
Factors Affecting the Implementation of e-Surat Applications at Regional Apparatus Organizations in Tabanan Regency

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ABSTRACT

The development of information technology has given birth to many new innovations, such as the e-Surat application which can help the administrative process of electronic service manuscripts at the OPD (Regional Apparatus Organization) in Tabanan Regency. The implementation of the e-Surat application on OPD in Tabanan Regency is still not optimal, there are factors that affect the implementation of the e-Surat application on OPD in Tabanan Regency. The model or method that is considered appropriate for analyzing and understanding the factors that can affect the implementation of the e-Surat application on OPD in Tabanan Regency is the TOE framework that will analyze the implementation of the e-Surat application on OPD in Tabanan Regency in terms of technology, organization and environment aspects. Data analysis techniques use multiple linear regression analysis. The results of the data analysis show that: (1) technological variables have a positive and significant effect on the implementation of e-Surat applications in OPD in Tabanan Regency, (2) organizational variables have a positive and significant effect on the implementation of e-Surat applications in OPD in Tabanan Regency and (3) environmental variables have a positive and significant effect on the implementation of e-Surat applications in OPD in Tabanan Regency.

Keywords: Implementation; Technology; Organization and Environment

1. INTRODUCTION

The development of information and communication technology has driven the strategic role of expanding information access networks in a global scope so that information traffic becomes increasingly widespread. The development of information and communication technology encourages the government to implement an Electronic-Based Government System (SPBE), so that this can reform the traditional bureaucratic paradigm, towards an electronic government paradigm (e-government) which emphasizes the use of information and communication technology in providing fast responsiveness from the government to society so as to realize good governance (Ardipandanto et al., 2015; Fauzi et al., 2023).

One of the problems faced by the Tabanan Regency Government in realizing e-government is related to the administrative governance of correspondence between OPDs (Regional Apparatus Organizations). The management of correspondence administration, both incoming and outgoing letters, takes a long time and is not safe, so this can interfere with communication activities between OPDs within the Tabanan Regency Government. The condition of correspondence activities that have been taking place is that outgoing letters are sent by officers or couriers, in the delivery process it is possible that there is a delay in delivery and also the letters sent can be lost or the mail that has been received has not been dispositioned to the recipient so that it can cause delays in submitting information. This problem is thought to be exacerbated by the impact of the Covid-19 Pandemic (Coronavirus Diseases 2019) which requires many employees to work from home to make the process of correspondence activities more difficult.

Overcoming the problems encountered, the Communication and Informatics Service together with the Library and Archives Service of Tabanan Regency created a digital or electronic correspondence management application which is useful for accelerating the delivery of letter information and its disposition to the intended party within the Tabanan Regency Government, which is named e-Surat Tabanan TOP. The TOP Tabanan e-Letter application or what can be called the e-Surat application is an official electronic official script layout application that is used by all OPDs within the Tabanan Regency Government in carrying out correspondence activities Hanum et al. (2020).

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It is hoped that the existence of the e-Surat application in its implementation can provide benefits and be able to form a new paradigm regarding the management of correspondence which previously required a long process and time, now it is safer, more effective, efficient, easy and accurate (Debora & Hany Fanida, 2016). However, in reality the implementation of the e-Letter application for OPDs in Tabanan Regency is still not running optimally, this has been proven by the fact that there are still OPDs that send letters manually. This problem is also exacerbated by incoming letters that have not been processed, so this proves that the implementation of the e-Letter application at OPD in Tabanan Regency is still not optimal.

The approach that can be used to analyze the implementation of the e-Letter application in Tabanan Regency is to use the TOE framework (technology, organization and environment) (Dwivedi, 2018). This TOE framework is suitable for analyzing the implementation of the e-Letter application at OPD in Tabanan Regency, based on technological, organizational and environmental aspects. Technological aspects will be explained with relative advantages, suitability and ease of use of the e-Surat application. Organizational aspects will be explained regarding organizational readiness, quality of human resources and support from top managers in the e-Surat application implementation process. Meanwhile, from the environmental aspect, it will be explained with environmental pressures and existing infrastructure and are able to support the implementation of the e-Letter application in the Tabanan Regency Government.

The results obtained with the analysis of technology, organization and environment on the implementation of this e-Letter application are able to provide recommendations and input on which factors are the most dominant that can influence the implementation of the e-Letter application at OPD in Tabanan Regency, so that corrective steps can be implemented going forward. Based on this, the implementation of the e-Letter application at OPD in Tabanan Regency is very important to do in order to facilitate the administration of letter administration, but in reality the implementation of this e-Letter application does not work as expected, therefore this research is important to do to provide information related to the problem implementation of the e-Letter application to OPD in Tabanan Regency.

2. LITERATURE REVIEW

Research conducted by Chong & Olesen (2017) The results of this study explain that (1) technological factors with indicators of relative advantage, suitability and convenience have a significant influence on the adoption of Green IT, (2) organizational factors with indicators of the quality of human resources and top management support have a significant influence on the adoption of Green IT, while the organizational size indicator does not have a significant influence on the adoption of Green IT, (3) environmental factors with indicators of competitive pressure, pressure from trading partners and regulatory support have a significant influence on the adoption of Green IT. Other research by (Andi Syamsul, 2018) which aims to determine how far the influence of the adoption of technological innovations in e-government in the Regional Government of Sidenreng Rappang Regency uses the TOE (technology-organization-environment) framework. Research by Aulia, Hartanto, and Fauziati (2016) The results of this study explain that (1) the technological context with indicators of ICT expertise, comfort, compatibility and complexity has a significant influence on website management in the Yogyakarta Special Region Government, (2) organizational context with indicators of top management support, information sharing, coordination, organizational structure and organizational readiness have a significant influence on website management at the Yogyakarta Special Region Government, (3) the environmental context with regulatory environment indicators, ICT infrastructure and community encouragement have a significant influence on website management at the Yogyakarta Special Region Government. Recent research by Kosasi (2019) which aims to determine the extent to which SME (Small and Medium Enterprises) businesses, especially the West Kalimantan region, are growing the creative economy market through the process of adopting e-Commerce using the TOE (technology-organization-environment) model. The results of this study explain that (1) technological aspects with indicators of relative advantage, compatibility, convenience and security have a significant influence on e-Commerce adoption, (2) organizational aspects with indicators of organizational size, top management support, organizational readiness and quality of resources human resources have a significant influence on e-Commerce adoption, (3) environmental aspects with indicators of competitive pressure, government policies and infrastructure have a significant influence on e-Commerce adoption.

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e-Surat Application

The application of e-Letters is part of bureaucratic reform, because it has an impact on demands for work planning that is more detailed, systematic, chronological and measurable. The electronic official document arrangement is designed with an automation system, so that it can run effectively, efficiently, planned and accountably. The use of the e-Letter application in each OPD within the Tabanan Regency Government will carry out the mandate of Circular Letter Number: 551/2961/Diskominfo as well as implementation of the Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform Number 6 of 2011 Concerning General Guidelines for Electronic Service Manuscripts in Government Agencies (Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform Number 6 of 2011 Concerning General Guidelines for Electronic Service Manuscripts in Government Agencies, 2011). With the implementation of the e-Letter application in the Tabanan Regency Government, it can provide benefits:

1. Supporting the implementation of electronic-based office activities towards e-government, this is because the e-Letter application greatly helps the implementation of office tasks related to correspondence activities, because it provides the following functions and features:
 - a. Network-based applications and systems (web);
 - b. Presentation of letter documents easily and quickly;
 - c. Flow of letter documents automatically through the internet network;
 - d. Recording of document letters automatically;
 - e. Recipients of letters are accurate and safe.
2. Effective and efficient, work related to correspondence can be carried out collaboratively where one document is analyzed at once by several people in a short time without the need for copying so as to increase work productivity and also the delivery process does not require a courier thereby increasing time efficiency and budget.
3. Reducing the use of paper, using the e-Letter application does not require paper (paperless) because letters are sent in digital form.
4. Saving storage space, letters sent in the e-Surat application do not require a large storage area or building.
5. Savings in search time for a document, the time for searching for an official document can be reduced very significantly because only by typing keywords, the document in question can be obtained directly.
6. Reducing the level of risk of losing documents, because all documents are recorded and stored automatically, the lower the risk of loss, damage and misplacement, or other reasons such as letters or invitations have not been received.
7. The ease of controlling official document documents and their users, can automatically control and monitor user activity on official document documents, facilitating the integration of several official document process flows into an interrelated process flow.

TOE Framework

The TOE framework theory is based on the concept that technology, organization and the environment are factors that must be considered when deciding to adopt an information technology. The TOE framework assumes that the process of adopting information technology in an organization will be effective when the organization considers internal and external factors within the organization. The TOE framework is a framework that identifies various factors that influence the adoption or implementation of a new information technology (Effendi et al., 2020). The TOE framework is also a theoretical framework that includes factors that can encourage user initiatives in adopting information technology, which are influenced by three aspects, namely technology, organization and environment. (Lei et al., 2012).

The TOE model is useful for seeing the understanding of users who continue to use information technology in their activities. The high level of use of information technology shows the usefulness and benefits of using information technology, this is because users will use information systems because it benefits them. The TOE framework is capable of explaining the key factors that determine user acceptance of the implementation of a new information technology in an organization (Hanum et al., 2020).

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Framework of thinking

The TOE framework in this study was adapted and adapted to the research context to identify aspects and indicators that could affect the implementation of the e-Letter application in OPD in Tabanan Regency. Here on figure 1. The framework of this research is shown.

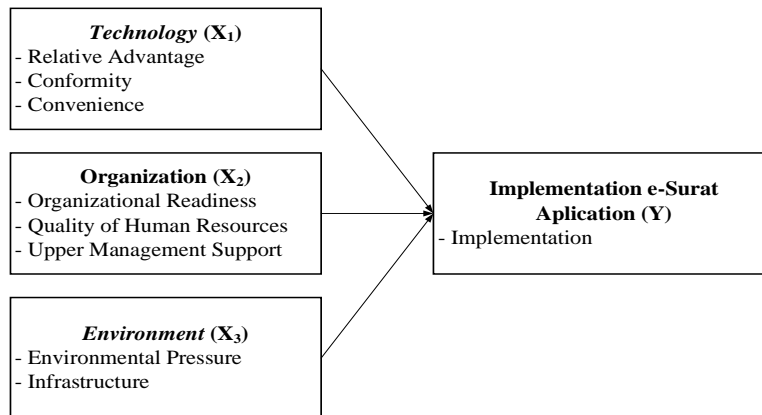


Fig. 1 Research thinking framework

Research Hypothesis

Based on the main issues and theoretical studies described above, the hypotheses in this study are as follows:

1. The technology variable has a positive and significant effect on the implementation of the e-Letter application at OPD in Tabanan Regency.
2. Organizational variables have a positive and significant effect on the implementation of e-Letter applications in OPD in Tabanan Regency.
3. Environmental variables have a positive and significant effect on the implementation of the e-Letter application at OPD in Tabanan Regency.

3. METHOD

Types of research

Based on the characteristics of the problems studied and the data used, this research can be classified as a type of quantitative research, because in general this research aims to analyze the relationship and influence (cause and effect) empirically by testing the established hypotheses and then interpreting the results of the analysis to obtain a conclusion or decision. Quantitative research methods are used to show relationships between variables, test theories and look for generalizations that have predictive value(Siregan, 2017).

Population and Research Sample

The population in this study are all employees who have e-Surat accounts at the Tabanan Regency Government. Based on data from the Communication and Informatics Office of Tabanan Regency, the number of e-Surat accounts owned by employees at the Tabanan Regency Government in 2022 is 412 people. Determine the number of samples in this study using the Slovin formula.

$$n = \frac{N}{1+N.e^2} = \frac{412}{1+412.(0,1)^2} = 80.47$$

Information:

n = number of samples

N = total population

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e =margin of error

Based on the results of the Slovin formula formulation above, the number of samples in this study were 80 people.

Research procedure

The procedure of this research can be described as a flowchart which describes the process flow in the design and manufacture of the analytical model, which can be seen in figure 2 related to research design procedures.

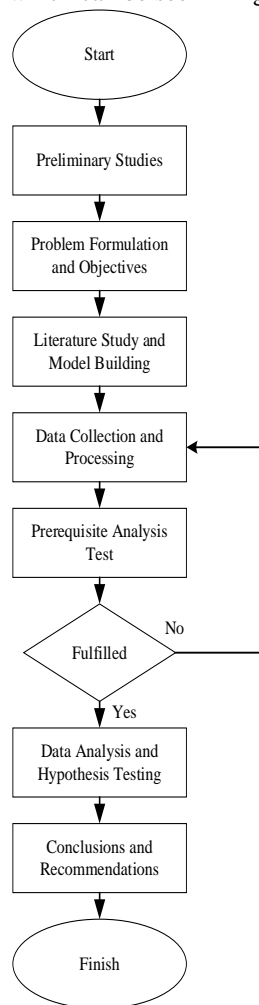


Fig. 2 Research design procedures

Judging from the approach, this research includes a quantitative approach with a causal design, because in this study it will try to find out the causal relationship and test the hypotheses that have been set on the correlated variables.

Research variable

The variables used in the research can be identified into two, namely the independent variable and the dependent variable.

1. The independent variable (X) is a variable that is independent and not influenced by other variables, but can affect other variables. The independent variables in this study are technology (X1), organization (X2) and environment (X3).

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2. The dependent variable (Y) is a variable that is dependent on and influenced by other variables or the result of other variables. The dependent variable in this study is the implementation of the e-Letter application at OPD in Tabanan Regency (Y)

Data Collection Technique

The techniques used to obtain the data needed in this study in order to achieve the objectives in this study can be described as follows.

1. Questionnaire, in this study will use a closed questionnaire type, where the answers to the statements given to respondents are already in the form of choices. This method is carried out to find relevant data from respondents with the aim of being able to answer problems in research. The distribution of research questionnaires will be carried out directly by giving questionnaires to the respondents.
2. Observation (observation), in this study is non-participant observation which aims to obtain data related to preliminary studies regarding the problems encountered in implementing the e-Letter application at OPD in Tabanan Regency.
3. Library research (library research) was conducted to obtain supporting data for this study, which were obtained from books, journals, laws, regulations and other sources.

Research Instruments

The research instrument used to collect research data used a questionnaire which contained a list of statements regarding the implementation of the e-Letter application from each statement item or indicator of each variable in the study which was measured using an even Likert scale in the form of positive statements which were given a score of:

Strongly Agree (SS)	score 4
Agree (S)	score 3
Disagree (TS)	score 2
Strongly Disagree (STS)	score 1

This Likert scale is used as an answer and a measure of the respondent's perception of each question or statement made on the questionnaire. Respondents will choose one of the four alternative answers according to the situation or the respondent's perception.

Data analysis

Comprehensively, the method of data analysis in this study can be described as follows.

1. Validity test
2. Reliability Test
3. Classic assumption test
4. Coefficient of Multiple Determination
5. Multiple Linear Regression Analysis
6. Simultaneous Hypothesis Test (F-Test)
7. Partial Hypothesis Test (t-test)

4. RESULT AND DISCUSSION

The results of the research will include related hypothesis testing, which includes the characteristics of the respondents, descriptive research data, results of instrument testing, results of analysis of prerequisite tests and results of research hypothesis testing.

Validity test

The validity test in this study was carried out by comparing the product moment correlation value (r-count) with the r-table value or the significance value (*p-value*) with the level of significance (α) value of 0.05 and then a decision was taken according to the testing criteria. The r-table value is obtained by the formulation $r\text{-table} = r(\alpha; n-2) = 0.219$. The results of the validity test can be seen in Table 1 following.

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Table 1

Validity test results

Items	r-count	Sig.	Information
X1.1	0.519	0.000	Valid
X1.2	0.717	0.000	Valid
X1.3	0.688	0.000	Valid
X1.4	0.665	0.000	Valid
X1.5	0.668	0.000	Valid
X1.6	0.666	0.000	Valid
X1.7	0.435	0.000	Valid
X1.8	0.502	0.000	Valid
X1.9	0.656	0.000	Valid
X2.1	0.820	0.000	Valid
X2.2	0.790	0.000	Valid
X2.3	0.746	0.000	Valid
X2.4	0.768	0.000	Valid
X2.5	0.624	0.000	Valid
X2.6	0.791	0.000	Valid
X2.7	0.608	0.000	Valid
X2.8	0.855	0.000	Valid
X2.9	0.727	0.000	Valid
X3.1	0.691	0.000	Valid
X3.2	0.811	0.000	Valid
X3.3	0.818	0.000	Valid
X3.4	0.808	0.000	Valid
Y. 1	0.752	0.000	Valid
Y.2	0.774	0.000	Valid
Y.3	0.676	0.000	Valid
Y.4	0.844	0.000	Valid
Y.5	0.741	0.000	Valid
Y.6	0.813	0.000	Valid

Source: Results of data processing, 2022

Based on Table 1, it can be seen that all question items or statements that measure technology variables (X_1), organization (X_2), environment (X_3), and the implementation of e-Letter applications in OPD in Tabanan Regency (Y) are valid, because all r-count values greater than the r-table value (r-count value > r-table value) and the significance value (*p-value*) is smaller than the level of significance (*p-value* < 0.05).

Reliability Test

The reliability test in this study was carried out by comparing the Cronbach's alpha value with 0.600 and then a decision was taken according to the testing criteria. The results of the validity test for all variables in this study can be seen in Table 2 following.

Table 2

Reliability test results

No.	Variable	Cronbach's Alpha	Information
1	Technology (X1)	0.751	Reliable
2	Organization (X2)	0.777	Reliable
3	Environment (X3)	0.809	Reliable
4	Implementation (Y)	0.789	Reliable

Source: Results of data processing, 2022

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Based on Table 2 it can be seen that all question items or statements that measure technology variables (X_1), organization (X_2), environment (X_3), and the implementation of e-Letter applications in OPD in Tabanan Regency (Y) are reliable, because *cronbach's alpha* value is greater of 0.600 (*cronbach alpha* > 0.600).

Classic assumption test

The results of the classical assumption test in this study can be described as follows:

1. The normality test in this study was carried out using the Kolmogorov-Smirnov test by comparing the Asymp values. Sig. with a level of significance (α) value of 0.05 then a decision is taken according to the testing criteria. Based on the results of data processing, it can be seen that the results of the normality test in this study amounted to 0.127, so it can be seen that the data used in this study have followed or approached the normal distribution of data rules, due to the Asymp value. Sig. greater than the value of the level of significance (0.127 > 0.050).
2. Linearity test, in this study was carried out by comparing the significance value of deviation from linearity with the level of significance (α) value of 0.05, then a decision was taken according to the test criteria. The results of the linearity test in this study can be seen in Table 3 following.

Table 3

Linearity test results		
Description	Deviation from Linearity	Information
Y=>X1	0.121	linear
Y=>X2	0.752	linear
Y=>X3	0.789	linear

Source: Results of data processing, 2022

Based on Table 3 it can be seen that the data used to build the model in this study has a linear relationship, because the significance of the deviation from linearity is greater than the level of significance (Sig. > 0.05).

3. The multicollinearity test, in this study, was carried out by comparing the tolerance value with 0.10 or the VIF value with 10 and then making a decision according to the testing criteria. The results of the multicollinearity test in this study can be seen in Table 4 following.

Table 4

Multicollinearity test results			
Description	tolerance	VIF	Information
X ₁	0.519	1,926	No multicollinearity
X ₂	0.443	2,259	No multicollinearity
X ₃	0.562	1,779	No multicollinearity

Source: Results of data processing, 2022

Based on Table 4 it can be seen that the independent variables in this study do not have a high correlation (no multicollinearity symptoms), because the tolerance value is greater than 0.10 (tolerance > 0.10) and the VIF value is less than 10 (VIF < 10).

4. Heteroscedasticity test, in this study was carried out by looking at the image patterns on the histogram Scatterplot then making a decision according to the test criteria. The results of the heteroscedasticity test in this study can be seen in Figure 3 following.

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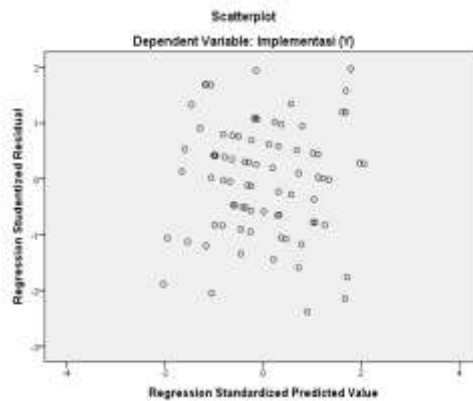


Fig. 3 Histogram Scatterplot of Heteroscedasticity Test Results (Source: Data processing results, 2022)

Based on Figure 3 it can be seen that in the regression model there is no difference in variance from the residual, which means it is in a condition of homoscedasticity (no symptoms of heteroscedasticity), because there is no clear pattern at the points of data distribution in the histogram Scatterplot graph.

Coefficient of Multiple Determination

The coefficient of multiple determination (R^2) is carried out to measure how much variation (up and down) the implementation of the e-Letter application at OPD in Tabanan Regency (Y) can be explained by variations (up and down) of technology (X_1), organization (X_2) and environment (X_3). Based on the results of data processing, it can be seen that the results of the multiple determination coefficient in this study amounted to $R^2 = 0,765$, this means that 76,5 percent of the variation (ups and downs) of the implementation of the e-Letter application at OPD in Tabanan Regency can be explained by variations (ups and downs) technology, organization and environment, while the remaining 23,5 percent is explained by other variables not included in this research model.

Multiple Linear Regression Analysis

Multiple linear regression analysis was carried out to determine the causal relationship or influence of technology (X_1), organization (X_2) and environment (X_3) on the implementation of the e-Letter application at OPD in Tabanan Regency (Y) assuming that there are no disruptive factors. Multiple linear regression analysis will show the magnitude and direction of the influence of each independent variable on the dependent variable. The results of the multiple linear regression analysis in this study can be seen in Table 5 following.

Table 5
The results of multiple linear regression analysis

No.	Description	B
1	(Constant)	3,256
2	Technology (X_1)	0.531
3	Organization (X_2)	0.204
4	Environment (X_3)	0.072

Source: Results of data processing, 2022

Based on Table 5 then a multiple linear regression equation model can be made, namely as follows.

$$\hat{Y} = 3.256 + 0.531 X_1 + 0.204 X_2 + 0.072 X_3$$

Based on the multiple linear regression equation obtained, it can be seen that the magnitude and direction of the influence of technology, organization and the environment on the implementation of the e-Letter application at OPD in Tabanan Regency. The interpretation of the multiple linear regression equation above can be described as follows:

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1. The b_0 (constant/intercept) value of 3.256 has an interpretation that, the implementation of the e-Letter application in OPD in Tabanan Regency (Y) has an average value of 3.256 one unit, if it is assumed that technology (X_1), organization (X_2) and environment (X_3) is zero or constant.
2. The b_1 value (regression coefficient X_1) of 0.531 has the interpretation that, if the technology variable (X_1) increases by one unit, then the implementation of the e-Letter application at OPD in Tabanan Regency (Y) will increase by an average of 0.531 one unit, assuming organizational variables (X_2) and environment (X_3) have constant/fixed values. The value of the regression coefficient X_1 is positive, which means that the direction of the influence of the technology variable (X_1) on the implementation of the e-Letter application at OPD in Tabanan Regency (Y) is unidirectional. Technological improvements both in terms of relative advantage, suitability and ease of use will increase the implementation of the e-Letter application at OPD in Tabanan Regency and vice versa.
3. The b_2 value (regression coefficient X_2) of 0.204 has the interpretation that, if the organizational variable (X_2) increases by one unit, then the implementation of the e-Letter application at OPD in Tabanan Regency (Y) will increase by an average of 0.204 one unit, assuming technology (X_1) and environment (X_3) variables have a constant/fixed value. The value of the regression coefficient X_2 is positive, which means that the direction of influence of the organizational variable (X_2) on the implementation of the e-Letter application at OPD in Tabanan Regency (Y) is unidirectional. Organizational improvement both in terms of organizational readiness, quality of human resources and top management support will improve the implementation of the e-Letter application at OPD in Tabanan Regency and vice versa.
4. The b_3 value (regression coefficient X_3) of 0.072 has the interpretation that, if the environmental variable (X_3) increases by one unit, then the implementation of the e-Letter application at OPD in Tabanan Regency (Y) will increase by an average of 0.072 one unit, assuming technology (X_1) and organization (X_2) variables have a constant/fixed value. The value of the regression coefficient X_3 is positive, which means that the direction of the influence of the environmental variable (X_3) on the implementation of the e-Letter application at OPD in Tabanan Regency (Y) is unidirectional. Improving the environment both in terms of environmental pressure and existing infrastructure will increase the implementation of the e-Letter application at OPD in Tabanan Regency and vice versa.

Simultaneous Hypothesis Test (F-Test)

Simultaneous hypothesis testing (F-Test) was carried out to test whether the technology (X_1), organization (X_2) and environment (X_3) variables had a significant influence on the implementation of the e-Letter application at OPD in Tabanan Regency (Y) together or in unison. The F-test in this study was carried out by comparing the F-count value with the F-table value or the significance value (*p-value*) with the level of significance (α) value of 0.05 and then a decision was taken according to the test criteria. F-table values obtained with the formulation $F\text{-table} = F[\alpha; df1(k-1); df2(nk)] = 2,720$. Based on the results of data processing, it can be seen that the results of the F-test or the calculated F-value in this study were 38.072 and a significance value (*p-value*) of 0.000. These figures give the meaning that the technology (X_1), organization (X_2) and environment (X_3) is zero or constant

Partial Hypothesis Test (t-test)

Partial hypothesis testing (t-test) was carried out to test whether the technology (X_1), organization (X_2) and environment (X_3) variables had a significant influence on the implementation of the e-Letter application at OPD in Tabanan Regency (Y) individually or individually. The t-test in this study was carried out by comparing the t-count value with the t-table value or the significance value (*p-value*) with the level of significance (α) value of 0.05 and then a decision was taken according to the test criteria. The t-table value is obtained by the formulation $t\text{-table} = t[\alpha; (nk)] = 1.992$. The results of the t-test can be seen in Table 6 following.

Table 6

Partial hypothesis test results			
No.	Description	t-count	Sig.
1	Technology (X1)	4,459	0.000
2	Organization (X2)	3,308	0.001
3	Environment (X3)	2,743	0.028

Source: Results of data processing, 2022

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The following describes the partial hypothesis testing (t-test) of each variable in this study.

1. T-test the effect of technology (X_1) on the implementation of e-Letter applications (Y). Based on Tabel 6 it can be seen that the t-value of the technology variable (X_1) is 4.459 and the significance value (*p-value*) is 0.000. These figures mean that the technology variable (X_1) has a partially significant effect on the implementation of the e-Letter application in OPD in Tabanan Regency (Y), because the t-count value is greater than the t-table value ($4.459 > 1.992$) and significance value (*p-value*) is less than 0.050 ($0.000 < 0.050$).
2. The t-test of the effect of Organizational (X_2) on the implementation of the e-Letter application (Y). Based on Tabel 6 it can be seen that the t-count value of the organizational variable (X_2) is 3.308 and the significance value (*p-value*) is 0.001. These figures mean that the organizational variable (X_2) has a partially significant effect on the implementation of the e-Letter application in OPD in Tabanan Regency (Y), because the t-count value is greater than the t-table value ($3.308 > 1.992$) and significance value (*p-value*) is less than 0.050 ($0.001 < 0.050$).
3. The t-test of the effect of the environment (X_3) on the implementation of the e-Letter application (Y). Based on Tabel 6 it can be seen that the t-value of the environmental variable (X_3) is 2.743 and the significance value (*p-value*) is 0.028. These figures mean that the environmental variable (X_3) has a partially significant influence on the implementation of the e-Letter application at OPD in Tabanan Regency (Y), because the t-count value is greater than the t-table value ($2.743 > 1.992$) and the significance value (*p-value*) is less than 0.050 ($0.028 < 0.050$).

5. CONCLUSION

Based on the results of the analysis and testing of the hypotheses that have been carried out, several conclusions can be obtained, namely as follows: (1) The technology variable has a positive and significant influence on the implementation of the e-Letter application at OPD in Tabanan Regency. (2) Organizational variables have a positive and significant influence on the implementation of the e-Letter application at OPD in Tabanan Regency. (3) Environmental variables have a positive and significant influence on the implementation of the e-Letter application at OPD in Tabanan Regency. Suggestions for further research namely: (1) Considering the broader scope of locations, samples and research objects from e-Letter applications in other areas in order to further enrich research results and findings. (2) Specifically considering the theory and aspects of other factors that are not or have not been studied in the research model so that they can provide a more in-depth explanation of the implementation of the e-Letter application while also being able to conduct research using qualitative types of research to obtain information that is not usually obtained through quantitative research so that can better understand the causes of good or bad implementation and the opportunities that exist for improvement and develop e-Surat applications. (3) Considering the use of a longitudinal research design or comparisons of subsequent studies to be able to reveal whether there are differences or not for the consistency of empirical results from time to time.

6. REFERENCES

- Andi Syamsul, A. N. (2018). *Adopsi Inovasi Teknologi dalam e-Government (Studi Kasus: Pemerintah Daerah Kabupaten Sidenreng Rappang)*. 1, 8–28.
- Ardipandanto, A., Ardiyanti, H., Budiman, A., & Sanur, D. (2015). *Pengembangan Teknologi Informasi Komunikasi : Bagi Pelayanan Publik Dan Keamanan Nasional Di Daerah*. 150.
- Aulia, K., Hartanto, R., & Fauziati, S. (2016). Analisis Faktor-faktor yang Mempengaruhi Pengelolaan Website pada Pemerintah Daerah Istimewa Yogyakarta. *Seminar Nasional Ilmu Komputer, Snik*, 1–8.
- Chong, J. L. L., & Olesen, K. (2017). A technology-organization-environment perspective on eco-effectiveness: A meta-analysis. *Australasian Journal of Information Systems*, 21, 1–26. <https://doi.org/10.3127/ajis.v21i0.1441>
- Debora & Hany Fanida, E. (2016). Efektivitas Sistem Tata Persuratan Digital (e-Surat) di Dinas Komunikasi dan Informatika Kota Surabaya. *E-Journal*, 1104067401, 1–7.
- Dwivedi, Y. K. (2018). *Informations Systems Theory: Vol.2*. Springer, 28(September 2018), 461. <https://doi.org/10.1007/978-1-4419-6108-2>
- Effendi, M. ., Sugandini, D., Istanto, Y., Arundati, R., & Adisti, T. (2020). *The Technology–Organization–*

* Coressponding author



Environment Framework: ADOPSI TEKNOLOGI PADA UKM (Issue November).

- Fauzi, A. A., Kom, S., Kom, M., Budi Harto, S. E., MM, P. I. A., Mulyanto, M. E., Dulame, I. M., Pramuditha, P., Sudipa, I. G. I., & Kom, S. (2023). *PEMANFAATAN TEKNOLOGI INFORMASI DI BERBAGAI SEKTOR PADA MASA SOCIETY 5.0*. PT. Sonpedia Publishing Indonesia.
- Hanum, S., Adawiyah, R. Al, Sensuse, D. I., Lusa, J. S., Arief, A., & Prima, P. (2020). Factors Influencing e-Government Adoption (A Case Study of Information System Adoption in PPAK) (Faktor-faktor yang Memengaruhi Adopsi e-Government (Studi Kasus Adopsi Sistem Informasi di PPAK)). *JURNAL IPTEKKOM (Jurnal Ilmu Pengetahuan & Teknologi Informasi)*, 22(1), 19–30.
- Kosasi, S. (2019). Analisis Kritis Adopsi E-Commerce untuk Pasar Ekonomi Kreatif melalui Kerangka Teknologi-Organisasi-Lingkungan. *Ijccs, x, No.x*(July 2018), 1–5.
- Lei, C. F., Wai, E., Ngai, T., Lei, C., Fong, W., Ting Ngai, E., Green, ", & Ngai, E. W. T. (2012). *Association for Information Systems AIS Electronic Library (AISeL) AMCIS 2012 Proceedings Proceedings Green IS Assimilation: A Theoretical Framework and Research Agenda Recommended Citation Green IS Assimilation: A Theoretical Framework and Research Agenda. 2*.
- Peraturan Menteri Negara Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 6 Tahun 2011 tentang Pedoman Umum Tata Naskah Dinas Elektronik di Lingkungan Instansi Pemerintah, (2011).
- Siregan, S. (2017). *Statistik Parametrik untuk Penelitian Kuantitatif*. Bumi Aksara.

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