REPORT

Service Satisfaction and Education Process Implementation

(Unesa Students Respondents)

FACULTY OF ENGINEERING
SURABAYA STATE UNIVERSITY
QUALITY ASSURANCE GROUP

2020

Endorsement page

Hereby stating that the Report on Service Satisfaction and Education Process Implementation of the Surabaya State University was actually made

Surabaya, December 29th 2020

Dean of Faculty of Engineering

Mengetahui,
Dekan Fakultas FT

(Dr. Maspiyah, M.Kes.)
NIP. 196404101990032013

Head of Quality Assurance Group

(Dra. Hj. Suhartiningsih, M.Pd.)
NIP. 195711221984032001

CHAPTER 1

INTRODUCTION

1.1. Background

The Data and Information System Division is one of the Quality Assurance Group (QAG) which in charge of assisting the implementation of quality assurance with the PIECI model (Quality Planning, Quality Implementation, Quality Evaluation, Quality Control, Quality Improvement). One of the tasks of division is to conduct a Customer Service Satisfaction Survey which is currently a necessity and requirement for Study Program Accreditation and Higher Education Accreditation.

Satisfaction surveys were carried out on all activities carried out by QAG so that the quality of the implementation activities were evaluated periodically. This survey was conducted online and performed after the student educational activity was ended. The results of this survey will be followed up with an evaluation meeting and will be used for service improvement for further activities.

Along with the increasing need to improve the service quality at Unesa, it is necessary to have a satisfaction survey for students, lecturers, and staff. It is necessary to know what variables must be improved and maintained in quality. The questionnaire were consisted of filling in the expectations and reality of the service from last year.

1.2. Problem

a. How are the comparison results between expectations and the reality of satisfaction with Service Satisfaction and Education Process Implementation (Criterion 6) Faculty of Engineering based on the 2020 Unesa student survey.
b. How is the comparative analysis between expectations and reality of service satisfaction on the Education Process Implementation of the Faculty of Engineering (Unesa Student Survey 2020) based on the Cartesian Diagram.

1.3. Purpose

To know the quality of service satisfaction and the implementation of the educational process (Criterion 6) Faculty of Engineering (2020 Unesa student survey) based on the Cartesian Diagram.

1.4. Report Systematic

The report systematic is the chapter I introduction which consisted of the background, problems, objectives, and systematics of the report. Chapter II is consisted of the survey method, from the type and design of the survey, variables, operational definitions, survey instruments, methods, and data processing. Chapter III the results and discussion, and Chapter IV conclusions.

CHAPTER II

SURVEY METHOD

2.1. Types and Design of Survey Implementation

This type of survey design uses non-experimental quantitative research. Non-experimental research is research whose observations are carried out with a number of subject variables according to what they are (in nature), without manipulation (Pratiknya, 2001).

This research uses a cross sectional design which is used to study the relationship between the independent variable and the dependent variable by taking measurements at the same time (point time approach). The same time means that each subject is only observed once and subject variables are observed at the time of observation. The method used in data collection is a questionnaire.

2.2. Operational Definition

Some operational definitions were followed:

a. Consumers are all students who use Service Satisfaction and Implementation of the Education Process (Criterion 6) Unesa in 2020.
b. Consumer expectations are students who receive services for Service Satisfaction and Implementation of the Education Process (Criterion 6) Unesa in 2020.
c. Customer satisfaction is the consumer's acknowledgment of Service Satisfaction and Implementation of the Education Process (Criterion 6) Unesa in 2020.
d. The quality of service that will be examined is the expectations and reality of consumers on reliability, responsiveness, assurance (guarantee, empathy), and tangible.

2.3. Survey Instrument

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 (reliability),

responsiveness (responsiveness), assurance (guarantee), empathy (empathy), and tangible (tangibility).

2.4. Method

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

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

If possible, the next step is to use the Importance Performance Analysis method which was first introduced by Martilia and James (1977) with the aim of measuring the relationship between consumer/customer perceptions and priorities for improving product/service quality, also known as Quadrant Analysis.

2.5. Data processing

- Gap analysis

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

The highest satisfaction occurs when the reality exceeds expectations, namely when the service provided is maximum (4) while the minimum expectation is (1). The interval is obtained using the formula:

Interval= (Highest score – Lowest score)/Number of groups

From the above calculation, the gap classification is obtained in Table 2.1.

Table 2.1. Gap Classification

Interval	**Classification**	**Satisfaction Level**
-3 until -1,5	Very Negative	Very dissatisfied compared to expectations
-1.5 until 0	Negative	Less dissatisfied compared to expectations
0 until 1,5	Positive	More satisfied compared to expectations
1,5 until 3	Very Positive	Most satisfied compared to expectations

Data normality test

The normality test of the data was carried out by statistical analysis. This test is carried out by entering the average reality and expectations of each statement contained in the questionnaire. This test is carried out to find out whether the data used normally distributed or not so that the next statistical test to be used can be determined.

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, then the data is normally distributed (parametric data) and can be analyzed using 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.

- Wilcoxon test

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

- Cartesian Charts

The Cartesian diagram describes the level of the statement into four parts where with this diagram it can be determined several factors that affect customer satisfaction which can then be prioritized for the company to be further improved.

CHAPTER III
RESULTS AND DISCUSSION

3.1. Data Normality Test

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	HARAPAN	Statistic	df	Sig.	Statistic	df	Sig.
HARAPAN	1	.459	19	.000	.497	19	.000
	2	.357	167	.000	.775	167	.000
	3	.498	1532	.000	.397	1532	.000
	4	.535	2266	.000	.188	2266	.000

a. Lilliefors Significance Correction

Figure 3.1. Data normality test results

Based on the results of the normality test using SPSS for Windows 25, the results showed that significance value of 0.000 <0.05, so that the data is declared not normally distributed.

3.2. Wilcoxon Test

	KENYATAAN - HARAPAN
Z	-25.170[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) of 0.000 <0.05 so it can be stated that there is a significant difference between the expectations and the reality of student satisfaction with services and the implementation of the Unesa education process.

3.3. The Results of Reality and Expectation Calculation

The results of the calculation of Reality, Expectations, Gap Analysis, and Quality of Service Satisfaction and Implementation of the Education Process (Criterion 6) Faculty of Engineering 2020 with student respondents are described in Table 3.1-3.7.

Table 3.1. The results of the calculation of Reality, Expectations, Gap Analysis, and Quality of Satisfaction Service and Implementation of the Educational Process (Criterion 6) Faculty of Engineering 2020

Dimension	P	Statement	Reality	Expectation	GAP	Tki (%)
Reliability (Credibility)	P1	Lecturer's Mastery on course material	3.31	3.56	-0.25	92.99233
	P2	Lecturer's Conversation on course material	3.26	3.55	-0.29	91.7978
	P3	Structured and independent assignments according to the weight of the credits and the purpose of the lecture	3.24	3.53	-0.29	91.80937
	P4	Good and correct use of Indonesian	3.30	3.55	-0.29	92.96545
	P5	Suitability of assignments and exam questions with learning objectives	3.25	3.53	-0.25	91.9092
	P6	Availability of academic services, administration and services for academic information needs from lecturers, education staff and managers accurately and satisfactorily	3.25	3.54	-0.29	91.78964
		Mean	3.27	3.54	-0.28	92.21063
Responsiveness (Fairness)	P7	Punctuality in starting and ending lectures	3.21	3.53	-0.32	90.99578
	P8	The punctuality of returning assignments to students by Lecturers	3.23	3.524658	-0.30	91.5477
	P9	Lecturer's willingness to give remidial exams	3.22	3.52	-0.30	91.41228
	P10	Lecturers are willing to accept suggestions and input from students in the lecture and mentoring process	3.24	3.53	-0.29	91.81162
	P11	Ability to create a conducive learning atmosphere to motivate students	3.24	3.53	-0.29	91.765
	P12	Ease of service for lecturers, education staff and managers in solving academic problems	3.24	3.53	-0.28	91.95067

		Mean	3.23	3.53	-0.30	91.58
Assurance (Commitment)	P13	Implementation of mid-term and final term exams according to the academic calendar	3.28	3.538516	-0.26	92.78782
	P14	Fulfillment of face-to-face lectures 15 meetings/semester	3.25	3.54	-0.28	92.01205
	P15	Transparency in scoring	3.22	3.53	-0.30	91.44663
	P16	The friendliness of the education staff to serve	3.25	3.53	-0.28	91.99871
	P17	Educational/laboratory staff serve students according to working days	3.26	3.53	-0.27	92.30964
		Mean	3.25	3.53	-0.28	92.11
Empathy (Accountabilit y)	P18	Objectivity in the assessment	3.24	3.530061	-0.29	91.67388
	P19	Lecturers and students together make a lecture contract at the beginning of the semester meeting	3.28	3.53	-0.25	92.93384
	P20	Communication of education personnel in service	3.25	3.53	-0.28	92.1748
		Mean	3.26	3.53	-0.27	92.26
Tangible (Transparent)	P21	Easy access to information system-based service facilities (SSO Unesa and Website)	3.23	3.53	-0.30	91.45089
	P22	Availability and quality of laboratories/workshops/libraries/n etworks/classrooms, etc. in supporting academic activities	3.22	3.53	-0.30	91.40141
		Mean	3.23	3.53	-0.30	91.43
		Total Mean of Five Dimension	3.2470 15	3.532491	-0.28548	91.91782

3.4. The Comparative Results between Reality and Expectation

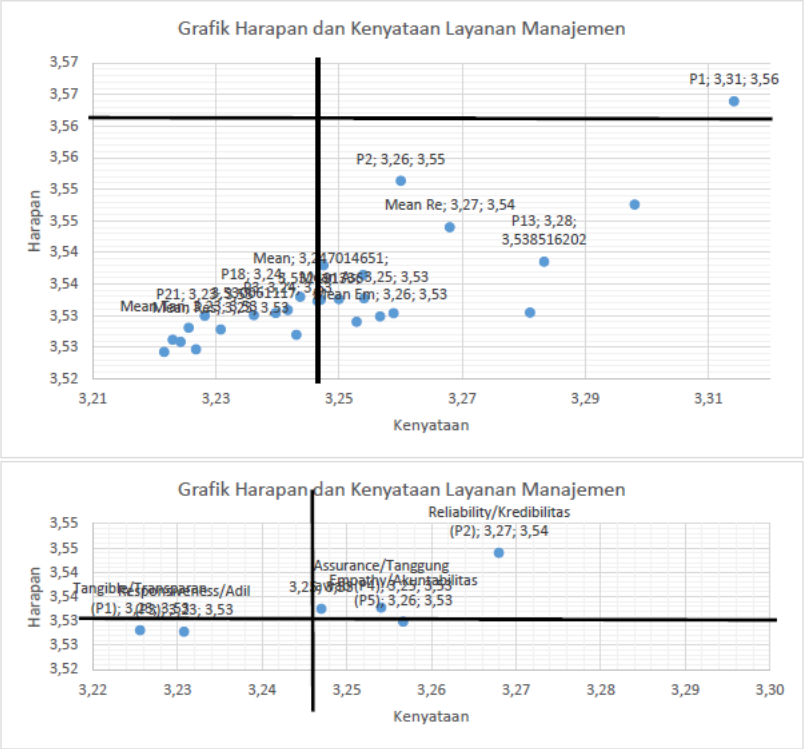

Figure 3.3. Cartesian Diagram Service Satisfaction Survey and Implementation of the Education Process (Criterion 6) in 2020

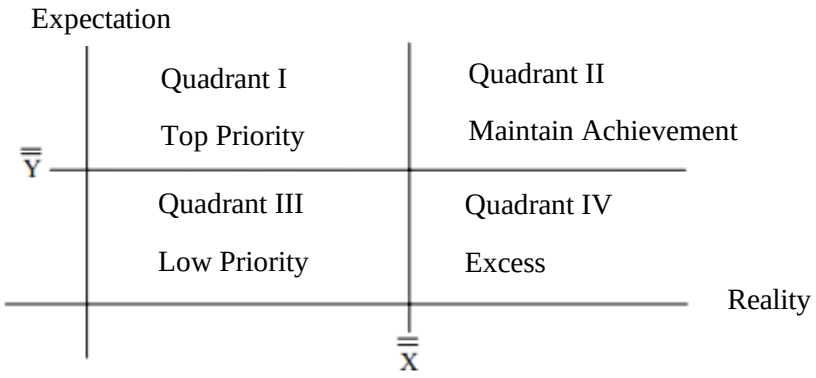

Figure 3.4. Cartesian Diagram (Supranto, 2001)

Information:

Quadrant I (Top Priority)

This quadrant showed that the factors were considered to affect customer satisfaction and include service elements that considered very important for consumers. However, service providers had not implemented

it in accordance with the wishes of consumers, causing disappointment/dissatisfaction. Variables in this quadrant need to be taken seriously.

Quadrant II (Maintain Achievement)

This quadrant shows the factors that were considered important by consumers had been implemented properly and could satisfy consumers, so the obligation of service providers must be maintained their performance.

Quadrant III (Low priority)

This quadrant showed that the factors were considered less important by consumers and the implementation by service providers was mediocre. Variables included in this quadrant did not need to be questioned even though they did not satisfy consumers because consumers did not consider them very important

Quadrant IV (Excess)

This quadrant showed the factors which were considered less important by consumers but had been carried out very well by service providers.

Analysis of each dimension

Service Satisfaction and Implementation of the Educational Process (Criterion 6)

— Reliability

Based on the results of the analysis of the reliability dimension, it is in quadrant II. The results showed that the availability of services had been carried out in accordance with the wishes of consumers, so it must be maintained by the University.

— Tangible

The tangible dimension is in quadrant III. The result showed that this dimension had been well served.

— Assurance

The assurance dimension is in quadrant II. The result showed the dimension was considered important by consumers and had implemented it in accordance with the wishes of consumers, this achievement needs to be maintained by the University.

— Responsiveness

The responsiveness dimension is in quadrant III. The result showed that this dimension had been well served.

— Empathy

The empathy dimension is in quadrant IV. The result showed that this dimension had been well served and had been taken seriously by the University.

CHAPTER IV

CLOSING

Based on the results of the analysis, it can be concluded that the level of student satisfaction with the service and implementation of the educational process (criterion 6) of the Faculty of Engineering in 2020 is in the good category with a satisfaction index level of 91.91%.

Attachment

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

INSTRUCTION

Please fill in by putting a check mark ($\surd$) on the "Expectation" and "Reality" in the real field.

Number	Statement	Expectation				Reality			
		Very Good	Good	Enough	Deficient	Very Good	Good	Enough	Deficient
A	**Reliability: the ability of lecturers, education staff, and managers in providing services;**								
1 (P1)	Lecturer's Mastery on course material								
2 (P2)	Lecturer's Conversation on course material								
3 (P3)	Structured and independent assignments according to the weight of the credits and the purpose of the lecture								
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 services for academic information needs from lecturers, education staff and managers accurately and satisfactorily								
B	**Responsiveness: willingness of lecturers, education staff, and managers to help students and serve quickly;**								
1 (P7)	Punctuality in starting and ending lectures								

2 (P8)	The punctuality of returning assignments to students by Lecturers								
3 (P9)	Lecturer's willingness to give remidial exams								
4 (P10)	Lecturers are willing to accept suggestions and input from students in the lecture and mentoring process								
5 (P11)	Ability to create a conducive learning atmosphere to motivate students								
6 (P12)	Ease of service for lecturers, education staff and managers in solving academic problems								
C	**Assurance: the ability of lecturers, education staff, and managers to give confidence to students that the services provided are in accordance with the provisions**								
1 (P13)	Implementation of mid-term and final term exams according to the academic calendar								
2 (P14)	Fulfillment of face-to-face lectures 15 meetings/semester								
3 (P15)	Transparency in scoring								
4 (P16)	The friendliness of the education staff to serve								
5 (P17)	Educational/laboratory staff serve students according to working days								
D	**Empathy: willingness/concern of lecturers,**								

	education staff, and managers to pay attention to students								
1 (P18)	Objectivity in the assessment								
2 (P19)	Lecturers and students together make a lecture contract at the beginning of the semester meeting								
3 (P20)	Communication of education personnel in service								
E	**Tangible: student assessment of the adequacy, accessibility, quality of facilities and infrastructure**								
1 (P21)	Easy access to information system-based service facilities (SSO Unesa and Website)								
2 (P22)	Availability and quality of laboratories/workshops/libraries/networks/classrooms, etc. in supporting academic activities								