

# Analysis of the Effect of Internal Control Systems, System Quality, and User Satisfaction in User Performance of E-Planning Applications Case Study in Kediri Regency, Indonesia

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**Abstract:-** The implementation of the regional development system is a requirement of every region, so that the performance of Regional Apparatus Employees as the users of e-Planning applications influence regional development planning. This study wants to analyze the effect of Internal Control Systems, System Quality, and User Satisfaction on User Performance of e-Planning Applications in Kediri Regency. Using quantitative methods and data collection techniques with a questionnaire to respondents, amounting to 37 users. The research data were analyzed using the Multiple Linear Regression method using the SPSS application. The results showed that the Internal Control System, System Quality and User Satisfaction simultaneously affect the User Performance of e-Planning Applications in Kediri Regency based on the statistical f value of 6.407 which is greater than (f table) 4.20. Partially, the Internal Control System has no effect on User Performance based on a statistical t value of 0.026 which is smaller than (t table) 2.03. System Quality and User Satisfaction have an effect on User Performance based on the t statistical value of 3.052 and 2.809, which is greater than (t table) 2.03.

**Keywords:-** E-Planning Application; Internal Control System; System Quality; User Satisfaction; User Performance.

## I. INTRODUCTION

Local governments need the implementation of a regional development system which is regulated in the Minister of Home Affairs Regulation Number 98 of 2018 concerning the Regional Development Information System. The Regional Development Planning Agency carries out control and supervision of development planning using the e-Planning application. Control and supervision in overseeing the implementation of information systems both in terms of a supportive environment and good coordination between each user. For this reason, user performance is very much considered in the implementation of the e-Planning application for development planning in Kediri Regency.

In the application of information systems, Ardianto (2013) in his research suggests that information technology

has not been able to improve organizational performance. Tandil (2019), found that the application of information systems has an effect on employee performance in the organization. The better the internal control system in the organization has an impact on the higher performance of employees in the organization. Olufunmilayo (2018) and Taradipa (2017), conclude that internal control affects one's performance in a company. Al Amin (2014) found that the quality of information systems and user satisfaction affects the performance of information system users.

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## II. LITERATURE OF RESEARCH

### A. Information System

The information system according to Tulodo (2019) is a process carried out in processing data into information needed by individuals and organizations in making decisions. The success of information systems is assessed based on the level of usefulness of information in policy making (Utomo: 2017). According to Tsai (2017) information systems are only as tools, and those who operate the system carry out their full function.

### B. E-Planning Application

Based on the Regulation of the Minister of Home Affairs, Number 98 of 2018 concerning Regional Development Information Systems explains that Electronic-Based Planning / e-Planning is an application used to help formulate policies in the preparation of regional development plan documents to formulate policies in online-based regional development plans.

**C. User Performance**

Tulodo (2019) individual performance is one dimension of measuring the success of information systems in terms of individual impact. Tandj (2019) in his research states that performance measurement must be adjusted to the activities that have been running in the organization, so that they can see the user's ability to carry out various programs. Taradipa (2017) says that employee performance refers to the level of achievement of the tasks that compose the work.

**D. Internal Control System**

Olufunmilayo (2018) the effect of the internal control system on performance has different impacts. Tandj (2019) says that the internal control system is an example of internal factors that affect performance. According to Taradipa (2017), the internal control system consists of policies and procedures designed to provide management with appropriate assurance that the company has achieved its goals and objectives. Tsai (2017) in implementing information systems for e-government, the application of information systems does not focus on system implementation only, but on the use of systems both externally for society and internally by employees themselves.

**E. System Quality**

Tulodo (2019), system quality is one part of measurement to determine the success of information systems in providing the information needed by users. Widiastuti (2019), system quality is defined as a phenomenon of system diversity used to measure the quality of information technology systems. DeLone and McLean (2016) in measuring the success of information systems, system quality must be a key variable. And Al Amin (2014) says that system quality is related to the quality of the output produced.

**F. User Satisfaction**

Widiastuti (2019) says that user satisfaction is a user response that is closely related to user attitudes towards the use of information systems. The user's position on the information system is an objective criterion of how the user likes the system used. Nuskiya (2018) says that satisfaction through information technology is caused because it can simplify their work in many ways such as automatic report generation and the timeliness used when on the network. DeLone and McLean (2016), user satisfaction is a popular measure of information system success. Al Amin (2014) says that user satisfaction is the user's perception of the extent to

which the impact of using information systems may have an effect on improving their performance later.

**III. CONCEPTUAL MODEL**

This study uses three independent variables and one dependent variable. The research conceptual framework is presented in Figure 1.

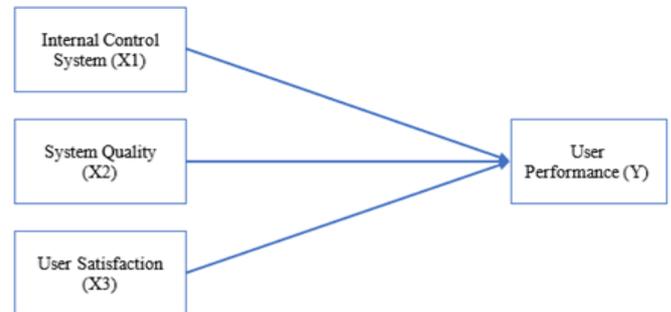


Fig. 1. Research Conceptual Framework

**IV. RESEARCH METHODOLOGY**

This research is a quantitative study by taking samples directly to analyze the relationship between variables. A population of 37 users of the e-Planning application, using the census method. The research was conducted at the Regional Development Planning Agency in Kediri district. Primary data were obtained directly from respondents using a questionnaire with a Likert scale. The independent variable consists of the Internal Control System (X1), System Quality (X2), User Satisfaction (X3) and the dependent variable is User Performance (Y). Data analysis used Multiple Linear Regression with the help of the SPSS program version 18.00. Data analysis is used to prove the research hypothesis as follows:

- H1: Internal Control Systems, System Quality and User Satisfaction have an effect on the User Performance of e-Planning Applications in Kediri Regency.
- H2: The Internal Control System affects the User Performance of the e-Planning Application in Kediri Regency.
- H3: System Quality affects the User Performance of e-Planning Applications in Kediri Regency.
- H4: User Satisfaction affects the User Performance of e-Planning Applications in Kediri Regency.

**V. RESULT**

**A. Validity and Reliability**

TABLE I. SUMMARY OF VALIDITY AND RELIABILITY TEST

Variable	Validity		Reliability	
	p-value	Result	Cronbach's Alpha	Result
Internal Control System	0.000 – 0.031	valid	0.694	reliable
System Quality	0.000 – 0.040	valid	0.705	reliable
User Satisfaction	0.000 – 0.001	valid	0.761	reliable
User Performance	0.000 – 0.005	valid	0.732	reliable

Based on table 1, it is known that the validity test of the question items on these variables can be declared valid because the p-value greater than  $\alpha$  (0.05). Reliability testing can be declared reliable because the Cronbach Alpha value is greater than 0.60.

*B. Classic Assumptions*

TABLE II. SUMMARY OF MULTICOLINIERITY TEST

Model	Collinearity Statistics	
	Tolerance	VIF
Internal Control System (X1)	0.709	1.411
System Quality (X2)	0.767	1.303
User Satisfaction (X3)	0.846	1.184

Variance Inflation Factor shows a value less than 10.00 and a Tolerance value greater than 0.100, which means that there is no multicollinearity problem in this research model.

TABLE III. SUMMARY OF AUTOCORELATION TEST

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	Durbin-Watson
1	0.607	0.368	0.311	2.174	1.934

The DW value generated from the regression model is 1,934. From the DW table it is obtained that the values of  $dL = 1.3068$  and  $dU = 1.6550$ . So that the value of DW (1,934) is between  $dU$  (1.6550) and  $4-dU$  (2.345), which means that there is no autocorrelation.

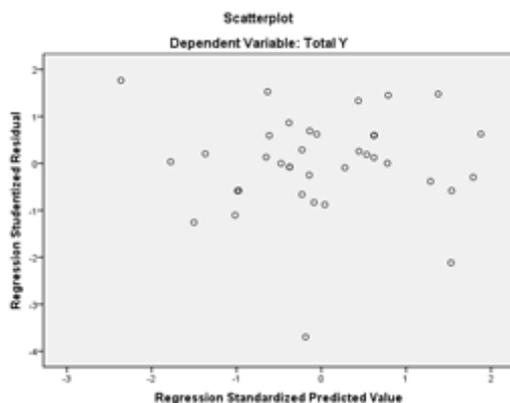


Fig. 2. Heteroscedasticity Test

Figure 2 shows that the data points do not form a certain pattern and the data spreads above and below the number 0 on the Y axis, so it can be concluded that there is no interference with the assumption of heteroscedasticity.

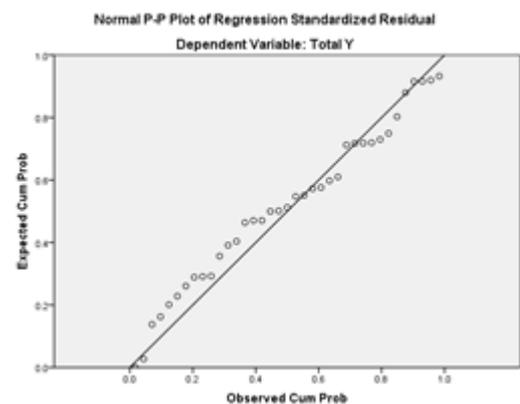


Fig. 3. Normality Test

Figure 3 shows that the data (points) spread out in the direction of the horizontal line, so it can be concluded that the regression meets the assumption of normality.

**VI. RESEARCH FINDINGS**

Multiple linear regression analysis to determine whether there is an effect of the Internal Control System (X1), System Quality (X2), and User Satisfaction (X3) variables on User Performance (Y), analyzed using the SPSS Version 18.00 program.

TABLE IV. SUMMARY OF MULTIPLE LINIER REGRESSION

Variable	Koef.	p-value	Test		R <sup>2</sup>	Result
			t	F		
Constant	4.701					
X1	0.004	0.980	0.026			Not Significant
X2	0.400	0.004	3.052			Significant
X3	0.260	0.008	2.809			Significant
X1,X2,X3		0.002		6.407	0.368	Significant

The table explains the constant value of 4.701, the regression coefficient value of the Internal Control System variable is 0.004, the regression coefficient value of the

System Quality variable is 0.400, and the regression coefficient value of the variable User Satisfaction is 0.260.

- The first hypothesis is that the Internal Control System, System Quality and User Satisfaction affect the User Performance of e-Planning Applications in Kediri Regency. Proven significant based on the F test with a statistical f value of 6.407 greater than (f table) 4.20 and p-value 0.002 smaller than  $\alpha$  (0.05).
- The second hypothesis is that the Internal Control System affects the User Performance of the e-Planning Application in Kediri Regency. Proven to be insignificant based on the t test with a statistical t value of 0.026 smaller than (t table) 2.03 and p-value of 0.980 greater than  $\alpha$  (0.05).
- The third hypothesis is that system quality has an effect on the User Performance of e-Planning Applications in Kediri Regency. Proven significant based on the t test with a statistical t value of 3.052 greater than (t table) 2.03 and p-value of 0.004 smaller than  $\alpha$  (0.05).
- The fourth hypothesis is that User Satisfaction has an effect on User Performance of e-Planning Applications in Kediri Regency. It was proven to be significant based on the t test with a statistical t value of 2.809 greater than (t table) 2.03 and p-value of 0.008 smaller than  $\alpha$  (0.05).

## VII. DISCUSSION

Internal Control Systems, System Quality and User Satisfaction are proven to be an part of the system package in influencing the User Performance of e-Planning Applications in Kediri Regency. This conclusion is supported by the results of previous research Tandi (2019) which says that the Internal Control System and System Quality have a positive influence on Application User Performance. Tulodo research (2019) which confirms that User Satisfaction affects Application User Performance.

Meanwhile, partially the Internal Control System has no effect on the User Performance of the e-Planning Application in Kediri Regency. This is not relevant to the results of previous research by Tandi (2019) and Al Amin (2014), but in line with the results of Ningtyas (2019) research. Respondents feel that the Internal Control System is something that is inherent in them. Responden terbiasa mengikuti aturan dan jadwal yang telah ditentukan. So the Internal Control System variable has no effect on their performance.

System Quality has a positive effect on User Performance of e-Planning Applications in Kediri Regency. This is supported by the results of previous research by Tandi (2019) which says that the quality of the e-Planning Program has an effect on the Performance of the State Civil Apparatus. Respondents felt that the Ease of Application for Use has a positive role as part of the Quality System assessment in order to improve their performance. Because the e-Planning application is a web-based application that can be accessed wherever and whenever needed as long as it is connected to the internet.

User Satisfaction affects the User Performance of e-Planning Applications in Kediri Regency. This is supported by research by Tulodo (2019) which states that User

Satisfaction has a positive effect on performance. User Satisfaction is based on the perception of the extent of the impact of the use of Information Systems. Where it is found in this study that Information Satisfaction plays a major role in improving the performance of e-Planning Application Users in Kediri Regency. User satisfaction with the information they get can be seen from the easy understanding of users in reading the information generated and the appropriate format used.

## VIII. CONCLUSIONS AND FUTURE RESEARCH

The results showed that the Internal Control System, System Quality, User Satisfaction together have an effect on the User Performance of e-Planning Applications in Kediri Regency. The Internal Control System partially has no effect on User Performance. Because the user being familiar with the rules and schedules that are set in the implementation of activities. System Quality partially affects User Performance. With easy access to web-based applications at any time via the internet. User Satisfaction partially affects User Performance. Proven information satisfaction in accordance with the required format. Based on the percentage contribution of the variable, it shows a value of 36.8%, which means that there are 63.2% of contributions from other variables that are not included in this study. Such as the addition of intervening variables between Internal Control Systems and Performance in Ningtyas research (2019). The variable quality of information on user performance, directly or indirectly through user satisfaction in Al Amin research (2014).

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