

Factors Influencing Intention of Adopting S Pay Global Fintech Mobile App: Extending the Unified Theory of Acceptance and Use of Technology

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ABSTRACT

The rapid growth of mobile technologies has driven the expansion of mobile payment services, yet little is known about what shapes consumer intention to use government-funded platforms such as S Pay Global. Despite strong promotion by the Sarawak state government, S Pay Global's adoption remains lower than private alternatives like Touch 'n Go, raising concerns about competitiveness, security, and privacy. To examine the factors influencing the intention to use S Pay Global, an extended Unified Theory of Acceptance and Use of Technology (UTAUT) was tested by incorporating variables more closely aligned with consumer perceptions. Survey data from 192 respondents in Sarawak were analysed using SmartPLS. Results show that the core UTAUT variables—performance expectancy, effort expectancy and social influence—significantly influenced intention to adopt S Pay Global. In contrast, the extended variables of perceived trust, perceived risk and innovativeness exerted no significant effect. The findings confirm the strength of the core UTAUT model in a government-backed mobile payment context and highlight the need to enhance S Pay Global's usefulness, ease of use, and social acceptance, alongside continuous improvements in security.

Keywords: S Pay Global, mobile payment, UTAUT, perceived trust, perceived risk, innovativeness

INTRODUCTION

The rapid adoption of digital technology, especially the emergence of mobile e-wallets, has significantly affected how government services are delivered to citizens. As a digital payment system, e-wallets are instruments of transformation and economic development, especially in developing economies with limited banking infrastructure, in that they provide convenient payment, reduce transaction costs, streamline payment processing, and expand access to financial services. They help to empower customers and small and medium enterprises (SMEs), improve financial management, and drive the development of a cashless society.

A mobile e-wallet, also known as a digital or electronic wallet, refers to 'a mobile device-based platform that facilitates cashless payments of a sales transaction—either in proximity or remotely, between consumers and merchants or service providers' (Ramli & Hamzah, 2021). Utilising Near Field Communication (NFC) technology and QR codes, mobile e-wallets such as Samsung Pay, Apple Pay and Google Pay have transformed traditional payment methods by enabling users to store payment information, digital currencies, debit/credit cards, and loyalty programs for seamless, secure and contactless electronic transactions without physical cash or cards (Uzialko, 2025).

For governments, mobile e-wallets have enabled seamless delivery of public services, such as real-time tax payments, utility bills, and welfare disbursements, thereby enhancing administrative efficiency, citizen accessibility, security, compliance, and financial inclusion (Kaur et al., 2020; Putrevu & Mertzanis, 2024; Supahan, 2024). In the Malaysian state of Sarawak, the utilisation of e-wallets is central to economic digitisation initiatives to ensure financial inclusion, reduce poverty and advance a cashless society (Chiam, 2025). In 2017, the Sarawak government launched S Pay Global (formerly known as Sarawak Pay), an e-wallet platform licensed by Bank Negara Malaysia, to promote cashless payments throughout Sarawak (Lau & Kong, 2019) and complement other state-supported e-commerce and online service initiatives (Azmi, 2019). The platform enables fast, easy, and secure digital payments for bills and purchases, including utilities and local council assessments (Chua, 2017; Lim, 2017). Although the S Pay Global e-wallet has been instrumental in appropriating transformational initiatives, such as the Sumbangan Keperluan Asas Sarawak (SKAS) programme in 2024, which distributes financial aid to low-income households, only 63.6% of eligible recipients had registered on the platform as of February 2025 (Lorna, 2025a; Lorna, 2025b). The low adoption rate has limited programme effectiveness and raises concerns regarding the viability and efficient utilisation of public resources invested in the government-funded platform.

In relation to such issues, the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003) proposes that behavioural intention is shaped by performance expectancy, effort expectancy and social influence, while usage behaviour is affected by behavioural intention and facilitating conditions. Slade et al. (2015) extended the UTAUT model to better reflect consumer settings by adding innovativeness, perceived risk, and perceived trust. Their study on non-users' intention to adopt remote mobile payments found significant effects for innovativeness and perceived risk, while Kang (2019) reported all three extended variables as significant. These constructs are particularly relevant for S Pay Global, which is targeted at consumers rather than organisations.

Empirical studies employing the UTAUT model to explain mobile payment adoption have reported inconsistent results across contexts. For example, effort expectancy was insignificant in the UK (Slade et al., 2015) and South Korea (Kang, 2019), but significant in India (Thakur, 2013). Moreover, most studies focus on commercial mobile payment services, with limited research on government-funded platforms such as S Pay Global. Although So et al. (2024) identified government support as a key determinant of e-wallet adoption in Indonesia, this influence appears weaker among users in Sarawak. The weaker effect may stem from heightened security and privacy concerns, including potential fraud, data misuse (Keith et al., 2013; Zhou, 2011), and recent public apprehension over data sharing with S Pay Global's technology partners (Tawie, 2024). As such, the role of UTAUT variables in shaping Sarawakians' adoption intentions remains unclear.

To address these gaps, this study aims to examine the effects of performance expectancy, effort expectancy, social influence, perceived trust, perceived risk, and innovativeness on consumers' intention to use S Pay Global. By applying the extended UTAUT model proposed by Slade et al. (2015) to a government-backed mobile payment platform in a developing economy, this study seeks to provide deeper insight into the factors influencing government funded mobile e-wallet adoption. The findings are expected to enhance understanding of Sarawakian consumers' perceptions of government-funded e-wallet and to offer practical guidance for developers and policymakers in strengthening platform acceptance and usage.

This paper begins with a review of the relevant literature and development of hypotheses. It then outlines the measurement instruments, data collection and sampling procedures. The subsequent section presents the statistical results on S Pay Global adoption behaviour, followed by a discussion of key findings, implications, and limitations.

LITERATURE REVIEW

This section synthesises relevant literature to establish the theoretical foundation for the proposed hypotheses examining the effects of UTAUT variables on mobile payment adoption behaviour and to develop the research framework.

Hypotheses Development

Performance expectancy refers to the extent to which individual consumers believe that using mobile payment systems will provide practical benefits and enhance transaction efficiency (Kang, 2019). In the original UTAUT model, performance expectancy was identified as the strongest predictor of behavioural intention (Venkatesh et al., 2003). This relationship has been consistently supported in mobile payment contexts (Kang, 2019; Slade et al., 2015; Thakur, 2013; Wang & Yi, 2012). For S Pay Global, performance-related benefits include convenient bill payments to government agencies (Chua, 2017), direct receipt of government financial assistance (Lorna, 2025a), and expanded payment functionality through its partnership with UnionPay (Tay, 2019). These advantages are expected to strengthen users' perceptions of usefulness. Therefore, it is reasonable to propose that:

H1: Performance expectancy positively affects behavioural intention to use S Pay Global.

Effort expectancy refers to the degree to which users perceive mobile payment systems as easy to learn and use (Wang & Yi, 2012). Prior studies identify effort expectancy as a key determinant of behavioural intention, particularly during the early stages of adoption (Thakur, 2013; Wang & Yi, 2012). S Pay Global incorporates a range of user-friendly features, including straightforward app installation, multiple reload options, and fast transaction processing. When users perceive a system as requiring minimal effort, they are more likely to adopt it. Accordingly, this study proposes that:

H2: Effort expectancy positively affects behavioural intention to use S Pay Global.

Social influence is the extent to which individuals perceive that people who are important to them, such as family and friends, believe they should use a particular technology (Venkatesh et al., 2012). Mobile payment platforms often support social interactions through features such as peer-to-peer transfers and bill splitting, which may encourage adoption. Prior studies highlight that social influence is especially relevant when technologies are new or when usage carries social visibility (Dickinger et al., 2008; Venkatesh & Davis, 2000). When individuals perceive that people around them using and endorsing a technology, they may feel social pressure to adopt it in order to maintain their social acceptance or image (Kang, 2019; Oliveira et al., 2016; Slade et al., 2015). Given the theoretical basis, it is hypothesised that:

H3: Social influence positively affects behavioural intention to use S Pay Global.

Trust is a subjective belief that a system will operate reliably and fulfil user expectations, which is particularly important in online financial transactions characterised by uncertainty and reduced user control (Lu et al., 2011). Trust has been shown to support long-term customer relationships in financial services (Sekhon et al., 2014), while a lack of trust remains a major barrier to electronic payment adoption (Keen, 1997). Since mobile payments extend from earlier e-payment systems, trust is expected to remain central to adoption decisions. Previous studies consistently demonstrate a positive relationship between trust and behavioural intention in mobile payment contexts (Chandra et al., 2010; Kang, 2019; Lu et al., 2011). Hence, it is hypothesised that:

H4: Perceived trust positively affects behavioural intention to use S Pay Global.

Perceived risk reflects users' uncertainty or concern about potential negative consequences arising from using a system (Mandrik & Bao, 2005). In online transactions, perceived risk is often heightened due to security concerns and the physical separation between payer and payee (Kim et al., 2009). The technical complexity of mobile payment systems may further undermine user confidence (Gaur & Ondrus, 2012). While findings are mixed, several studies report a significant negative relationship between perceived risk and mobile payment adoption intention (Kang, 2019; Liébana-Cabanillas et al., 2014; Lu et al., 2011; Slade et al., 2015). In the context of S Pay Global, perceived risks may include fears of data sharing or monitoring by third parties or government agencies, potentially affecting users' financial privacy. Therefore, this study proposes that:

H5: Perceived risk negatively affects behavioural intention to use S Pay Global.

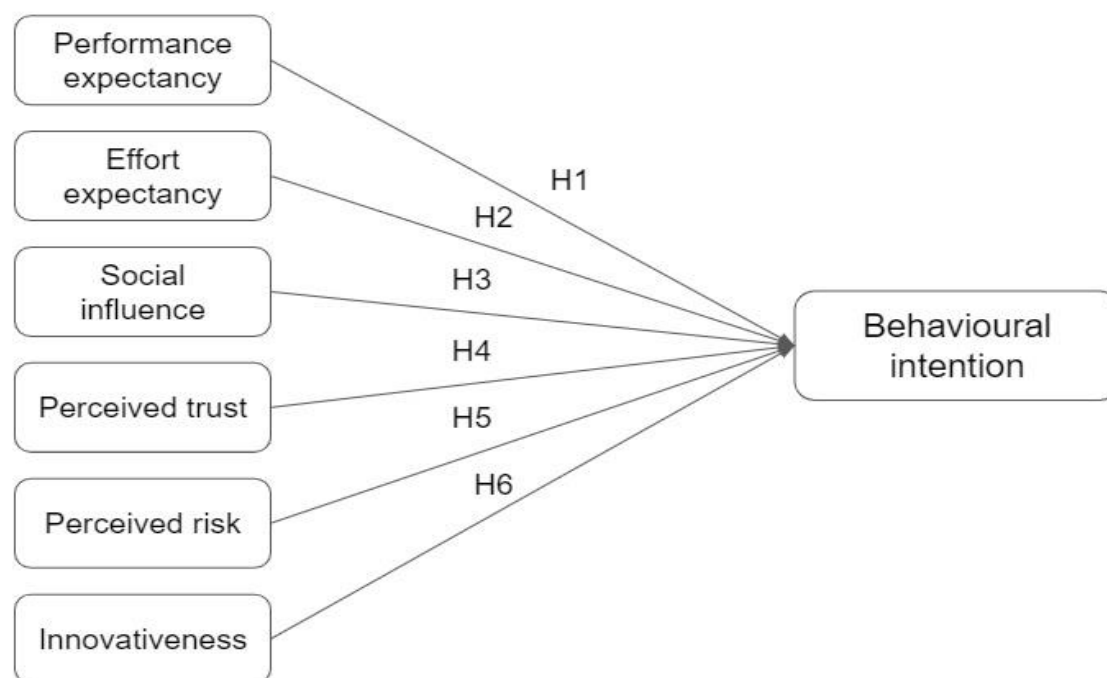
Innovativeness is defined as an individual's willingness to try out new technologies (Slade et al., 2015). Those with higher innovativeness tend to form more favourable attitudes toward new systems, increasing their likelihood of adoption (Jackson et al., 2013). Empirical evidence on this relationship, however, remains mixed. In India, Thakur and Srivastava (2014) found that innovativeness influenced adoption intention among users, but not non-users. However, Kang (2019) and Slade et al. (2015) reported the opposite. Meanwhile, Tan et al. (2014) identified innovativeness as a key determinant of Near Field Communication (NFC) mobile payment adoption in Malaysia. Reflecting this, S Pay Global integrates innovative features such as instant cashback rewards to enhance engagement, suggesting that innovativeness may play a role in user adoption. Hence, it is reasonable to hypothesise that:

H6: Innovativeness positively affects behavioural intention to use S Pay Global.

Research Framework

A research framework illustrating the hypothesised relationships among the six determinants and behavioural intention to use S Pay Global is presented in Figure 1. The framework specifies the cause–effect linkages underpinning the study's research model.

Figure 1. Research Framework



METHODOLOGY

To address the research questions, this study adopts a positivist research paradigm, given the substantial existing literature, well-established variables, and validated theoretical frameworks that provide a robust foundation for extending prior empirical findings. The positivist approach is appropriate because it emphasises objectivity, hypothesis testing, and quantifiable data to examine relationships among variables. This paradigm enables the application of statistical methods to test theoretical propositions derived from the extended UTAUT model and to generate findings that can be generalised to a broader population.

Operationalisation of the Variables

To test the six proposed hypotheses, seven variables were operationalised by adjusting the conceptual definitions to match the research context. Twenty-two validated scale items from prior studies were modified to measure the variables as shown in Table 1.

Table 1. Operationalised Items of Studied Variables

Variable and Source	Operationalised Items
Behavioural intention (Venkatesh & Bala, 2008)	INT1: If I had access to S Pay Global, I would intend to use it.
	INT2: If I had access to S Pay Global, I predict that I would use it.
	INT3: I plan to use S Pay Global in the next 3 months.
Performance expectancy (Kang, 2019)	PER1: I find S Pay Global would be useful in my daily life.
	PER2: Using S Pay Global would help me accomplish things more quickly.
	PER3: It is very convenient to use S Pay Global for my payments.
Effort expectancy (Kang, 2019)	EFF1: I believe learning how to use S Pay Global would be easy for me.
	EFF2: I believe that using S Pay Global is not complex or complicated.
	EFF3: It would be easy for me to skilfully use S Pay Global.
Social influence (Slade et al., 2015)	SOC1: People who influence my behaviour think that I should use S Pay Global.
	SOC2: According to people who are important to me, I should use S Pay Global.
	SOC3: People whose opinions I value prefer that I use S Pay Global.
Perceived trust (Slade et al., 2015)	TRU1: I trust S Pay Global to be reliable.
	TRU2: I trust S Pay Global to be secure.
	TRU3: I believe S Pay Global is trustworthy.
	TRU4: I trust S Pay Global.
Perceived risk (Lu et al., 2011)	RIS1: I do not feel safe providing personal private information over S Pay Global.
	RIS2: I am worried about using S Pay Global because other people may be able to access my account.
	RIS3: I do not feel secure sending personal banking details across S Pay Global.
Innovativeness (Slade et al., 2015)	INN1: If I heard about a new mobile payment technology, I would like to try it out.
	INN2: Among my peers, I am usually the first to explore new mobile payment technologies.
	INN3: I like to experiment with new mobile payment technologies.

The refined scale items were developed into a survey questionnaire that consists of three distinct sections. Section A of the questionnaire measures the respondent's behavioural intention to use S Pay Global, while Section B measures the six independent variables with seven-point Likert scales ranging from "Strongly disagree" to "Strongly agree". Section C covers demographic questions such as age, gender, nationality and employment status of respondents for segmentation purposes.

To ensure content validity, two academics and two practitioners were invited to review the draft survey questionnaire. To ensure that the questionnaire items were unambiguous, six peers were invited to face validate the draft survey questionnaire. The items in the survey questionnaire were then amended based on feedback obtained from the content and face validity tests.

Data Collection Procedures

This study focused on Sarawak, where S Pay Global was introduced to advance the state's digital economy initiative, with Kuching as the study site as it has the largest population in the state and serves as the core target market for S Pay Global. Moreover, most affiliated merchants are concentrated in urban areas, making Kuching an ideal location for data collection.

A purposive sampling technique was employed to target non-users of S Pay Global, allowing direct insights into barriers to adoption and strategies to convert non-users into users (Eriksson et al., 2021). Data were collected through an online survey distributed among non-users in Kuching. A screening question ensured only non-users participated, and a research information statement assured respondents of confidentiality and ethical compliance. A total of 228 valid responses were obtained.

ANALYSIS AND RESULTS

Data analysis was conducted in two stages. First, IBM Statistical Package for the Social Sciences (SPSS) (IBM Corp, 2019) was used to screen the data, identify outliers and generate descriptive statistics. Subsequently, the SmartPLS 4.0 (Ringle, Wende & Becker, 2024) was employed to test the research hypotheses.

Descriptive Statistics

During data screening, 36 responses were removed due to containing straightliners or outliers. In assessing common method variance (CMV), the total variance explained values generated in SPSS indicates that the major factor explains 45.8% of the model variance. Since this factor explains less than 50% of the model variance, CMV does not raise a serious problem in this research (Podsakoff et al., 2003).

The demographic details of the remaining 192 respondents are presented in Table 2. Female respondents exhibited slightly higher behavioural intention (BI) scores than males. By age group, respondents aged 25–34 and 55–64 showed higher adoption intention, while the 18–24 group reported the lowest. In terms of occupation, retirees, self-employed individuals, and full-time employees demonstrated the highest intention to adopt S Pay Global, whereas full-time students and unemployed respondents showed the lowest. Retirees may be motivated to use S Pay Global due to senior citizens being one of the target beneficiaries of the SKAS aid programme (Umpang, 2025). Self-employed participants may intend to use S Pay Global to provide their customers with the convenience of making payments online (Ayupp et al., 2021).

Table 2. Demographics of Survey Respondents

Demographic Variables		No. of Respondents	Percentage	Behavioural Intention Mean
Gender	Female	123	64.1%	5.94
	Male	69	35.9%	5.57
Age (Years)	18 – 24	41	21.4%	5.02
	25 – 34	59	30.7%	6.11
	35 – 44	46	24.0%	5.97
	45 – 54	27	14.1%	5.84
	55 – 64	16	8.3%	6.13
	65 and above	3	1.6%	5.89
Employment Status	Employed full-time	146	76.0%	5.98
	Employed part-time	7	3.6%	5.76
	Full-time student	26	13.5%	4.88
	Retired	5	2.6%	6.13
	Self-employed	4	2.1%	6.00
	Unemployed	4	2.1%	4.67

Note: $n = 192$

Source: Summarised from SPSS output.

Measurement Model Assessment

The composite reliability (CR) values presented in Table 3 ranged from 0.836 to 0.961, exceeding the recommended threshold of 0.7 (Gefen et al., 2000), thereby confirming internal consistency reliability for all variables. To assess the convergent validity, the outer loading and average variance extracted (AVE) values were examined. As depicted in Table 3, the outer loadings ranged from 0.722 to 0.954, surpassing the minimum acceptable value of 0.5, indicating that the indicators shared a substantial proportion of variance with their respective variables (Ringle et al., 2015). Similarly, AVE values ranged from 0.631 to 0.878, exceeding the 0.5 threshold (Ringle et al., 2015), thereby confirming convergent validity (Hair et al., 2014).

Discriminant validity was subsequently evaluated to ensure that the variables were empirically distinct (Hair et al., 2010). The Fornell-Larcker criterion outputs as represented in Table 4 showed that the square roots of the AVE for each variables exceed the correlation among the variables. Additionally, the cross-loadings analysis in Table 5 showed that each indicator loaded higher on its assigned variable than on any other variable. Collectively, these results confirm that all constructs in this study were conceptually and empirically distinct.

Table 3. Assessment of Reliability and Convergent Validity

Variable	Indicator	Loading	AVE	CR
Behavioural intention	INT1	0.882	0.747	0.898
	INT2	0.919		
	INT3	0.786		
Performance expectancy	PER1	0.947	0.878	0.956
	PER2	0.947		
	PER3	0.916		
Effort expectancy	EFF1	0.921	0.807	0.926
	EFF2	0.846		
	EFF3	0.926		
Social influence	SOC1	0.929	0.876	0.955
	SOC2	0.941		
	SOC3	0.939		
Perceived trust	TRU1	0.910	0.859	0.961
	TRU2	0.892		
	TRU3	0.954		
	TRU4	0.950		
Perceived risk	RIS1	0.823	0.761	0.905
	RIS2	0.913		
	RIS3	0.878		
Innovativeness	INN1	0.722	0.631	0.836
	INN2	0.777		
	INN3	0.876		

Note: Average Variance Extracted (AVE) = (summation of square of factor loadings) / [(summation of square of factor loadings) + (summation of error variances)], Composite Reliability (CR) = (square of summation of factor loadings) / [(square of summation of factor loadings) + (square of summation of error variances)]

Source: Summarised from PLS algorithm output.

Table 4. Assessment of Discriminant Validity via Fornell-Larcker Criterion

	INT	EFF	INN	RIS	TRU	PER	SOC
INT	0.864						
EFF	0.601	0.898					
INN	0.422	0.498	0.794				
RIS	-0.129	-0.172	-0.126	0.872			
TRU	0.537	0.627	0.517	-0.346	0.927		
PER	0.625	0.707	0.450	-0.089	0.703	0.937	
SOC	0.517	0.504	0.486	-0.063	0.588	0.653	0.936

Note: INT = behavioural intention, EFF = effort expectancy, INN = innovativeness, RIS = perceived risk, TRU = perceived trust, PER = performance expectancy, SOC = social influence.

Source: Summarised from PLS algorithm output.

Table 5. Assessment of Discriminant Validity via Cross Loadings of Indicators

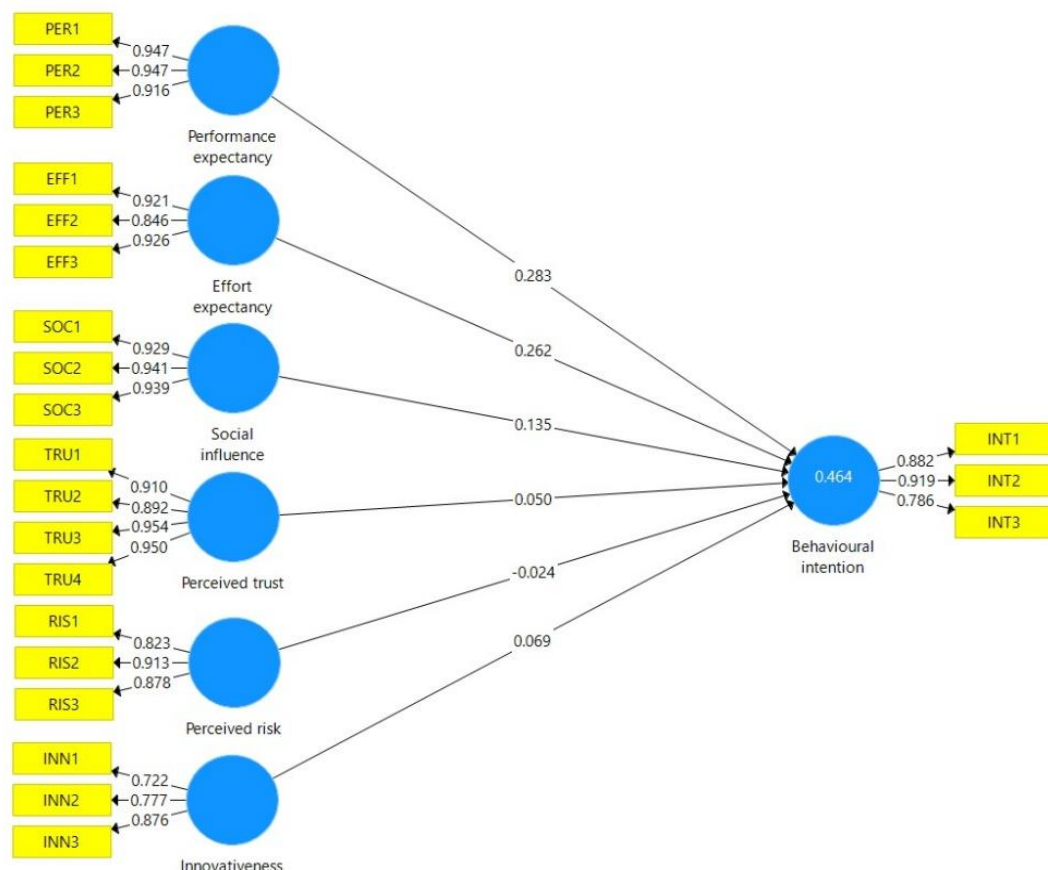
	INT	EFF	INN	RIS	TRU	PER	SOC
EFF1	0.590	0.921	0.459	-0.137	0.585	0.670	0.462
EFF2	0.431	0.846	0.398	-0.147	0.511	0.559	0.392
EFF3	0.576	0.926	0.478	-0.179	0.587	0.665	0.493
INN1	0.302	0.306	0.722	-0.049	0.278	0.245	0.325
INN2	0.294	0.420	0.777	-0.127	0.422	0.347	0.363
INN3	0.397	0.453	0.876	-0.121	0.510	0.457	0.456
INT1	0.882	0.573	0.358	-0.134	0.518	0.605	0.481
INT2	0.919	0.569	0.384	-0.154	0.474	0.540	0.418
INT3	0.786	0.397	0.355	-0.031	0.389	0.464	0.442
PER1	0.643	0.646	0.460	-0.056	0.664	0.947	0.642
PER2	0.585	0.671	0.403	-0.052	0.674	0.947	0.645
PER3	0.518	0.676	0.396	-0.155	0.638	0.916	0.538
RIS1	-0.109	-0.119	-0.055	0.823	-0.274	-0.105	-0.039
RIS2	-0.125	-0.161	-0.144	0.913	-0.325	-0.066	-0.077
RIS3	-0.101	-0.169	-0.127	0.878	-0.306	-0.064	-0.045
SOC1	0.486	0.440	0.472	-0.036	0.548	0.592	0.929
SOC2	0.460	0.456	0.402	-0.114	0.551	0.604	0.941
SOC3	0.503	0.515	0.487	-0.032	0.553	0.635	0.939
TRU1	0.514	0.638	0.520	-0.235	0.910	0.748	0.644
TRU2	0.438	0.516	0.393	-0.320	0.892	0.589	0.464
TRU3	0.528	0.609	0.483	-0.348	0.954	0.634	0.534
TRU4	0.505	0.553	0.509	-0.382	0.950	0.630	0.529

Note: INT = behavioural intention, EFF = effort expectancy, INN = innovativeness, RIS = perceived risk, TRU = perceived trust, PER = performance expectancy, SOC = social influence.

Source: Summarised from PLS algorithm output.

Structural Model Assessment

The structural model was assessed by examining the coefficients of determination (R^2) and predictive relevance (Q^2) values. According to Cohen (1988), R^2 values of 0.26, 0.13 and 0.02 represent substantial, moderate, and weak effect respectively. As shown in Figure 2, the overall R^2 value of 0.464 suggests that 46.4% of the variance in behavioural intention to use S Pay Global is explained by the six independent variables, demonstrating a substantial explanatory power. Individually, substantial path coefficients were found for performance expectancy and effort expectancy, with path coefficient values of 0.283 and 0.262 respectively. In addition, social influence was found to have a moderate effect with a path coefficient of 0.135. Meanwhile, a weak effect was found for both perceived trust and innovativeness, with path coefficients of 0.5 and 0.069 respectively. Furthermore, a negative path coefficient of -0.024 was observed for the perceived risk variable, implying that perceived risk reduces behavioural intention to use S Pay Global, albeit with a weak effect. The SmartPLS blindfolding procedure produced a Stone-Geisser's Q^2 value of 0.309. Since the Q^2 value exceeds zero, it indicates that the model possesses medium predictive relevance for behavioural intention (Hair et al., 2014).

Figure 2. Structural Model


Source: Summarised from PLS algorithm output.

Tests of Hypotheses

As seen in Table 6, H1 ($\beta = 0.283$, $t = 2.503$), H2 ($\beta = 0.262$, $t = 3.129$) and H3 ($\beta = 0.135$, $t = 1.675$) were supported at 5% significance level. These results demonstrate that consumers' performance expectancy, effort expectancy and social influence have significant positive effect on consumers' intention to use S Pay Global. Meanwhile, H4 ($\beta = 0.05$, $t = 0.61$), H5 ($\beta = -0.024$, $t = 0.426$) and H6 ($\beta = 0.069$, $t = 1.184$) were unsupported at a significance level of 5%. These results indicate that perceived trust, perceived risk and innovativeness of consumers do not have a significant impact on their intention to use S Pay Global.

Table 6. Hypotheses Testing Results

Hypothesis	Standardised Beta (β)	Standard Error (SE)	t Value (β / SE)	ρ Value	Decision
H1: Performance expectancy $\rightarrow$ Behavioural intention	0.283	0.113	2.503	0.006	Supported
H2: Effort expectancy $\rightarrow$ Behavioural intention	0.262	0.084	3.129	0.001	Supported
H3: Social influence $\rightarrow$ Behavioural intention	0.135	0.081	1.675	0.047	Supported
H4: Perceived trust $\rightarrow$ Behavioural intention	0.050	0.083	0.610	0.271	Not supported
H5: Perceived risk $\rightarrow$ Behavioural intention	-0.024	0.056	0.426	0.335	Not supported
H6: Innovativeness $\rightarrow$ Behavioural intention	0.069	0.059	1.184	0.119	Not supported

Source: Summarised from PLS bootstrapping output.

DISCUSSION AND IMPLICATIONS

The results identify the factors that matter most to potential users and offer clear insights for enhancing the platform and informing future research. The key findings and implications are summarised below.

DISCUSSION of the Findings

The supported H1, H2, and H3 imply that utilitarian benefits such as usefulness, efficiency and convenience are central to potential users of S Pay Global. This finding aligns with prior mobile payment adoption studies (Kang, 2019; Slade et al., 2015; Thakur, 2013; Wang & Yi, 2012). Accordingly, the platform's developers should emphasise these benefits of S Pay Global in promotional campaigns, emphasising improved payment efficiency, security and transaction speed (Mohamed et al., 2023). In addition, developers can consider expanding the range of services offered through S Pay Global to enhance users' performance expectancy. For instance, integrating features such as food ordering, public transport ticketing, loyalty programmes, and cross-platform interoperability further strengthen performance expectancy by enhancing perceived usefulness.

Supported H2 result confirms that effort expectancy was the strongest predictor of behavioural intention, reaffirming findings from Thakur (2013) and Wang and Yi (2012). This underscores the need for a highly intuitive user experience. The developers of S Pay Global should prioritise strategies that reinforce simplicity and user-friendliness. These include strategies such as step-by-step onboarding guides, simplified navigation, and reduced task complexity can improve ease of use and encourage sustained adoption.

The significant impact of social influence on behavioural intention confirms the influence of peer endorsement and community norms. This result is consistent with Kang (2019), Slade et al. (2015), Thakur (2013) and Venkatesh et al. (2003). From the perspective of Diffusion of Innovations theory (Rogers, 2003), this finding reflects adoption behaviours typical of the "Late Majority" (34%) who rely heavily on social proof before embracing new technologies. Individuals in this group tend to be more sceptical of new technologies and generally adopt only after a significant proportion of their peers or social networks have done so. The strong social influence effect highlights the importance of peer endorsement and community persuasion in driving adoption. Developers of S Pay Global could leverage this by introducing referral programmes, peer-to-peer incentives, and endorsements from trusted community figures to accelerate adoption within this segment.

In contrast, the insignificant effect of perceived trust diverges from earlier studies (Chandra et al., 2010; Kang, 2019; Lu et al., 2011). This discrepancy may be context-specific: whereas previous studies examined commercial mobile payment systems, this study focuses on a government-backed platform. The institutional legitimacy of S Pay Global may substitute for personal trust, as users may perceive government involvement as ensuring public interest rather than profit motives. This interpretation aligns with the Late Majority and Laggards categories in Rogers' (2003) model, who are typically risk-averse and rely on institutional assurances over interpersonal trust. Furthermore, the result implies that consumers are generally unconcerned about potential monitoring of their spending behaviour by authorities such as the Inland Revenue Board of Malaysia.

The finding that perceived risk does not significantly influence intention contradicts prior studies (Kang, 2019; Liébana-Cabanillas et al., 2014; Lu et al., 2011; Slade et al., 2015). One plausible explanation is that users perceive minimal risk because S Pay Global is primarily used for low-value, routine transactions, such as paying for groceries or utilities (Cheong, 2022). As such, potential losses are perceived as negligible. This reflects the tendencies of the Early Majority adopters (Rogers, 2003), who value practicality and tend to perceive lower risk once technologies become mainstream.

Finally, the unsupported effect of innovativeness on adoption intention contrasts with Kang (2019), Slade et al. (2015), and Tan et al. (2014). However, this outcome is consistent with Thakur and Srivastava (2014). This suggests that innovative offerings by S Pay Global, such as cashback rewards, fail to distinguish the platform from competitors like GrabPay and Boost. Respondent feedback pointed to a less intuitive user interface and limited functionality relative to competing platforms, which is consistent with S Pay Global's lower user ratings on the Google Play Store (Google, 2025). These deficiencies may explain why younger users (aged 18–24),

typically Innovators or Early Adopters (Rogers, 2003), are less inclined to adopt the platform. To address this, developers should therefore introduce distinct functional advantages unavailable on rival platforms.

Theoretical Implications

This study offers several contributions to the literature on government-owned mobile payment systems in a multicultural setting such as Sarawak.

First, this research has empirically demonstrated that performance expectancy, effort expectancy and social influence significantly affect consumers' intention to adopt S Pay Global. These findings confirmed that the three initial UTAUT variables developed by Venkatesh et al. (2003) can explain behavioural intention of consumers in Sarawak to accept a government-backed mobile service platform.

Second, the results of H4 to H6 reveal that the extended UTAUT variables proposed by Slade et al. (2015), namely perceived trust, perceived risk and innovativeness do not significantly affect the adoption intention among Sarawakian consumers, contrary to the results reported by Kang (2019). Although perceived trust showed a positive but insignificant relationship with adoption intention, and perceived risk exhibited a weak negative association, neither was strong enough to influence consumer behaviour meaningfully. This suggests that users are relatively insensitive to privacy or monitoring concerns, possibly because S Pay Global is primarily used for low-value, routine transactions such as grocery and utility payments. The relatively small financial stakes involved may reduce perceived risk and the salience of trust in adoption decisions.

Practical Implications

The findings of this study provide several practical insights for the developers and marketers of S Pay Global to enhance its adoption among Sarawakian consumers. Addressing these implications can strengthen the platform's service effectiveness and competitiveness within Malaysia's fragmented mobile payment landscape.

First, the significant effect of performance expectancy indicates that users value usefulness, efficiency, and convenience. Developers should therefore focus on enhancing the platform's utilitarian value and differentiating it from competing services. In the crowded mobile payment market, integrating diverse payment and billing functions within a single interface could reduce users' dependence on multiple applications. The government-backed nature of S Pay Global provides a strategic advantage, allowing integration with state agencies and services, such as utilities, local councils, and agency payments, to enhance convenience. Furthermore, as the official disbursement channel for the SKAS programme, the platform can capitalise on this role by embedding SKAS-related functions—such as balance checks and transaction histories—directly into the app interface. This would enhance perceived usefulness, encourage habitual use, and create a competitive edge not easily replicated by private platforms. Expanding the network of participating merchants, particularly online stores, would further increase accessibility and perceived value.

Second, since effort expectancy being the strongest determinant of intention, developers should prioritise ease of use and user experience enhancement. Simplifying the registration process, providing step-by-step tutorials for new users, and designing an intuitive, consistent interface will lower entry barriers, especially for SKAS recipients joining for the first time. Strengthening customer support through hotlines or live chat and communicating ease-of-use benefits through targeted campaigns can further improve perceptions.

Third, the significant role of social influence highlights the importance of network-driven adoption. As users often encourage peers to adopt similar platforms, marketing strategies should leverage social diffusion. The SKAS programme can act as a social catalyst, where existing beneficiaries influence others in their communities to register. Referral incentives, peer-to-peer rewards, and testimonials from community leaders could accelerate this process. Framing platform uses as a social norm and sharing real-life success stories on social media can further enhance perceived legitimacy and desirability.

Interestingly, perceived trust, perceived risk, and innovativeness were not significant predictors in this study. This can be largely attributed to S Pay Global's unique position as a government-backed platform. As an official

government initiative, the application inherently commands a high level of institutional trust, which counterbalances the typical consumer and merchant anxieties regarding financial security and data privacy. The government's endorsement acts as a powerful safety net, leading users to treat trust and risk as baseline assumptions rather than active determinants of adoption. Similarly, the lack of significance for innovativeness suggests that Sarawakians perceive S Pay Global as more of a practical public utility than as a cutting-edge technological novelty, especially given its integration with state disbursements like the SKAS programme. Consequently, users adopt the platform due to its functional necessity rather than a personal inclination to experiment with new technologies. Nevertheless, developers should continue investing in advanced security measures—including data encryption, multi-factor authentication, and third-party security certifications—to strengthen consumer trust and mitigate perceived risks as the platform scales and the broader mobile payment landscape evolves.

Although perceived trust, perceived risk, and innovativeness were not significant predictors in this study, these factors may become more salient as cashback incentives decline and consumers grow more aware of security issues. Developers should thus continue investing in advanced security measures—including data encryption, multi-factor authentication, and third-party security certifications—to strengthen consumer trust and mitigate perceived risks. To appeal to innovation-oriented users, particularly younger consumers, introducing exclusive discounts, gamified loyalty programmes, or partnerships with popular brands could enhance the platform's competitiveness.

Finally, these findings have broader policy implications beyond Sarawak. They provide valuable insights for policymakers and researchers in Southeast Asia seeking to understand consumer adoption of government-backed fintech platforms. Lessons drawn from S Pay Global's adoption experience can inform the design, implementation, and communication strategies of similar government-supported fintech initiatives in other developing economies.

Limitations and Future Research Directions

This research has several limitations that offer avenues for future research.

First, the use of a cross-sectional survey design limits the ability to examine changes in adoption behaviour over time. Longitudinal studies could provide deeper insights into the stability and evolution of these relationships.

Second, the sample was restricted to respondents from Kuching, which may not fully represent the diverse perceptions of users across different demographic groups or regions. Future studies should include respondents from different regions to improve the applicability of findings.

Third, this research focused primarily on intention to use rather than actual usage behaviour, which may create differences between users' stated preferences and real adoption patterns. Future research may consider examining actual usage behaviour, transaction frequency, and long-term user retention rather than relying only on behavioural intention.

Moreover, although perceived trust and risk were included as extended variables, this study did not explore in depth why these factors were insignificant, despite their importance in digital payment adoption. Further investigation into why these variables did not significantly influence adoption would provide deeper insights into consumer decision-making.

Finally, future models could incorporate other relevant factors such as perceived service quality, satisfaction, digital literacy, government support, and platform reliability. Examining these variables could contribute to a more comprehensive understanding of adoption determinants in government-supported fintech ecosystems such as S Pay Global.

CONFLICT OF INTEREST

We declare that there are no conflicts of interest regarding the publication of this manuscript.

DATA AVAILABILITY

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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