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The Effect Of Service Quality And Academic Information Systems Quality On Student's Satisfaction

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Abstract :

The aims of study to determine the effect of service quality dimensions as seen from 5 dimensions of responsiveness, reliabilty, empathy, assurance, and tangible, then this study aims to determine the effect of quality of academic information systems dimensions as seen from 2 dimensions of system quality and quality of information towords college student satisfaction is following Riau University Pekanbaru. In this study, data were collected by using questonnaire to 400 respondents, which aims is used, include validity test, reliability test, classic assumptions test (normality, heteroscedasticity and multicolinearity), multiple linear regression analysis, goodness of fitest (F test, t test, the coefficient of determination). Data obtained then processed using SPSS program version 19.0, where the value of determination coefficient obtained by 40,6% which means that independent variables is responsiveness, reliability, empathy, assurance, tangible, system quality and quality of information have an effect of the dependent the remaining 59,4% is influenced by other variables not observed in this research.

Keywords *: Responsiveness, reliability, empathy, assurance, tangible, system quality and quality of information*

1. Introduction

Riau University is one of the State Universities in Riau, precisely in Pekanbaru which is located on Jalan Seobrantas, precisely on the Bina Widya Campus KM 12.5 Simpang Baru, Tampan City Pekanbaru, Riau. Various facilities available at UR include conference halls, laboratories, sports facilities, student press, campus buses, worship facilities, free hotspots, libraries, information technology, educational calendars, language training centers and others.

Starting in 2018, the University of Riau (UR) was ranked 22nd in all universities in Indonesia, releasing the webometrics version in 2018. Webometrics is a system that

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provides an assessment of all the best universities in the world through the university's official website. webometric ranks more than 20,000 Universities around the world. In this ranking of the webometrics version, Riau University is ranked 22nd out of 2122 universities in Indonesia (Webometrics, 2018). Starting with the first rank occupied by the University of Indonesia, followed by Gadjah Mada University, Bandung Institute of Technology, Bogor Agricultural University, Diponegoro University, Sebelas Maret University UNS Surakarta and Padjadjaran University Bandung. Rank 23.

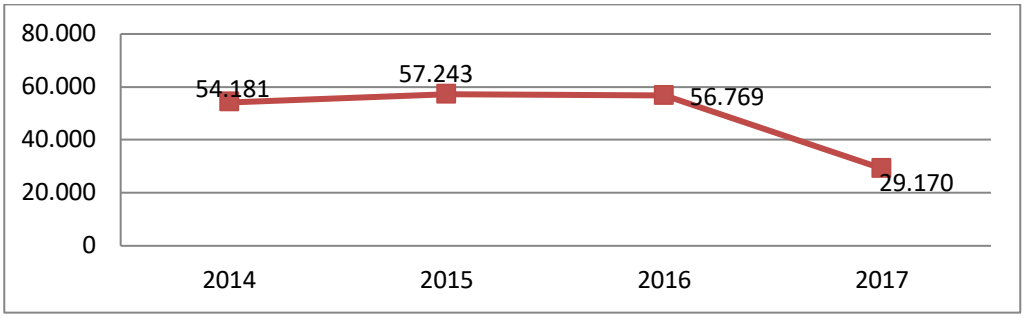

Figure 1. Number of Students in 2014-2017 at Riau University
Source: Processed Data, 2018

Based on Figure 1 above regarding the number of students in 2014-2017 at the University of Riau, it can be concluded that in 2014 the number of students was 54,181. Then in 2015 the number of students increased by 57,243 and in 2016 the number of students decreased by 56,769. Then in 2017 the number of students decreased by 29,170.

Riau University has various kinds of information systems using the internet system or all online so as to make it easier for students and lecturers to meet their needs, namely as follows: Filling out KRS online to make it easier for students to take any courses taken without having to record again because it is already based fast online system. KHS online card of study results which can be called the value achieved by students during the course they are taking. Class and lecturer information to find out in which class or room students study the courses taken and with which lecturers teach according to the courses applied by the campus.

Scheduling lectures and exams to find out when the lecture schedule starts and when to schedule exams that will be taken by the student. Administration to find out how much fees will be paid by students, anyone who has paid or has not paid for the lecture. User Community Media provides communication media facilities to all its users, including students, lecturers, academic staff, financial staff, PMB (New Student Admissions) staff, to find out alumni students, to find out what majors are covered in the faculty.

The development of online-based technology can provide benefits for the University of Riau such as timeliness, reduced document handling, produce accurate, fast, efficient information that can meet user expectations and greatly assist the performance of organizations or individuals concerned and other benefits and has made information very useful. important. The information needed or used by the University of Riau is to support their activities.

The quality of service at the University of Riau is the ability of the campus to meet needs in accordance with what is expected or desired based on student needs. The value of service quality also depends on the campus and its staff in meeting student expectations, such as: (1) Able to serve students quickly and accurately (2) Able to communicate that is easy to understand (3) Provide what needs are needed by students and others.

Table 1. Service Quality Responses to Riau University Students.

No.	Comment (+)	Percentage	Comment (-)	Percentage
1.	Employees / staff serve students well.	50%	Different services for each UR student	27%
2.	Complete learning facilities.	17%	Submission of unclear information.	46%
3.	Officers' response to student problem	33%	Lack of correcting facility change updates.	27%
		100%		100%

Source: Processed Data, 2018

Based on Table 1. above regarding student responses to service quality for UR students, it can be concluded that in positive comments the service quality of employees / staff serving students well is 1 with a percentage of 50%. Then the positive comments on the service of complete learning facilities to students are as much as a percentage of 17%. And positive comments on the service officer's response to student problems are as much as a percentage of 33%.

Then the negative comments on the quality of service that differ in each student are as much as a percentage of 27%. Then negative comments on the quality of service delivery of information that is not clear is as much as a percentage of 46%. And the negative service quality of the lack of checking for renewal of facility changes is as much as a percentage of 27%.

Academic information system is used in student administration. For students, accessing data is in the form of updating student biodata and viewing various academic data. The quality of the existing academic information system at the University of Riau is a system to process data and process academic activities such as high scalability, safe, reliable, easy and fast implementation. Various applications that are easy and according to the needs of these students.

The academic information system is also easy to operate by not eliminating important information to be conveyed. Manage all data in an integrated manner so that the data will always be updated and always ready for use, reducing the possibility of data duplication because the online academic information system is a centralized database system.

Table 2. Responses of the Quality of Academic Information Systems to Riau University Students

No.	Comment (+)	Precentage	Comment (-)	Percentage
1.	Ease of using SIAKAD	87%	Network System Error	100%
2.	Update information and fast	13%		
		100%		100%

Source: Processed Data, 2018

Based on Table 2 above regarding the number of responses to the quality of the academic information system for UR students, it can be concluded that in the positive comments the quality of the academic information system, the ease of using SIAKAD, is as much as a percentage of 87%. Positive comments on the quality of the academic information system, update and fast information are as much as a percentage of 13%. Then the negative comments on the quality of the academic information system network system error is as much as a percentage of 100%.

According to one of the previous studies by (Setiawan 2017), it states that the results of the simultaneous test, the dimensions of service quality (reliability, direct evidence, responsiveness, assurance and empathy) given by the Institute for Mental Arithmetic Education in Malang City have a positive and significant effect. According to previous research, (Moenardy et al., 2016) states that the five variables have a positive effect on consumer satisfaction. According to one of the previous studies, (Purwati and Sherly 2016) stated that Responsiveness, Reliability, Assurance, Empathy and Tangible have a positive effect on customer satisfaction.

Based on the success model of information systems (Claassen et al., 2008) aims to measure the success of information systems. There are several success factors of information: (1) the quality of the system (system quality), (2) the quality of information (information of quality) has a positive and significant effect.

Based on the description and phenomena above, it shows that there is a problem that might be one of the factors that resulted in the decline in the number of students, based on 5 service factors and 2 academic information system quality factors.

The objectives of this study are as follows: (1) To determine and analyze the effect of Responsiveness on Student Satisfaction at the University of Riau. (2) To find out and analyze the effect of Quality of Reliability on Student Satisfaction at the

University of Riau. (3) To find out and analyze the effect of Empathy on Student Satisfaction at the University of Riau. (4) To find out and analyze the effect of Assurance on Student Satisfaction at the University of Riau. (5) To find out and analyze the influence of Tangible on Student Satisfaction at the University of Riau. (6) To find out and analyze the effect of System Quality on Student Satisfaction at the University of Riau. (7) To find out and analyze the effect of to information quality on student satisfaction at the University Of Riau.

2. Theoretical Background

Responsiveness
According to (Glass & Finley 2002) Responsiveness is the desire and willingness of employees to help customers and provide services quickly and responsively. The indicators according to Glass dan Finley (2002) can be measured through: (1) The response of officers to complaints and problems faced by customers. (2) Speed in serving and helping provide services quickly

Reliability
According to (Awaludin & Tambruka 2017), reliability is the ability to provide the promised service immediately, accurately and satisfactorily. The reliability indicators according to (Awaludin & Tambruka 2017) are: (1) Performance must be in accordance with expectations, which means timing. (1)Same service for all customers without fault. (2) Sympathetic attitude and with high accuracy.

Empathy
According to (Miller et al., 2012) states that Empathy is describing a company that understands the problems of its customers and acts in the interests of customers and gives personal or individual attention to customers. According to (Miller et al., 2012) empathy consists of several indicators: (1) Behaving fairly to every customer. (2) Give individual attention to customers.

Assurance
Sitorus & Yustisia (2018) states that Assurance is the knowledge, courtesy and ability of the company's employees to foster customer trust in the company. Sitorus & Yustisia (2018) state that the Assurance indicators are: (1) Knowledge, competence, courtesy and trustworthiness of the staff. (2) Free from danger, risk or doubt.

Tangible (Physical products)
According to (Pollack 2009), the tangible appearance and ability of the company's physical facilities and infrastructure that can be relied on by the surrounding environment is tangible evidence of the services provided by service providers. According to (Pollack 2009) Tangible indicators are: (1) There is a comfortable waiting room for customers. (2) Cleanliness and tidiness of the office. (3) Office interior design planning.

System Quality
According to Sarrab et al., (2016) states that the Quality System is an appropriate system, meets the standards that have been set and always follows the times and technological advances. According to (Sarrab et al., 2016) System Quality indicators are: (1) Availability of equipment. (2) Equipment Reliability. (3) Ease of use. (4) Response time.

Information Quality
According to Sarrab et al., (2016) states that Information Quality is the user's perception of the quality of information generated by the internet in order to obtain the information needed. According to Sarrab et al., (2016), it can be seen that the indicators of Information Quality consist of: (1) The system can meet the needs of its users. (2) Improving the informativeness of SIAKAD. (3) The relevance of SIAKAD and timeliness of SIAKAD information.

Research Framework
The framework of thought is a narrative (description) or statement (proposition) about the problem-solving conceptual framework that has been identified or formulated. The framework or framework of thought in a quantitative study, greatly determines the clarity and validity of the overall research process. The framework of thought in this research is:

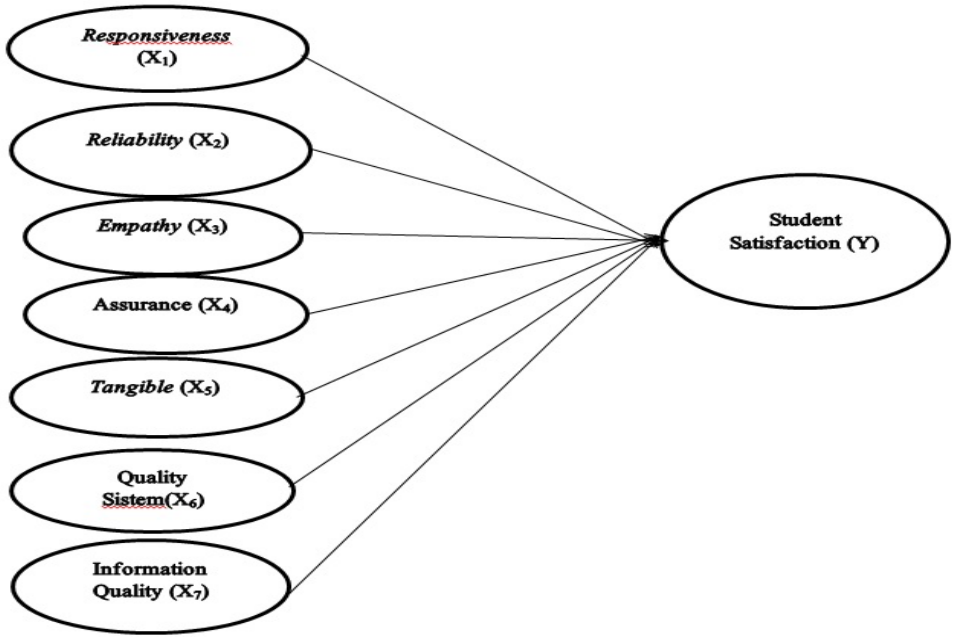

Figure 2. Thinking Framework

Source: Processed data, 2018

Hypothesis
Based on the background of the problem, the theoretical basis and the framework described, the existing hypotheses include: (1) Responsiveness has an effect on customer satisfaction. (2) Reliability has an effect on customer satisfaction. (3) Empathy has no effect on customer satisfaction. (4) Assurance has a significant effect on customer satisfaction. (5) Tangibles have an effect on customer satisfaction. (6) System Quality has an effect on student satisfaction. (7) Information Quality (Quality Of Information) has no significant effect on student satisfaction.

3. Methodology

Population and Sample
The population is a generalization area consisting of: subject objects that have certain qualities and characteristics determined by the researcher to be studied and then draw conclusions Sugiyono (2008). The population in this study used the target population, namely Riau University students with a total of 29,170 students.

According to (Sugiyono 2008), the sample is part of the number and characteristics possessed by the population. What is learned from the sample, the conclusions will be applied to the population. The sample is a subject that is directly involved. Therefore, in this study, the researcher determined several criteria for the sample to be used from the target population, including: Students. Thus, it is possible to use the Slovin formula with a standard of 5%, namely

$$\frac{N}{1+Ne^2} = \frac{29.170}{1+29.170.(0,05)^2} = 400$$

N = Population
E = Error Margin

Research Instruments
This research is a survey, so the instrument used is in the form of a questionnaire by submitting a statement to the respondent. Respondents were asked to provide responses by providing answers to the questions in the questionnaire, then each qualitative answer was quantified by providing a score measured by the Likert Scale proposed by (Sugiyono 2014) that the Likert Scale is used to measure a person's attitudes, opinions, and perceptions or a group of people about social phenomena. Indicators and measurements on a Likert Scale consisting of five levels of answers are each given a weight with the following answer choices: (1) Strongly Agree answers are given a weight of 5. (2) Agree answers are given a weight of 4. (3) Answers Moderately Agree are given a weight of 3. (4) Answers Disagree are given a weight of 2. (5) Answers Strongly Disagree are given a weight of 1.

Data collection technique
The data collection methods used in this study are as follows: (1) List of Statements Questionnaire or list of statements, given to respondents to find out the reality that is happening in the field. The questionnaire or list of statements given contains matters relating to the quality of service and academic information systems on student satisfaction at the University of Riau. (2) Documentation Documentation is looking for data and collecting data on matters in the form of transcripts, forlap DIKTI and so on.

Data Types and Sources
The types and sources of data needed in this study consist of primary data and secondary data. (1) Primary Data is information collected by researchers directly from the source. The primary data used in this study is the result of filling out questionnaires by respondents, namely students who use the services of the University of Riau. (2) Secondary data is data obtained indirectly, either in the form of information or literature related to research.

Data Analysis Method Validity Test and Reliability Test
According to (Sugiyono 2010), if the validity value of each statement item is greater than 0.3 then the statement items from the instrument are considered valid. According to (Supranto 2010) a measuring instrument is said to be reliable (reliable) if it is used to measure repeatedly under relatively the same conditions, it will produce the same data or slight variations. The level of reliability of a research construct/variable can be seen from the statistical results of Cronbach Alpha (α). A variable is said to be reliable if it gives a Cronbach Alpha value > 0.60 (Ghozali 2008). The closer the alpha value is to one, the more reliable the data reliability value is.

Simultaneous Test (F Test)
According to (Ghozali 2012) Statistical Test basically shows whether all independent variables or independent variables included in the model have a joint influence on the dependent variable or dependent variable. To test this hypothesis, F statistic is used with the following decision making criteria: (1) If the F value is greater than 4, then H0 is rejected at the 5% confidence level. In other words, we accept the alternative hypothesis, which states that all independent variables simultaneously and significantly affect the dependent variable. (2) Comparing the calculated F value with F according to the table. If the calculated value is greater than the table F value, then H0 is rejected and Ha is accepted.

Determination Test (R2)
Is a tool to measure how far the model's ability to explain the variation of the dependent variable. The value of the coefficient of determination is between zero or one. A small value of R2 means that the ability of the dependent variables is very limited. And conversely, if the value is close to 1, it means that the independent variables provide almost all the information needed to predict the dependent variable.

Multiple Linear Regression Analysis
Multiple Linear Regression Analysis is used to determine how much influence the relationship between Responsiveness, Reliability, Empathy, Assurance is. System Quality and Quality of Information on the dependent variable of student satisfaction (Y). The regression equation used is as follows (Crammer and Howwit 2009).
$Y = \alpha + \beta 1 + \beta 2\ X2 + \beta 3\ X3 + \beta 4\ X4 + \beta 5X5 + \beta 6 + X6 + \beta 7 + X7 + {}^{e}$
Description :
Y = Student Satisfaction
α = Constant
1 = Regression coefficient of variable X1 (Responsiveess)
X1 = Responsiveess
2 = regression coefficient of variable X2 (Reliability)
X2 = Reliability
3 = regression coefficient of variable X3 (Empathy)
X3 = Empathy
4 = regression coefficient of variable X4 (Assurance)
X4 = Assurance
5 = regression coefficient of variable X5 (Tangible)
X5 = Tangible
6 = regression coefficient of variable X6 (System Quality)
X6 = Quality System
7 = regression coefficient of variable X7 (Quality of Information)
X7 = Quality of Information
e = Standard Error / other factors

Partial Test (t Test)
According to (Ghozali 2012), the different t-test was used to test how far the influence of the independent variables used in this study individually in explaining the dependent variable partially. When decision making is used in the t-test as follows: (1) If the t-count value is more than t-table and the significance probability value > that the independent variable has no significant effect on the dependent variable. (2) If the value of t-count t-table and significance probability value <0.05, then the hypothesis is accepted. The hypothesis cannot be rejected, which means that the independent variable has a significant effect on the dependent variable.

4. Empirical Findings/Result

Characteristics of Respondents

The description of the general description of respondents from this study includes age, gender, level of study, type of study and semester used as many as 400 respondents.

Table 4. Demographics of Research Respondents

Demographics	category	Frequency	Total
Age	< 20 year	84	84
	Year	293	293
	>30 year	22	22
Gender	Man	222	222
	Women	178	178
Study Level	D3	81	81
	S1	284	284
	S2	14	14
	S3	21	21
Study Tape	Full Time	365	365
	Part Time	35	35
Semester	I	51	51
	III	56	56
	V	167	167
	VII	126	126

Source: Processed Data, 2018

Validity and Reliability Test Results

An instrument is said to be valid if it is able to measure what it wants to measure and can reveal data from the variables studied on a regular basis. The testers of the instrument both in terms of validity and reliability of the 400 respondents used the research results where the correlation (r) is greater than 0.3 (Sugiono, 2011) and the reliability coefficient value (Alpha Cronbach) is greater than 0.6 for more details can seen in the following table:

Table 5. Validity and Reliability Test Results

Variable	Indicator	Corrected Item - Total Correlation	Description
Responsiveness	Statement 1	0, 559	Valid
	Statement 2	0, 606	Valid
	Statement 3	0, 540	Valid
	Statement 4	0, 571	Valid
Alpha Coefficient		0,774	Reliabel

Variable	**Indicator**	**Corrected Item - Total Correlation**	**Description**
Relabilty	Statement 1	0, 613	Valid
	Statement 2	0, 594	Valid
	Statement 3	0, 611	Valid
	Statement 4	0, 596	Valid
	Statement 5	0, 662	Valid
Alpha Coefficient		0,774	Reliabel
Empathy	Statement 1	0, 741	Valid
	Statement 3	0, 563	Valid
	Statement 4	0, 785	Valid
	Statement 5	0, 565	Valid
Alpha Coefficient		0, 832	Reliabel
Assurance	Statement 1	0, 554	Valid
	Statement 2	0, 524	Valid
	Statement 3	0, 541	Valid
Alpha Coefficient		0, 720	Reliabel
Tangible	Statement 1	0, 662	Valid
	Statement 2	0,829	Valid
	Statement 3	0,807	Valid
	Statement 4	0,675	Valid
	Statement 5	0,828	Valid
Alpha Coefficient		0,904	Reliabel
Sistem quality	Statement 1	0,811	Valid
	Statement 2	0,798	Valid
	Statement 3	0,797	Valid
	Statement 4	0,768	Valid
Alpha Coefficient		0,908	Reliabel
Informant Quality	Statement 1	0,437	Valid
	Statement 2	0,437	Valid
		0,608	Reliabel
student satisfaction	Statement 1	0,831	Valid
	Statement 2	0,740	Valid
	Statement 3	0,816	Valid
	Statement 4	0,778	Valid
	Statement 5	0,760	Valid
Koefisien Alpha		0,916	Reliabel

Source: Processed Data, 2018

Based on table 5 regarding the Validity and Reliability Test, it can be seen that the X3 Empathy variable in statement 2 is not in the table because when conducting the Validity and Reliability test it is not valid, therefore the research omitted statement 2. While the X4 Assurance variable in statement 4 is not in the table because when conducting the Validity and Reliability test it is not valid, therefore the research eliminates statement 4. Then the X5 Tangible variable in statement 5 is not in the table because when conducting the Validity and Reliability test it is not valid, therefore the study eliminates statement 5. Then the X6 System Quality variable in statement 5 is not in the table because when conducting the Validity and Reliability test it is not valid, therefore the study eliminates statement 5. And the X7 Information Quality variable in statement 7 is not in the table because when conducting the Validity and Reliability test it is not valid, therefore the research omitted the statements 3 and 4.

Simultaneous Test (F Test)

Table 6. Simultaneous Test Results (F Test)

Model	F Count	F Tabel	Sig	Description
X_1, X_2 ,X_3, X_4, X_5, X_6, X_7 to Y	39,927	6,70	0,000***	X_1, X_2, X_3, X_4, X_5, X_6, X_7 effect on Y with a value of Sig < α = 0,01

Source: Processed Data, 2018

Based on the results of the ANOVA test in table 4.17 above, it shows the F-count value of 39.927 with a significance level of 0.000. Because F count 39.927>F table 6.70 and a significance value of 0.000 < 0.01, the regression model can be used. This shows that the Responsiveness, Reliability, Empathy, Assurance, Tangible, System Quality, Information of Quality variables simultaneously have a significant effect on student satisfaction.

Coefficient of Determination Test (R2)

The coefficient of determination (R2) is used to see the ability of the independent variable in explaining the dependent variable, where if the value of R square is close to 1 (one), the independent variable provides all the information needed to predict the variation of the dependent variable.

Table 7. Coefficient of Determination Test Results (R2)

Model	R	R *Square*	*Adjusted* R *Square*	Std *Error of the Estimate*
1	0,645	0,416	0,406	0,53338

Source: Processed Data, 2018

The value of the coefficient of determination (R2) is used to explain the proportion of variation in the dependent variable that is explained by the independent variables together. Table 4.17 shows the R2 value of 0.406. This means that student satisfaction which is influenced by the variables of responsiveness, reliability,

empathy, assurance, tangible, system quality, information quality is 40.6% while 59.4% is explained by other variables not examined in the model.

Multiple linear regression

The results of the Multiple Linear Regression test can be seen in the following table:

Table 8. Multiple Linear Regression

Model	*Unstandardized Coefficients*		*Standardized Coefficient*
	B	Std Error	Beta
(Constant)	0,069	0,355	
Responsiveness (X_1)	0,106	0,046	0,098
Reliability (X_2)	0,227	0,055	0,169
Empathy (X_3)	-0,051	0,046	-0,048
Assurance (X_4)	0,228	0,048	0,24
Tangible (X_5)	0,074	0,040	0,076
Kualitas Sistem (X_6)	0,459	0,041	0,475
Kualitas Informasi (X_7)	-0,019	0,044	-0,018

Source: Processed Data, 2018

The regression equation model that can be written from these results is in the form of the following equation:

Y = 0,069 + 0,106 + 0,227 – 0,051 + 0,228 + 0,074 + 0,459 – 0,019

The regression equation can be explained as follows: The constant of = - 0.069 means that if the regression coefficient value of the other variables is zero (0) then the student satisfaction coefficient (Y) is -0.069. The responsiveness regression coefficient (X1) is positive and the magnitude is 0.108, meaning that if the responsiveness variable has increased by one unit, then the student satisfaction coefficient (Y) will increase by 0.108. The coefficient is positive, there is a negative relationship between the level of student satisfaction and responsiveness, the higher the responsiveness, the higher the level of student satisfaction.

The reliability regression coefficient (X2) is positive and the magnitude is 0.227, meaning that if the reliability variable has increased by one unit, the student satisfaction coefficient (Y) will have increased by 0.227. The coefficient is positive, there is a positive relationship between the level of student satisfaction and reliability, the higher the reliability, the higher the level of student satisfaction.

The empathy regression coefficient (X3) is negative and the magnitude is -0.051, meaning that if the empathy variable has increased by one unit, the student satisfaction coefficient (Y) will increase by -0.051. A negative coefficient has a negative relationship between the level of student satisfaction and empathy, the higher the empathy, the lower the level of student satisfaction.

The assurance regression coefficient (X4) is positive and the magnitude is 0.228, meaning that if the assurance variable increases one unit, the student satisfaction coefficient (Y) will increase by 0.228. The coefficient is positive, there is a positive relationship between the level of student satisfaction with assurance, the higher the assurance, the higher the level of student satisfaction.

The tangible regression coefficient (X5) is positive and the magnitude is 0.074, meaning that if the tangible variable increases by one unit, the student satisfaction coefficient (Y) will increase by 0.074. The coefficient is positive, there is a positive relationship between the level of student satisfaction and tangible, the higher the tangible, the higher the level of student satisfaction.

The regression coefficient of system quality (X6) is positive and the magnitude is 0.459, meaning that if the system quality variable has increased by one unit, the student satisfaction coefficient (Y) will increase by 0.459. The coefficient is positive, there is a positive relationship between the level of student satisfaction and the quality of the system, the higher the quality of the system, the higher the level of student satisfaction.

The regression coefficient of information quality (X7) is negative and the magnitude is -0.019, meaning that if the information quality variable increases one unit, then the student satisfaction coefficient (Y) will increase by 0.019. The coefficient is negative, there is a negative relationship between the level of student satisfaction and the quality of the system, the higher the quality of information, the lower the level of student satisfaction.

Partial Test (t Test)

The t test is used to test the significance of the relationship between variables X and Y variables X1, X2, X3, X4, X5, X6, X7 (responsiveness, reliability, empathy, assurance, tangible, system quality, information quality) really affect the Y variable. (student satisfaction) separately or partially.

Table 9. Partial Test Results (t Test)

Model	T_{Count}	T_{tabel}	Sig	Descreption
Responsiveness (X_1)	2,336	1,649	0,020**	Significant influence with α =0,05
Reliability (X_2)	4,169	2,336	0,000***	Significant influence with α =0,01
Empathy (X_3)	-1,092	1,284	0,276	no significant effect
Assurance (X_4)	4,752	2,336	0,000***	Significant influence with α = 0,01
Tangible (X_5)	1,826	1,284	0,069*	Significant influence with = 0,1
Kualitas Sistem (X_6)	11,243	2,336	0,000***	Significant influence with α = 0,01
Kualitas Informasi (X_7)	-0441	1,284	0,660	no significant effect

Source: Processed Data, 2018

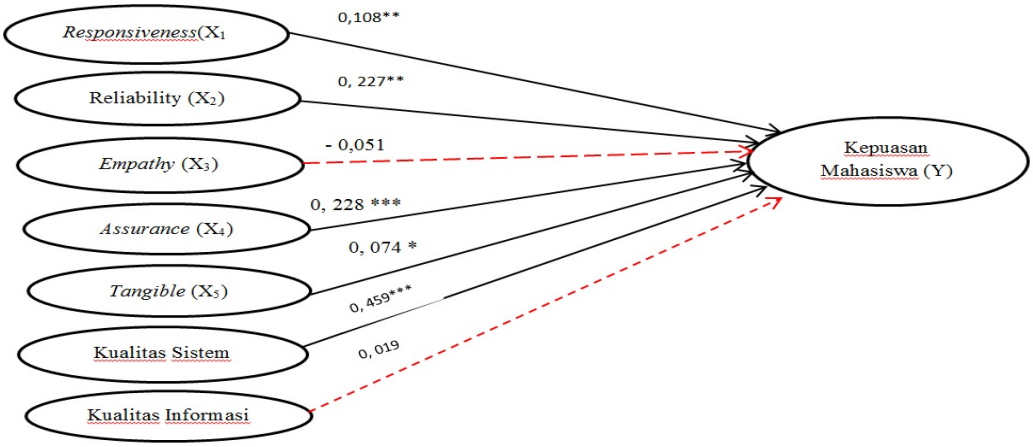

Figure 3. Final Research Model

Partial test results can be explained as follows:
Responsiveness variable (X1). Partial regression analysis between the responsiveness variable (X1) and consumer decisions in student satisfaction (Y) with a t-test of 2.336, greater than the t-table value of and 1.649 and probability of 0.020 (P <α = 0.05), with Thus it can be said that partially there is a significant and significant influence between responsiveness and student satisfaction.

Variable reliability (X2). Partial regression analysis between the reliability variable (X2) and consumer decisions in student satisfaction (Y) with a t-test count of 4.169, greater than the t-table value of 2.336 and a probability of 0.000 (P < = 0.01), with Thus it can be said that partially there is a significant and significant influence between reliability and student satisfaction.

Empathy variable (X3). Partial regression analysis between Empathy variable (X3) and consumer decisions in student satisfaction (Y) with a t-test of -1.092, smaller than the t-table value of 1.284 and probability 0.276 (P > = 0.01), with Thus it can be said that partially there is no significant and insignificant effect between Empathy and student satisfaction.

Assurance variable (X4). Partial regression analysis between the Assurance variable (X4) and consumer decisions in student satisfaction (Y) with a t-test of 4.752, greater than the t-table value of 2.336 and a probability of 0.000 (P < = 0.01), with Thus it can be said that partially there is a significant and significant influence between Assurance and student satisfaction.

Tangible Variable (X5). Partial regression analysis between Tangible variables (X5) and consumer decisions in student satisfaction (Y) with a t-test of 1.826, greater than the t-table value of 1.284 and probability of 0.069 (P < = 0.1), with Thus it can be

said that partially there is a significant and significant effect between Tangible and student satisfaction.

System Quality Variable (X6). Partial regression analysis between System Quality (X6) and consumer decisions in student satisfaction (Y) with a t-test count of 11.243, greater than the t-table value of 2.336 and a probability of 0.000 (P < = 0.01), with Thus it can be said that partially there is a significant and significant influence between System Quality and student satisfaction.

Information Quality Variable (X7). Partial regression analysis between Information Quality (X7) and consumer decisions in student satisfaction (Y) with a t-test of -0.441, greater than the t-table value of 1.284 and probability of 0.660 (P > = 0.1), Thus it can be said that partially there is a significant and significant influence between Information Quality and student satisfaction.

Based on the results of the significance analysis for each of these independent variables, it was proven that only the responsiveness, reliability, assurance and system quality variables had a positive and significant effect on student satisfaction. While the variables of empathy and information quality have a negative and significant influence on student satisfaction.

5. Discussion

The Effect of Responsiveness Variables on Student Satisfaction
The results of this study indicate that Responsiveness is a factor considered important by respondents regarding the causes of student satisfaction at UR Pekanbaru. The highest respondent's response on the UR Employee indicator provides pleasant services to students, while the lowest respondent's response on the UR Employee indicator can handle student problems appropriately. Responsiveness is the desire and willingness of employees to help customers and provide responsive service. Includes the response of officers to complaints and problems faced by customers, speed in serving and helping provide services quickly. However, if you make improvements in terms of service, adding the number of employees can speed up solving the problems faced by these UR students. This partially states that the Responsiveness variable has a positive and significant effect on student satisfaction. Research conducted by (Ekinci et al., 2008) states that Responsiveness has a positive and significant effect on consumer satisfaction. Meanwhile, according to research by (Hong et al., 2019) which states that the Responsiveness variable has a positive and significant effect on consumer satisfaction. And according to research by (Purwati and Sherly 2016) states that Responsiveness has a positive effect on customer satisfaction.

The Effect of Reliability Variables on Student Satisfaction
The results of this study indicate that reliability is a factor considered important by respondents regarding the causes of student satisfaction at UR Pekanbaru. The

highest respondent's response on the UR Employee indicator is able to meet student requests, while the lowest respondent's response is that UR Employees have the ability to handle complaints from students appropriately. Reliability is the ability to provide the promised service immediately, accurately and satisfactorily. If UR employees provide services, they can improve or improve in a fast manner, be alert in all complaints such as meeting face-to-face, listening to any complaints and providing responses along with solutions with what is needed, of course there will be an increase in reliability to UR student satisfaction. This partially states that the reliability variable has a positive and significant effect on student satisfaction. According to research by (Kalia et al., 2017), reliability has a positive and significant effect on consumer satisfaction. Meanwhile, research by (Kalia et al., 2017) which states that the reliability variable has a positive and significant effect on consumer satisfaction. And research according to (Purwati and Sherly 2016) states that reliability has a positive effect on customer satisfaction.

The Effect of Empathy Variables on Student Satisfaction

The results of this study indicate that Empathy is a factor considered important by respondents regarding the causes of student satisfaction at UR Pekanbaru. The highest respondent's response is on the indicator that UR employees understand the needs of students, while the lowest respondent's response is that UR employees pay special attention to students. Empathy is to describe the company understands the problems of its customers and acts in the interests of customers. Such as providing opportunities to get merit scholarships for students and facilitating them, it will increase Empathy for UR student satisfaction. This partially states that the Empathy variable has a negative and significant effect on student satisfaction. Because in empathy services by UR employees in particular, it is not too important for students because they have done an online system. The results of this study are in accordance with previous research conducted by (Choi & Yang 2011) which states that empathy has a negative and significant effect on student satisfaction.

The Effect of Assurance Variables on Student Satisfaction

From the results of this study, it shows that Assurance is a factor that is considered important by respondents regarding the causes of student satisfaction at UR Pekanbaru. The highest respondent's response to the indicator that UR employees can solve student problems, while the lowest respondent's response is that UR employees have the ability to answer student questions. Assurance is the knowledge, courtesy and ability of the company's employees to foster customer trust in the company. It should be added with the help of the needed solutions and guaranteeing student confidence in UR employees, it will increase Assurance on student satisfaction. This partially states that the Assurance variable has a positive and significant effect on student satisfaction. Research by Meesala & Paul (2018) states that Assurance has a positive and significant effect on consumer satisfaction. Meanwhile, research by Meesala & Paul (2018) which states that the Assurance variable has a positive and significant effect on consumer satisfaction. And

according to research by (Purwati and Sherly 2016), assurance has a positive and significant effect on customer satisfaction.

The Effect of Tangible Variables on Student Satisfaction

The results of this study indicate that Tangible is a factor considered important by respondents regarding the causes of student satisfaction at UR Pekanbaru. The highest respondent's response to the UR indicator has its own charm, while for the lowest respondent's response UR provides the comfort of a comfortable waiting room. Tangible is the appearance and ability of the company's physical facilities and infrastructure that can be relied on by the surrounding environment. It will increase if providing friendly service, a smile and a fast work system in serving students will increase Tangible for UR student satisfaction. Research by (Meesala & Paul 2018; Suyono et al., 2020) states that Assurance has a positive and significant effect on consumer satisfaction. Meanwhile according to research by (Purwati and Sherly 2016), assurance has a positive and significant effect on customer satisfaction

The Effect of System Quality Variables on Student Satisfaction

From the results of this study, it shows that the quality of the system is a factor that is considered important by respondents regarding the causes of student satisfaction at UR Pekanbaru. The highest respondents' responses were on the indicator of the ease of technology-based systems implemented on the UR campus for students, while for the lowest respondents' responses there were indicators that if the information system had a problem, the repair period was very fast. The quality of the system is an appropriate system, meets the standards that have been set and always follows the times and technological advances. If you experience problems with the information system, it should be able to provide a period of time and tolerance in inputting data, it will certainly increase the quality of the system for UR student satisfaction. This partially states that the System Quality variable has a positive and significant effect on student satisfaction. The results of this study are in accordance with previous research conducted by Pham et al., (2019) showing that System Quality has no significant effect on student satisfaction.

The Effect of Information Quality Variables on Student Satisfaction

The results of this study indicate that the quality of information is a factor considered important by respondents regarding the causes of student satisfaction at UR Pekanbaru. The highest respondent's response to the UR information system indicator is very important for its usefulness to facilitate academic affairs, while the lowest respondent's response to the UR information system indicator always presents important announcements and news on time. Information quality is the user's perception of the quality of information generated by the internet in order to obtain the required information. If the online system has problems, the delivery of information is not only done in an online system, it can use print media and post it on the wall and through social media, it will increase the quality of information on UR student satisfaction. This partially states that the Information Quality variable has a negative and significant effect on student satisfaction. The results of this study

are in accordance with previous research conducted by Pham et al., (2019) stating that the quality of information has no significant effect on student satisfaction.

6. Conclusions

Based on the results of the study, conclusions can be drawn: (1) Based on a partial analysis, it turns out that the results of the study prove that the Responsiveness variable has an effect and is significant on the variable of student satisfaction at the University of Riau. (2) Based on the partial analysis, it turns out that the results of the study prove that the reliability variable has an effect and is significant on the variable of student satisfaction at the University of Riau. (3) Based on a partial analysis, it turns out that the results of the study prove that the Empathy variable has no effect and is significant on the variable of student satisfaction at the University of Riau. (4) Based on a partial analysis, it turns out that the results of the study prove that the Assurance variable has an effect and is significant on the variable of student satisfaction at the University of Riau. (5) Based on a partial analysis, it turns out that the results of the study prove that the Tangible variable has a significant and significant effect on the variable of student satisfaction at the University of Riau. (6) Based on a partial analysis, it turns out that the results of the study prove that the System Quality variable has a significant and significant effect on the variable of student satisfaction at the University of Riau. (7) Based on a partial analysis, it turns out that the results of the study prove that the Information Quality variable has no and significant effect on the variable of student satisfaction at the University of Riau

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