

Development of Adoption Success Model Based on Electronic Regional Tax Returns

Dodik Ariyanto¹  | Ayu Aryista Dewi² *  | Henny Triyana Hasibuan³

¹Universitas Udayana, Faculty of Economics and Business, Denpasar, Indonesia

²Universitas Udayana, Faculty of Economics and Business, Denpasar, Indonesia

³Universitas Udayana, Faculty of Economics and Business, Denpasar, Indonesia

*Correspondence to: Ayu Aryista Dewi, Universitas Udayana, Faculty of Economics and Business, Denpasar, Indonesia.

E-mail: ayu_aryista@unud.ac.id

Abstract: The successful adoption of digital government services is critical. Even more so, in the era of the COVID-19 pandemic, e-government adoption needs attention from many sectors of society. During the pandemic, all government services have been increasingly provided through e-government. This paper examines the success of the electronic regional tax return (e-RTR), and the trust it has garnered as a significant factor in realizing a sustainable information society. The authors researched e-RTR users and data processing using partial least square regressions. The results demonstrated that trust in technology, information quality, information system quality, and service quality positively affected perceived usefulness and user satisfaction. However, trust in government itself has virtually no effect on perceived usefulness or user satisfaction. This indicates enhancing trust in the government should take precedence when the government uses e-government applications as a means of service to the community. Perceived usefulness and user satisfaction have a positive effect on net benefits, and net benefits positively affect the rise of a sustainable information society. This effect proves that a sustainable information society can be realized if the public perceives a net benefit when using e-government.

Keywords: electronic regional tax return, trust theory, sustainable information society.

Article info: Received 7 April 2021 | revised 28 November 2021 | accepted 2 December 2021

Recommended citation: Ariyanto, D., Dewi, A. A., & Hasibuan, H. T. (2021). Development of Adoption Success Model Based on Electronic Regional Tax Returns. *Indonesian Journal of Sustainability Accounting and Management*, 5(2), 339–353. <https://doi.org/10.28992/ijSAM.v5i2.397>

INTRODUCTION

The outbreak of Covid-19 in the world has implications to the fiscal health of local governments. Fiscal health refers to the government's ability to balance financial obligations with available revenue streams (McDonald, 2018; McDonald & Larson, 2020; Maher et al., 2020). Provisional evidence, showing many cities and counties face fiscal stress due to the virus (McDonald & Larson, 2020). Maher et al. (2020) proposes a RISE model which aimed at helping regional heads to navigate facing and passing crises and think ahead to the recovery of the Covid-19 pandemic.

The RISE model (Maher et al., 2020) consists of R-Resilience, I-Intension, S-Sustain, E-Endurance. The first stage (Resilience) emphasizes financial capacity and organizational's flexibility. The second phase (Intension)



focuses on reducing the financial impact. The third stage (Sustain/maintain) highlights operational and financial changes and stabilization. The fourth stage (Endurance) thinks about and reforms strategies and seizes new opportunities. One way that local governments can realize the RISE model and provide optimal service in the future for Covid-19 is to develop e-government.

E-government is defined as the use of internet-based IT to increase the responsibility and functions of government operations. The development of e-government aims to improve the capabilities of public services, governance, transparency, and accountability of public administration (Al Hujran et al., 2013; Chatfield & Al Hujran, 2009). E-government becomes an important tool for the government to provide services optimally so that the benefits of service can be felt by the community. The government must take the initiative so that government units as e-government providers and communities as the users to become sustainable information society (SIS).

Sustainable Information Society (SIS) is a new phase of information community development in which information and communication technology (ICT) become the main lever of sustainability (Ziemba, 2013; Zahid & Din, 2019; Ziemba, 2019). ICT can be approached from two points of view, namely ICT as an industry and ICT as a tool. As an industry, ICT has been an economic driver in the hardware, software, telecommunications, and consulting services sectors. ICT as a tool is used to transform and improve people's business, daily life, and public governance through e-government. Acceptance or adoption of e-government is a certain phase so that SIS can be achieved.

A new phase of SIS development in which ICT is key to sustainability (Fuchs, 2010; Fuchs, 2008; Hilty & Aebischer, 2015; Ziemba, 2013; Ziemba, 2019). Researchers have explored areas where the information community is sustainable. The sustainable development, and ICT are united (Curry & Donnellan, 2012; Seidel et al., 2013). To take into account, the development of ICT and the demands of improving public services, electronic systems are used as the embodiment of e-government. An example of e-government used by districts and cities is the Electronic Regional Tax Return (e-RTR).

E-RTR is implemented in Badung district based on Regional Regulation of Badung District (Perda No. 2 Year 2016) on The Regional Tax Online System. This rule was strengthened by regional regulation of Bali (Pergub No.2 Year 2019) on The Integration Data of Hotel and Restaurant Tax System of Districts and Cities Electronic in Bali Province. E-RTRS is a way of submitting local tax returns to the Regional Revenue Office conducted online and in real time. Online means that local taxpayers can report taxes over the internet anywhere and anytime, while the word realtime means that confirmation from the Regional Revenue Office can be obtained at a moment's time if the e-RTR has been filled in and sent electronically.

This study contributes to developing a successful model of e-government adoptions concerning a successful model of information systems adoption (DeLone & McLean, 2003) and trust. The successful adoption of information technology is only related to individual performance and organizational performance (DeLone & McLean, 1992) and net & benefits (DeLone & McLean, 2003), but not or not yet measured by a sustainable information society (Ziemba, 2013; Ziemba, 2019). The first contributions of the DeLone & McLean model in 1992 and 2003 did not include trust. According to belief theory (Teo et al., 2008; Chen et al., 2015), trust is an important variable and a trigger in the adoptions of e-government. Therefore, the research further develops the adoption of e-government, especially E-RTR, as a tool of realizing a sustainable information society. E-government adoption to be successful if local taxpayers have used E-RTR, which means that people have trust in e-government. Besides that, a sustainable information society can be used as the main means of

implementing the RISE model during and after the Covid-19 pandemic (Maher et al., 2020), which is a form of improving services to the community by using e-government.

METHODS

The population of this study is local taxpayers in Badung Regency who uses E-SPTPD to report local tax obligations. Local taxpayers in Badung Regency are managed by the Regional Revenue Service. The number of local taxpayers in Badung Regency is 4,981 local taxpayers, which can be seen in Table 1.

Table 1 Number of Local Taxpayers in Badung Regency

Tax Reporting	Hotel	Restaurant	Entertainment	Parking	Total
Manual	1,301	811	283	7	2,402
E-RTR	1,501	816	240	22	2,579
Total	2,802	1,627	523	29	4,981
% e-RTR	54%	50%	46%	76%	52%

Source: Badung District Revenue Office, 2019

Table 1 shows that hotel and restaurant taxpayers are the most regional taxpayers in Badung Regency. Besides, hotel and restaurant taxes (PHR) are the highest contributor to local revenue. On that basis, the sample of this study is 2,317 taxpayers. Determination sample size using the Slovin formula. Sampling was done randomly with a confidence level of 5% to obtain a sample of 330 taxpayers. The variables used in the study consisted of exogenous variables and endogenous variables. Data clearly presented in Table 2.

Table 2 Research Variables

Construct & Source	Question Items
Trust in government (TIG); Bélanger & Carter, 2008; McKnight & Chervany, 2001; Teo et al., 2008; Wang & Benbasat, 2008; Chen et al., 2015.	<ol style="list-style-type: none"> 1. Acts in citizen's best interest. 2. Truthful, honest, and genuine. 3. Competent and effective. 4. Reliable to meet their obligations.
Trust In Technology (TIT) ; Bélanger & Carter, 2008; Teo et al., 2008; Wang & Benbasat, 2008; Chen et al., 2015	<ol style="list-style-type: none"> 1. The Internet has enough safeguards. 2. Legal and technological structures adequately protect. 3. Encryption and other technological advances are safe for transactions. 4. Internet is now a robust and safe environment in which to transaction.
Information Quality (IQ) DeLone & McLean, 2003; Teo et al., 2008; Chen et al., 2015.	<ol style="list-style-type: none"> 1. Accurate. 2. Up to date. 3. Relevant. 4. Meet my needs. 5. Easy to read and understand. 6. Sufficient for the task at hand.

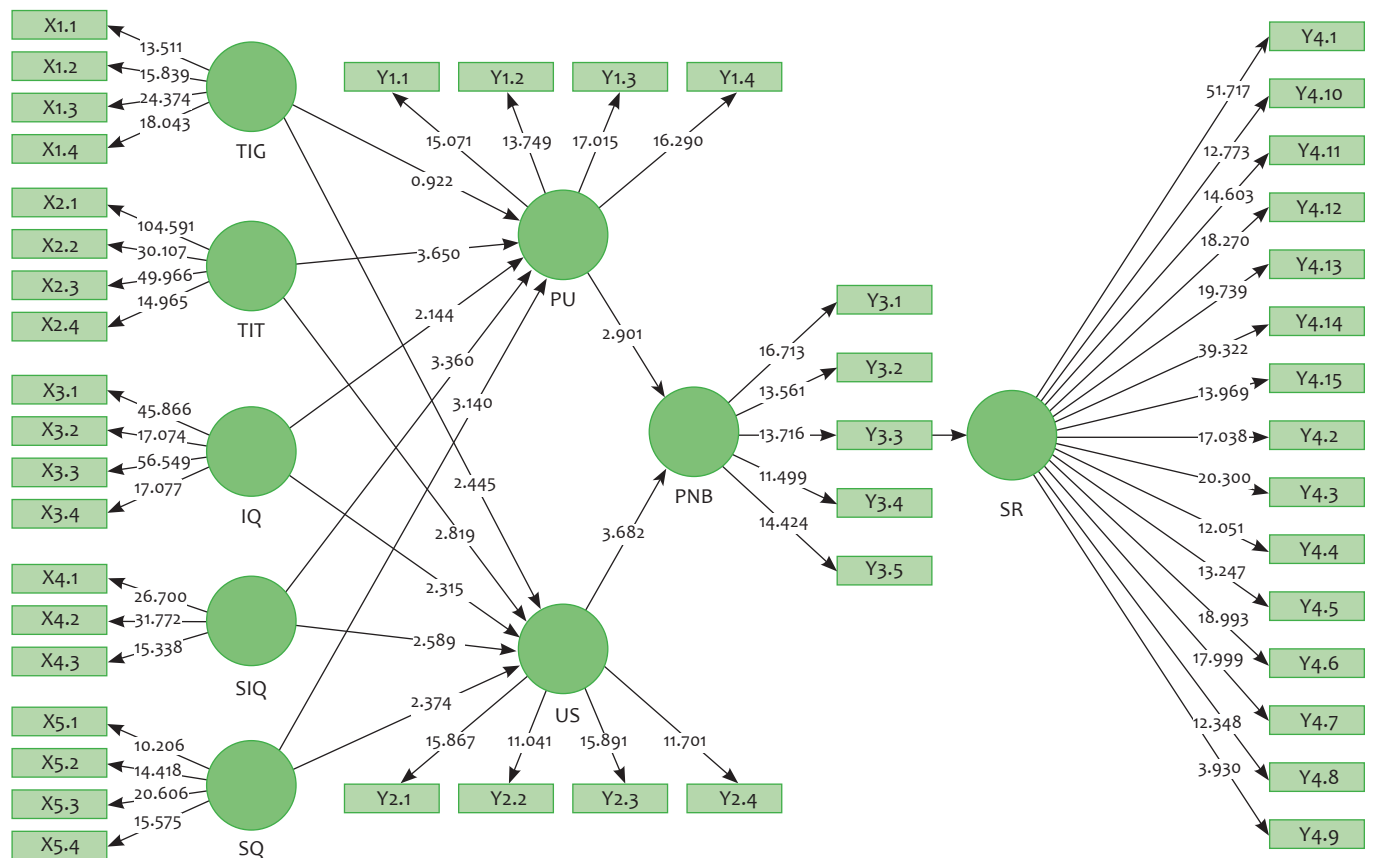
System Information Quality (SIQ) DeLone & McLean, 2003; Teo et al., 2008; Chen et al., 2015.	<ol style="list-style-type: none"> 1. Provides the necessary forms to be downloaded. 2. Provides the necessary transactions needed to be completed online. 3. Helpful instruction for performing my task. 4. Easy to use. 5. Well-organized. 6. Easy to navigate and finish my tax-filing. 7. Can be accessed immediately. 8. Enables me to accomplish task quicker.
Service Quality (SQ) DeLone & McLean, 2003; Teo et al., 2008; Chen et al., 2015.	<ol style="list-style-type: none"> 1. Responds quickly to my needs. 2. System is dependable. 3. System can respond to my needs. 4. System understands my needs.
Perceived Usefulness (PU) DeLone & McLean, 2003; Chen et al., 2015	<ol style="list-style-type: none"> 1. Improve my performance. 2. Improve my productivity. 3. Enhance my effectiveness. 4. System useful.
User Satisfaction (US) DeLone & McLean, 2003; Teo et al., 2008; Chen et al., 2015	<ol style="list-style-type: none"> 1. Adequately meets my needs of interaction. 2. Efficient in fulfilling my needs of interaction. 3. Effective in fulfilling my needs. 4. Satisfied with system.
Perceived Net Benefit (PNB); Wang & Liao, 2008; Chen et al., 2015	<ol style="list-style-type: none"> 1. Time Saving. 2. Cost Saving. 3. Responds and takes my opinion or complaints into consideration. 4. Enables easy and comfortable communication. 5. More beneficial to use
Sustainability Information Society (SR) Ziemba, 2017; Ziemba, 2019, de Leeuw et al., 2015).	<ol style="list-style-type: none"> 1. Ecological sustainability (2 item question) 2. Social and cultural sustainability (6 item question) 3. Economic sustainability (5 item question) 4. Political sustainability (2 item question)

Source: Processed Data (2020)

Based on Chin (1998), exogenous variables in this study are trust in government, trust in technology, information quality, system information quality, service quality, perceived usefulness, user satisfaction, perceived and net benefit. Meanwhile, the endogenous variable of this study is the Sustainability Information Society (SR). Sustainability Information Society ICT means ICT can trigger ecological, socio-cultural, economic, and political sustainability after adopting ICT (Ziemba, 2019).

This study used instruments in the form of questionnaires distributed to 150 respondents as local taxpayers using E-RTRS. The question or statement of this research questionnaire is adopted from previous research (Table 2). The respondent's answer was scored using a five-point likert scale, i.e. a value of 1 = strongly disagree (SD), 2 = disagree (D), 3 = neutral (N), 4 = agree (A), 5 = strongly agree (SA).

Hypothesis testing using PLS (Partial Least Square). Analysis using PLS is conducted in three stages of testing, namely outer model analysis, inner model analysis and hypothesis testing. Figure 1 is a diagram of the research path.



Source: Processed Data 2020

Figure 1 Inter-Variable Path Diagram

RESULTS AND DISCUSSION

The number of questionnaires distributed is 330 copies with a respondents' rate of return (response rate) of 32% and a usable response rate of 30% (Table 3).

Table 3 Return Questionnaire

Description	Number
Disseminated questionnaires	330
Questionnaires that do not return	223
Returning questionnaire	107
Incomplete questionnaire	7
Returning and usable questionnaires	100
Response rate	$107/330 \times 100\% = 32\%$
Usable response rate	$100/330 \times 100\% = 30\%$

Source: Processed Data, 2020

Data characteristics of respondents can be based on the length of use of e-RTR. Respondents who had utilized e-RTR service for < 2 years as many as 15 hotels (15%), while > 2 years as many as 85 hotels (85%). This shows that respondents are aware well of the usefulness of the local tax online system.

Outer models are performed to assess the validity and reliability of the model. Research indicators are evaluated through convergent validity, discriminant, composite reliability and cronbach alpha (Chin, 1998). The rule of thumb is usually used for loading factor values between 0.6-0.7. The AVE value must be greater than 0.5. Analyst results showed an AVE value of more than 0.5. This means that the indicators used in this study are valid or have met convergent validity.

Test the validity of the discriminant by looking at the cross-loading value for each variable. Cross Loading value must > 0.70 (Chin, 1998). When viewed from the cross-loading value, it can be noted that each indicator's cross loading value is more than 0.7. Therefore, the indicators used in the research are valid.

Construct validity and reliability tests are carried out by looking at composite reliability and cronbach alpha. The rule of thumb for composite reliability and cronbach alpha must be greater than 0.7 (Chin, 1998). When viewed from composite reliability and cronbach alpha values, it can be noted that each indicator has a value of more than 0.7. Therefore, the indicators used in the research are valid and reliabel.

Inner models are evaluated using R-square (R^2) for each endogenous latent variable as the predictive strength of the structural model (Chin, 1998). Table 4 is an R^2 yield of 0.834; 0.845; 0.715; and 0.204. This value indicates that the model is "good" and "weak" (Chin, 1998).

Table 4 R^2 Determination Coefficient

Variable	R Square	R Square (%)
Perceived Usefulness (PU)	0.834	83.4%
User Satisfaction (US)	0.845	84.5%
Perceived Nett Benefit (PNB)	0.715	71.5%
Sustainability Information Society (SR)	0.204	20.4%

R-square (R^2) results percieved usefulness and user satisfaction of 0.834 and 0.845. This means percieved usefulness and user satisfaction is influenced by trust in government, trust in technology, information quality, system information quality, service quality with R-square values of 0.834 and 0.845. It can be interpreted that the variability of trusts in government, trust in technology, information quality, system quality, service quality can affect percieved usefulness and user satisfaction by 83.4% and 84.5% and can be categorized as good models.

Model R square (R^2) perceived net benefit of 0.715. This means perceived nett benefit in variable perceived usefulness and user satisfaction with an R-square value of 0.715. The interpretation of this is that percieved usefulness and user satisfaction variability can affect the perceived net benefit by 71.5% and indicate that the model is good.

Model R square (R^2) sustainability reporting of 0.204. This means sustainability reporting in variable perceived net benefit with an R-square value of 0.204. The interpretation of this is that the perceived net benefit variable can affect sustainability reporting by 20.4% and indicates a weak model.

Table 5 presents the mean and standard deviation for all the nine constructs and their individual items. The high overall as well as individual items' means for most of the constructs indicate that respondents react favorably to

the all the measures related to information system success model and behavioral intention to realize sustainable information society. The value for overall mean for Trust in Government as '3.947' and Trust in Technology as '4.212' on the Likert scale [1–5] indicates that respondents feel comfortable using the e-RTR system.

Tabel 5 Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
TIG	100	3.000	5.000	3.947	0.5238
TIT	100	3.000	5.000	4.212	0.666
IQ	100	3.000	5.000	4.215	0.692
SIQ	100	3.000	5.000	4.013	0.507
SQ	100	3.000	5.000	3.930	0.387
PU	100	3.000	5.000	4.502	0.451
US	100	4.000	5.000	4.555	0.418
PNB	100	4.000	5.000	4.656	0.389
SR	100	3.000	5.000	4.213	0.529

Sources: Processed Data 2020

Hypothetical testing is performed by looking at the parameter coefficient value and the p value significance value to find out the influence of each variable through the bootstrapping procedure. The results of the analysis are presented in Table 6.

Table 6 Hypothetical Test Results (Test t)

Variable	Coefficient	t statistic	p value	Description
TIG → PU	-0.136	0.922	0.179	H1; not supported
TIG → US	0.047	0.445	0.328	H2; not supported
TIT → PU	0.325	3.650	0.000	H3; supported
TIT → US	0.276	2.819	0.000	H4; supported
IQ → PU	0.228	2.144	0.017	H5; supported
IQ → US	0.265	2.315	0.011	H6; supported
SIQ → PU	0.321	3.360	0.001	H7; supported
SIQ → US	0.269	2.587	0.006	H8; supported
SQ → PU	0.354	3.140	0.001	H9; supported
SQ → US	0.238	2.374	0.010	H10; supported
PU → PNB	0.371	2.901	0.002	H11; supported
US → PNB	0.504	3.682	0.003	H12; supported
PNB → SR	0.451	6.341	0.000	H13; supported

Source: Processed Data 2020

The influence of trust in government (TIG) on perceived usefulness (PU) and user satisfaction (US). The results of the Study Table 6 and Figure 2 prove that trust in government has no effect on perceived usefulness and user satisfaction. Trust in government is a belief that influences the desire to engage and use e-government (Warkentin et al., 2002; Chen et al., 2015; Ma & Christensen, 2019) while according to (Deakins & Dillon, 2002) trust in e-government with regard to security guarantees and privacy provided by the government to the public as users.

Building trust is an evolutionary process (Teo et al., 2008; Warkentin et al., 2002). Trust in government can change quickly depending on how the government works. Some studies explore trust in the context of e-government (Anggreni et al., 2020; Chen et al., 2015; Beldad et al., 2010; Santa et al., 2019). Some studies consider trust in government significant perceived usefulness and user satisfaction in the context of e-government (Chen et al., 2015; Bélanger & Carter, 2008; Ma & Christensen, 2019; Teo et al., 2008) depends on the government's conditions when adopting e-government. While according to (Warkentin et al., 2002) trust in e-government is the belief or expectation of a citizen that e-government services are in accordance with his needs and desires. Citizens have no control over the performance of e-government services because the use of e-government by the public is mandatory.

A person is reluctant to do something that does not provide positive benefits to him, as does online tax reporting (e-RTR). The answer to paying taxes online (e-RTR) does not guarantee the benefit and satisfaction of the taxpayer. Moreover, e-RTR in Badung Regency was only operationalized in 2016 by being determined through the Regional Regulation of Badung District (Perda No. 2 Year 2016) about the Regional Tax Online System. This rule was strengthened by regional regulation of Bali (Pergub No.2 Year 2019) on The Integration of Hotel Tax System and Data and Restaurant Tax of Districts and Cities Electronic in Bali Province.

Balinese people do not yet have confidence in the local government especially related to the e-RTR web. The public as taxpayers also compares e-RTR web services with web pajak.go.id which has been adopted by the central government for the process of calculation, withholding, and taking into account and reporting of central taxes such as electronic tax return value-added tax (VAT), personal income tax, and corporate income tax. Web e-RTR has not been able to provide a wider, better, more detailed and clearer service compared to the electronic tax return (e-TR) system used by the central government.

Trust in local government by local taxpayers can be used as a basis to support the perception usefulness and user satisfaction of e-RTR. Thus, the higher trust in local government agencies, in this case the local revenue office to report taxes using e-RTR will have a positive impact on the user satisfaction and perception usefulness.

Influence of trust in technology (TIT) on perceived usefulness (PU) and user satisfaction (US). The results prove that trust in technology has a positive effect on perceptions of usability and user satisfaction. This indicates that the higher the trust in technology the perceived usefulness and user satisfaction the higher.

Based on the descriptive statistic value of trust in technology variables can be informed that the average value of e-RTR has sufficient protection to make me feel comfortable using to transact private business with government agencies (4.360), I feel confident that the legal structure and technology protect me from problems in e-RTR (4.270), I feel confident that other technological advances in e-RTR make me safe to transact (4.250), as a general e-RTR is now a strong and safe environment for business transactions (4.290).

Trust in technology has become a major predictor of perceived usefulness and user satisfaction. The main factors of trust in technology are security issues (Bélanger & Carter, 2008) and privacy (Gefen et al., 2008) the use of e-government (de Leeuw et al., 2015). The appreciation of the value of trust in technology is very important (Teo et al., 2008). In this case, trust in technology is essentially a belief in the tools that will be used

to provide e-RTR services. Trust in technology is essential to encourage citizens to trust the e-RTR website. The higher public confidence in technology (e-RTR) will increase perceived usefulness and user satisfaction when using e-RTR.

The influence of Information Quality on Perceived Usefulness and User Satisfaction. The results prove that the quality of information has a positive effect on perceived usefulness and user satisfaction. This indicates that the higher the quality of information the perceived usefulness and user satisfaction the higher when using E-RTR.

Based on the average value of descriptive statistics can be informed that the information indicator provided by the E-RTR local tax filing system is accurate (4.34), the information provided by the E-RTR local tax filing system is the latest (4.290), the information provided by the E-RTR regional tax filing system is relevant (4.240), the information provided by daerah E-RTR tax filing system is easy to read and understand (4.290).

The quality of information is defined as the extent to which the information provided best suits the needs of the user (Anggreni et al., 2020). The quality of information is based on how accurate, relevant, timely, and complements the information to meet perceived usefulness and user satisfaction (Prasetyo et al., 2021; DeLone & McLean, 2003). Searching for information through the e-government website is the most common reason for its use (Schaupp et al., 2010), because citizens cannot physically observe transactions (Beldad et al., 2011; Beldad et al., 2010). The better the content, the better the perception of the website (Aladwani, 2013; Santa et al., 2019). Previous studies have agreed on the definition of the quality of this information, especially about how the information provided can meet their needs. Higher information quality improves perceived usefulness and user satisfaction (Borek et al., 2014). This implies that the quality of information significantly affects perceived usefulness and user satisfaction when using e-RTR that is an application by local governments.

Effect of system information quality on perceived usefulness and user satisfaction. The results of the study prove the quality of the information system positively affects perceived usefulness and user satisfaction. This indicates that the higher the quality of the system the higher perceived usefulness and user satisfaction of the community using e-RTR.

Based on the average value of descriptive statistics known indicators of quality of the regional tax filing information system E-RTR provides useful instructions for completing tax filing (4.100), e-RTR regional tax filing system is easy to use (4.040), e-RTR regional tax filing system allows me to complete tax reporting faster (4.030).

The information systems quality is defined as the level at which system functions can address the needs of users or customers with ease and minimize usage problems (DeLone & McLean, 2003; Floropoulos et al., 2010; Santa et al., 2019; Weerakkody et al., 2013). Included in these functions are consistency of use, ease of use, response rate, and program management that can better address the needs of users or customers. The high quality of the system is a desirable characteristic of the information system as it is also an important mechanism that allows the government to provide its services properly (Chen et al., 2019; Cegarra-Navarro et al., 2012).

The effect of System Quality on Perceived Usefulness and User Satisfaction. The results prove that the quality of service has a positive effect on the perceived benefits. This indicates that the higher the quality of service the higher perceived usefulness and user satisfaction of the e-RTR user community.

Based on the average value on the known descriptive statistics service indicators provided by the E-RTR regional tax filing system responds to my needs quickly (3.950), the services provided by the E-RTR regional tax filing system are reliable (4.950), the services provided by the local tax filing system E-RTR have the ability to respond to my needs (3.950), the services provided by the regional tax filing system E-RTR understand my needs (3.920).

The e-government system exists to provide some form of service to its citizens, so it needs to evaluate the services quality. Service quality is defined as the extent to which the best service suits the customer's needs especially the support of the system manager entity (DeLone & McLean, 2003; Kofahe et al., 2019), in this context the steward of the local revenue office as a tax bureau (Floropoulos et al., 2010; Ariyanto et al., 2020). In each service, the user expects a good level of service quality. Good service quality can be measured by reliability, responsiveness, assurance, and empathy aimed at improving the management of citizen relations with the government (Hsieh et al., 2013; Intrada et al., 2019). Better service quality improves perception of usability and satisfaction, and meets user performance and effort expectations (Mustafa et al., 2020; Weerakkody et al., 2013; Ariyanto et al., 2020).

Influence perceived usefulness on net benefit. The results prove that the perceived benefits have a positive effect on the perceived net benefit. This indicates that the higher the perceived benefit the higher the net benefit felt by the community of e-RTR users.

Based on the average value on descriptive statistics it is known that indicators using the e-sptdpd local tax filing system will improve saa performance in preparing local tax reporting (4.450), using the E-RTR regional tax filing system will increase my productivity in reporting local taxes (4.710), overall, I feel the regional tax filing system e-RTR useful (4.600).

Users should consider the system to be useful before net benefits can be felt (DeLone & McLean, 2003). If the system has been useful in performing the task it should, it will benefit the user by increasing work productivity. The better the perception of usability, the easier it is for citizens to appreciate and justify the overall value in the online system (Chen et al., 2015; Rowley, 2011; Abdulkareem & Ramli, 2021) makes it easier to see the benefits of such an investment.

The effect of user satisfaction on net benefit. The results prove that user satisfaction has a positive effect on perceived net benefits. This indicates that the higher the user satisfaction the higher the net benefit is felt.

Based on the average known value of indicators I feel that the local tax filing system E-RTR sufficiently meets my interaction with government agencies (4.460), I feel that the E-RTR regional tax filing system is efficient in meeting the needs of my interactions with government agencies (4.670), I feel that the E-RTR regional tax filing system is effective in meeting the needs of my interactions with government agencies (4.710), and overall I am satisfied with the e-RTR local tax filing system (4.600).

The success of e-government also depends on user satisfaction with the system (Chen et al., 2015; Wang & Liao, 2008). User satisfaction is a subjective evaluation of the various experiences assessed and created over time (DeLone & McLean, 1992; Arshad & Khurram, 2020). In this case, satisfaction with the e-government website measures the psychological or affective state of citizens due to cognitive assessment of their experience with the E-RTR website.

Moreover, little is known about how and why citizens connect with their governments over the internet. It's important to acknowledge who's moving to connect with the government, why they're connected to the government, so that user satisfaction can be generated. To satisfy citizens, the needs and values of e-government must be prioritized when deciding on the design and functionality of the system (Reddick & Roy, 2013), the design and development of a distinctive website (Lee & Koubek, 2010; Chen et al., 2015; Arshad & Khurram, 2020).

Certain benefits will occur if there is a positive experience when using so that leads to user satisfaction (Wang & Liao, 2008; Carter et al., 2022). The positive or negative benefits of system stakeholders will affect continuous use and user satisfaction (DeLone & McLean, 2003; Santa et al., 2019; Prasetyo et al., 2021).

The results of the study prove that the net benefit is perceived to have a positive effect on sustainability information society or sustainability reporting. This indicates that the higher the perceived net benefit by the user the higher the sustainability information society.

Based on the average known value of sustainability information society indicators that the economic sustainability indicator that has 5 question items has the highest average score of (4.250), Social and cultural sustainability indicators that have 6 question items have an average score of (4.240), political sustainability indicators consisting of 2 question items have an average score of (4.150), and the latter ecological sustainability indicator consisting of 2 question items has an average score of (4.130). Question items that have the highest score of each indicator namely the use of E-RTR can develop and improve learning and self-employment environment, the use of E-RTR facilitates services to the community, the use of E-RTR increases participation, consultation, and decision-making and public administration and the use of E-RTR reduces resource/energy consumption and improves environmental protection.

Pro-environmental behavior (PEB) is a concern that has practical implications for creating a sustainable future (Gifford & Nilsson, 2014; de Leeuw et al., 2015). The adoption of technology can be considered a sustainability problem, but it can also be considered a solution to sustainability problems. The attitude and benefits felt for the utilization of technology especially E-RTR have an impact on sustainability so that the sustainable information society is realized (de Leeuw et al., 2015; Ziemba, 2019). In the context of this study, the local tax wajib felt the benefits of reporting local taxes online so that the sustainable information society (SIS) materialized.

The results of this study have many theoretical and practical implications. It can be used for local government in Badung Regency to provide optimal service in the time and after the Covid-19 pandemic, so that they can improve services to the community by using e-government. There is a theoretical implication for this study results from the supporting evidence of the trust theory, DeLone and McLean model and the sustainable information society in explaining the success of e-government adoption with a successful model of information system. The present findings that trust in government and trust in technology should take precedence when e-government (E-RTR) is a means of service.

CONCLUSION

Based on the analysis and discussions in the previous chapter, it can be concluded that trust in government has no effect on perceived usefulness and user satisfaction. This indicates that trust in government is not a predictor of perceived usefulness and user satisfaction. Trust in technology has positive effects on perceived usefulness and users' satisfaction. This indicates that the higher Trust in Technology means the the higher perceived usefulness and users' satisfaction. Trust in government and trust in technology should take precedence when e-government is a means of service. Trust in e-government should be built on the perception that using e-government is beneficial for e-government users. The information quality, the information system of quality, and the service quality have positive effects on perceived usefulness and user satisfaction. This indicates that the higher the information quality, means the higher perceived usefulness and users' satisfaction. System Information quality, system information quality, service quality have positive effects on perceived usefulness and user satisfaction. When designing and improving systems, issues regarding information quality, system information quality, and service quality should be a priority. Especially when associated with e-tax services and e-filing ole local government, as there is a comparison of e-tax and e-filing operated by the central government. Perceived usefulness and

user satisfaction have a positive effect on net benefit. This indicates that the higher perceived usefulness and User satisfaction the higher the net benefit. Net benefit has a positive effect on sustainability reporting. This indicates that the higher the Net benefit the higher the sustainability reporting. Previous experience, perceived usefulness and user satisfaction are important considerations. This is because the success of e-government depends on continuous use and perceived gains. This will encourage sustainable e-government use and will be created by the Sustainable Information Society, especially the utilization of e-tax and e-filing. This study has some limitations. The first sustainable information society construct is a new construct that needs to be explored further. This can be seen from the inner value of the model which is relatively weak. Generalization of findings to regions and other IT utilization requires further research. Research subjects are limited to the public as e-government users and do not include government employees as e-government users to achieve sustainable information society.

ORCID

Dodik Ariyanto  <https://orcid.org/0000-0002-2022-850X>

Ayu Aryista Dewi  <https://orcid.org/0000-0002-1299-3922>

REFERENCES

- Abdulkareem, A. K., & Ramli, R. M. (2021). Evaluating the Performance of e-government: Does Citizens' Access to ICT Matter? *Pertanika Journal of Social Sciences and Humanities*, 29(3), 1507–1534. <https://doi.org/10.47836/pjssh.29.3.03>
- Al Hujran, O., 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>
- Aladwani, A. M. (2013). A Cross-cultural Comparison of Kuwaiti and British Citizens' Views of e-Government Interface Quality. *Government Information Quarterly*, 30(1), 74–86. <https://doi.org/10.1016/j.giq.2012.08.003>
- Anggreni, N. M. M., Ariyanto, D., Suprasto, B. H., & Dwirandra, A. (2020). Successful Adoption of the Village's Financial System. *Accounting*, 6(6), 1129–1138. <https://doi.org/10.5267/j.ac.2020.7.005>
- Ariyanto, D., Andayani, G. W., & Putri, I. G. A. P. (2020). Influence of Justice, Culture and Love of Money Towards Ethical Perception on Tax Evasion with Gender as Moderating Variable. *Journal of Money Laundering Control*, 23(1), 245–266. <https://doi.org/10.1108/JMLC-06-2019-0047>
- Arshad, S. & Khurram, S. (2020). Can Government's Presence on Social Media Stimulate Citizens' Online Political Participation? Investigating the Influence of Transparency, Trust, and Responsiveness. *Government Information Quarterly*, 37(3), 101486. <https://doi.org/10.1016/j.giq.2020.101486>
- Bélanger, F. & Carter, L. (2008). Trust and Risk in e-Government Adoption. *Journal of Strategic Information Systems*, 17(2), 165–176. <https://doi.org/10.1016/j.jsis.2007.12.002>
- Beldad, A., De Jong, M., & Steehouder, M. (2010). How Shall I Trust the Faceless and the Intangible? A Literature Review on the Antecedents of Online Trust. *Computers in Human Behavior*, 26(5), 857–869. <https://doi.org/10.1016/j.chb.2010.03.013>
- Beldad, A., De Jong, M., & Steehouder, M. (2011). I trust not therefore it must be risky: Determinants of the perceived risks of disclosing personal data for e-government transactions. *Computers in Human Behavior*, 27(6), 2233–2242. <https://doi.org/10.1016/j.chb.2011.07.002>

- Borek, A., Parlikad, A. K., Woodall, P., & Tomasella, M. (2014). A Risk Based Model for Quantifying the Impact of Information Quality. *Computers in Industry*, 65(2), 354–366. <https://doi.org/10.1016/j.compind.2013.12.004>
- Carter, L., Yoon, V., & Liu, D. (2022). Analyzing e-government Design Science Artifacts: A Systematic Literature Review. *International Journal of Information Management*, 62(October 2021), 102430. <https://doi.org/10.1016/j.ijinfomgt.2021.102430>
- Cegarra-Navarro, J. G., Pachón, J. R. C., & Cegarra, J. L. M. (2012). E-government and Citizen's Engagement with Local Affairs Through e-Websites: The Case of Spanish Municipalities. *International Journal of Information Management*, 32(5), 469–478. <https://doi.org/10.1016/j.ijinfomgt.2012.02.008>
- Chatfield, A. T. & Al Hujran, O. (2009). A Cross-Country Comparative Analysis of E-Government Service Delivery among Arab Countries. *Information Technology for Development*, 15(1), 43–51. <https://doi.org/10.1002/itdj>
- Chen, J., Jubilado, R. J. M., Capistrano, E. P. S., & Yen, D. C. (2015). Factors affecting online tax filing - An application of the IS Success Model and trust theory. *Computers in Human Behavior*, 43, 251–262. <https://doi.org/10.1016/j.chb.2014.11.017>
- Chen, Y. C., Hu, L. T., Tseng, K. C., Juang, W. J., & Chang, C. K. (2019). Cross-Boundary e-Government Systems: Determinants of Performance. *Government Information Quarterly*, 36(3), 449–459. <https://doi.org/10.1016/j.giq.2019.02.001>
- Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modelling. In *Modern Methods for Business Research*, 295, 295–336.
- Curry, E. & Donnellan, B. (2012). Understanding the Maturity of Sustainable ICT. *Green Business Process Management: Towards the Sustainable Enterprise*, Springer Berlin, 203–216. https://doi.org/10.1007/978-3-642-27488-6_12
- de Leeuw, A., Valois, P., Ajzen, I., & Schmidt, P. (2015). Using the Theory of Planned Behavior to Identify Key Beliefs Underlying pro-Environmental Behavior in High-School Students: Implications for Educational Interventions. *Journal of Environmental Psychology*, 42(June), 128–138. <https://doi.org/10.1016/j.jenvp.2015.03.005>
- Deakins, E. & Dillon, S. M. (2002). E-government in New Zealand: The local authority perspective. *International Journal of Public Sector Management*, 15(5), 375–398. <https://doi.org/10.1108/09513550210435728>
- DeLone, W. H. & McLean, E. R. (1992). Information Systems Success The Quest for the dependent variabel. *Infomation System Research*, 3(1), 60–95.
- DeLone, W. H. & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9–30. <https://doi.org/10.1080/07421222.2003.11045748>
- Floropoulos, J., Spathis, C., Halvatzis, D., & Tsipouridou, M. (2010). Measuring the Success of the Greek Taxation Information System. *International Journal of Information Management*, 30(1), 47–56. <https://doi.org/10.1016/j.ijinfomgt.2009.03.013>
- Fuchs, C. (2008). The Implications of New Information and Communication Technologies for Sustainability. *Environment, Development and Sustainability*, 10(3), 291–309. <https://doi.org/10.1007/s10668-006-9065-0>
- Fuchs, C. (2010). Theoretical Foundations of Defining the Participatory, Co-operative, Sustainable Information Society. *Information Communication and Society*, 13(1), 23–47. <https://doi.org/10.1080/13691180902801585>
- Gefen, D., Benbasat, I., & Pavlou, P. A. (2008). A Research Agenda For Trust in Online Environments. *Journal of Management Information Systems*, 24(4), 275–286. <https://doi.org/10.2753/MIS0742-1222240411>
- Gifford, R. & Nilsson, A. (2014). Personal and Social Factors that Influence pro-Environmental Concern and Behaviour: A Review. *International Journal of Psychology*, 49(3), 141–157. <https://doi.org/10.1002/ijop.12034>

- Hilty, L. M. & Aebischer, B. (2015). *ICT for Sustainability: An Emerging Research Field. Advances in Intelligent Systems and Computing* (Vol. 310). https://doi.org/10.1007/978-3-319-09228-7_1
- Hsieh, P. H., Huang, C. S., & Yen, D. C. (2013). Assessing Web Services of Emerging Economies in an Eastern Country - Taiwan's e-Government. *Government Information Quarterly*, 30(3), 267–276. <https://doi.org/10.1016/j.giq.2013.02.003>
- Intrada, B., Wahyudi, T., & Aswardi. (2019). The Influence of Personal Taxpayer Attitudes Related to the Implementation of Administrative Sanctions, Account Representative Services and Ability to Pay Tax Amnesty Ransom to the Compliance of Individual Taxpayers in Palembang City, Indonesia. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, 5(2), 38–56. <https://doi.org/10.32602/jafas.2019.19>
- Kofahe, M. K., Hassan, H., & Mohamad, R. (2019). Factors Affecting Successful Implementation of Government Financial Management Information System (GFMIS) in Jordan Public Sector: a Proposed Framework. *International Journal of Accounting, Finance and Business (IJAFB)*, 4(20), 32–44.
- Lee, S. & Koubek, R. J. (2010). The Effects of Usability and Web Design Attributes on User Preference for e-commerce Web Sites. *Computers in Industry*, 61(4), 329–341. <https://doi.org/10.1016/j.compind.2009.12.004>
- Ma, L. & Christensen, T. (2019). Government Trust, Social Trust, and Citizens' Risk Concerns: Evidence from Crisis Management in China. *Public Performance and Management Review*, 42(2), 383–404. <https://doi.org/10.1080/15309576.2018.1464478>
- Maher, C. S., Hoang, T., & Hindery, A. (2020). Fiscal Responses to COVID-19: Evidence from Local Governments and Nonprofits. *Public Administration Review*, 80(4), 644–650. <https://doi.org/10.1111/puar.13238>
- McDonald, B. D. (2018). Local Governance and the Issue of Fiscal Health. *State and Local Government Review*, 50(1), 46–55. <https://doi.org/10.1177/0160323x18765919>
- McDonald, B. D. & Larson, S. (2020). Implications of the Coronavirus on Sales Tax Revenue and Local Government Fiscal Health. *Journal of Public and Nonprofit Affairs*, 6(3), 377–400. <https://doi.org/10.2139/ssrn.3571827>
- McKnight, D. H. & Chervany, N. L. (2001). What Trust Means in e-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology. *International Journal of Electronic Commerce*, 6(2), 35–59. <https://doi.org/10.1080/10864415.2001.11044235>
- Mustafa, S. Z., Kar, A. K., & Janssen, M. F. W. H. A. (2020). Understanding the Impact of Digital Service Failure on Users: Integrating Tan's Failure and DeLone and McLean's Success Model. *International Journal of Information Management*, 53(April 2019), 102119. <https://doi.org/10.1016/j.ijinfomgt.2020.102119>
- Perda No. 2 Tahun 2016. Sistem Online Pajak Daerah, Kabupaten Badung (2016).
- Pergub No. 2 Tahun 2019. Integrasi Sistem dan Data Pajak Hotel dan Pajak Restoran Kabupaten dan Kota Secara Elektronik di Provinsi Bali, Gubernur Bali (2019). <https://doi.org/10.1017/CBO9781107415324.004>
- Prasetyo, Y. T., Ong, A. K. S., Concepcion, G. K. F., Navata, F. M. B., Robles, R. A. V., Tomagos, I. J. T., ... Redi, A. A. N. P. (2021). Determining Factors Affecting Acceptance of e-learning Platforms During the Covid-19 Pandemic: Integrating Extended Technology Acceptance Model and DeLone & Mclean is Success Model. *Sustainability (Switzerland)*, 13(15), 1–16. <https://doi.org/10.3390/su13158365>
- Reddick, C. G., & Roy, J. (2013). Business Perceptions and Satisfaction with e-Government: Findings From a Canadian Survey. *Government Information Quarterly*, 30(1), 1–9. <https://doi.org/10.1016/j.giq.2012.06.009>
- Rowley, J. (2011). E-Government stakeholders - Who are they and what do they want? *International Journal of Information Management*, 31(1), 53–62. <https://doi.org/10.1016/j.ijinfomgt.2010.05.005>
- Santa, R., MacDonald, J. B., & Ferrer, M. (2019). The Role of Trust in e-Government Effectiveness, Operational Effectiveness and User Satisfaction: Lessons From Saudi Arabia in e-G2B. *Government Information Quarterly*, 36(1), 39–50. <https://doi.org/10.1016/j.giq.2018.10.007>

- Schaupp, L. C., Carter, L., & McBride, M. E. (2010). E-file adoption: A study of U.S. taxpayers' intentions. *Computers in Human Behavior*, 26(4), 636-644. <https://doi.org/10.1016/j.chb.2009.12.017>
- Seidel, S., Recker, J., & Vom Brocke, J. (2013). Sensemaking and sustainable Practicing: Functional Affordances of Information Systems in Green Transformations. *MIS Quarterly: Management Information Systems*, 37(4), 1275-1299. <https://doi.org/10.25300/MISQ/2013/37.4.13>
- Teo, T. S. H., Srivastava, S. C., & Jiang, L. (2008). Trust and Electronic Government Success: An Empirical Study. *Journal of Management Information Systems*, 25(3), 99-132. <https://doi.org/10.2753/MIS0742-1222250303>
- Wang, W. & Benbasat, I. (2008). Attributions of Trust in Decision Support Technologies: A Study of Recommendation Agents for e-Commerce. *Journal of Management Information Systems*, 24(4), 249-273. <https://doi.org/10.2753/MIS0742-1222240410>
- Wang, Y. S. & Liao, Y. W. (2008). Assessing e-Government Systems Success: A Validation of the DeLone and McLean Model of Information Systems Success. *Government Information Quarterly*, 25(4), 717-733. <https://doi.org/10.1016/j.giq.2007.06.002>
- Warkentin, M., Gefen, D., Pavlou, P. A., & Rose, G. M. (2002). Encouraging Citizen Adoption of e-Government by Building Trust. *Electronic Markets*, 12(3), 157-162. <https://doi.org/10.1080/101967802320245929>
- Weerakkody, V., El-Haddadeh, R., Al-Sobhi, F., Shareef, M. A., & Dwivedi, Y. K. (2013). Examining the Influence of Intermediaries in Facilitating e-Government Adoption: An Empirical Investigation. *International Journal of Information Management*, 33(5), 716-725. <https://doi.org/10.1016/j.ijinfomgt.2013.05.001>
- Zahid, H. & Din, B. H. (2019). Determinants of Intention to Adopt e-Government Services in Pakistan: An Imperative for Sustainable Development. *Resources*, 8(3). <https://doi.org/10.3390/resources8030128>
- Ziemba, E. (2013). The Holistic and Systems Approach to the Sustainable Information Society. *Journal of Computer Information Systems*, 54(1), 106-116. <https://doi.org/10.1080/08874417.2013.11645676>
- Ziemba, E. (2017). The ICT Adoption in Enterprises in the Context of the Sustainable Information Society. *Proceedings of the 2017 Federated Conference on Computer Science and Information Systems, FedCSIS 2017*. <https://doi.org/10.15439/2017F89>
- Ziemba, E. (2019). The Contribution of ICT Adoption to the Sustainable Information Society. *Journal of Computer Information Systems*, 59(2), 116-126. <https://doi.org/10.1080/08874417.2017.1312635>