

## Why the Utilization of E-Government Services is Poor? – A study with the Citizens in Colombo Municipal Council Area in Sri Lanka

U.P.A. Withanage<sup>1</sup>, Lasith Gunawardena<sup>2</sup> and Dileepa M. Endagama<sup>3</sup>

<sup>1</sup>IT System Administrator, Electronic National Identity Card Project, Department for Registration of Persons, SRI LANKA.

<sup>2</sup>Professor, Department of Information Technology, University of Sri Jayewardenepura, SRI LANKA.

<sup>3</sup>Senior Lecturer, Department of Decision Sciences, Faculty of Management Studies and Commerce, University of Sri Jayewardenepura, SRI LANKA.

<sup>1</sup>Corresponding Author: priyan1217@gmail.com



[www.ijrah.com](http://www.ijrah.com) || Vol. 2 No. 4 (2022): July Issue

Date of Submission: 23-05-2022

Date of Acceptance: 14-06-2022

Date of Publication: 18-06-2022

### ABSTRACT

One of the most important elements of an e-Government system is the interaction between users and e-Government systems, specifically the adoption and utilization by those users, who are the main target of such systems. However, even after taken numerous efforts to develop an e-service system in Sri Lanka, its utilization and adoption are still at a very poor level. It indicates as the rate of online submission of applications is 1.16% and for license/ permits it is 0.18%. Thus, this research aims to investigate, analyze and understand the key factors that influence users' adoption and utilization of two e-Government services: e-Vehicle revenue license and e-Police clearance certificate in Sri Lanka with a holistic approach. The conceptual framework was developed by studying the Technology Acceptance Model (TAM) and Web Trust models and theories related to technology acceptance and usage, in conjunction with a review of e-Government adoption and utilization literature. The study population was the Colombo Municipal Council area with 561,314 individuals. A random sample of 203 chief occupants was selected and the response rate was 96.5%. Respondents' demographic details, educational qualifications, internet experience, e-Government usage and as well as preferences when obtaining e-Government services were included. The results showed significant (5% level) moderate positive relationships among utilization and "usefulness", "ease of use", "trust in the internet" and "trust in the Government". Moreover, "usefulness" ( $\beta=0.445$ ) and "trust of the government" ( $\beta=0.379$ ) were found to be the significant (5% level) influential factors in adoption and utilization with model adequacy at 36.5%. Similar to the literature, the findings ensure that when the usefulness and the trust are at a higher level, the adoption and utilization also be at a higher level. The challenges for citizen-centered e-Government applications were identified as a lack of users' trust in the internet service providers, level of security standards, quality of e-Government systems, reluctance to share, exchange, and store their personal information specially the financial information in the online platform. However, the positive factor is the citizens perceive and experience e-Government systems as simple to use and useful. Further, they intend to accept and use it. Based on the interviews held with the uses, implementing simple and useful e-services and e-transactions, enhancing the reliability of the services, improving the accessibility options of the implemented e-services and e-transactions, and increasing the awareness of implemented e-services and their benefits were highlighted as their suggestions to develop the existing e-Government systems and services in Sri Lanka. The most important fact emphasized here is the implementation of a one-stop e-Government portal for all the services. Actions taken to enhance the digital literacy of the citizens from their school level will be benefited to successful adoption and utilization of e-services in Sri Lanka.

**Keywords-** e-Government, e-Services, Technology Acceptance Model, Trust, Usefulness

### I. INTRODUCTION

The public sector faces new demands and new aspirations, driven by a rapidly growing availability of

technology and instruments. One of the major challenges for every government is to apply these technologies to their full potential and requires new ways of organizing, from optimizing the user experience to digitizing internal

processes to exploring new organizational models and partnerships (European Commission, 2018). As to Samsudeen and Thelijjagoda (2013) "Many governments have been challenging difficulties such as bureaucracy in systems, centralized decision-making process, redundancy leading to complexity, poor sharing and coordination of the information and lack of solid information and communication technology (ICT) infrastructure". The internet usage has become an essential activity of the daily routine of the people worldwide and the penetration rate is 62% (% Pop) (Miniwatts Marketing Group, 2018). Hence, over the past decades, Governments around the world are investing more in electronic services and it has incorporated the potential of online resources to improve their citizens' services and enhance their competitive advantages (Ahmad et al., 2012).

## II. BACKGROUND OF THE STUDY

Electronic Government (e-Government) which is the system of digital interaction between a government and other parties - such as citizens, companies, employees and government organizations is currently a prominent topic in Sri Lanka. The success of e-Government services can be elucidated as "citizens' willingness to adopt those services" (Hujran et al., 2013; Lallmahomed et al., 2017; Liu, 2017). Lack of e-Government adoption hinders the realization of the benefits due to attitudes toward use and trustworthiness issues on such services/systems (AlAwadhi & Morris, 2009; Alomari et al., 2012; Gharaibeh et al., 2018; Ranaweera, 2016). As to Ndou (2004, p. 2) features of a government sector is "... mostly followed the traditional bureaucratic paradigm, characterized by internal productive efficiency, functional rationality, departmentalization, hierarchical control and rule-based management". Since Sri Lanka has rapidly changing economy, this behaviour should have to be changed towards the economical and knowledge-based economy requirements (Weerakkody et al., 2009).

As defined by Choejey et al., (2015, p. 1) "The main objective of e-Government implementation is to improve the efficiency, effectiveness and quality of public service delivery using information and communication technologies (ICT)". The United Nations (UN) conducts an e-Government Survey to recognise the strengths, challenges, opportunities, policies, and strategies of 193 member countries of the every year (United Nations, 2018). Sri Lanka's National e-Government Plan was approved in November 2002 (Rainford, 2006).

As a result of that project, Sri Lanka has achieved a massive development and introduced a number of e-services to the general public and holding the rank of 94<sup>th</sup> and an e-Government Development Index (EGDI) of 0.5751 (United Nations, 2018). As to the source the online portal that offers are "A-Z government web indexes, 108 number of e-services for citizens, 51 e-services for businesses and 10 non-residence related e-services".

Some of the most used services are "online services for certificate issuance and examination results by the Department of Examinations, online services for Revenue License (new/ renewal) by the Department of Motor Traffic, and online service for Western Province Revenue License expiry/ active status, Online purchase of vehicle information, ongoing Vehicle Number Enquiry" (Irfan, 2017), and "Police Clearance Certificates Issuance e-Service Online Application by the Sri Lanka Police" (Government of Sri Lanka, 2015). The general public can use those services via accessing the websites, Mobile Apps, KIOSK, and SMS services. The Government of Sri Lanka had allocated over Rs. M. 2140 for the National e-Governance programme in the year 2018 (Ministry of Finance, 2018).

### **2.1 Utilization of E-government (UeGov) by citizens in Sri Lanka**

As a developing country, this investment is a vast percentage of money compared to the other normal finance allocations and spending. Low UeGov has become an issue in developing nations (Taiwo et al., 2012) and it is critical in Sri Lanka (Karunasena & Deng, 2009). Findings of the "Information Communication Technology Agency (ICTA) of Sri Lanka" done a survey in 2018 with 30,239 individuals in Sri Lanka, highlighted that the rate of individual usage of the internet is 34.5%, the rate of household access to computers is 23.68%, and the rate of household access to tablets or/ and smart phones is 49.9% (ICTA, 2018). Even though the rates of education (learning - 19.18%, training/teaching -14.60%, online reading-18.48%), entertainment (downloading and playing game-38.31%, Social Media 36.88%), and communication/social interaction (Sending and receiving email- 47.98%), are at a moderate level, the accessing of commercial and economic activities and E-government facilities are at very low as: internet banking - 2.82%, using services related to travel and transport (Booking tickets, rooms etc.) - 0.12%, Paying bills via internet (electricity, water, telephone) - 3.50%, Online submission of applications - 1.16%, and License/ Permits - 0.18% (ICTA, 2018).

Despite the ease of access to online services, out of the 1,941,536 number of vehicle revenue licenses issued in year 2018 by the Western province, only 2.14% of them were issued online (Department of Motor Traffic, 2018). Deputy Municipal Treasurer of the Colombo Municipal Council (CMC) stated that, out of 150,000 over registered Tax payers of the CMC, only 1% use the online service. The Department of Police had issued 49264 nos. of clearance report in the year of 2018, but only 2% used the online service (Sri Lanka Police, 2018).

## III. RESEARCH PROBLEM AND OBJECTIVES

Many Governments face issues related to adoption, implementation and utilization of e-services by citizens. In Sri Lanka, a large amount of funds have been

used to implement e-Government initiatives, resulting in the launch of a number of valuable online services. Yet the Sri Lankan users' adoption and e-Gov systems is not in a satisfactory level. In order to get the real value, the rate of e-Government adoption and utilization has to be improved. This situation initiates the rationale and motivation for this research. The Main objective of the study was to identify the key factors influence on the utilization of e-Government services (two services as e-Revenue License Renew and e-issuance of Police Clearance Certificate) in the CMC area in Colombo district. The specific objectives were as follows:

- To examine the relationships between usefulness, ease of use, trust of the internet, and trust of the government with the UeGov services in the CMC are in Sri Lanka.
- To identify the factors that influence on the utilization of e- Government applications (vehicle revenue license renewal, Police clearance certificate).
- To identify the existing challenges for citizen-centered e-Government applications.

#### IV. LITERATURE REVIEW

'Usefulness' has a positive relationship with UeGov (AlAwadhi & Morris, 2009; Hamid et al., 2016; Liu, 2017; Sharabati & Hawajreh, 2012). 'Perceived usefulness' (PU) derived from the 'Technology Acceptance Model' (TAM), which is developed by Davis (1989), assumed when users perceive the usefulness and ease to use (EoU) of the technology, they will use it. PU is positively associated with continuance intention in the context of UeGov services/systems (AlAwadhi & Morris, 2009; Hamid et al., 2016) and it is hypothesized as the possibility that users will UeGov to accomplish a certain task. As to Ahmad et al., (2012) PU is the level at which the users perceive the e-government websites save time when performing transactions. PU is a significant factor to the UeGov, and also in different cultural backgrounds (Alomari et al., 2012).

Carter and Belanger (2005) recognised the perceived EoU in the TAM as a factor that influences the users when choosing UeGov services. In the business world, the EoU has been considered the dominant belief that affects the intention to adopt or utilize the technology (Patel & Jacobson, 2008). If a system is comparably easy to use, citizens are likely to learn more about its features and finally expect to use it (Hamid et al., 2016). It is conceptualized as "the level or extent to which individuals or citizens see the use of technology to be simple" (Rehman et al., 2012).

The trust is a significant protagonist in the context of e-Government and it helps users to mitigate the ambiguity of the online services. The construct "Trust" is validated in many e-Government kinds of research (Alomari et al., 2012; Carter, 2008; Carter & Bélanger, 2005; Kurfali et al., 2017; Rehman et al., 2012) and the trust in the Internet refers as "Institution-based trust

which is the association with an individual's perceptions of the institutional environment, such as the structures, regulations and legislation which make an environment feel safe and trustworthy" (Carter & Bélanger, 2005, p. 9). Those who have trust in the internet can be easily adapted to UeGov services (Ranaweera, 2016). Prior research has widely recognized trust in the internet as a significant factor in e-government service adoption and utilization (Alomari et al., 2012; Carter, 2008; Kurfali et al., 2017; Rehman et al., 2012).

Trust in the Government refer to "one's perceptions regarding the integrity and ability of the agency providing the service" (Mcknight et al., 2002). Lack of trust is one of the most critical barriers to e-service adoption and utilization, especially when personal or financial information is involved (Carter & Bélanger, 2005). A failure to keep trust in the government due to not fulfilling the desirable outcome will drastically destroy its public value (Ahmad et al., 2012; Karunasena & Deng, 2009; Lallmahomed et al., 2017). The security and privacy of citizens' information such as personal and bank details is another critical factor when use e-Government services (Patrick et al., 2005; Rehman et al., 2012).

Utilization refers to "The process of using something effectively" (Mcknight et al., 1998, 2002). Government organizations and departments can reassure citizens of the reliability, useful of e-services by including ease of access with adequate legal and technological structure with visible privacy statements on their sites (Alomari et al., 2012; Ranaweera, 2016; Rehman et al., 2012; Sharabati & Hawajreh, 2012; Twizeyimana & Andersson, 2019).

#### V. METHODOLOGY

The theory of TAM and the Theory of Trustworthiness were the theatrical base of the current study and the UeGov is the outcome variable of the conceptual model (Figure 1). According to the TAM, "attitude toward use" is determined by perceived usefulness (PU) and perceived ease of use (EoU). Trustworthiness is measured with trust in the internet (TI) and trust in the government (TG) (AlAwadhi & Morris, 2009; Hamid et al., 2016).

The study paid attention to the relationships and impacts of the independent variables with /on the dependent variable. Therefore, there were four hypotheses to test the relationship and another four were developed to test the impacts of the study.

##### 5.1 Research Hypotheses of the Study

H1: Higher perceived usefulness will increase the UeGov systems/services.

H2: Higher perceived Ease of Use will increase the UeGov systems/services.

H3: Higher the trust of the Internet will increase the UeGov systems/services.

H4: Higher the trust of the Government will increase the UeGov systems/services.

H5: Perceived usefulness will have impact on UeGov systems/services.

H6: Perceived ease of use will have impact on UeGov systems/services.

H7: Trust of the internet will have impact on UeGov systems/services.

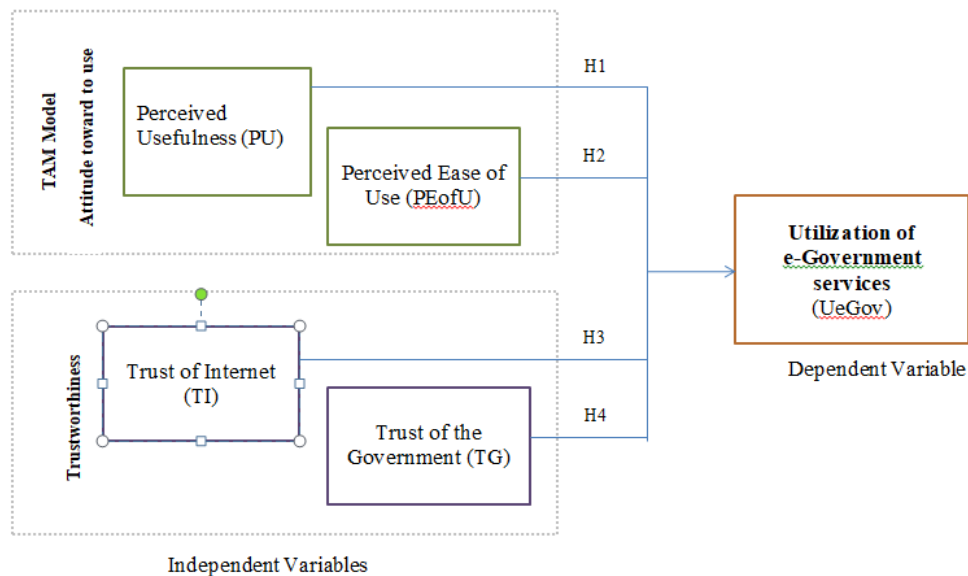
H8: Trust of the government will have impact on UeGov systems/services.

This is basic research that followed the positivistic approach and mainly focuses on the testing of the research hypothesis. The study used a close-ended questionnaire-based survey to collect quantitative data and had interviews to get in-depth information on the issue. The questionnaire was contained 65 items and since the participants are the general public, the sample was consisted with people who had and not had

experience of e-Government. A clear and appropriate instructions were given with the questionnaire to maintain the accuracy of the data. The study population is the CMC area which has 124,260 households (Department of Census and Statistics, 2012) A random sample of 210 chief occupants was selected for the sample and the response rate is 96.6%. Respondents' demographic details, educational qualifications, internet experience, e-Government usage and as well as preferences when obtaining e-Government services were collected.

**5.2 Methods of Data Analysis**

Mainly, a quantitative approach was applied in this research and, descriptive as well as inferential analytical techniques were used to test the proposed model and to identify the significant influential factors that lead to UeGov.



**Figure 1- Conceptual Framework of the Study**

Initially examined the missing or incorrectly entered data and as well as treated for the outliers. Reliability and validity were ensured with the tests of Cronbach's alpha, the Kaiser-Meyer-Olkin (KMO) test, and Bartlett's test of sphericity. Descriptive statistics were used to explain the behaviour of the population and got an idea of the variables in the study. The correlation analysis was used to test the significance of the relationship between the dependent and independent variables. The Multiple Linear Regression analysis was used to test the significance of the impacts of the independent variables on the dependent variable. Outliers and influential points of the residuals were checked with the Cook's D values and the Leverage values. The Durbin Watson statistic to test the auto-correlation with the residuals, Tolerance statistics, Homoscedasticity measures, and the normality of the residuals were used to ensure the accuracy of the fitted model.

**VI. RESULTS AND DISCUSSIONS**

The majority of the respondent were males (64.4%) and 55.6% are in the age group 31-45 years. 5% of respondents were above 60 years of age. Nearly 7% were not having a school education and 86.3% were having either a diploma or degree or postgraduate degree as their highest qualifications. 30.6% were government employees, 44.4% were private-sector employees, and 24.4% are either self-employed or entrepreneurs. The majority of the respondents (36.3%) were in the income group of between Rs 100,000-200,000. 52.5% belonged to the group of Rs 25,000 -100,000. 27% of the respondents mentioned that they have an excellent computer proficiency level and 45.3% have a good level of proficiency. But, nearly 5% said that their proficiency level is low. The majority of the respondents (74.4%) are using the internet daily and 22.2% are using it several

days a week. 95.6% had awareness about the e-Government at the time of the survey.

KMO and Bartlett’s Chi-Square values were used to determine the construct validity. A summary of the analysis showed in table 1. According to table 1, the KMO values of all five constructs are above 0.6 and

hence, it indicates the sample adequacy for further analysis. Bartlett’s Chi-Square values for all constructs are significant at a 5% level and it indicates the sufficiency of the relationship among the items to test the validity. Further analysis ensured the discriminant and convergent validity of the constructs.

**Table 01: Results of the Construct Validity**

	Validity			
	Total variation explained	Minimum factor loading	KMO test	Bartlett's Test Chi-Square Value
Usefulness	83.4%	0.902	0.847	529.4**
Ease of Use	80.1%	0.854	0.848	452.9**
Trust of the Internet	88.2%	0.928	0.761	394.2**
Trust of the Gov	77.4%	0.791	0.668	255.5**
UeGov	92.6%	0.951	0.734	557.9**

significant at 1% level,

**Table 02: Results of the Reliability analysis**

	Reliability	
	No. of items	Cronbach's Alpha
Usefulness	4	0.953
Ease of Use	4	0.922
Trust of the Internet	3	0.932
Trust of the Gov	3	0.831
UeGov	3	0.955

The table 2 illustrates the results of the Reliability analysis. All inter-item correlations were in between 0.3 and 0.7. All the Cronbach’s Alpha values are above 0.7 and it ensured the internal consistency of the constructs.

The results of the correlation analysis are in table 3. This analysis was done only with 159 responses who already used at least one of the services considered in the

study. 24 respondents were not ever used those two services. All four independent variables are significantly and positively related to the UeGov services. It implies that when the usefulness, ease of use, trust in the internet and trust of the government are at a higher level the utilization of e-Government services will be at a higher level.

**Table 03: Correlation with the utilization**

Correlation	UeGov services
Perceived usefulness	.534**
Perceived ease of use	.459**
Trust of the internet	.450**
Trust of the government	.552**

\*\* Correlation is significant at 1% level, N=159

Multiple linear regression analysis was used to find the significantly influential factors on the utilization. In the initial step, test the impact of the four independent variables later used the Step-wise Regression method to select the best model for the data. The results indicate that the usefulness ( $\beta=0.433$ ) and trust in government ( $\beta=0.476$ ) were the only significant factors influencing

the utilization at the 1% level. Trust in government has a higher impact than usefulness.

**6.1 Adequacy and Accuracy of the fitted Model**

The adequacy of the model is 36.5%. Since the R-Squared value is explained the explanatory power of the fitted model and the objective of fitting this model is to identify the influential variables rather than predicting

the dependent variable, and the analysis showed that only two variables significantly influence on the dependent variable, 36.5% is an acceptable level for the model adequacy. Further, the Root Mean Squared Error (RMSE) is 0.434 ( $<0.5$ ) indicates the model also has sufficient ability to predict the dependent variable (Schermelleh-Engel et al., 2003).

The accuracy of the final model was tested with the normality of the residuals, Homoscedasticity, independence of the residuals, and the Multicollinearity diagnostics of the independent variables. The Durbin-Watson value is 1.927 and it is very close to 2 which is the expected level when the residuals are free of autocorrelation. The correlation between the residuals and the independent variables is also not significant and at a very weak level. All Tolerance values are above 0.26 and the VIF values are below level 5 (Marcoulides & Raykov, 2019). It indicates that the independent variables are free of Multicollinearity. Heteroscedasticity was tested with the scatter plot of residual values against the predicted values. This graph also confirmed the Homoscedasticity by not having any visible pattern in the plot. The normality of the residuals was tested with a normality test, and the results confirmed the normality of the residuals. Outliers and influential points were checked with the Cook's D values and the Leverage values of the residuals. After removing three observations which identified as outliers, the two plots showed an accurate pattern. All these tests ensured the accuracy of the fitted model.

## VII. CONCLUSION AND RECOMMENDATIONS

The rate of utilization of e-government services is at a very poor level in the CMC area as well as in Sri Lanka. The respondents who used it perceived and experienced the e-Government systems have simple procedures and they are useful. Hence, they are ready to use it. 'Usefulness' and 'Trust in Government' were the significantly influential factors in their utilization. Even among the users, there are problems of 'trust in the Internet and the government'. A successful e-Government with a high level of security standards can enhance the trust and confidence in the users and further, their utilization also can be increased. Enhancing the awareness of the citizens regarding the effectiveness and the benefits of the e-services is essential. Further, enhancing digital literacy, improving the accessibility options of the implemented e-Services and e-Transactions, enhancing the reliability of the services, and implementing a one-stop-shop e-Government portal are the constructive suggestions given by the users.

This research critically reviewed the most extensively used theories and models related to the technology acceptance that are used to analyse e-Government adoption and intention to use. Using the findings of the study, the authorities and the providers of e-Services and e-Transactions can understand the most

significant factors that influence the adoption and UeGov from citizens' perspectives.

## REFERENCES

- [1] Ahmad, M. O., Markkula, J., & Oivo, M. (2012). Factors influencing the adoption of e-government services in Pakistan. *Proceedings of the European, Mediterranean and Middle Eastern Conference on Information Systems, EMCIS 2012, January*, 118–133.
- [2] AlAwadhi, S., & Morris, A. (2009). Factors influencing the adoption of e-government services. *Journal of Software*, 4(6), 584–590. <https://doi.org/10.4304/jsw.4.6.584-590>
- [3] Alomari, M., Woods, P., & Sandhu, K. (2012). Predictors for e-government adoption in Jordan: Deployment of an empirical evaluation based on a citizen-centric approach. *Information Technology and People*, 25(2), 207–234. <https://doi.org/10.1108/09593841211232712>
- [4] Carter, L. (2008). E-government diffusion: A comparison of adoption constructs. *Transforming Government: People, Process and Policy*, 2(3), 147–161. <https://doi.org/10.1108/17506160810902167>
- [5] Carter, L., & Bélanger, F. (2005). The utilization of e-government services: Citizen trust, innovation and acceptance factors. *Information Systems Journal*, 15(1), 5–25. <https://doi.org/10.1111/j.1365-2575.2005.00183.x>
- [6] Choejey, P., Fung, C. C., Wong, K. W., Murray, D., & Xie, H. (2015). Cybersecurity Practices for E-Government: An Assessment in Bhutan. *The 10th International Conference on E-Business (INCEB2015), November*, 1–8.
- [7] Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.5962/bhl.title.33621>
- [8] Department of Census and Statistics. (2012). Census of Population and Housing. *ensus Popul Hous. Sri Lanka. In Sensus of Population and Housing.*
- [9] European Commission. (2018). eGovernment Benchmark 2018. Securing eGovernment for all. In *European Commission.*
- [10] Gharaibeh, M. K., Arshad, M. R. M., & Gharaibeh, N. K. (2018). Using the UTAUT2 model to determine factors affecting adoption of mobile banking services: A qualitative approach. *International Journal of Interactive Mobile Technologies*, 12(4), 123–134. <https://doi.org/10.3991/ijim.v12i4.8525>
- [11] Government of Sri Lanka. (2015). *Government of Sri Lanka.*
- [12] Hamid, A. A., Razak, F. Z. A., Bakar, A. A., & Abdullah, W. S. W. (2016). The Effects of Perceived Usefulness and Perceived Ease of Use on Continuance Intention to Use E-Government. *Procedia Economics and Finance*, 35(October 2015), 644–649. [https://doi.org/10.1016/s2212-5671\(16\)00079-4](https://doi.org/10.1016/s2212-5671(16)00079-4)
- [13] Hujran, O. Al, Aloudat, A., & Altarawneh, I. (2013).

Factors influencing citizen adoption of e-government in developing countries: The case of Jordan. *International Journal of Technology and Human Interaction*, 9(2), 1–19. <https://doi.org/10.4018/jthi.2013040101>

[14] ICTA. (2018). *Countrywide-ICT-Survey-Presentation-made*.

[15] Irfan, M. I. M. (2017). The Role of E-Governance in Administrative Efficiency and Combating Corruption : Case of Sri Lanka. *Global Journal of Management and Business Research*, 17(2), 1–13.

[16] Karunasena, K., & Deng, H. (2009). A conceptual framework for evaluating the public value of e-government: A case study from Sri Lanka. *12th Australian Conference on Knowledge Management and Intelligent Decision Support, ACKMIDS 09 and 20th Australasian Conference on Information Systems, ACIS 2009*, 1002–1012.

[17] Kurfalı, M., Arifoğlu, A., Tokdemir, G., & Paçın, Y. (2017). Adoption of e-government services in Turkey. *Computers in Human Behavior*, 66, 168–178. <https://doi.org/10.1016/j.chb.2016.09.041>

[18] Lallmahomed, M. Z. I., Lallmahomed, N., & Lallmahomed, G. M. (2017). Factors influencing the adoption of e-Government services in Mauritius. *Telematics and Informatics*, 34(4), 57–72. <https://doi.org/10.1016/j.tele.2017.01.003>

[19] Liu, Y. Y. (2017). The Key Factors Influencing E-Government Acceptance: Case of Vietnam. *European Journal of Research in Social Sciences*, 5(4), 41–57.

[20] Marcoulides, K. M., & Raykov, T. (2019). Evaluation of Variance Inflation Factors in Regression Models Using Latent Variable Modeling Methods. *Educational and Psychological Measurement*, 79(5), 874–882. <https://doi.org/10.1177/0013164418817803>

[21] Mcknight, D. H., Choudhury, V., & Kacmar, C. (2002). *Developing and Validating Trust Measures for e-Commerce : An Integrative Typology. April 2014*.

[22] Mcknight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial Trust Formation in new Organizational relationships. *Academy of Management Review*, 23(3), 473–490.

[23] Ministry of Finance. (2018). *Budget Estimates 2018 Volume I Fiscal Year 2018 - Democratic Republic of Sri Lanka: Vol. I*.

[24] Miniwatts Marketing Group. (2018). *WorldWorld Internet Users Statistics and 2020 World Population Stats. (2018)*.

[25] Ndou, V. D. (2004). E - Government for Developing Countries: Opportunities and Challenges. *The Electronic Journal of Information Systems in Developing Countries*, 18(1), 1–24. <https://doi.org/10.1002/j.1681-4835.2004.tb00117.x>

[26] Patel, H., & Jacobson, D. (2008). Factors influencing citizen adoption of e-government: A review and critical assessment. *16th European Conference on*

*Information Systems, ECIS 2008, March*.

[27] Patrick, A., Marsh, S., & Briggs, P. (2005). Designing systems that people will trust. In L. Cranor (Ed.), *Security and Usability* (Issue January 2005, pp. 75–100). O'Reilly Media, Inc.

[28] Rainford, S. (2006). E-Sri Lanka: An integrated approach to e-government. *Regional Development Dialogue*, 27(2), 209–218.

[29] Ranaweera, H. M. B. P. (2016). Perspective of trust towards e-government initiatives in Sri Lanka. *SpringerPlus*, 5(1), 1–11. <https://doi.org/10.1186/s40064-015-1650-y>

[30] Rehman, M., Esichaikul, V., & Kamal, M. (2012). Factors influencing e-government adoption in Pakistan. *Transforming Government: People, Process and Policy*, 6(3), 258–282. <https://doi.org/10.1108/17506161211251263>

[31] Samsudeen, S. N., & Thelijjagoda, S. (2013). Evaluating the adoption of e-government in Sri Lanka: a citizen's perspective. *Research Gate*, 1(December 2018), 1–180. <https://doi.org/10.13140/RG.2.2.24652.67202>

[32] Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *MPR-Online*, 8(May), 23–74.

[33] Sharabati, A.-A. A., & Hawajreh, K. M. (2012). The Impact of Organizational Information on Knowledge Management Practices. *International Journal of Business and Social Science*, 03(24), 121–126. <https://doi.org/10.1108/jeim-09-2012-0063>

[34] Sri Lanka Police. (2018). *Performance Report 2018*.

[35] Taiwo, A. A., Mahmood, A. K., & Downe, A. G. (2012). User acceptance of eGovernment: Integrating risk and trust dimensions with UTAUT model. *2012 International Conference on Computer and Information Science, ICCIS 2012 - A Conference of World Engineering, Science and Technology Congress, ESTCON 2012 - Conference Proceedings, 1*, 109–113. <https://doi.org/10.1109/ICCISci.2012.6297222>

[36] Twizeyimana, J. D., & Andersson, A. (2019). The public value of E-Government – A literature review. *Government Information Quarterly*, 36(2), 167–178. <https://doi.org/10.1016/j.giq.2019.01.001>

[37] UN DESA. (2014). *United Nations E-Government Survey 2014*. Department of Economic and Social Affairs (UN DESA). <https://www.slideshare.net/undesa/united-nations-egovernment-survey-2014>

[38] United Nations. (2018). *E-Government Survey 2018*.

[39] Weerakkody, V., Dwivedi, Y. K., & Kurunananda, A. (2009). Implementing e-government in Sri Lanka: Lessons from the UK. *Information Technology for Development*, 15(3), 171–192. <https://doi.org/10.1002/itdj.20122>