://doi.org/10.1002/ijfe.1756

Nguyen, N. D. P., & Trang, T. T. D. (2018). Repurchase intention: The effect of service quality, system quality, information quality, and customer satisfaction as mediating role: A PLS approach of m-Commerce ride hailing service in Vietnam. *Marketing and Branding Research, 5*(2), 78–91. https://doi.org/10.33844/mbr.2018.60463

Nyesiga Catherine, B., Mayoka Geofrey, K., Moya, M. B., & Aballo, G. (2017). Effort expectancy, performance expectancy, social influence and facilitating conditions as predictors of behavioural intentions to use ATMS with fingerprint authentication in Ugandan Banks. *Global Journal of Computer Science and Technology, 17*(5), 5–23.

Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior, 61*, 404–414. https://doi.org/10.1016/j.chb.2016.03.030

Parasuraman, A., Parasuraman, T., Zeithaml, V., Berry, L., Zeithmal, V., Parasurman, A., Zeithaml, V., & Bern, L. (1988). *SERVQUAL. A multiple-item scale for measuring consumer perceptions of service quality.* 64(1), 12–40.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual of service quality and its implications for future research. *Journal of Marketing, 49*(4), 41–50.

Quoquab, F., Mohammad, J., Yasin, N. M., & Abdullah, N. L. (2018). Antecedents of switching intention in the mobile telecommunications industry. *Asia Pacific Journal of Marketing and Logistics,* 30(4), 1087–1111. https://doi.org/10.1108/APJML-06-2017-0121

Rampersad, G., Plewa, C., & Troshani, I. (2012). Investigating the use of information technology in managing innovation: A case study from a university technology transfer office. *Journal of Engineering and Technology Management, 29*(1), 3–21. https://doi.org/10.1016/j.jengtecman.2011.09.002

Simatele, M., & Mbedzi, E. (2021). Consumer payment choices, costs, and risks: Evidence from Zimbabwe. *Cogent Economics & Finance, 9*(1), 1–23. https://doi.org/10.1080/23322039.2021.1875564

Singh, N., Sinha, N., & Liébana-Cabanillas, F. J. (2020). Determining factors in the adoption and recommendation of mobile wallet services in India: Analysis of the effect of innovativeness, stress to use and social influence. *International Journal of Information Management, 50*, 191–205. https://doi.org/10.1016/j.ijinfomgt.2019.05.022

Sivathanu, B. (2019). Adoption of digital payment systems in the era of demonetization in India. *Journal of Science and Technology Policy Management, 10*(1), 143–171. https://doi.org/10.1108/JSTPM-07-2017-0033

Slade, E., Williams, M., & Dwivdei, Y. (2013). Extending UTAUT2 to explore consumer adoption of mobile payments. *UK Academy for Information Systems Conference Proceedings 2013, 36.*

Song, S., Zhao, Y., & Sun, J. (2018). Understanding user's switching intention on mobile payment platforms. IConference 2018 Proceedings, 1–6. https://www.ideals.illinois.edu/handle/2142/100271

Srivastava, K., & Sharma, N. K. (2013). Service quality, corporate brand image, and switching behavior: The mediating role of customer satisfaction and repurchase intention. *Services Marketing Quarterly, 34*(4), 274–291. https://doi.org/10.1080/15332969.2013.827020

Statista. (2022). *Digital Payments - Malaysia.* https://www.statista.com/outlook/dmo/fintech/digital-payments/malaysia#transaction-value

Tan, G. W. H., Ooi, K. B., Chong, S. C., & Hew, T. S. (2014). NFC mobile credit card: The next frontier of mobile payment? *Telematics and Informatics, 31*(2), 292–307. https://doi.org/10.1016/j.tele.2013.06.002

Tang, K. L., Aik, N. C., & Choong, W. L. (2021). A modified UTAUT in the context of m-payment usage intention in Malaysia. *Journal of Applied Structural Equation Modeling, 5*(1), 40–59. https://doi.org/10.47263/JASEM.5(1)05

Tang, K. L., Tan, P. M., Tan, K. E., Hooi, P. H., & Choong, W. L. (2021). A modified UTAUT model m-payment use intention: A comparative analysis between Malaysians and foreigners in Malaysia. *Journal of Wealth Management & Financial Planning 47*, 8(June), 47–76.

Tarhini, A., Alalwan, A. A., Shammout, A. B., & Al-Badi, A. (2019). An analysis of the factors affecting mobile commerce adoption in developing countries: Towards an integrated model. *Review of International Business and Strategy, 29*(3), 157–179. https://doi.org/10.1108/RIBS-10-2018-0092

Tweneboah-Koduah, E. Y., Mann, V., & Quaye, D. M. (2017). Determinants of customer switching behaviour: Evidence from the non-bank financial institutions in Ghana. *International Journal of Services, Economics and Management, 8*(4), 268–286. https://doi.org/10.1504/ijsem.2017.095452

Venkatesh, V., Tong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory. *MIS Quarterly, 36*(1), 157–178.

Wang, L., Luo, X. (Robert), Yang, X., & Qiao, Z. (2019). Easy come or easy go? Empirical evidence on switching behaviors in mobile payment applications. *Information and Management, 56*(7), 103150. https://doi.org/10.1016/j.im.2019.02.005

Wang, X. (2018). Review of sesearch on online users' switching behavior. *DEStech Transactions on Computer Science and Engineering, cnai, 224–228*. https://doi.org/10.12783/dtcse/cnai2018/24161

Williams, M. D. (2021). Social commerce and the mobile platform: Payment and security perceptions of potential users. *Computers in Human Behavior, 115, 105557*. https://doi.org/10.1016/j.chb.2018.06.005

Wilson, E. V., Mao, E., & Lankton, N. K. (2010). The distinct roles of prior IT use and habit strength in predicting continued sporadic use of IT. *Communications of the Association for Information Systems, 27*(12), 186–206.

Wirth, J., & Maier, C. (2017). Why individuals switch to using mobile payment: A migration-theoretic, empirical study. *AMCIS 2017 - America's Conference on Information Systems: A Tradition of Innovation*, 1–10.

Wu, J., Liu, L., & Huang, L. (2016). Exploring user acceptance of an innovative mobile payment service in an emerging market: The moderating effect of the diffusion stages of WeChat payments in China. *Pacific Asia Conference on Information Systems, PACIS 2016 -* Proceedings, July.

Xu, F., Tian, M., Xu, G., Reyes Ayala, B., & Shen, W. (2017). Understanding Chinese users' switching behaviour of cloud storage services. *The Electronic Library, 35*(2), 214–232. https://doi.org/10.1108/EL-04-2016-0080

Ye, C., & Potter, R. (2011). The Role of Habit in Post-Adoption Switching of Personal Information Technologies: An Empirical Investigation. *Communications of the Association for Information Systems, 28*, 585–610. https://doi.org/10.17705/1CAIS.02835

18Ye, C., Seo, D., Desouza, K. C., Sangareddy, S. P., & Jha, S. (2008). Influences of IT substitutes and user experience on post-adoption user switching: An empirical investigation. *Journal of the American Society for Information Science and Technology, 59*(13), 2115–2132. https://doi.org/10.1002/asi.20921

Yen, Y.-S., & Wu, F.-S. (2016). Predicting the adoption of mobile financial services: The impacts of perceived mobility and personal habit. *Computers in Human Behavior, 65*, 31–42. https://doi.org/10.1016/j.chb.2016.08.017

Zaied, A. N. H. (2012). An integrated success model for evaluating information system in public sectors. *Journal of Emerging Trends in Computing and Information Sciences, 3*(6), 814–825.

Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of customers: What we know and what we need to learn. *Journal of the Academy of Marketing Science, 28*(1), 67–85. https://doi.org/10.1177/0092070300281007

Zhou, T. (2013). An empirical examination of continuance intention of mobile payment services. *Decision Support Systems, 54*(2), 1085–1091. https://doi.org/10.1016/j.dss.2012.10.034

Zhou, T. (2014). Understanding the determinants of mobile payment continuance usage. *Industrial Management and Data Systems, 114*(6), 936–948. https://doi.org/10.1108/IMDS-02-2014-0068

Zhou, T. (2016). Examining user switch between mobile stores. *Information Resources Management Journal, 29*(2), 1–13. https://doi.org/10.4018/irmj.2016040101

Zhou, T. (2018). Examining users' switch from online banking to mobile banking. *International Journal of Networking and Virtual Organisations, 18*(1), 51–66. https://doi.org/10.1504/IJNVO.2018.090675