Sri Lanka Journal of Marketing
University of Kelaniya - Sri Lanka

SLJM Vol 11 Issue 2: July-December 2025
ISSN 2719 – 2598 (Online)

RESEARCH ARTICLE

E-Government Adoption in Sri Lanka: Application of an extended UTAUT2 Model

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HOW TO CITE (APA 7TH)
Abeykoon, B. B. D. S., & Sirisena, A. B. (2025). E-government adoption in Sri Lanka: Application of an extended UTAUT2 model. *Sri Lanka Journal of Marketing, 11*(2), 197–220. ttps://doi.org/10.4038/sljmuok.v11i2.240
DOI: https://doi.org/10.4038/sljmuok.v11i2.240

Abstract

Electronic government (e-government) uses digital technologies to deliver services to citizens, businesses, and governments, enhancing efficiency and transparency in governmental procedures. The current study discovers the key determinants influencing e-government adoption in Sri Lanka using an extended Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) model. The study introduces the Intention to Recommend as an incorporated construct to better understand the predictors of e-government adoption. Data were collected from 550 respondents across the Western, Southern, and Uva provinces of Sri Lanka using an online questionnaire that represented different digital literacy levels. The hypotheses of the proposed model were tested using Partial Least Squares-Structural Equation Modeling (PLS-SEM). The results reveal that Performance Expectancy, Facilitating Conditions, Habit, and Personal Innovativeness significantly influence the Use Behavior of Sri Lankan citizens. Additionally, use behavior indicates a strong positive impact on Intention to Recommend, underscoring the importance of citizen engagement in governmental digital platforms. These findings provide actionable insights and implications for government agencies, policymakers, and platform developers to enhance e-government adoption rates in Sri Lanka. This study also contributes to the growing literature on technology adoption, specifically in the e-government context.

Keywords: *E-government adoption, UTAUT2, SmartPLS, Use Behavior, Intention to Recommend*

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1. INTRODUCTION

The rapid evolution of information and communication technologies (ICT) has significantly improved the efficiency of government administrative processes. (Aldroubi & Yusof, 2024). The transformation known as 'e-government' involves the use of digital platforms to facilitate interactions among citizens, businesses, and governments. (ELKheshin & Saleeb, 2020). This transformative change is expected to simplify administrative workflows and improve interactions between citizens and government authorities. (Elahi & Ahmed, 2023). E-government improves overall public administration efficiency while reducing corruption. (Abdalla et al., 2023). In particular, many studies stress that several technological and infrastructural barriers in developing countries hinder the adoption of technology. Therefore, the adoption of e-government services remains low despite enormous government investments. (Alfiani et al., 2024; Endong, 2020).

Sri Lanka, a South Asian country, has embarked on its digital journey through the 'e-Sri Lanka program', which has made notable initiatives to lay the foundation for a more connected government. (*ICTA, Sri Lanka*, 2024). Even though these efforts have been ongoing, e-government adoption among Sri Lankan citizens remains low and has not gained widespread use. (Dikmadugoda, 2024). The citizens continue to primarily rely on traditional in-person visits to government agencies, even with many digital alternatives available. (Dilinika & Weerasinghe, 2019). This situation provides a snapshot of Sri Lankans' current adoption of digital platforms and highlights the disconnect between the availability of digital services and their actual use. Thus, this research gap needs to be bridged by investigating the key determinants that hinder users from adopting e-government platforms in Sri Lanka.

Several researchers have proposed technology adoption models to enhance adoption rates in both developed and developing countries, helping avoid barriers and challenges. Among them, the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) developed by Venkatesh et al. (2012) is a prominent framework used in numerous research studies. The UTAUT2 model was extended with incorporated constructs such as *Hedonic Motivation, Price Value,* and *Habit.* However, many scholars later extended the UTAUT2 model, incorporating different constructs. Farooq et al. (2017) extended the model by adding

Personal Innovativeness in IT. Personal innovativeness is primarily used by scholars specializing in technology adoption research. By applying the extended UTAUT2 model, the researchers expect to uncover the enablers of e-government adoption, as such investigations are limited in developing countries like Sri Lanka (Abubakr & Kaya, 2021; Adjei-Bamfo et al., 2019). For example, limited internet access and low digital literacy in several rural areas may constitute notable barriers (Ofosu-Ampong, 2021). Further prior Sri Lankan studies on e-government adoption have predominantly focused on behavioral intention and have offered limited insight into actual system use and post-adoption outcomes (Priyashantha & Dilhani, 2022), which offer greater practical value. Moreover, many fails to account for individual heterogeneity in digital readiness or the social diffusion of e-government services, yet understanding these factors in distinct social, economic, and technological aspects concerning the Sri Lankan context is crucial in designing targeted interventions.

The main objective of the current study is to examine the key factors influencing the adoption of e-government services in Sri Lanka. Based on the literature, the study uses the well-established UTAUT2 model, incorporating additional constructs to achieve the objective. By adopting the UTAUT2 framework, which extends earlier models by incorporating habit and experiential factors, we increase the practicality and appropriateness of the research model for analyzing sustained use of public digital services in developing-country contexts (Venkatesh et al., 2012). The findings will help formulate strategies and policies for digital governance initiatives. Ultimately, the study provides valuable reference for future research while government agencies and technology providers are assisted in similar contexts.

2. LITERATURE REVIEW

The integration of digital technologies into public administration has become a cornerstone of the 21st century. (Abdul Wahi & Berenyi, 2024). According to the United Nations E-government survey, countries worldwide are increasingly adopting e-government services. (Carlsen & Bruggemann, 2021). These digital services enhance transparency, reduce inefficiencies, and foster citizen interaction. (Akkaya et al., 2012). The e-government services range from essential online information dissemination to advanced real-time transactions. (ALQahtani, 2016). E-government platforms are often seen as a tool for bridging the digital

divide in developing countries. (Androutsopoulou et al., 2019). However, the success of the e-government initiatives hinges on the willingness to adopt (Al Sayegh et al., 2023).

The Sri Lankan government has launched several online platforms to provide citizens with convenient e-services. (ICTA, Sri Lanka, 2024). For instance, citizens can pay utility bills online, such as water, electricity, and telephone bills. (CEB | Home, 2024; National Water Supply and Drainage Board, 2024; SLT Payment Client, 2025). The web and mobile applications have reduced the need for physical visits to government agencies. (Abusamhadana et al., 2021). Online banking facilities in government banks, online vehicle revenue license services, online university registration, and online passport applications and extensions are among the other digital services offered by the Sri Lankan government. (Online Vehicle Revenue Licence Service, 2025; OnlinePassport, 2025; People's Bank, 2024; University Grants Commission - Sri Lanka, 2025). These e-services save time and resources while promoting good governance. Despite the clear benefits of e-government, the adoption rate in Sri Lanka remains a challenge. (Dikmadugoda, 2024; Madhuwanthi & Muthulingam, 2020). Studies show that lack of awareness, inadequate infrastructure, and concerns about data security act as barriers to widespread adoption. (Fernando & Perera, 2022; Nawaz & Thelijjagoda, 2015).

The researchers heavily use technology adoption models to understand the factors influencing the adoption and recommendation intentions for digital platforms. (Agus Rofi'i et al., 2023; Almuraqab, 2021; I. Bashir & Madhavaiah, 2014). Among them, the UTAUT2 model is a well-established framework widely spread in various domains, such as e-learning, mobile banking, and mobile games. However, the UTAUT2 model has been used sparingly in e-government research. (M. A. Bashir et al., 2023; Fakhoury & Chebaro, 2021). In addition, there is a notable gap in research related to the role of intention to recommend the adoption of e-government services in Sri Lanka. (Hettiarachchi & Lakmal, 2023). Given this research gap, the researchers propose an extended version of the UTAUT2 model to examine Sri Lankan e-government platforms. The proposed model consists of the constructs: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, Habit, Personal Innovativeness in IT, Use Behavior, and Intention to Recommend.

The construct performance expectancy refers to the users' beliefs that utilizing a new technology will enhance their efficiency and effectiveness in the routines (Alraja et al., 2016; Rizkalla et al., 2024). According to the literature, perceived usefulness, relative advantage, and outcome expectations are similar in nature to the performance expectancy (Ryu & Fortenberry, 2021). Individuals are more likely to utilize e-government services if they reduce stress and save time (Ryu & Fortenberry, 2021; Thursina et al., 2021). On the other hand, effort expectancy, another prominent construct in the model, highlights the importance of user-friendly interfaces in web portals and mobile applications in driving technology adoption (Venkatesh et al., 2012). The literature indicates that this construct plays a critical role in helping users become familiar with the system at the early stages of adoption (Razak et al., 2017; Shaikh, 2021). Furthermore, in the Sri Lankan context where administrative delays and inefficiencies often characterize traditional public service delivery, citizens are more inclined to continue using e-government services when these services demonstrate tangible improvements in performance, efficiency, and responsiveness, thereby contributing to greater public value perceptions (Karunasena & Deng, 2012). Accordingly, the study hypothesized the first two hypothesis as follows

H1: Performance expectancy has a positive and significant impact on e-government adoption.

H2: Effort expectancy has a positive and significant impact on e-government adoption.

According to Mensah et al. (2020) Social influence is a powerful force that drives technology adoption. Consequently, use behavior in technological platforms is influenced by the opinions of important others, such as peers or family members. (Alraja, 2016). When users see influential figures approve digital platforms, they are more inclined to view the services as worth adopting. (Afonasova et al., 2019). The initial barriers can be reduced through impactful social influence. (Koenig-Lewis et al., 2015). Further Nawaz and Thelijjagoda (2015) found that social influence positively and significantly influences university academics' intention to adopt e-government services in Sri Lanka, highlighting the contextual importance of the question. Accordingly, the following hypothesis is developed.

H3: Social Influence has a positive and significant impact on use behavior toward e-government adoption.

Facilitating conditions, on the other hand, address the practical, technical, and logistical factors required for technology use (Venkatesh et al., 2012). It extends up to policy and regulatory frameworks, guidelines on data privacy, and digital trust (Prawati et al., 2022). For example, when cybersecurity measures are strong and users feel their data is secure, they are more likely to adopt digital services, as clear security guidelines pave the way (Alraja, 2016). Further, Yuan et al. (2023) have emphasized that users adopt digital platforms more readily when they perceive the external environment as distinct and when resources are adequate to complete the tasks. As far as local context is concerned in Sri Lanka, facilitating conditions such as access to reliable ICT infrastructure, availability of technical support, and institutional readiness play a crucial role in translating citizens' willingness into actual and continued use of e-government services, as structural and resource constraints continue to hamper the public service delivery environment (Karunasena & Deng, 2012; Nawaz & Thelijjagoda, 2015)

H4: Facilitating Condition has a positive and significant impact on e-government adoption.

The enjoyment and drive of using a new technology highlight how hedonic motivation drives technology adoption. (Jadmiko et al., 2024). Venkatesh et al. (2012) Argue that fun and engaging e-government web applications and mobile applications persuade users to embrace e-government platforms. Similarly, Macedo (2017) Underscored how user-friendly interfaces and interactive features nurture enjoyment, encouraging continued use of digital platforms among older adults. While research on the e-government adoption of Sri Lanka has not directly identified this construct as hedonic motivation, South Asian e-government and mobile government (m-government) research has indicated that enjoyment and experiential value has a strong connection with actual use behavior, especially in the developing-country context where follow-up use is voluntary. For example, Indian and Pakistani research using UTAUT2 and extended TAM models also reveals that hedonic motivation is a strong predictor of use behaviour of government digital services, so that citizens are more inclined to use such systems, when they perceive their interactions with them as pleasant and involving engagement as opposed to being functional (Gupta et al., 2018; Rana et al., 2017).

H5: Hedonic Motivation has a positive and significant impact on use behavior toward e-government adoption.

Subsequently, price value has been recognized in the literature as a significant factor influencing use behavior toward e-government services. (Venkatesh et al., 2012). The broader adoption of technological platforms can be ensured for free or low-cost e-services. (M. A. Bashir et al., 2023). For instance, when individuals perceive that the benefits of e-government services exceed the monetary cost, they are more likely to adopt and consistently use the relevant platforms. (Arenas-Gaitán, 2015). Also, scholars stress the importance of e-service affordability across user groups and domains. (Tamilmani et al., 2018). According to Arenas-Gaitán (2015), the hidden costs should be minimized, and internet accessibility should be improved to enhance perceived value. (Farooq et al., 2017). Further, Nawaz and Thelijjagoda (2015) demonstrate that, in Sri Lanka, the perceived benefits of e-government services relative to the effort and resources required to use them have a strong influence on intention to use and behaviour. On the same note, research in South Asian contexts shows that low transaction costs or perceived effort may affect the adoption and persistence of use of government digital services (Rana et al., 2017). Since there is digital inequality and fluctuating access costs between the urban and rural populations of Sri Lanka, price value is a construct of meaning in that context.

H6: Price Value has a significant impact on e-government adoption.

Habit is another construct in the UTAUT2 model that determines whether users continue to use digital services over time across different contexts. The routine behavior in technology adoption is facilitated by speed, convenience, and efficiency compared to conventional practices. (Rey-Moreno & Medina-Molina, 2017). Empirical evidence from developing countries and the public sector shows that once users are familiar with and recognize the ease of use of digital platforms, traditional pathways decline. Because the less effort of habitual users put into using the systems provides comfort to their feelings with the systems (Dwivedi et al., 2020; Fakhoury & Chebaro, 2021; Venkatesh et al., 2012).

H7: Habit has a positive and significant impact on e-government services.

Furthermore, the incorporated construct, Personal innovativeness in IT (PIIT), reflects how quickly users adopt new technologies, even in uncertain or unfamiliar situations. (Farooq et al., 2017). The construct captures a person's openness to embrace novel technological solutions without waiting for social validation (Kalinichenko, 2022). In e-government settings, PIIT is particularly important because digital public services are sometimes perceived as risky, unfamiliar procedures, and lack user support, particularly in developing nations. More personal innovativeness increases the likelihood that citizens will experiment with online government platforms, even when system usability is suboptimal or traditional service channels remain extensive (Cheng et al., 2014). Therefore, PIIT is a significant precursor of performance expectancy, effort expectancy, and behavioral intention, thereby enhancing UTAUT2's explanatory power when technology adoption is uneven across the population.

H8: Personal Innovativeness in IT has a positive impact on e-government adoption.

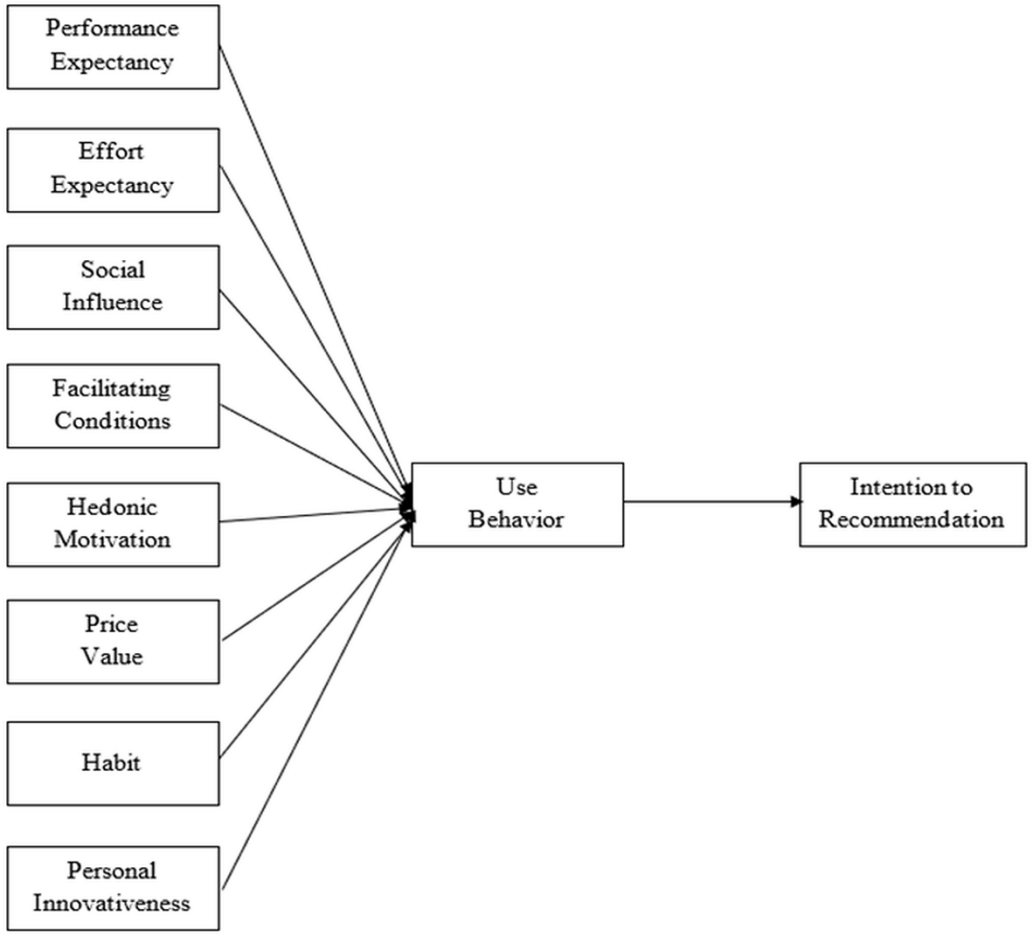
The construct intention to recommend suggests how a user advocate advocates and promotes digital platforms based on their personal experience, as discussed in several studies. (Hartono et al., 2021; Naranjo-Zolotov et al., 2019). Usually, positive experiences and the attitudes individuals develop strengthen their social networks, including friends, family, and colleagues. (Mensah et al., 2020). According to Ariyanto et al. (2020), Recommendation intention is a powerful driver in e-government adoption, which can significantly influence others' decisions (Nguyen et al., 2023). In addition, literature stresses that user satisfaction, loyalty and word-of-mouth are linked together with the intention to recommend (Chang et al., 2017). The efficient, user-friendly, and beneficial digital services are more likely to be recommended by citizens. For instance, if a citizen successfully renews a driving license or a passport online with minimal disturbances, they will recommend the services to others who are reluctant to use them. (Finn et al., 2009). The recommendations are more persuasive than traditional government campaigns. Nevertheless, the impact of use behavior on intention to recommend remains underexplored, particularly in developing countries such as Sri Lanka. Thus, the current study proposes an extended UTAUT2 model to understand the role of intention to recommend in e-government adoption.

H9: E-government adoption has a positive impact on intention to recommend adoption of e-government services.

3. RESEARCH METHODOLOGY

The current study employs a quantitative approach to investigate the factors impacting e-government adoption in Sri Lanka. The data for the study were gathered at a single point in time, following a cross-sectional survey design, which is an effective method for examining relationships between variables. (Setia, 2016). The research population is citizens in Sri Lanka, and the target population was chosen from three provinces: Western, Southern, and Uva, to represent a mix of urban, semi-urban, and rural areas based on digital literacy and socio-economic criteria. (Department of Census and Statistics, 2022). The three chosen provinces were selected using a stratified approach to achieve variation in urbanization, digital literacy, and access to e-government infrastructure. Western Province is characterized by the most urbanized areas with high levels of digital access; the Southern Province is semi-urban; and the Uva Province represents the most rural areas with constrained levels of digital penetration. This stratification will improve the study's capacity to examine the adoption of e-government across different socio-economic and technological backgrounds; thus, the sampling strategy will align with the research aim. A total of 550 respondents were recruited using convenience sampling, which efficiently reached a geographically dispersed population. Data were collected via an online questionnaire that included demographic information and model constructs. The questions were adapted from the existing literature on technology adoption. The items were measured using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Further, the questionnaire was pilot-tested with 30 respondents to ensure clarity, reliability, and validity before the primary data collection. The wording and structure of the questionnaire were refined based on feedback from the pilot test. The data analysis was performed using SPSS and SmartPLS.

Figure 1
Proposed Conceptual Framework



4. RESULTS AND ANALYSIS

This section provides a comprehensive understanding of the respondents' demographic profiles and assessments of the measurement and structural models.

The demographic profile delivers valuable insights into the sample and its impact on e-government adoption. According to Table 1, males represent 54.9% of the total sample, slightly skewing toward male respondents, compared with 45.1% female respondents. However, the distribution is relatively balanced and represents the population. The age distribution shows a higher likelihood that younger and middle-aged respondents will engage

with e-government services, in line with global trends in technology adoption. Meanwhile, the sample was well distributed across three provinces, which is critical for understanding regional variations in e-government adoption in Sri Lanka. In addition, a significant proportion reported a monthly income of less than 50,000 LKR, suggesting that the sample is primarily composed of middle- and lower-income groups. The sample includes respondents with relatively high levels of education, with the majority holding a degree/professional qualification. The frequency of e-government use suggests that, even among respondents who are familiar with e-government services, improvements are still needed to encourage more consistent use.

Table 1
Profile Statistics of Respondents

	Frequency	Percentage (%)	Cumulative Percentage (%)
Gender			
Male	302	54.9	54.9
Female	248	45.1	100.0
Age (in years)			
Less than 20	62	11.3	11.3
20 - 30	226	41.1	52.4
31 - 40	119	21.6	74.0
41 - 50	122	22.2	96.2
51 - 60	16	2.9	99.1
More than 60	5	0.9	100.0
District			
Western	145	26.4	26.4
Southern	207	37.6	64.0
Uva	198	36.0	100.0
Income per Month (in LKR)			
Less than 50,000	234	42.5	42.5
50,000 - 100,000	153	27.8	70.4
100,001 - 200,000	106	19.3	89.6
200,001 - 300,000	21	3.8	93.5
300,001 - 400,000	15	2.7	96.2
More than 400,000	21	3.8	100.0
Education Qualification			
G.C.E. O/L	26	4.7	4.7
G.C.E. A/L	167	30.4	35.1
Degree/Professional Qualification	247	44.9	80.0
Post Graduate	90	16.4	96.4
Other	20	3.6	100.0
Frequency of using e-government services			
Always	55	10.0	10.0
Often	182	33.1	43.1
Sometimes	196	35.6	78.7
Rarely	117	21.3	100.0

The reliability and validity of the constructs in the proposed model were confirmed with the measurement model analysis. (Hair et al., 2020). As shown in Table 2, the strength of the relationship between each item and its construct is represented by the outer loadings. (Sarstedt et al., 2021). The higher outer loading values above the recommended threshold of 0.7 for all items indicate that the measurement model accurately represents the conceptual framework. (Ringle et al., 2020).

Table 2
Factor loadings for the items

Variable	Item Code	Outer Loadings	Variable	Item Code	Outer Loadings
Performance Expectancy (PE)	PE1	0.875	Price Value (PV)	PV1	0.872
	PE2	0.922		PV2	0.910
	PE3	0.954		PV3	0.906
	PE4	0.922		PV4	0.911
	PE5	0.898		PV5	0.922
Effort Expectancy (EE)	EE1	0.856	Habit (HA)	HA1	0.913
	EE2	0.912		HA2	0.882
	EE3	0.928		HA3	0.834
	EE4	0.929		HA4	0.871
	EE5	0.899		HA5	0.890
Social Influence (SI)	SI1	0.901	Personal Innovativeness in IT (PIT)	PIT1	0.946
	SI2	0.916		PIT2	0.958
	SI3	0.920		PIT3	0.885
	SI4	0.908	Use Behavior (UB)	UB1	0.934
	SI5	0.857		UB2	0.942
Facilitating Conditions (FC)	FC1	0.926		UB3	0.951
	FC2	0.927		UB4	0.946
	FC3	0.852		UB5	0.934
	FC4	0.951	Intention to Recommend (ITR)	ITR1	0.926
	FC5	0.921		ITR2	0.942
Hedonic Motivation (HM)	HM1	0.853		ITR3	0.954
	HM2	0.920		ITR4	0.939
	HM3	0.911		ITR5	0.939
	HM4	0.910			
	HM5	0.915			

Table 3 demonstrates strong internal consistency and convergent validity of the model constructs. All Cronbach's alphas exceed the acceptable threshold of 0.7 and indicate high reliability. (Hair et al., 2019; Shuttleworth, 2022). The Cronbach's alpha values are range from a lower value of 0.922 (HA) to an upper value of 0.968 (HM, ITR). In addition, composite reliability values are consistently above 0.7, indicating the constructs' internal

consistency. These results confirm that the constructs are free of significant measurement error. (Hair et al., 2020). The Average Variance Extracted (AVE) values indicate the extent to which a latent variable accounts for the variance of its indicators. Accordingly, all AVE values exceed the acceptable threshold of 0.5 (Santos & Cirillo, 2021). The highest AVE was observed for Intention to Recommend (0.886), and the lowest AVE was for Social Influence (0.772). These results collectively validate the measurement model, thereby ensuring the credibility of the structural model evaluation.

Table 3
Reliability and Convergent

Variable	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
PE	0.945	0.947	0.819
EE	0.952	0.954	0.839
SI	0.926	0.928	0.772
FC	0.943	0.944	0.814
HM	0.967	0.967	0.884
PV	0.951	0.951	0.836
HA	0.922	0.937	0.865
PIT	0.944	0.946	0.818
UB	0.942	0.944	0.811
ITR	0.968	0.968	0.886

Note. PE = Performance Expectancy, EE = Effort Expectancy, SI = Social Influence, FC = Facilitating Conditions, HM = Hedonic Motivation, PV = Price Value, HA = Habit, PIT = Personal Innovativeness in IT, UB = Use Behavior, ITR = Intention to Recommend

Table 4 presents the discriminant validity of the model constructs using the Fornell-Larcker Criterion. The diagonal values are the square roots of the AVEs, which measure the variance of a construct relative to measurement error. (Sarstedt et al., 2018). Accordingly, the diagonal values are larger than the off-diagonal correlations, ensuring each construct shares more variance with its own indicators than with other constructs. Additionally, high diagonal values confirm the measurement model's reliability and validity, while supporting the distinctiveness and robustness of the constructs in the proposed model. (Ringle et al., 2020).

Table 4
Discriminant Validity Assessment Using Fornell-Larcker Criterion

	EE	FC	HA	HM	ITR	PE	PIT	PV	SI	UB
EE	**0.905**									
FC	0.682	**0.916**								
HA	0.599	0.641	**0.879**							
HM	0.612	0.609	0.628	**0.902**						
ITR	0.615	0.662	0.695	0.664	**0.940**					
PE	0.751	0.669	0.599	0.542	0.634	**0.914**				
PIT	0.628	0.757	0.625	0.598	0.608	0.561	**0.930**			
PV	0.573	0.625	0.552	0.565	0.614	0.655	0.451	**0.904**		
SI	0.640	0.553	0.604	0.529	0.606	0.674	0.495	0.636	**0.901**	
UB	0.619	0.736	0.671	0.609	0.847	0.668	0.671	0.632	0.555	**0.941**

Note. PE = Performance Expectancy, EE = Effort Expectancy, SI = Social Influence, FC = Facilitating Conditions, HM = Hedonic Motivation, PV = Price Value, HA = Habit, PIT = Personal Innovativeness in IT, UB = Use Behavior, ITR = Intention to Recommend

4.1. Measurement Model

A comprehensive representation of the validated measurement model generated with SmartPLS is depicted in Figure 2. The relationship between the indicators and the latent constructs is indicated in the context of e-government adoption. Each construct is associated with multiple items with high factor loadings above the threshold value of 0.7, determining strong indicator reliability. (Cheng et al., 2014). This means the respective items effectively represent the latent variables. Consequently, the direct impacts are shown with the arrows along with the path coefficients. The validated measurement model provides a strong foundation for robust insights into e-government service adoption in the current study.

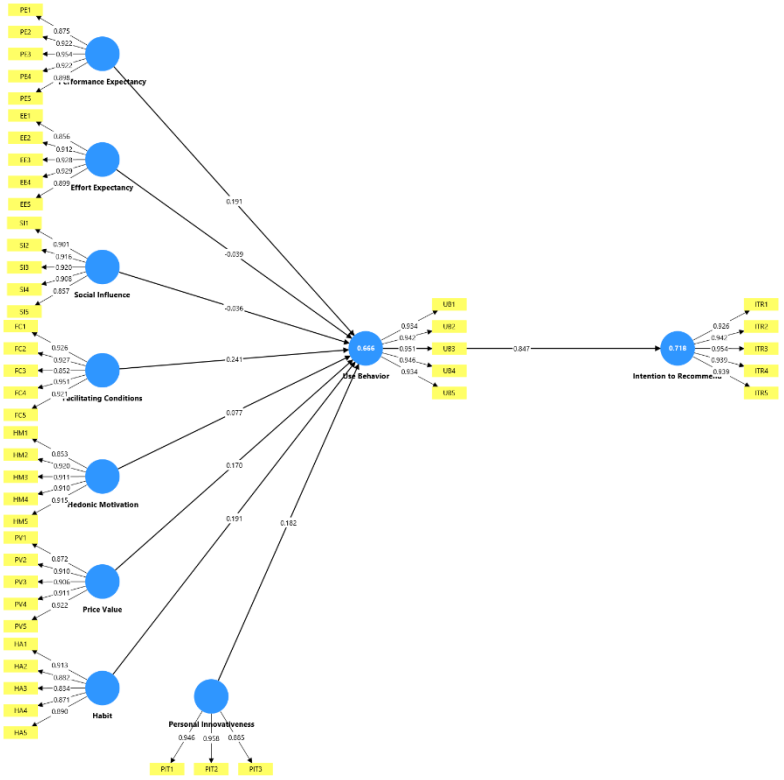
4.2. Structural Model

The structural model shown in Figure 3 highlights the relationships between independent variables and use behavior, as well as the influence of use behavior on intention to recommend (Almufti et al., 2024). The model consists of path coefficients and p-values indicating the statistical significance of the relationships. Accordingly, the structural model confirms that the constructs Performance Expectancy, Facilitating Conditions, Habit, and Personal Innovativeness in IT are predictors of Use Behavior in e-government adoption. On the other hand, Effort Expectancy, Social Influence, Hedonic Motivation, and Price Value do not

establish statistical significance. Furthermore, Use Behavior is a strong predictor of Intention to Recommend the adoption of governmental digital services in the Sri Lankan context.

Meanwhile, the results of the model fit assessment indicate how well the structural model fits the collected data. (Carrion et al., 2019). As per Table 5, the Standardized Root Mean Square Residual (SRMR), squared Euclidean distance (d_ULS), geodesic distance (d_G), Chi-square, and Normed Fit Index (NFI) were examined as fit-indices for the proposed model. (Hair et al., 2014). Accordingly, the SRMR values for both the estimated and saturated models are below the 0.08 threshold. Therefore, the model has an acceptable fit. Similarly, the d_ULS values indicate that the model does not significantly deviate from the ideal structure. In addition, d_G values suggest an acceptable level of model discrepancy. Given the large sample size, a high Chi-square value was expected, as Chi-square is sensitive to sample size. Moreover, NFI values represent a moderate model fit, as the values above 0.9 are typically considered strong.

Figure 2
Validated measurement model



The proportion of variance in the dependent variables explained by the predictor variables in the model is referred to as R-squared (R^2). The R^2 value of 0.718 indicates that its predictors explain 71.8% of the variance in use behavior. This demonstrates a strong explanatory power. Similarly, 66.6% of the variance in intention to recommend is explained by its influencing factors, as indicated by the resulting R2 of 0.666. Both the R^2 values, 0.718 for use behavior and 0.666 for intention to recommend, are very close to their respective adjusted R^2 values. Thus, the model is stable and not overly sensitive to the predictors.

Figure 3
Structural Model

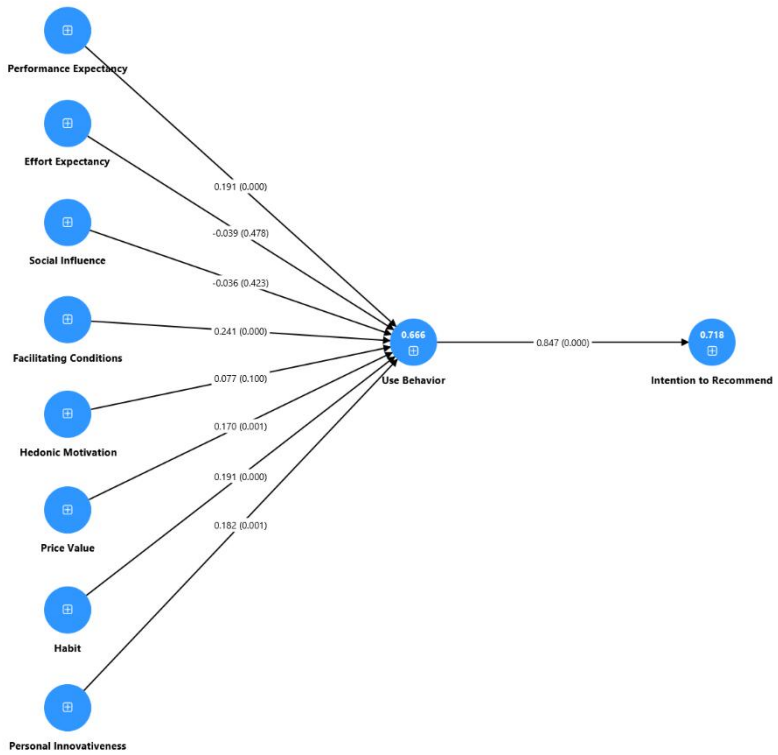


Table 5
Model fit indices for the saturated and estimated models

	Saturated model	Estimated model
SRMR	0.042	0.054
d_ULS	2.037	3.367
d_G	1.470	1.515
Chi-square	4781.930	4890.469
NFI	0.862	0.859

Table 6
R-square values for endogenous variables

	R-square	R-square adjusted
UB	0.718	0.718
ITR	0.666	0.661

Table 7 presents the hypothesis-testing results for the proposed relationships in the model. Accordingly, the model supports five paths: Performance Expectancy (H1), Facilitating Conditions (H4), Habit (H7), and Personal Innovativeness in IT (H8) on Use Behavior. These statistically significant paths indicate that those factors have a strong influence on the usage of e-government services. The findings stress the importance of designing user-centric e-government platforms and providing reliable internet access and technical support. Also, it emphasizes the necessity for initiatives that encourage regular use and the importance of nurturing a culture of digital readiness among citizens. Further, the statistical values indicate that Use Behavior (H9) strongly predicts intention to recommend, confirming that actual users of the digital services are more inclined to recommend them to others.

On the other hand, Effort Expectancy, Social Influence, Hedonic Motivation, and Price Value were found to have no significant impact on Use Behavior. These could primarily be due to the utilitarian nature of e-government platforms, which focus more on functionality than entertainment. Moreover, in several instances, the rising familiarity with digital technologies may have contributed to the non-significant results, especially for factors such as effort expectancy.

Table 7
Hypothesis testing results: Path coefficients and significance levels

	Path	T-values and P-values	Supported?
H1	PE → UB	T = 3.747 p = 0.000	**Yes**
H2	EE → UB	T = 0.710 p = 0.478	**No**
H3	SI → UB	T = 0.801 p = 0.423	**No**
H4	FC → UB	T = 4.376 p = 0.000	**Yes**
H5	HM → UB	T = 1.645 p = 0.100	**No**
H6	PV → UB	T = 1.601 p = 0.109	**No**
H7	HA → UB	T = 4.226 p = 0.000	**Yes**
H8	PIT → UB	T = 3.458 p = 0.001	**Yes**
H9	UB → ITR	T = 40.433 p = 0.000	**Yes**

Note. PE = Performance Expectancy, EE = Effort Expectancy, SI = Social Influence, FC = Facilitating Conditions, HM = Hedonic Motivation, PV = Price Value, HA = Habit, PIT = Personal Innovativeness in IT, UB = Use Behavior, ITR = Intention to Recommend

5. CONCLUSION

The current study aimed to explore the factors influencing e-government adoption in Sri Lanka. The proposed model extends UTAUT2 by incorporating Intention to Recommend as an additional construct. The research study was conducted with 550 respondents from the Western, Southern, and Uva provinces. The findings reveal that Performance Expectancy, Facilitating Conditions, Habit, and Personal Innovativeness in IT are significant factors influencing use behavior. In contrast, Effort Expectancy, Social Influence, Hedonic Motivation, and Price Value do not significantly affect adoption. The study also found a strong and positive impact of Use Behavior on Intention to Recommend.

The results of the study can be used to enhance e-government adoption by improving perceived benefits and ensuring the availability of the resources and infrastructure required for the use of digital platforms. Additionally, fostering openness to new technologies requires establishing a culture of innovation. Policymakers and government authorities should also focus on strengthening the enabling conditions and ensuring seamless use of e-government platforms by users.

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