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# ANALYSIS OF FACTORS AFFECTING THE EFFECTIVENESS OF STATE PROPERTY FINANCIAL ACCOUNTING MANAGEMENT INFORMATION SYSTEMS (SIMAK-BMN) AT THE MINISTRY OF WOMEN'S EMPOWERMENT AND CHILD PROTECTION

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#### Abstract

This study aims to determine the effectiveness of the State Property Management and Accounting Information System (SIMAK-BMN) at the Ministry of Women's Empowerment and Child Protection, due to the different data constraints in the SIMAK-BMN system with the physical data of the goods. The method used in this study is a quantitative method with questionnaires as the data collection techniques. Questionnaires were distributed to 5 work unit (satker) in the Ministry of Women's Empowerment and Child Protection, including the Deputy of the Gender Equality Division, Deputy for the Protection of Women's Rights, Deputy for Child Protection, Deputy for Child Growth, Deputy for Community Participation, and the work unit of Ministry of Women's Empowerment. Questionnaires were distributed to 30 respondents at 5 work units (satker) aimed at SIMAK-BMN operators. The research was based on the DeLone and McLean (2003) model as the effectiveness reference of SIMAK- BMN including information quality, system quality, service quality, usage, user satisfaction, and net benefits. The collected questionnaire data were tested and processed using multiple regression analysis on SPSS version 25. The results of this study are the effectiveness of SIMAK-BMN at the Ministry of Women's Empowerment and Child Protection influenced by factors including information quality,

service quality, and system usage. Based on the results, it is necessary to have routine evaluations and training for SIMAK-BMN operators and systems should be made more user friendly.

Keywords: Information Quality, System Quality, Service Quality, Usage, User Satisfaction, Net Benefits

#### INTRODUCTION

State Property (BMN) is all goods obtained or purchased at the expense of the State Revenue and Expenditure Budget or derived from other legitimate acquisition. The management of State Property (BMN) is currently carried out by each government agency and periodically reported to the Director General of State Assets or the Supreme Audit Agency to be audited and assessed for acquisition. This is in accordance with Government Regulation Number 6 of 2006 concerning the management of State / Regional Property, this regulation is the implementation of the provisions of article 48 paragraph (2) and article 49 paragraph (6) of Law No. 1 of 2004 concerning State Treasury and to ensure the administration of orderly and orderly management of BMN / Regions. State Property Management and Accounting Information System (SIMAK-BMN) must be used by all government agencies in accordance with the Directorate of Accounting and Reporting, Ministry of Finance of the Republic of Indonesia Number S / 350 / PB / 2008 concerning the Launching of State Property Management and Accounting Information System (SIMAK-BMN). So that each government agency appoints an operator responsible for operating the State Property Management and Accounting Information System (SIMAK-BMN) application.

The Ministry of Women's Empowerment and Child Protection has used the application of Management Information Systems and State-Owned Financial Accounting (SIMAK BMN). Over time, there were some obstacles that led to findings from the BPK which required the ministry to revise the 2017 State-Owned Property report. The findings arose because of a discrepancy between the data of the number of inventory items that have been inputted in the SIMAK BMN application and real inventory., inputting BMN data from 5 satker can be presented at 47% in 2017. In addition, the process of sending inventory data is often failed to the State Property Management and Accounting Information System (SIMAK-BMN) application then proceed to the SAIBA application, this happens more than once for each satker and every month, even if it fails once it will be very disturbing data in SIMAK-BMN because it is out of sync, so the process of sending inventory data must be done repeatedly. There was an error in the status of the

condition of the goods, for example in the work unit of the Deputy of Child Growth where the status of the goods should have been severely damaged, but in the report it was still written in good condition. Besides that there are still items that must be accounted for. This is what causes the data difference. The data can be seen in Figure 1 and Table 1 below.

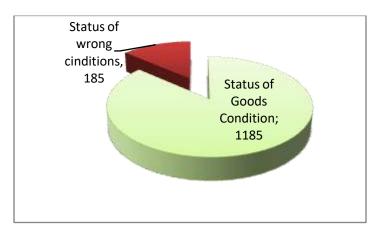


Figure 1 Status of Goods Condition (Source: Results of 2017 BMN Report Data)

Table 1 Details of Types of Accountability for Inventory Items

Туре	Remaining Goods (December 2018)	Final Distribution	Responsibility
Printed Goods	1000	775	225
Other Print Materials	8	6	2
Tools / materials for office / other activities	2485	2470	15
Inventory Goods	124	109	15
Total responsibility			257

(Source: Results of 2017 BMN Report Data)

We must know that the level of effectiveness in an application can be seen from the ease of users in identifying data, accessing data, and interpreting data. Data in the information system is organized data from all organizational units so that it can be used for various task needs in the organization effectively and efficiently (Budiasih, 2017). In this case, the application of the State Property Management and Accounting Information System (SIMAK-BMN) at the Ministry of Women's Empowerment and Child Protection is efficient. It can be said to be efficient because

with this application, the process of collecting inventory items faster means that it has been time efficient, and it is no longer necessary to use a lot of paper for manual recording, and certainly does not incur repetitive costs for paper purchases.

Based on the constraints faced, the evaluation is needed to find out whether the application of the Accounting Management and Financial Property Information System (SIMAK-BMN) is effective both in terms of users and applications. Moreover, for evaluation of the use of the Accounting Management and State-Owned Financial Information System (SIMAK-BMN) for 2017 at the Ministry of Women's Empowerment and Child Protection, it has not been conducted. According to (Mercika and Jati, 2015) the achievement of the effectiveness of an information system will depend on how the information system is operated and the ease of the system for its users. In addition, the effectiveness of the preparation of financial statements is the main requirement that must be applied so that the prepared financial statements do not contain elements of misstatement which results in information received by the community not in accordance with the actual facts (Riyanti et al, 2015). Given the connection between reports of State Property and financial statements, it is necessary to evaluate so as not to produce false financial statements simply because of the ineffectiveness of the State Property report. With this evaluation, it can find out what the real solution can be done to prevent the misuse of the application of the Analysis of Factors Affecting the Effectiveness of State Property Financial Accounting Management Information Systems (SIMAK-BMN) at the Ministry of Women's Empowerment and Child Protection or the improvement of its application in 2018 and so on. This evaluation can answer whether the application of the Accounting Management and State Owned Financial Information System (SIMAK-BMN) has been effective, so that the effectiveness of the application of the Analysis of Factors Affecting the Effectiveness of State Property Financial Accounting Management Information Systems (SIMAK-BMN) at the Ministry of Women's Empowerment and Child Protectionis carried out.

Effectiveness is "the ultimate goal of an activity where reality is in accordance with planning and hope" (Masruri and Muazansyah, 2017). Whereas according to (Yanto et al, 2017) "effectiveness is the main element to achieve the goals or targets that have been determined in an organization, activity or program". According to (Mahmudi, 2011 in Samuel et al, 2016) effectiveness is the relationship between output and goals or objectives that must be achieved. Said effective if the process of activities reaches the policy goals and final goals. The greater the output produced against the goals and objectives specified, the more effective the work process of an organization. In the system effectiveness test, supporting factors are needed, such as those used in previous research by (Budiasih, 2017) where the research describes six aspects of information system success proposed by DeLone and McLean (2003), namely system quality, quality information (information quality), service quality (service quality), use (use), user satisfaction (user satisfaction), and net benefits (net benefits). Based on the research, it can be concluded that there are two factors that significantly affect the level of SIMDA-BMD effectiveness, namely service quality and net benefits. While the four other factors such as system quality (system quality), information quality (information quality), use (use), user satisfaction (user satisfaction) in the category of less effective. Another case with research conducted by (Putrawan et al, 2017) emphasizes that the information quality factor and top management support have a positive effect on usability, but the quality of the system has no effect on usability. System quality, information quality, usability have a positive effect on user satisfaction, but top management support has no effect on user satisfaction. Unlike the research conducted by (Ramadhan, 2014), it was produced that the factors that influence the effectiveness of the implementation of SIMAK-BMN are effort expectancy, service quality, and facilitating conditions. While research conducted by (Laksono, 2017) concludes that system quality, information quality, and perceived ease of use influence the perception of usability. The quality of the system and the quality of information is influential towards perceived ease of use. Perception of usability, perceived ease of use, and service quality have an effect on user satisfaction. User satisfaction affects the net benefits. While the variable quality of the system, and the quality of information has no effect on the net benefits of using SIMDA-BMD. While research conducted by (Widiastuti, 2016), the variable quality of information, system quality, and use of the system affect user satisfaction, but service quality does not affect user satisfaction. The use of the system and user satisfaction affect the net benefits. From the previous studies described above, it can be concluded that in each case not all factors of the DeLone and McLean (2003) model have effective effect. Certainly in each study there are several factors that do not have a positive effect on the running of the system. So that the evaluation of the system needs to be done in stages, so that it is known what must be improved so that the system can be used more effectively.

Along with the development of the application of the State-Owned Financial Management and Accounting Information System (SIMAK-BMN) that has been implemented for several years including the Office of the Ministry of Women's Empowerment and Child Protection, an evaluation is needed to determine the effectiveness of State-Owned Management Information Systems and Financial Accounting (SIMAK-BMN). Therefore, based on the constraints faced by the Ministry of Women's Empowerment and Child Protection, the authors are interested in conducting research to find out the application role of SIMAK-BMN and what factors influence application effectiveness based on factors in the information quality model DeLone and McLean (2003), so the author took the title "Analysis of Factors Affecting

the Effectiveness of State Property Financial Accounting Management Information Systems (SIMAK-BMN) at the Ministry of Women's Empowerment and Child Protection".

It is hoped that this research can produce any factors that affect the effectiveness of the State Owned Financial Accounting Management Information System (SIMAK-BMN) application as a benchmark especially for the Ministry of Women's Empowerment and Child Protection to increase the factors that influence the effectiveness of use Management Information System and State-Owned Financial Accounting (SIMAK-BMN).

#### **METHODOLOGY**

Frame of mindset starting from data collection through a questionnaire which will be distributed to 30 respondents who are SIMAK-BMN officers or operators. The questionnaire was made with reference to the DeLone and McLean Models. The independent variables used include system quality, information quality, service quality, usage, usage satisfaction, and net benefits. For the dependent variable in this study is effectiveness. After the questionnaire was made, validity and reliability were tested. If the questionnaire made is considered valid, then the questionnaire is distributed to the target, namely the intended respondent. Processing data from questionnaires that have been filled and collected, the results of the research analysis will be obtained.

#### **Data Source**

The appropriate data sources in this study are primary data sources. According to (Sugiyono, 2017) explains that the primary data source is a source of data that directly provides data to data collectors. Primary data collection in this study is to directly distribute questionnaires to parties related to the research conducted.

## **Data Collection Technique**

Data collection techniques are several ways used to obtain data and information needed in research. There are data collection techniques used in this study as follows:

#### a. Questionnaire

Questionnaires are data collection techniques that are carried out by giving a number of questions or written statements to the respondent to fill in the answers. The purpose of the questionnaire is to obtain relevant information about the research variables to be measured.

## b. Literature Study

In library studies, the author collects and studies various theories and basic concepts related to the problem under study. The author and the basic concepts obtained by examining various sources such as books, journals, and reading materials that are relevant to research.



# **Research Population and Sample**

The object of this research is respondents who use the SIMAK-BMN application at the Ministry of Women's Empowerment and Child Protection which consists of 5 work units. The Satker included the Deputy of the Gender Equality Division, Deputy satker for the Protection of Women's Rights, Deputy Satker for Child Protection, the Working Unit Deputy for Child Growth, Deputy Deputy for Community Participation, and the Minister of PP's Satker. Respondents were taken from each work unit consisting of 5 operators, 3 verifiers for the whole work unit, and 2 validators for the entire satker. This research is intended to measure the factors that influence the effectiveness of SIMAK-BMN.

# **Method of Collecting Data**

The method of data collection in this study uses quantitative methods, by distributing questionnaires to users who have been mentioned previously in the object of research. The quantitative method itself is interpreted as a passive method because it is based on positivism philosophy. This method is a scientific method because it has met scientific principles, namely concrete or empirical, objective, measurable, rational, and systematic. This method is called a quantitative method because the data and research are in the form of numbers and analysis using statistics (Sugiyono, 2017). The questionnaire was distributed directly to the SIMAK-BMN operator and collected the results of the filled questionnaire. As for this questionnaire, the types of questions used are closed questions where respondents are only allowed to answer the alternative answers provided in the questionnaire. This is so that the possibility of the answers given by the user becomes narrowed and also makes it easier to fill out the questionnaire. A total of 30 questionnaires will be distributed to users, where each question has a weight on a scale of 1 to 5 which will be used in statistical analysis.

#### **Research Variables**

Each variable in the questionnaire is measured by a Likert scale model that is a scale that can be used to measure attitudes, opinions, and perceptions of a person about a particular object or phenomenon. In this study a five-point sketch is used, namely point 1 for Strongly Agree, point 2 for Agree, point 3 for Doubt, point 4 for Disagree, and point 5 for Strongly Disagree (Siregar, 2017). Respondents will be asked to state their opinions on the questions raised according to their actual conditions. Likert scale is the most common method of measurement used in research where it involves surveys. The variables used are independent variables and dependent variables.

Independent variables are variables that influence or are the cause of change or the emergence of dependent variables (Sugiyono, 2017) in this study include information quality, system quality, service quality, system usage, user satisfaction, and net benefits. While the effectiveness of SIMAK BMN functions as a non-free or bound variable, which is a variable that is influenced or which is a result of the existence of independent variables (Sugiyono, 2017). The six independent variables have a significant effect on the effectiveness of the SIMAK BMN where to analyze it using the Multiple Regression method. The Multiple Linear Regression Model is used to test whether the independent variable has an influence on the dependent variable simultaneously or partially. Analysis of Multiple Linear Regression according to (Sugiyono, 2017) can be formulated as follows:

 $Y = \alpha + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + \varepsilon$ 

Where.

Υ Dependent Variable

Constant α

b Regression Coefficient Independent Variable

Χ Independent Variable

Standard error 3

On the independent variables used in this study, contain supporting variables in the form of questions poured in the form of a questionnaire.

#### **Research Hypotheses**

In this study a hypothesis test will be conducted where the hypotheses are determined as follows:

Hypothesis 1

: There is no influence of system quality factors, information quality, service quality, system usage, user satisfaction, and net benefits on the effectiveness of SIMAK BMN.

H₁ : There are at least one of the factors of system quality, information quality, service quality, system usage, user satisfaction, and net benefits on the effectiveness of SIMAK BMN. Hypothesis 2

: There is no influence of information quality factors on the effectiveness of SIMAK BMN.  $H_0$ 

: There is an influence of system quality factors on the effectiveness of SIMAK BMN. H₁

Hypothesis 3

: There is no influence on system quality factors on the effectiveness of SIMAK BMN. H₀

H₁ : There is an influence of information quality factors on the effectiveness of SIMAK BMN.

# Hypothesis 4

 $H_0$ : There is no influence on service quality factors on the effectiveness of SIMAK BMN.

: There is an influence of service quality factors on the effectiveness of SIMAK BMN. H₁ Hypothesis 5

Н₀ : There is no influence of system usage factors on the effectiveness of SIMAK BMN.

: There is an influence of system usage factors on the effectiveness of SIMAK BMN. H₁

Hypothesis 6

 $H_0$ : There is no influence of the user satisfaction factor on the effectiveness of the SIMAK BMN.

H₁ : There is an influence factor of user satisfaction on the effectiveness of SIMAK BMN. Hypothesis 7

 $H_0$ : There is no effect of the net benefit factor on the effectiveness of the SIMAK BMN.

H₁ : There is the influence of the net benefit factor on the effectiveness of the SIMAK BMN.

# **Validity Test**

Validity and reliability testing is done with SPSS version 25 tools. Test validity is used to know how carefully an item is in measuring what will be measured. This validity test will determine the validity of the instruments used in the study. The provisions of this validity test as explained by (Hasibuan, 2007) if the sample requirements are normal (> 30), then the method used is Pearson product moment, whereas if the sample is taken small (<30) then the method used is spearman rank correlation. In this study because the sample used is 30 which means ≥30, then the method for testing the validity is the Pearson product moment. The test results are said to be valid if the value of r count> r table and invalid if r count <r table. In addition according to (Sugiyono, 2017) to calculate the correlation in the validity test using the Pearson product moment method, with the following formula:

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X^2)] [n \sum Y^2 - (\sum Y)^2]}}$$

To test the validity according to [11] the conditions that must be fulfilled as criteria for the items tested are valid or not, are as follows:

a. If  $r \ge 0.03$  then the items are declared valid

b. If  $r \le 0.03$  then the items are declared invalid

# **Reliability Test**

Reliability testing can be used to determine the consistency of measuring instruments that usually use a questionnaire. The method used in this study to measure reliability is Cronbach's



Alpha. This reliability test is a continuation of the validity test, where in the reliability test the items tested are only valid items. The items are said to be reliable if the variable coefficient is more than 0.6.

# **Classic Assumption Test**

In this study, a classic assumption test was used. Classical assumption testing is done to provide certainty that the regression equation obtained has accuracy, is not biased, and is consistent. In this study, four types of classical assumption tests were used according to (Privatno, 2018), including:

## a. Normality Assumption Test

The normality test aims to test whether in the regression model, the disturbing or residual variables have a normal distribution. A good regression model that has a residual value that is normally distributed. There are 2 ways that are used to find out whether the residual is normally distributed or not, that is by the graph method by looking at the normal probability plot and statistical tests with one sample kolmogorov smirnov.

## b. Multicollinierity Assumption Test

Test of multicollinearity assumptions is used to test whether the regression model found a correlation between independent variables. If there is a correlation, it can be said as a multicollinearity problem. It should be noted that a good regression model should not occur between the independent variables.

#### c. Autocorrelation Assumption Test

The autocorrelation assumption test is used to test whether in the linear regression model there is a correlation between the confounding errors in period t and the disturbing errors in the previous period. If there is a correlation, it is called the autocorrelation problem.

#### d. Heteroscedasticity Asumption Test

The heteroscedasticity assumption test is used to test whether in the regression model there is an inequality of residual variance between one observation to another. If the variance of the residuals from one observation to another observation remains, it is called homocedasticity. If the variance differs from one observation to another, it is called heteroscedasticity. The good regression model is not heteroscedasticity, but homocedasticity.

## Multiple Linier Regression Test

Based on the hypothesis described previously, then in this study used the Multiple Linear Regression analysis method using SPSS version 25 tools. According to (Sugiyono, 2017) that multiple linear regression analysis intends to predict how the condition (ups and downs) of the dependent variable (criteria), if two or more independent variables are at least 2, so the multiple linear regression equation specified is as follows:

$$Y = a + b_1X_1 + b_2X_2 + \varepsilon$$

This study has more than 2 independent or free variables in the form of questions on each independent variable. So that the analysis method uses multiple linear regression in accordance with the effectiveness research on SIMAK BMN.

## **RESULTS AND DISCUSSION**

The result of the recapitulation of the frequency distribution of respondents taken from the questionnaire. For operator officers and person in charge of SIMAK-BMN at the Ministry of Women's Empowerment and Child Protection, there were 16 men (53%), while women were 14 people (47%). It can be said that the appointment of operator officers and those responsible for SIMAK-BMN at the Ministry of Women's Empowerment and Child Protection is given more to men. For the age of the operator and the person in charge of SIMAK-BMN at the Ministry of Women's Empowerment and Child Protection, it is dominated by the age of <30 as many as 15 people with a percentage of 50%. This proves that the operator officers and person in charge of SIMAK-BMN are occupied by second-level productive age, where the majority are still young. The education level of the operator and SIMAK-BMN responsible for the most Ministry of Women's Empowerment and Child Protection is S1 with 24 people (80%), followed by high school education with 3 people (10%), S2 education with 2 people (6,7 %), and the least number of officers with D3 education is only 1 person (3.3%). It can be concluded that most of the operators responsible for SIMAK-BMN at the Ministry of Women's Empowerment and Child Protection have a fairly high educational background, namely S1. The working period of the operator and the person in charge of SIMAK-BMN at the Ministry of Women's Empowerment and Child Protection is dominated by a working period of <5 years as many as 15 people (50%).

# **Results of Validity Test**

In this study, the Pearson Correlation method will be used by correlating item scores with the total item score for each variable. After that, significance testing was carried out by using the r table at the 0.05 significance level with a two-sided test. If the value is positive and r count> r table, items can be declared valid. If r counts <r table, then the item is declared invalid. To test the validity of this study, can be seen in Table 2. In Table 2, is the output of the validity test using SPSS version 25 tools. From the results of the validity test, to find out whether the item is valid or not, comparison can be made on the significance value. If significance ≤ 0.05 the item is

valid, but if> 0.05 the item is invalid. Based on the significance, 36 items were declared valid because the significance value of the 36 items was <0.05.

Table 2 Results of Validity Test

No	Variable	r value	r value	Sign.	Comment
		calculated	table		
1	A1	0,531	0,361	0,003	Valid
2	A2	0,728	0,361	0,000	Valid
3	A3	0.473	0,361	0,008	Valid
4	A4	0,589	0,361	0,001	Valid
5	A5	0,779	0,361	0,000	Valid
6	A6	0,728	0,361	0,000	Valid
7	A7	0,502	0,361	0,005	Valid
8	A8	0,580	0,361	0,001	Valid
9	B9	0,547	0,361	0,002	Valid
10	B10	0,698	0,361	0,000	Valid
11	B11	0,876	0,361	0,000	Valid
12	B12	0,868	0,361	0,000	Valid
13	B13	0,761	0,361	0,000	Valid
14	B14	0,725	0,361	0,000	Valid
15	B15	0,747	0,361	0,000	Valid
16	B16	0,701	0,361	0,000	Valid
17	B17	0,469	0,361	0,009	Valid
18	B18	0,531	0,361	0,003	Valid
19	B19	0,728	0,361	0,000	Valid
20	C20	0,605	0,361	0,000	Valid
21	C21	0,451	0,361	0,012	Valid
22	C22	0,605	0,361	0,000	Valid
23	C23	0,411	0,361	0,024	Valid
24	D24	0,604	0,361	0,000	Valid
25	D25	0,361	0,361	0,050	Valid
26	D26	0,487	0,361	0,006	Valid
27	E27	0,605	0,361	0,000	Valid
28	E28	0,674	0,361	0,000	Valid
29	E29	0,728	0,361	0,000	Valid
30	F30	0,502	0,361	0,005	Valid
31	F31	0,392	0,361	0,032	Valid
32	F32	0,437	0,361	0,016	Valid
33	F33	0,568	0,361	0,001	Valid
34	F34	0,622	0,361	0,000	Valid
35	F35	0,536	0,361	0,002	Valid
36	G36	0,728	0,361	0,000	Valid

In addition to looking at the significance value, to find out whether the item is valid or not can be used with the Pearson Correlation method, the way is to compare the r count with r table. Suppose that in item 1, it produces r count 0.466 and r table in this validity test is 0.361. The r table value is obtained by looking at the reference table r, where the significance is 0.05 (5%) and the number n or respondent is 30. Can be stated if the result of 0.531 (r count)> of 0.361 (r table) indicates that the item is valid. For item 2 to item 36, the calculated r value is greater than r table, it can be stated that all items in this validity test are valid. The conclusion is that these items can be used as references for questions in the questionnaire without having to have them removed or deleted.

# **Results of Reliability Test**

To determine a reliable instrument or not, the limit of 0.6 is used. Reliability < 0.6 is not good, for reliability 0.7 can be accepted, and 0.8 is good. The reliability test results of this study can be seen in the following (Table 3 and Table 4).

Table 3 Case Processing Summary

Case Processing Summary					
		N	%		
Cases	Valid	30	100.0		
	Excluded*	0	.0		
	Total	30	100.0		

Table 4 Results of Reliability Test

Reliability Statistics				
Cronbach's Alpha	N of Items			
.951	36			

In the reliability test, two outputs are produced, namely the Summary and Reliability Statistics Case Processing. Output Case Processing Summary describes the amount of valid data to be processed and the data issued and the percentage. It can be seen in table 3 that valid data amounts to 30 with a percentage of 100%, and no data is released (exclude). Whereas Reliability Statistics is the result of reliability analysis with Cronbach Alpha. In table 4 Cronbach Alpha for this study was 0.951. These results can be compared with existing provisions where if the reliability <0.6 is not good, reliability 0.7 is acceptable, and reliability> 0.8 is good. So it can be concluded that this test is reliable because Cronbach Alpha is 0.951> 0.6.

## **Residual Normality Test Results**

The residual normality test is done to test whether the residual values generated from the regression are normally distributed or not. In this study, the method used for residual normality

testing is the graph method. The graph method is done to see the spread of data on diagonal sources in the Normal P-P graph Plot of regression standardized residuals. The following can be seen the results of the residual normality test in (e.g. Fig. 2).

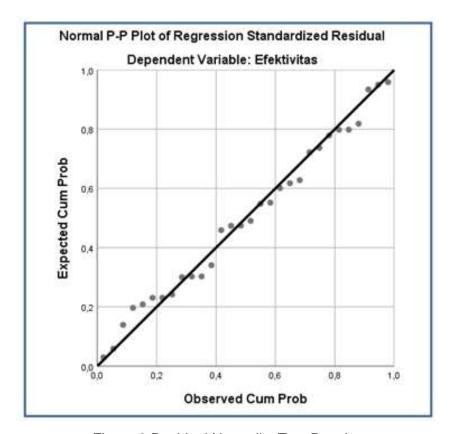


Figure 2 Residual Normality Test Results

Based on the results of the data in (e.g. Fig. 2), a decision can be made provided that the points spread around the line and follow the diagonal line, then the residual value is normal. It can be seen in (e.g. Fig. 1) the points spread around the line and follow the diagonal line, so that it can be said that the residual value in this residual normality test is normal.

## **Multicollinierity Test Results**

In this multicollinearity test, it will be done by looking at two aspects, namely the value of Tolerance and VIF (Variant Inflation Factor). The provision is to find out a regression model not multicollinearity can be seen from the VIF (Variant Inflation Factor) value <10 and Tolerance> 0.1. Following are the results of the multicollinearity test, can be seen in Table 5.

Table 4 Multicollinierity Test Results

	Coefficients								
Unstandardized		Standardized		Collinearity					
		Coeffi	cients	Coefficients			Statistics		
Model		В	Std. Error	Beta	t	Sig	Tolerance	VIF	
1	(Constant)	-,927	,632		-1,467	,156			
	Kualitas_Informasi	,125	,029	,728	4,361	,000	,252	3,972	
	Kualitas_Sistem	-,007	,015	-,062	-,440	,664	,354	2,821	
	Kualitas_Layanan	,182	,052	-,609	3,501	,002	,232	4,307	
	Penggunaan_System	-,107	,042	-,263	-2,535	,018	,654	1,528	
	Kepuasan_Penggunaan	-,047	,092	-,118	-,516	,611	,134	7,462	
	Manfaat_Bersih	-,021	,028	-,089	-,761	,454	,514	1,945	

Based on the conditions explained, the multicollinearity test in Table 5 can be concluded that there is no multicollinearity. From the independent variables tested as many as 6 variables, a Tolerance value of 6 variables is produced, which is more than 0.1 and VIF. The 6 variables are less than 10.

# **Heterocedasticity Test Results**

To test heteroscedasticity can be done by Glejser test and see the points on the regression scatterplots, and in this study both tests were carried out, (Table 6) and (Fig. 3) are the results of heteroscedasticity tests with the Glejser test and regression scatterplots.

Table 6 Heteroscedasticity Test Results (Glejser Test)

Coeffic	ients					
		Unst	andardized	Standardized		
		Co	efficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig
1	(Constant)	,000	,632		,000	1,000
	Kualitas_Informasi	,000	,029	,000	,000	1,000
	Kualitas_Sistem	,000	,015	,000	,000	1,000
	Kualitas_Layanan	,000	,052	,000	,000	1,000
	Penggunaan_System	,000	,042	,000	,000	1,000
	Kepuasan_Penggunaan	,000	,092	,000	,000	1,000
	Manfaat_Bersih	,000	,028	,000	,000	1,000

To test heteroscedasticity with the glejser test, it is done by regression between the independent variables and their residual absolute values. If the significance value between the independent variables with the residual absolute value is more than 0.05, then it can be said that there is no problem with heteroscedasticity. By looking at (Table 6) it can be concluded that this test is not heteroscedasticity, because the significant value of the six independent variables tested is 1,000 and more than 0.05.

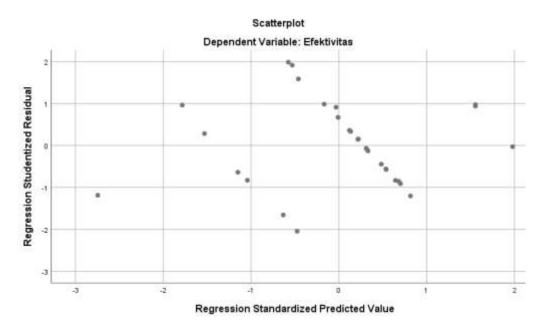


Figure 3 Heteroscedasticity Test Results (Scatterplot)

From the results of heteroscedasticity test in (e.g. Fig. 3), it can be seen that the points do not form a clear pattern. The points spread above and below the number 0 on the Y axis. Therefore, it can be concluded that there is no problem of heteroscedasticity in the regression model.

#### **Autocorrelation Test Results**

The following results from the autocorrelation test in this study can be seen in (Table 7) below.

Model Summary					
Model	R	R Square	Adjusted	Std. Error of	Durbin-
Model	IX	it oquare	R Square	the Estimate	Watson
1	,916 <sup>a</sup>	,838	,796	,29233	1,670

Table 7 Autocorrelation Test Results

In the autocorrelation test with the Durbin-Watson method (DW test) there are provisions if DU <DW <4-DU then Ho is accepted and there is no autocorrelation, if DW <DL or DW> 4-DL then Ho is rejected and autocorrelation occurs, if DL < DW <DU or 4-DU <DW <4-DL then there are no definite conclusions or conclusions. In this autocorrelation test, the number of independent variables (k) is obtained by 6 with the number of respondents as much as 30 (N), the value of

DU is 1.9313, the value of DL is 0.9982. To find out the value of DU and DL can be seen in the Durbin-Watson table. The 4-DU value is 2.0687, the 4-DL value is 3.0018, and the DW value can be seen in the table 7 of 1.670. So it can be concluded that DL <DW <DU (0.9982 <1.670 <1.9313) so that the results have no definite conclusions or conclusions.

# **Multiple Linier Regression Test Results**

The following are the results of multiple linear regression trials:

Table 8 Output Variable Entered/Removed

Variables Entered/Removed <sup>a</sup>						
Model	Variables Entered	Variables	Method			
		Removed				
1	Net_Benefits, Usage,		Enter			
	Service_Quality,					
	Information_Quality,					
	System_Quality,					
	User_Satisfaction					

The output in Table 8 describes the variables included in the model and those that are removed from the model. It can be seen that the independent variables included in the model are net benefits, service quality, system use, information quality, system quality, usage satisfaction, while the dependent variable is effectiveness. It can be concluded that there are no variables removed.

Table 9 Output Model Summary

Model Summary							
Model	R	R Square	Adjusted R	Std. Error of			
			Square	the Estimate			
1	,916 <sup>a</sup>	,838	,796	,29233			

Here will be explained about the output of the summary model including R shows the value of multiple correlation between two or more independent variables on the dependent variable. The value of R ranges from 0 to 1, if close to 1 relationship gets tighter, and if it approaches 0 the relationship gets weaker. The value of R in this study is 0.916, so it can be said that the correlation between the variables of net benefits, service quality, system use, information quality, system quality, user satisfaction with effectiveness is closely related because the R value is close to 1.

R Square or square of R shows the coefficient of determination. In Table 9 it is known that the value of R Square is 0.838. So the percentage contribution to the effect of net benefits, service quality, system use, information quality, system quality, user satisfaction on effectiveness is 83.8% and the rest is influenced by other factors. R Square is the same as Adjusted R Square which is used for the percentage contribution of the influence of more than two independent variables on the dependent variable, where the percentage is 79.6%. Adjusted R Square is an alternative given by SPSS as a comparison of the accuracy of its effect, when the R value is contaminated by various disturbing values that might cause measurement errors. Standard Error of the Estimate is used to measure prediction errors with a value of 0.29233. That is, errors that can occur in predicting effectiveness are 0.29233.

Table 10 Output Anova

ANOVA	a					
Model		Sum of Df		Mean		Sig
Model		Squares	ы	Square		
1	Regression	10,201	6	1,700	19,896	,000 <sup>b</sup>
	Residual	1,965	23	,085		
	Total	12,167	29			

In the multiple linear regression test, Anova test is performed to explain the results of the F test or the regression coefficient test together. From Table 10, the calculated F value is 19,896 with a significant value of 0,000. In the existing provisions where if a significant value is smaller than 0.05 then Ho is rejected. Anova's output shows that the significance is 0,000 <0,05, meaning that there is at least one independent variable from six independent variables that affect the effectiveness of SIMAK-BMN.

Table 11 Output Coefficients

			Coeffic	cients		
		Unstand	dardized	Standardized		
		Coeff	icients	Coefficients		
Model		В	Std. Error	Beta	t	Sig
1	(Constant)	-,927	,632		-1,467	,156
	Information_Quality	,125	,029	,728	4,361	,000
	System_Quality	-,007	,015	-,062	-,440	,664
	Service_Quality	,182	,052	-,609	3,501	,002
	Usage	-,107	,042	-,263	-2,535	,018
	User_Satisfaction	-,047	,092	-,118	-,516	,611
	Net_Benefits	-,021	,028	-,089	-,761	,454

From the results of multiple linear regression tests on SPSS version 25 tools, there are several independent variables that influence the effectiveness of SIMAK-BMN. The independent variables tested were 6 variables including information quality (X1), system quality (X2), service quality (X3), system use (X4), usage satisfaction (X5), net benefit (X6), on the dependent variable namely effectiveness (Y). Based on (e.g. Fig. 8) the independent variables that affect the effectiveness of SIMAK-BMN are information quality (X1), service quality (X3), and system usage (X4). This dependent variable is said to affect because it is seen based on the results of significance (Table 11). If the significance value is less than 0.05, it can be said that the significance of the independent variable tested affects the dependent variable. For the system quality variable (X2) with a significant 0.664> 0.05, so also the usage satisfaction variable (X5) the significance is 0.611> 0.05, the net benefit variable (X6) with a significance of 0.454> 0.05, then these variables can omitted because the significance value is more than 0.05. So that the regression equation is obtained from the results of the study as follows:

$$Y = -0.927 + 0.125 X_1 + 0.182 X_3 - 0.107 X_4$$

# **Hypothesis Testing Results**

The results of hypothesis testing are explained as follows:

Hypothesis 1

 $H_0$ : There is no influence of system quality factors, information quality, service quality, system usage, user satisfaction, and net benefits on the effectiveness of SIMAK BMN.

H₁ : There are at least one of the factors of system quality, information quality, service quality, system usage, user satisfaction, and net benefits on the effectiveness of SIMAK BMN. To test hypothesis 1, the F test is used by looking at the significance value. Obtained F count from the results of multiple linear regression testing of 19,896. F table can be obtained by looking at the F table in the statistical table at a significance of 0.05, the provision is to find the value of 1, namely the number of variables - 1, then the value 7-1 = 6. Then of 2 with the calculation nk-1, n as the number data, k as the number of independent variables. In this case the value of df 2 is 36 - 6 - 1 = 29. The results of df 1 and df 2 as a reference to see table F, so that F table is obtained at 2.43.

If F count ≤ F table, then Ho is accepted. If F count> F table, then Ho is rejected. In this study F count> F table is 19,896> 2.43, the conclusion is Ho is rejected and H1 is accepted. So, there is at least one of the factors of system quality, information quality, service quality, system usage, user satisfaction, and net benefits on the effectiveness of SIMAK BMN.

# Hypothesis 2

H<sub>0</sub>: There is no influence of information quality factors on the effectiveness of SIMAK BMN.

H<sub>1</sub> : There is an influence of information quality factors on the effectiveness of SIMAK BMN. This hypothesis 2 test uses the t test, the step is to determine t count from the research that has been done in the multiple linear regression test, resulting in t count on the information quality variable of 4.361. Then determine the t table that can be seen with the help of table t, where first look for df = nk-1 or 36 - 6 - 1 = 29. T-test with 2 sides, with reference to the value of df, is obtained t table of 2,045 or -2,045 . If −t counts ≥ -t table or t count ≤t table, Ho is accepted. If −t count <-t table or t count> t table, Ho is rejected. In this case, the value of t count> t table is 4.361>2.045, so the conclusion is Ho is rejected and H1 is accepted. So, there is the influence

## Hypothesis 3

H<sub>0</sub>: There is no influence on system quality factors on the effectiveness of SIMAK BMN.

of information quality factors on the effectiveness of SIMAK BMN.

H<sub>1</sub>: There is an influence of system quality factors on the effectiveness of SIMAK BMN.

To test the 3-step hypothesis the same as the hypothesis test 2. Obtained the value of t count of -0.440 and t table 2.045 or -2.045. Then the -t count> -t table is -0.440> -2.045 Ho is accepted and H1 is rejected. So, there is no effect on system quality factors on the effectiveness of SIMAK BMN.

#### Hypothesis 4

H<sub>0</sub>: There is no effect on service quality factors on the effectiveness of SIMAK BMN.

H<sub>1</sub>: There is an influence of service quality factors on the effectiveness of SIMAK BMN.

In hypothesis 4 test, the value of t arithmetic is 3.501 and t table is 2.045 or -2.045. Then t count> t table which is 3.501> 2,045 Ho is rejected and H1 is accepted. So, there is the influence of service quality factors on the effectiveness of SIMAK BMN.

#### Hypothesis 5

H<sub>0</sub> : There is no effect of the system usage factor on the effectiveness of the SIMAK BMN.

H<sub>1</sub>: There is an influence of system usage factors on the effectiveness of SIMAK BMN. In hypothesis 5 test, the value of t count is -2.535 and t table is 2.045 or -2.045. Then the -t count <-t table is -2.535 <-2.045 Ho is rejected and H1 is accepted. So, there is the influence of system usage factors on the effectiveness of SIMAK BMN.



# Hypothesis 6

: There is no influence of the user satisfaction factor on the effectiveness of the SIMAK  $H_0$ BMN.

Н₁ : There is an influence factor of user satisfaction on the effectiveness of SIMAK BMN. In hypothesis 6 test, the value of t count is -0.516 and t table is 2.045 or -2.045. Then the -t count> -t table is -0,516> -2,045 Ho is accepted and H1 is rejected. So, there is no influence of the user satisfaction factor on the effectiveness of the SIMAK BMN.

# Hypothesis 7

H₀ : There is no effect of the net benefit factor on the effectiveness of the SIMAK BMN.

: There is an effect of the net benefit factor on the effectiveness of the SIMAK BMN. H₁ In hypothesis 7 test, the value of t count is -0.761 and t table is 2.045 or -2.045. Then the -t count> -t table is -0.761> -2.045 Ho is accepted and H1 is rejected. So, there is no effect of the net benefit factor on the effectiveness of the SIMAK BMN.

#### CONCLUSIONS

SIMAK-BMN is an application that is used in the Ministry of Women's Empowerment and Child Protection, of course, a reliable information system is needed in supporting work completion, including in the management of State Property assets (BMN). Limitations of problem in this research are using quantitative method with questionnaires as the data collection techniques. Questionnaires were distributed to 5 work unit (satker) in the Ministry of Women's Empowerment and Child Protection, including the Deputy of the Gender Equality Division, Deputy for the Protection of Women's Rights, Deputy for Child Protection, Deputy for Child Growth, Deputy for Community Participation, and the work unit of Ministry of Women's Empowerment. Questionnaires were distributed to 30 respondents at 5 work units (satker) aimed at SIMAK-BMN operators. The research was based on the DeLone and McLean (2003) model as the effectiveness reference of SIMAK- BMN including information quality, system quality, service quality, usage, user satisfaction, and net benefits. The collected questionnaire data were tested and processed using multiple regression analysis on SPSS version 25. Based on the empirical findings, it can be concluded that:

1) Independent variable quality of information (information quality) is proven to influence the effectiveness of SIMAK-BMN based on the results of multiple linear regression trials with a significance value of 0,000 where it is smaller than 0.05. To test the hypothesis obtained t count> t table that is 4.361> 2.045, then Ho is rejected and H1 is accepted.

- 2) Independent variables of system quality (system quality) are proven not to affect the effectiveness of SIMAK-BMN based on the results of multiple linear regression trials with a significance value of 0.664 which is greater than 0.05. To test the hypothesis obtained -t count> -t table that is -0.440> -2.045, then Ho is accepted and H1 is rejected.
- Independent variable of service quality is proven to influence the effectiveness of SIMAK-BMN based on the results of multiple linear regression trials with a significance value of 0.002 which is smaller than 0.05. To test the hypothesis obtained t count> t table that is 3.501> 2,045, then Ho is rejected and H1 is accepted.
- 4) Independent variable use of the system (use) is proven to affect the effectiveness of SIMAK-BMN based on the results of multiple linear regression trials with a significance value of 0.018 which is smaller than 0.05. To test the hypothesis obtained -t count <-t table is -2.535 <-2.045, then Ho is rejected and H1 is accepted.
- 5) Independent variable of user satisfaction (user satisfaction) is proven not to affect the effectiveness of SIMAK-BMN based on the results of multiple linear regression trials with a significance value of 0.611 which is greater than 0.05. To test the hypothesis obtained -t count> -t table is -0,516> -2,045, then Ho is accepted and H1 is rejected.
- 6) The independent variable of net benefits is proven not to affect the effectiveness of SIMAK-BMN based on the results of multiple linear regression trials with a significance value of 0.454 which is greater than 0.05. To test the hypothesis obtained -t count> -t table is -0.761> -2.045, then Ho is accepted and H1 is rejected.

#### **SUGGESTIONS**

Suggestions that can be delivered after this research are as follows:

- More in-depth research can be carried out by raising more factors that support the effectiveness of information systems.
- The need for regular evaluation and training of SIMAK-BMN operators so that users or operators will understand better.
- Can be used as an evaluation for program makers, in order to prioritize user comfort, the system is made more user friendly, and not fragmented so that it will make it easier for SIMAK-BMN operators to operate this application.

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