

Success Analysis of Academic Information System (SIKAD) Using Delone and Mclean Models (Case Study of STIHPADA Palembang)

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Abstract

Academic Information System (SIKADSTIHP) is a legal information system in high schools (SIKADSTIHP). It is necessary to measure the success of the implementation of SIKAD. In this study, researchers analyzed the success of academic information systems using the Delone and McLean models by measuring using 6 variables, namely Information Quality, System Quality, Service Quality, Use, User Satisfaction, and Net Benefit which aims to determine the success factors of academic information systems. The sample in this study amounted to 100 respondents. The data analysis method used is quantitative analysis method using validity test, reliability test, normality test, multicollinearity test, F test and T test. The research data uses an instrument in the form of a questionnaire and is processed using statistical product and service solution (SPSS) software.

Keywords

academic information systems;
delone and mclean models;
SPSS



I. Introduction

The development of computers and internet technology today plays a very important role in showing quality in the academic field, these developments, especially information systems that can help and facilitate various fields of work related to ease of access, distance, and time. In the era of globalization, the role of information and communication technology is getting faster and more sophisticated where all activities can be done through technology (Seprina et al., 2021). The ease of internet access today has also encouraged various fields of government agencies and private institutions to use it, including in the field of education. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019). Organizations create new information systems by taking advantage of developments in information technology and can quickly implement them in their services. In an institution that serves the needs of the public, both internally and externally, it is very necessary to have proper and accurate information and management in the activities of the institution (Komalasari & Seprina, 2018). Information systems can be defined as an integration of people, data, tools and procedures that work together to achieve a goal.

An information system that uses internet technology to assist an organization or agency in providing information and services online with the aim of making it easier for them, namely the users to interact without having to come or meet face to face. However, the implementation of an information system itself is faced with two things, whether an organization or agency will succeed or vice versa.

An information system can be said to be successfully implemented if it can be proven to have a useful impact or benefit felt by its users. Based on the above, the researchers conducted a research on measuring the success of academic information systems using the Delone and McLean (2003) success approach which has been updated from the previous version in 1992. In the Delone and McLean approach, there are 6 evaluation variables, namely: Information Quality (quality of information), System Quality (quality system), Service Quality (quality of service), Use (use), User Satisfaction (user satisfaction), and Net Benefit (net benefits). Based on the description contained in the background, the problems that can be obtained in this study are "How does the influence of Information Quality, System Quality, Service Quality, Usage, User Satisfaction, and Net Benefits to users of the Academic Information System (SIKAD)". The purpose of this study is to analyze and determine the success of academic information systems by testing the relationship between 6 (six) variables contained in the Delone and McLean models, namely information quality (quality of information), system quality (system quality), Service Quality (quality of service), use (use), user satisfaction (User satisfaction), net benefits (Net benefit) on the Academic Information System (SIKAD).

The benefits of this research are as follows:

1. It is hoped that this research can provide evidence that influences the success of the academic information system at the youth oath law school by using the Delone and McLean model. And the results of this research are also expected to be a development in the field of information technology science.
2. Can find out about the factors in the success of academic information systems by testing the variables contained in the Delone and McLean model approach. And also can be expected to be a guideline for the development of information systems success in other institutions or to be used as material for further research.

II. Research Method

This research uses a descriptive quantitative approach. Quantitative approach is a research approach that is carried out by processing and presenting data using statistical calculations involving numbers or scores/values so as to enable researchers to make decisions objectively. This approach is used because it is relevant to the formulation of the problem to be answered in this study, namely trying to describe and find out the gaps in variables related to academic information systems. The purpose of this study is to show the relationship between variables, test the theory, and look for generalizations that have predictive value.

III. Result and Discussion

In this study, previous research has been carried out by distributing questionnaires to respondents through google forms and paper media, so that the results of questionnaire data are obtained then the data is processed and analyzed so that the results of this study are obtained. Users of the Grab application in the city of Palembang assess the level of application quality based on six variables, namely information quality, system quality, service quality, use, user satisfaction, benefits net (net benefits). The population in this study are students who use academic information systems using the Slovin formula and get a sample of 100 respondents, to get the correct and accurate data calculation results, the data will be processed using SPSS Version 22.

3.1 Characteristics of Respondents

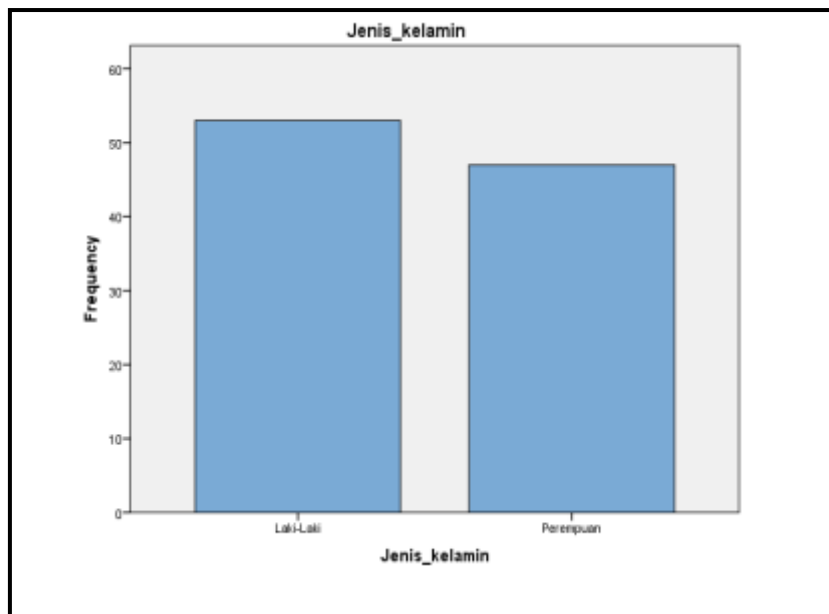
Table1. Respondent's Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	53	53.0	53.0	53.0
	Female	47	47.0	47.0	100.0
	Total	100	100.0	100.0	

In this study, the respondent's characteristics have the aim of describing the identity of the respondents who are the samples in this study. There are two characteristics of respondents, namely respondents based on gender and age. In this study, the questionnaire data was distributed to 100 respondents to assess the quality of the information system.

3.2 Characteristics Based on Gender

The characteristics of respondents based on gender consist of both male and female, can be seen in the following picture:



Source: SPSS Version 22

Figure 1. Characteristics of Respondents by Gender

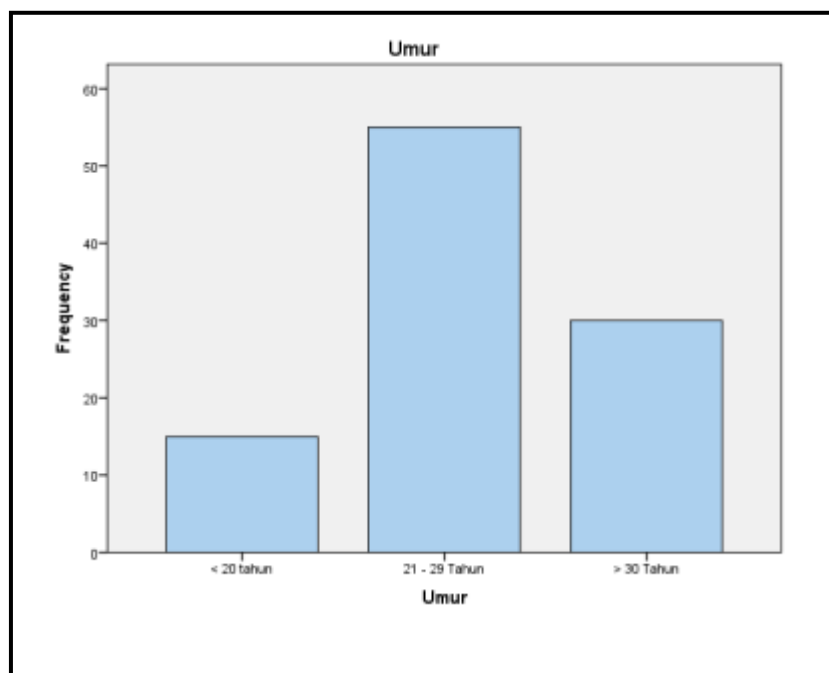
Based on the gender characteristics of the respondents in Figure 4.1, it can be seen that 53 male respondents or 53.0% were male and 47 female respondents or 47.0% of the total 100 respondents. It is concluded that the majority of respondents are male.

3.3 Characteristics of Respondents Based on Age

Characteristics of Respondents Based on Age consists of ages <20, 21-29, > 30. It can be seen in the following figure:

Table 2. Age

	Freque ncy	Perce nt	Valid Percent	Cumulativ e Percent
Valid < 20 years	15	15.0	15.0	15.0
21 - 29 Years	55	55.0	55.0	70.0
> 30 Years	30	30.0	30.0	100.0
Total	100	100.0	100.0	



Source: SPSS Version 22

Figure 2. Characteristics of Respondents Based on Age

3.4 Description of Research Variables

In this study there were 100 respondents who were students from STIHPADA. This questionnaire consists of 5 kinds of answers, namely 1, 2, 3, 4, 5. The variables contained in this study consist of information quality, system quality, service quality, user satisfaction, usage, and net benefits.

a. Information Quality Variables (Information Quality)

The following are the results of the respondents' responses from the questionnaire statements that have been distributed to 100 respondents which aims to measure the information quality variable (*Information quality*). users of academic information systems at stihpada consisting of three statement items as follows:

Table 3. Frequency Distribution of Information Quality Variables

Score	Frequency	Percentage
Strongly Agree	138	46.00%
Agree	39	13.00%
Fairly Agree	30	10.00%
Disagree	42	14, 00%
Strongly Disagree	51	17.00%
Total	300	100.00%

Source: Microsoft excel 2010

Based on table 4.1 above the results obtained are 46.00% of respondents who feel strongly agree, 13.00% feel agree, 10, 00% feel quite agree, 14.00% feel disagree, 17.00% feel strongly disagree. So it was concluded that the majority of respondents' answers on the Information Quality variable were Strongly Agree.

b. System Quality Variables

The following are the results of respondents' responses to questionnaire statements that have been distributed to 100 respondents which aim to measure system quality variables. Users of the academic information system at stihpada which consist of three statement items as follows:

Table 4. Distribution of Variable Frequency System quality

Score	Frequency	Percentage
Strongly Agree	125	41.00%
Agree	115	38.33%
Fairly Agree	50	16.00%
Disagree	9	3, 00%
Strongly Disagree	1	0.33%
Total	300	98.66%

Source: Microsoft excel 2010

Based on table 4 above the results obtained are 41.00% of respondents who feel strongly agree, 38.00% feel agree, 16, 00% feel quite agree, 3.00% feel disagree, 0.33% feel strongly disagree. So, it was concluded that the majority of respondents' answers on the Information Quality variable were Strongly Agree.

c. Variable Quality of Service (Service quality)

The following is the result of the respondents' responses to the questionnaire statement that has been distributed to 100 respondents which aims to measure the variable of service quality (*Service Quality*). users of academic information systems at stihpada consisting of three statement items as follows:

Table 5. Frequency Distribution of Service Quality Variables

Score	Frequency	Percentage
Strongly Agree	134	44.66%
Agree	96	32.00%
Fairly Agree	57	19.00%

Disagree	12	4,00%
Strongly Disagree	1	0,33%
Total	300	99,99%

Source: Microsoft excel 2010

Based on table 5 above the results obtained are 44.00% of respondents who feel strongly agree, 33.00% feel agree, 19,00% feel quite agree, 4.00% feel disagree, 0.33% feel strongly disagree. So it was concluded that the majority of respondents' answers on the Information Quality variable were Strongly Agree.

d. User Satisfaction Variables (User satisfaction)

The following are the results of the respondents' responses from the questionnaire statements that have been distributed to 100 respondents which aims to measure the User Satisfaction variable. users of academic information systems at stihpada consisting of three statement items as follows:

Table 6. Frequency Distribution of User Satisfaction Variables

Score	Frequency	Percentage
Strongly Agree	66	33.00%
Agree	79	38.00%
Fairly Agree	39	19.50%
Disagree	15	7,50%
Strongly Disagree	1	0.50%
Total	200	98.50%

Source: Microsoft excel 2010

Based on table 4.4 above the results obtained are 33.00% of respondents who feel strongly agree, 38.00% feel agree, 19,50% feel quite agree, 7.50% feel disagree, 0.50% feel strongly disagree. So it was concluded that the majority of respondents' answers to the Information Quality variable were Agree.

e. Variable Use (Use)

The following are the results of the respondents' responses from the questionnaire statement that has been distributed to 100 respondents which aims to measure the variable Use (*Use*). users of academic information systems at stihpada which consist of three statement items as follows:

Table 7. Distribution of Variable Frequency Use

Score	Frequency	Percentage
Strongly Agree	82	41.00%
Agree	81	40.50%
Fairly Agree	29	14.50%
Disagree	8	4.00 %
Strongly Disagree	0	0.00%
Total	200	100.00%

Source: Microsoft excel 2010

Based on table 4.5 above the results obtained are 41.00% of respondents who feel strongly agree, 40.00% feel agree, 14.00 % feel quite agree, 4.00% feel disagree, 0.00% feel strongly disagree. So it was concluded that the majority of respondents' answers on the Information Quality variable were Strongly Agree.

f. Variable Net Benefit (Net Benefit)

The following is the result of the respondents' responses from the questionnaire statement that has been distributed to 100 respondents which aims to measure the Net Benefit variable. users of academic information systems at stihpada consisting of three statement items as follows:

Table 8. Frequency Distribution of Net Benefit Variables

Score	Frequency	Percentage
Strongly Agree	81	40.50%
Agree	75	37.50%
Sufficiently Agree	36	18.00%
Disagree	8	4, 00%
Strongly Disagree	0	0.00%
Total	200	100.00%

Source: Microsoft excel 2010

Based on table 4.6 above the results obtained are 40.50% of respondents who strongly agree, 37.50% agree, 18, 00% feel quite agree, 4.00% feel disagree, 0.00% feel strongly disagree. So it was concluded that the majority of respondents' answers on the Information Quality variable were Strongly Agree.

3.5 Instrument Test

a. Validity

Test Validity test is used to measure the determination of an item in the questionnaire or scale that you want to measure. In determining whether or not an item is valid, the activity that must be carried out is to compare r count with r table where the significance rate used is 0.05 or 5% with N = 100 so the R table value is 0.195.

3.6 Information Quality Variables

Test the validity of the information quality variable with r table of significance 0.5. If the correlation value or r arithmetic > r table then the question items are considered valid and feasible for a questionnaire and can be used as something to be measured in research. The results of the validity test for the information quality variable with three question items on the questionnaire can be seen in the following table:

Table 9. Validity Test Results Information Quality

Code	R Count	R Table (5%)	Information
KI1	0.930	0.196	Valid
KI2	0.967	0.196	Valid
KI3	0.964	0.196	Valid

Source: Microsoft excel 2010

The results of the validity test show all items of information quality variable questions with a value of $r_{count} > r_{table}$ at a significance of 0.05 or 5%. It was concluded that all question items on the information quality variable in the research questionnaire were declared valid and could be used as research instrument materials.

3.7 System Quality Variables

Test the validity of the system quality variables with r_{table} of significance 0.5. Then the r_{table} for 98 (0.196) and the calculated r are KS1 (0.812), KS2 (0.825) and KS3 (0.850). If the correlation value or $r_{arithmetic} > r_{table}$ then the question items are considered valid and feasible for a questionnaire and can be used as something to be measured in research. If the correlation value or $r_{count} < r_{table}$, then the question is invalid and not feasible for a questionnaire and cannot be used as something to be measured in research. The results of the validity test for the system quality variable with three question items on the questionnaire can be seen in the following table:

Table 10. Validity Test Results for System Quality

Code Item	R Count	R Table (5%)	Information
KS1	0.812	0.196	Valid
KS2	0.825	0.196	Valid
KS3	0.850	0.196	Valid

Source: Microsoft excel 2010

The results of the validity test show all the question items for the system quality variable with a value of $r_{count} > r_{table}$ at a significance of 0.05 or 5%. It was concluded that all question items on the information quality variable in the research questionnaire were declared valid and could be used as research instrument materials.

3.8 Variable Service Quality (Service Quality)

Test the validity of the service quality variable with a significance r_{table} of 0.5. Then the r_{table} for 98 (0.196) and the calculated r are KP1 (0.882), KP2 (0.925), and KP3 (0.859). If the correlation value or $r_{arithmetic} > r_{table}$ then the question items are considered valid and feasible for a questionnaire and can be used as something to be measured in research. If the correlation value or $r_{count} < r_{table}$, the question is invalid and not feasible for a questionnaire and cannot be used as something to be measured in research. The results of the validity test for the service quality variable with three question items on the questionnaire can be seen in the following table:

Table 11. Service Quality Validity Test Results

Item code	R Count	R Table (5%)	Information
KP1	0.882	0.196	Valid
KP2	0.925	0.196	Valid
KP3	0.859	0.196	Valid

Source: Microsoft excel 2010

The results of the validity test show that all items in the question variable are 47 quality of information with a value of $r_{count} > r_{table}$ at a significance of 0.05 or 5%. It was concluded that all question items on the service quality variable in the research questionnaire were declared valid and could be used as research instrument materials

3.9 User Satisfaction Variable (User Satisfaction)

Test the validity of the user satisfaction variable with r table of significance 0.5. Then the r table for 98 (0.196) and the calculated r are KP1 (0.816) and KP2 (0.881). If the correlation value or r arithmetic $>$ r table then the question items are considered valid and feasible for a questionnaire and can be used as something to be measured in research. If the correlation value or r count $<$ r table, the question is invalid and not feasible for a questionnaire and cannot be used as something to be measured in research. The results of the validity test for the service quality variable with two question items on the questionnaire can be seen in the following table:

Table 12. Validity Test Results for User Satisfaction

Item code	R Count	R Table (5%)	Information
KU1	0.816	0.196	Valid
KU2	0.881	0.196	Valid

Source: Microsoft excel 2010

The results of the validity test show that all question items are user satisfaction variables with a calculated r value $>$ r table at a significance of 0.05 or 5%. It was concluded that all question items on the User Satisfaction variable in the research questionnaire were declared valid and could be used as research instrument materials.

3.10 Variable Use

Test the validity of the variable Intention to Use and Use with r table significance of 0.5. Then the r table for 98 (0.196) and the calculated r are NP1 (0.902) and NP2 (0.858). If the correlation value or r arithmetic $>$ r table then the question items are considered valid and feasible for a questionnaire and can be used as something to be measured in research. If the correlation value is 48 or r arithmetic $<$ r table, then the question is invalid and not feasible for a questionnaire and cannot be used as something to be measured in research. The results of the validity test for the variables of intention to use and use with two question items on the questionnaire can be seen in the following table:

Table 13. Test Results Validity Intention to Use and Use

Item code	R Count	R Table (5%)	Information
P1	0.902	0.196	Valid
P2	0.858	0.196	Valid

Source: Microsoft excel 2010

The results of the validity test show all the question items for the user satisfaction variable with a value of r count $>$ r table at a significance of 0.05 or 5%. It was concluded that all question items on the user satisfaction variable in the research questionnaire were declared valid and could be used as research instrument materials.

3.11 Variable Net Benefits

Test the validity of the service quality variable with r table significance of 0.5. Then the r table for 98 (0.196) and the calculated r are MB1 (0.908), MB2 (0.893), and MB3 (0.78328). If the correlation value or r arithmetic $>$ r table then the question items are considered valid and feasible for a questionnaire and can be used as something to be measured in research. If the correlation value or r count $<$ r table, the question is invalid

and not feasible for a questionnaire and cannot be used as something to be measured in research. The results of the validity test for the Net Benefit variable with three question items on the questionnaire can be seen in the following table:

Table 14. Net Benefit Validity Test Results

Item code	R Count	R Table (5%)	Information
NB1	0.908	0.196	Valid
NB2	0.893	0.196	Valid

Source: Microsoft excel 2010

The results of the validity test show all the question items for the Net Benefit variable with a value of r count > r table at a significance of 0.05 or 5%. So it was concluded that all question items on the Net Benefits variable in the research questionnaire were declared valid and could be used as research instrument materials.

3.12 Reliability

Test Reliability Test is to find out the consistency or regularity of the results of measuring instrument status if the instrument is used again as a measuring instrument for an object or respondent. As for the requirements to state if the item is declared reliable, there is a reliability test result and if the result is close to 1 then the item is declared reliable. The results of the reliability test using SPSS 22 can be seen from the table below:

Table 15. Reliability Test Results

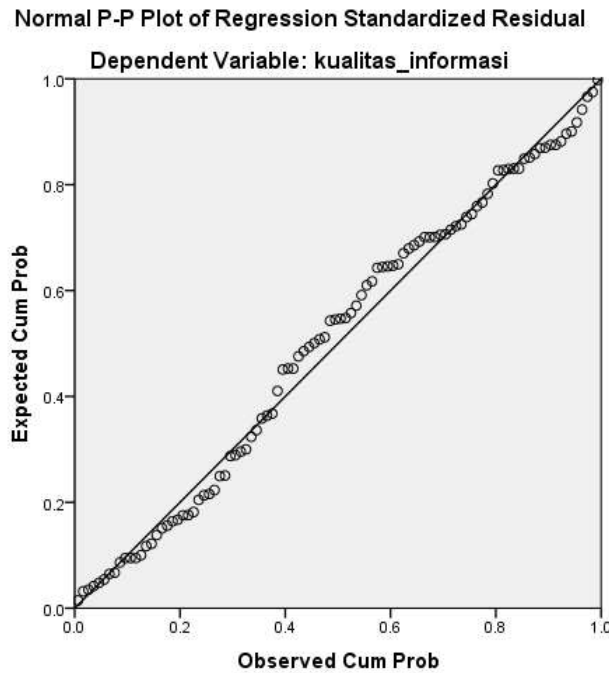
Variable	Cronbach's Alpha	Information
Quality Information	0.995	Reliable
System Quality	0.772	Reliable
Service Quality	0.865	Reliable
Satisfaction	0.704	Useable Reality
User	0.705	Real
Benefits Net	0.766	Reliable

Source: SPSS 22

Seen from table 15 from the results of the processing output using SPSS 22. Value Cronbach's Alpha For each variable > 0.6 and all questions on the questionnaire in this study were declared reliable.

3.13 Normality

The data normality test was conducted to determine whether the regression model of the dependent variable and the independent variable both had normal or abnormal data distributions. A good regression model is if it has a normal data distribution or if it is close to normal. We can see the normal distribution of data in the regression model in the normal pp plot graph below, where if the points spread around the diagonal line and the spread follows the direction of the diagonal line, then the data can be stated as a normal distribution.



Source: SPSS 22

Figure 3. Graph of PP plots Normality Test

Judging from Figure 3 if the points are spread around the diagonal line and the distribution follows where the diagonal line is, then the data is declared normally distributed, so the researcher concludes that the normality test on the information system is academically distributed normal.

3.14 Multicollinearity Test Multicollinearity

A test was conducted to test whether the regression model found a correlation between independent variables. A good regression model is a regression model that has no correlation between independent variables.

Table 16. Multicollinearity Test Results

Collinearity	Statistics	
	Tolerance	VIF
(Constant)		
1	Quality_system .983	Quality_service
	.960	User_satisfaction
Usage	1.042	1.029
.972	Benefits_Net	1.034
.967	a	.969

Dependent Variable: Quality _Information

Source: SPSS 22

Based on the table above, it is known that the Centered VIF value of each variable is below 10.00. system quality variable is $1.017 < 10.00$, service quality variable is $1.032 < 10.00$, user satisfaction variable is $1.042 < 10.00$, usage variable is $1.029 < 10.00$, Net Benefit variable is $1.034 < 10.00$. it can be concluded that the model stated that there is no multicollinearity.

3.15 F

The F test is known as the overall significance test. The F statistic test shows whether all independent variables have a simultaneous effect on the dependent variable. If the significance value is greater than 0.05, it means that the independent variables simultaneously have an influence on the dependent variable. Simultaneous testing uses the F distribution, which is to compare between F count (F ratio) and F table. The steps are as follows:

- a. Determining the level of significance (α) The level of significance (α) is the level of error tolerance in a study. This study uses the level of significance at = 5%.
- b. If the value of f arithmetic $>$ f table or significance value $<$ 0.05 then the independent variable (free) is declared to have a significant effect simultaneously (together) on the dependent variable (bound).
- c. If f count $<$ f table or significant value $<$ 0.05 then the independent variable (free) is declared to have no significant effect simultaneously (together) on the dependent variable (bound).

The value of the f table in this study was obtained by looking at the statistical table f at a significance of 0.05 (2-sided test) by first calculating the value of the degree of freedom (df) using the following formula:

$$\begin{aligned} \text{df1 (N1)} &= k-1 \\ \text{df2 (N2)} &= nk \end{aligned}$$

Information:

n: Number of respondents

k: Number of variables

In this study, the variables used were six variables consisting of five independent variables and one dependent variable. Thus, the calculation of the value of the degree of freedom (df) namely df1 (N1) and df2 (N2) to determine the value of the f table in this study is as follows: $\text{df1 (N1)} = 6-1 = 5$, $\text{df2 (N2)} = 100-6 = 94$. Then the value of df1 (N1) is 5 and the value of df2 (N2) is 94, then the f table value used in this study is for df1 (N1) = 5 and df2 (N2) = 94 with a significance of 0.05 based on in the statistical table f is 2.31. The results of the F test in this study are as follows

Table 17. F test results
ANOVA^a

<i>Sum</i>	<i>of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Regression</i>	<i>1379,389</i>	<i>5</i>	<i>275,878</i>	<i>37,221</i>	<i>000^b</i>
<i>1 Residual</i>	<i>696,721</i>	<i>94</i>	<i>7,412</i>		
<i>Total</i>	<i>2076,110</i>	<i>99</i>			

a. Dependent Variable: Information Quality

b. Predictors: (Constant), System quality, Service Quality, Usage, User Satisfaction, Net Benefits
Source: SPSS version 25

In Figure 4 above, the f test results for this study were obtained, this test was conducted to determine whether the system quality, service quality, user satisfaction, use, and net benefits of academic information systems have an important or significant influence on the information quality of academic information systems or not. The results of the ANOVA test showed that the calculated f value was 37,221 with a significance value of 0.000. The f arithmetic results obtained showed an f arithmetic value $> f$ table ($32.327 > 2.31$) and a significance value < 0.05 ($0.000 < 0.05$). In the decision making of the f test where if the value of f count $> f$ table or significant value < 0.05 then the independent variable (free) is declared to have a significant effect simultaneously (together) on the dependent variable (bound). Or if f count $< f$ table or significant value < 0.05 then the independent variable (free) is declared to have no significant effect simultaneously (together) on the dependent variable (bound). It can be concluded that the independent variable (independent) in this study is stated to have a significant simultaneous (joint) effect on the dependent (bound) variable. Which means system quality, service quality, user satisfaction, use and net benefits of information systems have an important or meaningful influence together on the quality of information on users of academic information systems.

3.16 T

The T test is to determine the level of significance of the influence of the independent variable (independent) on the dependent variable (dependent). The level of significance test (α) is 0.05 and t table. The steps for conducting the t-test are as follows:

- a. Determining the level of significance (α) This study uses the level of significance at = 5%.
- b. If the value of t count $< t$ table or significance value > 0.05 then the hypothesis is rejected, which means that the independent variable (free) has no significant effect on the dependent variable (bound).
- c. If the value of t arithmetic $> t$ table or significance value < 0.05 then the hypothesis is accepted meaning that the independent variable (free) has a significant influence on the dependent variable (bound).

The value of the t table in this study was obtained by looking at the t statistical table at a significance of 0.05 (2-sided test) by first calculating the value of the degree of freedom (df) using the following formula:

$$df = nk$$

Description:

n: Number of respondents

k: Number of variables

In this study, the variables used were six variables consisting of five independent variables and one dependent variable. The calculation of the degree of freedom (df) value to determine the t table value in this study is $100 - 6 = 94$. The t table value used in this study for $df = 94$ with a significance of 0.05 (two-sided test) based on the t statistical table is 1.98552. The results of the T test in this study are as follows:

**Table 4.18 T Test Results
Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.286	3,311		System_ quality	.001
.133	1,280	.581	.000	9,635	.000
1 .920	.117	.478	Service_ quali ty	7,871	User_satisf action
.629	.170	.225	.000	3,691	.191
Usage	.407	.129	.2134	.035	10,878
Net_benefit	.534	.181	.179	2,954	.004

a. Dependent Variable: Quality_information

Source: SPSS version 22

3.17 Research Discussion

In the discussion of data management, it discusses the analysis of the data processing that has been carried out. This discussion focuses more on explaining the details and details of the data that has been processed and making conclusions from the data that has been obtained so that this study provides quality analysis results on academic information systems based on user assessments of the academic information system. The following is a discussion of data management:

Based on the results of the validity test as follows, Y results, with 3 items getting R count values, 0.930, 0.967, 0.964 and R table 0.196 or R count > R table then all Y items are declared valid. The results of X1, with 3 items getting a calculated R value, 0.812, 0.825, 0.850, and an R table of 0.196 or a calculated R value > R table then all X1 items are declared valid. The results of X2, with 3 items getting a calculated R value, 0.882, 0.925, 0.859, and an R table of 0.196 or a calculated R value > R table then all X2 items are declared valid. The results of X3, with 2 items getting calculated R values, 0.816, 0.881, and Rtable 0.196 or calculated R values > R table then all items X3 items are declared valid. The results of X4, with 2 items getting a calculated R value, 0.902, 0.858, and an R table of 0.196 or a calculated R value > R table then all X4 items are declared valid. The results of X5, with 2 items getting a calculated R value, 0.908, 0.893, and an R table of 0.196 or a calculated R value > R table then all X3 items are declared valid.

Based on the results of the reliability test, all variables get *Cronbach's alpha* as follows Y 0.995, X1 0.772, X2 0.86, X3 0.704, X4 0.705, X5 0.766. which means all *Cronbach's alpha* > 0.6. With these results, the researcher stated that all questionnaire questions in this study were reliable.

Based on the results of the normality test of the data that can be seen on the PP plot graph where the results of the PP plot graph the points spread around the diagonal line and the distribution follows the direction of the diagonal line, it can be concluded that the data is normally distributed, so the author states that all data are normally distributed.

Based on the results of the multicollinearity test X1, X2, X3, X4, X5 against Y the independent variable has a *tolerance* 0.982, 0.969, 0.960, 0.972, 0.967 and the VIF (*Variance Inflation Factor*) 1.017, 1.032, 1.042, 1.029, 1.034, it can be concluded that the

tolerance above 0.10 or the VIF (*Variance Inflation Factor*) is below 10, then there is no multicollinearity. Based on the results, the researchers stated that for all independent variables there is no multicollinearity to the dependent variable, which if there is no multicollinearity can be continued further testing.

This means that system quality, service quality, user satisfaction, use and net benefits of information systems have an important or meaningful influence together on the quality of information on users of academic information systems. Based on the T-test of the results of X1 against Y, the T count is 9.635 and the T table is 1.988. When compared, the calculated T value is > from T table, it can be concluded that the independent variable X1 has an effect on the dependent variable Y. T table 1,988 when compared, the T count value > from T table, it can be concluded that the independent variable X2 has an effect on the dependent variable Y. The results of X3 on Y resulted in T count of 3,691 and T table 1,988 when compared, the value of T count > from T table it can be concluded that the independent variable X3 has an effect on the dependent variable Y. The results of X4 on Y resulted in a T count of 2.134 and a T table of 1.988 when compared, the value of T arithmetic > from T table, it can be concluded that the independent variable X4 has an effect on the dependent variable Y The results of X5 against Y resulted in T count of 2,954 and T table of 1,988 when compared, the value of T count > from T table, it can be concluded that the independent variable X5 affects the dependent variable Y.

IV. Conclusion

Based on the results of the analysis and discussion that have been carried out in this study, several conclusions were obtained regarding the success of the academic information system at STIHPADA, namely as follows:

1. The quality of information from the academic information system at STIHPADA is influenced by the quality of the system provided by the system.
2. The quality of information from the academic information system at STIHPADA is influenced by the quality of services provided by the system.
3. The level of information quality from the use of the academic information system at STIHPADA provides the results and benefits derived from using the system.
4. The benefits of using the academic information system at STIHPADA affect the use and satisfaction of its users.
5. User satisfaction with the STIHPADA academic information system is influenced by the level of use of the system itself.

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