REPORT

SERVICE SATISFACTION AND EDUCATION PROCESS IMPLEMENTATION

(Student Respondents)



UNIVERSITAS NEGERI SURABAYA

QUALITY ASSURANCE UNIT

DATA AND INFORMATION SYSTEM CENTER

2021

REPORT

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(Student Respondents)

SURABAYA STATE UNIVERSITY
QUALITY ASSURANCE UNIT
DATA AND INFORMATION SYSTEM DIVISION
2021

Endorsement page

Declare that the Student Satisfaction Report on Service and Implementation of the Surabaya State University Education Process was made truthfully

Surabaya, 29 December 2021

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INTRODUCTION

1.1. Background

The Data and Information Systems Division is one of the divisions in the Quality Assurance Unit (SPM) unit at the University which is tasked with assisting the implementation of quality assurance with the Quality Planning, Quality Implementation, Quality Evaluation, Quality Control, Quality Improvement (PPEPP) models. One of the duties of this division is to carry out a Customer Service Satisfaction Survey which is currently a requirement and demand from Study Program Accreditation and Higher Education Accreditation. Some of the surveys carried out are satisfaction surveys for all activities carried out by SPM so that the quality of the implementation of activities is evaluated periodically. This survey was conducted online *and* was carried out after the activity ended. The results of this survey will be followed up with an evaluation meeting whose results will be used to improve services for further activities.

Along with the increasing need to improve the quality of service at Unesa, it is necessary to have a satisfaction survey for students, university students, and staff. It is necessary to know what variables should be improved and maintained quality. Filling out the questionnaire consists of filling out expectations and realities for the services felt in 2021.

1.2. Problems

a. Are the results of the service satisfaction survey and the implementation of the Unesa education process in 2021 between expectations and reality, there is a significant difference statistically testing.
b. What is the result of a comparison between expectations and reality of service satisfaction and the implementation of the Unesa educational process based on the 2021 Unesa student survey using gap analysis.
c. What is the comparative analysis between expectations and reality of service satisfaction and implementation of Unesa's educational process based on Unesa's 2021 student survey using the *Importance-Performance Analysis* (IPA) method approach.

1.3. Objective

Knowing the quality of service satisfaction and the implementation of Unesa's educational process with service users are Unesa students in 2021 based on statistical analysis of different tests, gap analysis and science analysis.

1.4. Report Systematics

The systematics of this report is the introduction which consists of the background, problems, objectives and report systematics. Chapter II contains survey methods consisting of survey types and designs, variables, operational definitions, survey instruments, methods used, and data processing. Chapter III contains Results and Discussion, and Chapter IV contains conclusions.

CHAPTER II

SURVEY METHOD

2.1. Type and Design of Survey Implementation

This research is a quantitative descriptive research with a survey method. The survey method was chosen because it can provide a quantitative description or picture of trends, attitudes, and opinions of the population on variables by studying the sample (Johnson & Christensen, 2014); (Creswell & Creswell, 2018).

cross-sectional design that is used to study the relationship between the independent variables and the dependent variable by taking measurements at the same time (*point time approach*). At the same time, it means that each subject is only observed once and the subject variables are carried out at the time of observation. The method used in data collection is a questionnaire.

2.2. Operational definition

Some operational definitions are as follows:

a. Consumers are all students who use the services and implementation of the Unesa education process in 2021.
b. Consumer expectations are students who will receive services and carry out the Unesa education process in 2021.
c. Consumer satisfaction is consumer recognition regarding services and implementation of the Unesa education process in 2021.
d. The quality of service that will be examined is the expectations and reality of consumers on *reliability* , *responsiveness* , *assurance* , *empathy* , and *tangible* .

2.3. Survey Instruments

The instrument used is a questionnaire. Questionnaires are used to collect data by providing written questions about consumer expectations and realities to be answered. The questionnaire instrument consists of 5 main aspects, namely *reliability* , *responsiveness* , *assurance* , *empathy* , and *tangible* .

2.4. Method used

The method used is *Service Quality Servqual* method (Parasuraman et al., 1985), the dimensions of the service quality characteristics are:

1. *Tangibles* (Real) which includes physical appearance, equipment, employees, and means of communication.
2. *Reliability* , namely the ability to provide the promised service promptly, accurately and satisfactorily.
3. *Responsiveness* , namely the desire of staff to shape customers and provide responsive service.
4. *Assurance* (Guarantee) Covers the knowledge, ability, courtesy, and trustworthy nature of the staff free from danger, risk or doubt.
5. *Empathy* Includes ease in making relationships, good communication, personal attention, and understanding customer needs.

The next stage is to use the *Importance Performance Analysis method* which was first introduced by (Martilla & James, 1977) with the aim of measuring the relationship between consumer/customer perceptions and product/service quality improvement priorities, also known as *Quadrant Analysis.*

2.5. Data processing

a. Gap Analysis and Conformity Level (Tki)

The level of consumer satisfaction is explained using gap analysis (gap) and the level of conformity (Tki). This analysis compares *the mean* between expectations and reality received by consumers from the service dimensions, namely *reliability* , *responsiveness* , *assurance* , *empathy* , and *tangible* .

Gap = Reality – Expectations

Conformity level (Tki) = (Reality/Expectation) x 100%

Gap score shows the gap between reality and expectations (Parasuraman et al., 1985). This shows that there is a problem of mismatch between customer expectations and the reality they feel. Based on *the gap score,* a positive value (+) indicates that reality can meet customer expectations, while a negative value (-) indicates that it has not been fulfilled (Parasuraman et al., 1988).

b. Normality test

Data normality test was carried out by statistical analysis. This test was carried out by entering the average reality and expectations of each statement contained in the questionnaire. This test was conducted to find out whether the data used is normally distributed or not so that the next statistical test can be determined to be used. The test used to determine whether the data is normally distributed or not is by using Kolmogorov-Smirnov for large samples (more than 50 respondents) or Shapiro-Wilk for small samples (less than 50 respondents). If the significance value is > 0.05, the data is normally distributed (parametric data) and can be analyzed by paired t-test. If the significance value is <0.05 then the data is not normally distributed (non-parametric data) and can be analyzed using the Wilcoxon test.

c. Wilcoxon test

This test was conducted to find out whether there were significant differences or not from the reality and expectations studied so that it could be determined whether Ho was rejected or accepted. If the results obtained are significant differences then Ho is rejected but if the differences that occur are not significant then Ho is accepted. The paired t-test is performed if the two data being compared are normally distributed or the Wilcoxon test if at least one of the compared is not normally distributed, which can be from reality and expectations.

d . Cartesian diagram

The Cartesian diagram describes the level of statements into four parts where with this diagram it can be determined several factors that influence consumer satisfaction which can then be prioritized for the company to improve further.

CHAPTER III

RESULTS AND DISCUSSION

3.1.Statistic analysis

The survey was conducted by taking respondents who were students of Surabaya State University who were conducted randomly through *Single Sign On* (SSO). The data obtained amounted to 22,789 respondents. This number of samples has fulfilled the sample adequacy requirements using the Slovin formula. If the total student population at Unesa is 30,284 and it is assumed that *the error* that is tolerated is 5%, then the minimum sample that must be fulfilled is:

$$n = \frac{N}{1+Ne^2} = \frac{30284}{1+(30284)(0.05^2)} = 394.78 \approx 395$$

The number of samples is 22,789 respondents, so the data adequacy requirements have been fulfilled.

Next, a normality assumption test will be carried out as a prerequisite for testing the *mean difference* between Expectations and Reality. The hypothesis is defined as follows:

H_0 : The data follows the Normal Distribution

H_1 : The data does not follow the Normal Distribution

One-Sample Kolmogorov-Smirnov Test

		H	K
N		431	431
Normal Parameters[a,b]	Mean	80,59	74,55
	Std. Deviation	10,325	11,588
Most Extreme Differences	Absolute	,313	,183
	Positive	,236	,183
	Negative	-,313	-,163
Kolmogorov-Smirnov Z		6,508	3,791
Asymp. Sig. (2-tailed)		,000	,000

a. Test distribution is Normal.

b. Calculated from data.

Figure 3.1. Data Normality Test Results

By using a significance value of 5%, from Figure 3.1 it can be seen that the asymp. sig. (2-tailed) or the p-value is less than 0.05, it can be concluded that the result of testing the hypothesis is to reject H_0, which means that the data does not follow a normal distribution.

The Wilcoxon test is an alternative method of testing 2 paired samples in addition to testing with the *paired t-test* . If the sample meets the normal distribution assumption, the parametric statistical test approach can be used with the paired sample t test, whereas if the assumption of normality is not met, then the Wilcoxon test can be tested. From the results of the normality test, it was concluded that the survey data did not meet the normal distribution assumptions, therefore the Wilcoxon sign test nonparametric approach was used.

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
K - H	Negative Ranks	199[a]	126,83	25239,50
	Positive Ranks	38[b]	77,99	2963,50
	Ties	194[c]		
	Total	431		

a. K < H

b. K > H

c. K = H

Test Statistics[a]

	K - H
Z	-10,575[b]
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Figure 3.2. Wilcoxon test results

Based on the results of the Wilcoxon Test using SPSS for windows 25, the Asymp results were obtained. Sig. (2-tailed) < 0.05 so that it can be stated that $H_{0 \text{ is rejected}}$ with the following hypothesis:

H_0 : There is no difference between the value of Expectations and Reality

H_1 : There is a difference between the value of Expectations and Reality

So there is a significant difference between the expectations and the reality of student satisfaction with Unesa's service and implementation of the educational process .

3.2.Gap Analysis and Conformity Rate

The results of calculating Reality, Expectations, Gap Analysis, and Service Quality and Implementation of the Unesa Education Process in 2021 are explained in Table 3.1.

Table 3.1. Calculation results of Reality, Expectations, Gap Analysis, and Quality of Service and implementation of the Unesa education process in 2021

Dimensions	P	statement	K	H	GAP	Tki (%)
Reliability (Credibility)	P1	Mastery of lecturers in lecture material	3.39	3.63	-0.24	93.39
	P2	Submission of lecturers in lecture material	3.34	3.62	-0.28	92.27
	P3	Structured and independent assignments in accordance with credit scores and course objectives	3.34	3.61	-0.27	92.52
	P4	Good and correct use of Indonesian	3.38	3.62	-0.24	93.37
	P5	Suitability of assignments and exam questions with learning objectives	3.34	3.61	-0.27	92.52
	P6	Availability of academic services, administration and academic information needs services from lecturers, educational staff and administrators accurately and satisfactorily	3.34	3.61	-0.27	92.52
		Means	**3.36**	**3.62**	**-0.26**	**92.76**
Responsivenes s (Fair)	Q7	Punctuality in starting and ending lectures	3.3	3.61	-0.31	91.41
	Q8	The timeliness of returning assignments to students by the lecturer	3.32	3.61	-0.29	91.97
	Q9	Willingness of lecturers to give follow-up exams	3.32	3.6	-0.28	92.22
	P10	Lecturers are willing to accept suggestions and input from students in the lecture and mentoring process	3.34	3.61	-0.27	92.52
	P11	The ability to create a conducive learning atmosphere to motivate students	3.32	3.61	-0.29	91.97
	Q12	Ease of service for lecturers, education staff and administrators in solving academic problems	3.33	3.61	-0.28	92.24
		Means	**3.32**	**3.61**	**-0.29**	**92.06**
Assurance (Responsibility)	P13	Implementation of UTS / UAS according to the academic calendar	3.38	3.62	-0.24	93.37

Dimensions	P	statement	K	H	GAP	Tki (%)
	P14	Fulfillment of 15 face-to-face meetings/semester	3.35	3.61	-0.26	92.80
	P15	Transparency in awarding values	3.31	3.61	-0.30	91.69
	Q16	Friendliness of educational staff to serve	3.34	3.61	-0.27	92.52
	Q17	Education/laboratory staff serve students according to working days	3.35	3.61	-0.26	92.80
		Means	**3.35**	**3.61**	**-0.27**	**92.64**
Empathy (Accountability)	P18	Objectivity in assessment	3.34	3.61	-0.27	92.52
	P19	Lecturers and students together make lecture contracts at the beginning of the semester meeting	3.38	3.61	-0.23	93.63
	P20	Communication of education personnel in service	3.34	3.61	-0.27	92.52
		Means	**3.35**	**3.61**	**-0.26**	**92.89**
Tangible (Transparent)	P21	Ease of access to information system-based service facilities (Unesa SSO and *website*)	3.33	3.61	-0.28	92.24
	P22	Availability and quality of laboratories/workshops/libraries/networks/classrooms, etc. in supporting academic activities	3.31	3.6	-0.29	91.94
		Means	**3.32**	**3.61**	**-0.29**	**92.09**
		Fifth dimensional *mean*	**3.34**	**3.61**	**-0.27**	**92.49**

Based on the gap analysis, it shows that all dimensions and items are negative. *Responsiveness* /fair and *tangible/* transparent dimensions have the greatest value. Items that have the three largest gap scores are: punctuality in starting and ending lectures (-0.31/P7), transparency in grading (-0.30/P15), and timely return of assignments to students by lecturers (-0 .29/P8), the ability to create a conducive learning atmosphere to motivate students (-0.29/P11), the availability and quality of laboratories/workshops/libraries/networks/classrooms, and others in supporting academic activities (-0, 29/P22).

The level of conformity between expectations and reality, after being analyzed shows a score of 92.49% with detailed dimensions as follows: *reliability* (reliability) of 92.76%, *responsiveness* (responsiveness) of 92.06% , *assurance* (guarantee) of 92.64%, *empathy*

(empathy) of 92.89%, and *tangible* (tangibility) of 92.09%. This means that the service and the implementation of the educational process are categorized as very appropriate.

3.3.Cartesian Diagram (IPA)

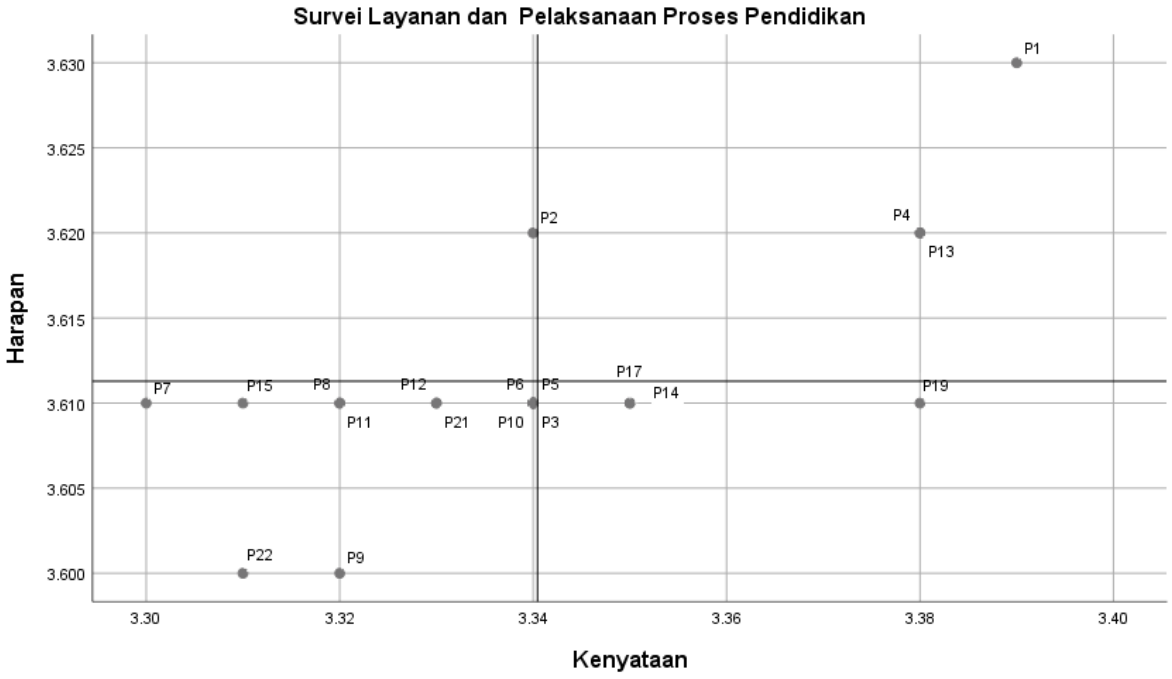


Figure 3.3. Cartesian Diagram of Service Satisfaction Survey and Implementation of the 2021 Education Process

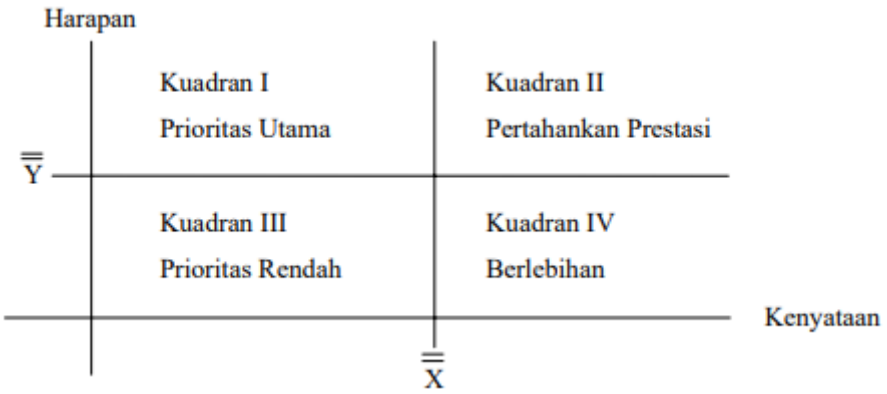


Figure 3.4. Cartesian Diagram (Supranto, 2001)

Information:

Quadrant I (Top Priority)

This quadrant shows the factors that are considered to affect customer satisfaction and includes service elements that are considered very important to consumers. However, service

providers have not implemented it in accordance with the wishes of consumers, causing disappointment / dissatisfaction. Variables in this quadrant need serious attention.

Quadrant II (Maintain Achievement)

This quadrant shows that the factors that are considered important by consumers have been implemented properly and can satisfy consumers, it is the obligation of service providers to maintain their performance.

Quadrant III (Low Priority)

This quadrant shows the factors that are considered less important by consumers and the performance by service providers is mediocre. Variables included in this quadrant do not need to be questioned even though they do not satisfy consumers because consumers do not consider them very important.

Quadrant IV (Excessive)

This quadrant shows factors that are considered less important by consumers but have been implemented very well by service providers.

Quadrant Analysis Results

1. Quadrant 1 analysis

Factors that are considered to affect consumer satisfaction and include service elements that are considered very important for consumers, but service providers have not implemented them include: lecturer delivery of lecture material (P2).

2. Quadrant 2 analysis

Factors that are considered important by consumers have been implemented properly and can satisfy consumers including: Lecturer mastery of lecture material (P1), good and correct use of Indonesian (P4), and implementation of UTS/UAS according to the academic calendar (P13).

3. Quadrant 3 analysis

Factors that are considered less important by consumers and mediocre implementation by service providers include: structured and independent assignments according to the weight of credits and course objectives (P3), suitability of assignments and exam questions with learning objectives (P5), availability of academic services , administration and services for academic information needs from lecturers, educational staff and administrators accurately and satisfactorily (P6), timeliness in starting and ending lectures (P7), timeliness in returning assignments to students by lecturers (P8), lecturers' willingness to give follow-up exams (P9), lecturers are willing to accept suggestions and input from students in the lecture and

mentoring process (P10), the ability to create a conducive learning atmosphere to motivate students (P11), ease of service for lecturers, education staff and managers in solving academic problems (P12), ease of access to information system-based service facilities (SSO Unesa and *website*) (P21), availability and quality of laboratories/workshops/libraries/networks/classrooms, and others in supporting academic activities (P22).

4. Quadrant 4 analysis

Factors that are considered less important by consumers but have been implemented very well by service providers include: fulfillment of 15 face-to-face meetings/semester (P14), education/laboratory staff serving students according to working days (P17), lecturers and students together together make a lecture contract at the beginning of the semester meeting (P19).

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the analysis, it can be concluded that the services and implementation of Unesa's education process with student respondents are as follows:

a. There is a significant difference between Expectations and Reality based on the results of the Wilcoxon test with a significance value of <5% and concluding that Ho is rejected.
b. Based on gap analysis, the items that have the three largest gap scores are: punctuality in starting and ending lectures, transparency in awarding grades, and timely return of assignments to students by lecturers, ability to create a conducive learning atmosphere to motivate students, availability and quality of laboratories / workshops / libraries / networks / classrooms, and others in supporting academic activities. As for the level of conformity between expectations and reality, after being analyzed it shows a score of 92.49%, which means that services and the implementation of the educational process are categorized as very appropriate.
c. Based on IPA analysis (Cartesian diagram), a service that is considered very important for consumers, but needs to be improved, is the lecturer's delivery of lecture material.

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Attachment

I. Service Satisfaction Instrument and Educational Process Implementation (Criterion 6)

INSTRUCTION
Please fill in by putting a tick (√) on "Expectations for answers" and "Existing facts" in the field in real terms.

No	Statement	Hope for an answer				Existing facts			
		Very good	Good	Enough	Not enough	Very good	Good	Enough	Not enough
A	**Reliability (*reliability*): the ability of lecturers, education staff, and administrators to provide services**								
1 (P1)	Lecturer mastery of lecture material								
2 (P2)	Lecturer delivery of lecture material								
3 (P3)	Structured and independent assignments in accordance with credit scores and course objectives								
4 (P4)	Good and correct use of Indonesian								
5 (P5)	Suitability of assignments and exam questions with learning objectives								
6 (P6)	Availability of academic services, administration and academic information needs services from lecturers, educational staff and administrators accurately and satisfactorily								
B	**Responsiveness (*responsiveness*): the willingness of lecturers, education staff, and**								

No	Statement	Hope for an answer				Existing facts			
		Very good	Good	Enough	Not enough	Very good	Good	Enough	Not enough
	administrators to help students and provide services quickly;								
1 (P7)	Punctuality in starting and ending lectures								
2 (P8)	The timeliness of returning assignments to students by the Lecturer								
3 (P9)	Lecturer's willingness to give follow-up exams								
4 (P10)	Lecturers are willing to accept suggestions and input from students in the lecture and mentoring process								
5 (P11)	The ability to create a conducive learning atmosphere to motivate students								
6 (P12)	Ease of service for lecturers, education staff and administrators in solving academic problems								
C	**Assurance : the ability of lecturers, educational staff, and administrators to give confidence to *students* that the services provided are in accordance with the provisions;**								
1 (P13)	Implementation of UTS / UAS according to the academic calendar								
2 (P14)	Fulfillment of 15 face-to-face meetings/semester								
3 (P15)	Transparency in awarding values								

No	Statement	Hope for an answer				Existing facts			
		Very good	Good	Enough	Not enough	Very good	Good	Enough	Not enough
4 (P16)	Friendliness of educational staff to serve								
5 (P17)	Education/laboratory staff serve students according to working days								
D	**Empathy (*empathy*): the willingness/concern of lecturers, educational staff, and administrators to pay attention to students;**								
1 (P18)	Objectivity in assessment								
2 (P19)	Lecturers and students together make lecture contracts at the beginning of the semester meeting								
3 (P20)	Communication of education personnel in service								
E	***Tangible:* student assessment of adequacy, accessibility, quality of facilities and infrastructure.**								
1 (P21)	Ease of access to information system-based service facilities (Unesa SSO and Website)								
2 (P22)	Availability and quality of laboratories/workshops/libraries/networks/classrooms, etc. in supporting academic activities								