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Improving The Quality of Service to Students at Ibnu Sina University

Nandar Cundara, Herman, Rizki Prakasa Hasibuan
Program Studi Teknik Industri, Universitas Ibnu Sina, Batam

ABSTRACT

This research data was conducted to determine the quality of teaching and learning process services currently available and to improve the quality of Teaching and Learning Process services at Ibnu Sina University by distributing questionnaires to Ibnu Sina University students totaling 267 respondents. The research variables created in the questionnaire refer to 5 dimensions of service, namely Tangible, Reliability, Responsiveness, Assurance, Emphaty. From the measurement results using the Servqual method, from all dimensions of service quality, students still feel dissatisfied because the gap value is still negative (-) and the negative value is the highest among the 5 The service quality dimension is the tangible dimension with the highest gap value of -0.98, followed by the responsiveness dimension with a value of -0.81. From the results of the quadrants produced using the Cartesian diagram, quadrant 1 is the main priority in improving service quality.

Keywords: *Service Quality, Servqual, Cartesian Diagram*

Corresponding author
Name: Herman
Email: herman.ac.id

INTRODUCTION

Quality education is the main foundation in building superior and competitive human resources. An education system that is organized systematically and consistently will contribute to the creation of human resources that are ready to face the challenges of industry and development in various sectors. Thus, the quality of the education system is closely related to the quality of graduates produced, who will later become the driving force for growth and development in the regions or institutions where they work.

Improving the quality of human resources cannot be separated from improving the education system itself. A good education system is not only characterized by a relevant curriculum and effective teaching methods, but also by the quality of educational services provided to students during the teaching and learning process (PBM). The quality of services in PBM is a crucial aspect that influences student satisfaction, because students as learners play an important role in assessing the effectiveness and efficiency of the learning process they experience.

Based on a preliminary study that has been conducted on students of the Industrial Engineering Study Program at Ibnu Sina University, a number of complaints were found regarding the quality of services in PBM. These complaints vary, ranging from inadequate facilities and infrastructure to teaching methods that are felt to be less than optimal by students. The complaint has been heard by the student association to the management, especially to the Industrial Engineering Study Program and the Dean's Office, which illustrates the dissatisfaction of students with several aspects of the educational services they receive.

The main problem in this study is how to measure the level of student satisfaction with the teaching and learning process services in the Industrial Engineering Study Program, Ibnu Sina University. Based on the findings of the preliminary study, there were a number of complaints submitted by students regarding the quality of services in the teaching and learning process, starting from aspects of facilities and infrastructure to teaching methods. This problem requires a solution that can improve the quality of educational services felt by students.

The purpose of this study is to conduct a comprehensive measurement of the level of student satisfaction related to the teaching and learning process services at Ibnu Sina University. In addition, this study also aims to design an effective strategy in improving the quality of educational services so that the teaching and learning process can take place more optimally, so that students get a better learning experience and support their increased competence.

METHOD

This research will be conducted through several stages. The first stage is measuring customer satisfaction using the SERVQUAL method. This method is based on a multi-item scale designed to measure customer expectations and perceptions regarding service quality, and to identify gaps between the two. Measurements will be made based on five main dimensions of service quality, namely tangibles, reliability, responsiveness, assurance, and attention. Each dimension will be measured using a Likert scale. The second stage is formulating a service improvement strategy using the SWOT method. The SWOT analysis begins by analyzing internal factors to evaluate strengths and weaknesses, and external factors to evaluate opportunities and threats. After that, a SWOT matrix will be compiled to determine the current position of the institution and develop a service quality improvement strategy based on the results of the analysis.

The data collection methods that will be used in this study include several techniques. First, questionnaires will be distributed to students of Ibnu Sina University, using a Likert scale to measure their responses regarding the quality of service received. Second, interviews will be conducted to collect more in-depth information regarding complaints experienced by students related to the teaching and learning process. Finally, a literature study will be used to collect secondary data obtained from the institution in the form of relevant notes or documentation.

FINDING AND DISCUSSION

This research data was conducted to determine the quality of teaching and learning process (PBM) services currently available and to improve the quality of Teaching and Learning Process services at Ibnu Sina University by distributing questionnaires to 267 respondents of Ibnu Sina University students. The research variables made in the questionnaire refer to 5 service dimensions, namely Tangible, Reliability, Responsiveness, Assurance, Empathy.

From the questionnaire data that has been distributed to respondents, a validity test is then carried out to determine whether the data that has been obtained is valid or not, while the reliability test is carried out to determine whether the data that has been obtained is reliable or not.

Validity Test of Perception and Expectation Variables

Based on the results of the validity test of the perception and expectation variables on the respondents' answers using the SPSS 2.0 for Windows program, it shows that the R Calculation value of each variable is greater than R Table (0.1201) and the significance level of each variable is less than 0.05. To determine R Table, the formula df = N - 2 is used, where N is the number of samples or respondents and 2 is a constant value. So, 267 – 2 = 265. With a significance level of 5%, the R Table value is 0.1201. The results of the calculation of the validity test of the perception and expectation variables can be seen in Table 1.

Table 1: Validation Test Results

No. Pert	Data Responden Persepsi		Ket	No. Pert	Data Responden Harapan		Ket
	R Hitung	Nilai R Tabel (N=267, N-2 = 265 α =5%)			R Hitung	Nilai R Tabel (N=267, N-2 = 265 α =5%)	
1	1	0,1201	Valid	**1**	1	0,1201	Valid
2	0,639	0,1201	Valid	**2**	0,775	0,1201	Valid
3	0,452	0,1201	Valid	**3**	0,582	0,1201	Valid
4	0,537	0,1201	Valid	**4**	0,653	0,1201	Valid
5	0,541	0,1201	Valid	**5**	0,701	0,1201	Valid
6	0,514	0,1201	Valid	**6**	0,652	0,1201	Valid
7	0,500	0,1201	Valid	**7**	0,620	0,1201	Valid
8	0,629	0,1201	Valid	**8**	0,700	0,1201	Valid
9	0,495	0,1201	Valid	**9**	0,685	0,1201	Valid
10	0,621	0,1201	Valid	**10**	0,735	0,1201	Valid
11	0,662	0,1201	Valid	**11**	0,749	0,1201	Valid
12	0,558	0,1201	Valid	**12**	0,697	0,1201	Valid
13	0,533	0,1201	Valid	**13**	0,707	0,1201	Valid
14	0,467	0,1201	Valid	**14**	0,651	0,1201	Valid
15	0,553	0,1201	Valid	**15**	0,662	0,1201	Valid
16	0,443	0,1201	Valid	**16**	0,630	0,1201	Valid
17	0,428	0,1201	Valid	**17**	0,650	0,1201	Valid
18	0,483	0,1201	Valid	**18**	0,712	0,1201	Valid
19	0,526	0,1201	Valid	**19**	0,658	0,1201	Valid
20	0,510	0,1201	Valid	**20**	0,647	0,1201	Valid
21	0,493	0,1201	Valid	**21**	0,597	0,1201	Valid
22	0,480	0,1201	Valid	**22**	0,655	0,1201	Valid
23	0,504	0,1201	Valid	**23**	0,694	0,1201	Valid
24	0,489	0,1201	Valid	**24**	0,589	0,1201	Valid
25	0,553	0,1201	Valid	**25**	0,615	0,1201	Valid
26	0,542	0,1201	Valid	**26**	0,672	0,1201	Valid
27	0,591	0,1201	Valid	**27**	0,672	0,1201	Valid
28	0,590	0,1201	Valid	**28**	0,677	0,1201	Valid
29	0,400	0,1201	Valid	**29**	0,689	0,1201	Valid
30	0,488	0,1201	Valid	**30**	0,592	0,1201	Valid
31	0,460	0,1201	Valid	**31**	0,587	0,1201	Valid
32	0,536	0,1201	Valid	**32**	0,657	0,1201	Valid
33	0,540	0,1201	Valid	**33**	0,668	0,1201	Valid
34	0,451	0,1201	Valid	**34**	0,632	0,1201	Valid

Based on the results obtained from the validity test of perception and expectation data for all variables, it can be obtained that the overall perception and expectation data are declared valid because R Calculation ≥ R Table. To conduct a reliability test using the Cronbach Alpha technique. The reliability test using the Cronbach Alpha technique is carried out by comparing the Alpha coefficient values obtained from calculations using SPSS Version 20 software. Cronbach Alpha is a measure of reliability that has a value ranging from 0 (zero) to 1 (one) (Hair et al., 2010: 92). According to Eisingerich and Rubera (2010: 27) the minimum Cronbach's Alpha reliability level value is 0.70.

Cronbach's Alpha	Tingkat Keandalan
0.00.0 – 0.20	Kurang Andal
>0.20 – 0.40	Agak Andal
>0.40 – 0.60	Cukup Andal
0.60 – 0.80	Andal
0.80 – 1.00	Sangat Andal

Figure 1: Cronbach's Alpha Reliability Level

Based on the results of data processing using the SPSS 20 for Windows program, the respondent data is stated as reliable or can be relied on because the Cronbach Alpha value is greater than 0.60 where the value of the service perception data is 0.969 ≥ 0.60 while the value of the service expectation data is 0.986 ≥ 0.60. The results of the reliability test data processing using the SPSS 20 program can be seen in figure 2.

Cronbach's Alpha	N of Items
.969	34

Cronbach's Alpha	N of Items
.986	34

Figure 2: Reliability Test Results

The respondents in this study based on gender consist of male and female respondents, the purpose of identifying respondents based on gender is to see the participation of respondents based on gender. The results of identifying research respondents based on gender can be seen in Figure 3.

No	Responden Jenis Kelamin	*Frequency*	*Percent*
1	Laki-laki	171	64
2	Perempuan	96	36
Total		267	100

Figure 3: Respondent gender data

Based on Figure 3, it shows that the number of male respondents is 171 people or 64% and the number of female respondents is 96 people or 36%. Thus, it can be said that the number of male respondents is more dominant than the number of female respondents from the total number of respondents of 267 people.

No	Responden Berdasarkan Semester	*Frequency*	*Percent*
1	2	84	31
2	4	111	42
3	6	64	24
4	8	8	3
Total		267	100

Figure 4: Respondent

Based on Figure 4, it shows that the assessment of service quality at Ibnu Sina University based on semesters, namely semester 2 as many as 84 people (31%), semester 4 as many as 111 people (42%), semester 6 as many as 64 people (24%) and semester 8 as many as 3 people (3%).

This service quality analysis is used to determine the level of satisfaction with the services of Ibnu Sina University (UIS) by comparing the perception score value with the expectation score value for the services felt by students. The results of the questionnaire that has been given to students are then analyzed for service quality to find out whether or not they are satisfied with the services available at UIS.

Based on the results of distributing questionnaires with a total of 34 questions to 267 respondents, a weighting value can be obtained based on each question item that has been answered by the respondents, this weighting assessment is based on what is felt and desired by customers regarding the services available at UIS. The weighting of each service item can be seen in Figure 5.

Pert	Bobot Tanggapan Persepsi						Bobot Tanggapan Harapan				
	A. Layanan Bukti Fisik (*Tangible*)										
	5	**4**	**3**	**2**	**1**	**Jml**	**5**	**4**	**3**	**2**	**1**
P1	18	81	116	41	11	267	105	87	56	15	4
P2	11	72	112	56	16	267	101	87	54	22	3
P3	31	75	100	41	20	267	118	88	39	17	5
P4	13	54	113	66	21	267	85	92	57	27	6
P5	10	40	85	89	43	267	108	69	42	33	15
P6	13	85	108	47	14	267	115	85	46	17	4
P7	24	56	111	57	19	267	121	72	51	18	5
P8	31	116	95	21	4	267	125	89	45	8	0
P9	20	47	92	59	49	267	123	65	49	16	14
P10	15	57	128	54	13	267	105	80	64	12	6
Jml	191	687	1063	533	211	2685	1111	818	506	187	63
%	7,1 %	25,6 %	39,6 %	19,9 %	7,9 %	100,0 %	41,4 %	30,5 %	18,8 %	7,0 %	2,3 %
B. Layanan Kehandalan (*Reliability*)											
P11	28	98	104	32	5	267	126	89	40	9	3
P12	32	84	106	27	18	267	120	89	44	6	8
B. Layanan Kehandalan (*Reliability*)											
P13	21	113	104	24	5	267	115	98	43	6	5
P14	45	127	76	14	5	267	119	102	39	4	3
P15	41	120	84	17	5	267	114	100	45	6	2
P16	46	109	92	16	4	267	122	97	37	9	2
P17	44	106	92	20	5	267	115	99	44	8	1
P18	14	66	60	104	23	267	90	97	55	19	6
Jml	271	823	718	254	70	2136	921	771	347	67	30
%	12,7 %	38,5 %	33,5 %	11,9 %	3,3 %	100,0 %	43,1 %	36,1 %	16,2 %	3,1 %	1,4 %
C. Layanan Daya Tanggap (*Responsiveness*)											
P19	24	89	107	32	15	267	119	85	51	5	7
P20	34	86	102	32	13	267	115	92	48	5	7
P21	22	90	106	35	14	267	112	92	46	11	6
Pert	Bobot Tanggapan Persepsi						Bobot Tanggapan Harapan				
	Layanan Daya Tanggap (*Responsiveness*)										
	5	**4**	**3**	**2**	**1**	**Jml**	**5**	**4**	**3**	**2**	**1**
P22	29	94	104	30	10	267	99	109	40	12	7
P23	25	81	103	30	28	267	116	89	43	10	9
Jml	134	440	522	159	80	1335	561	467	228	43	36
%	10 %	33 %	39,1 %	11,9 %	6,0 %	100,0 %	42 %	35 %	17,1 %	3,2 %	2,7 %
D. Layanan Jaminan (*Assurance*)											
P24	48	131	73	8	7	267	134	90	34	5	4
P25	41	123	90	7	6	267	127	98	37	2	3
P26	39	139	76	9	4	267	138	88	37	1	3
P27	29	97	115	15	11	267	123	92	44	6	2
P28	30	109	98	22	8	267	129	83	48	4	3
P29	41	103	97	15	11	267	130	87	44	1	5
P30	44	127	83	9	4	267	128	94	40	3	2
P31	62	121	75	6	3	267	142	81	41	0	3
Jml	334	950	707	91	54	2136	1051	713	325	22	25
%	15,6 %	44,5 %	33,1 %	4,3 %	2,5 %	100,0 %	49,2 %	33,4 %	15,2 %	1,0 %	1,2 %
E. Layanan Perhatian (*Emphati*)											
P32	25	105	109	16	12	267	118	83	56	5	5
P33	27	100	108	21	11	267	119	91	42	12	3
P34	60	101	83	13	10	267	140	84	33	5	5
Jml	112	306	300	50	33	801	377	258	131	22	13
%	14 %	38,2 %	37,5 %	6,2 %	4,1 %	100,0 %	47,1 %	32,2 %	16,4 %	2,7 %	1,6 %

Figure 5: Assessment weighting based on perception and expectations

This fishbone analysis is used to analyze the causes of the level of dissatisfaction with the services felt by students in the UIS environment, in order to find out the cause of the problem, researchers conducted brainstorming with the UIS university using the Fishbone diagram approach, more details can be seen in Figure 6.

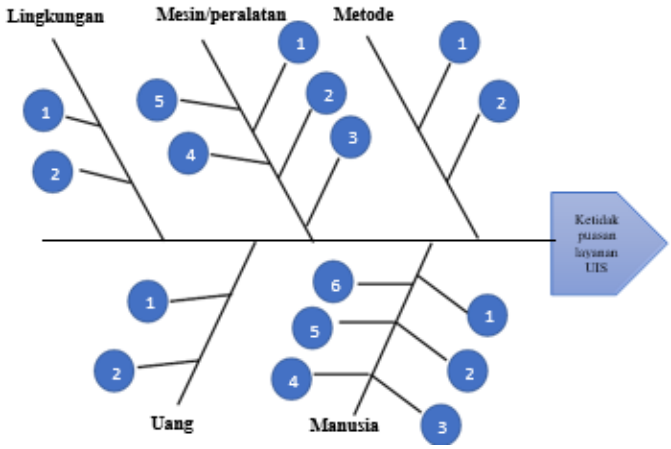

Figure 6: Fishbone diagram of services in UIS

Description:

Human:

- Slow response to student complaints
- Lack of supervision of available facilities
- Placement of human resources in the structure is not in accordance with competency
- Need for related training in their respective fields
- Some teaching staff human resources are still not up to date with technology
- The availability of human resources for educational administration services is still low

Method:

- Working hours do not align with lecture hours
- Lecture start times do not match the schedule Environment:
- Toilets are not clean
- The canteen is not tidy
- Parking is not spacious enough (does not match vehicle capacity with the available parking area
- Classrooms are not comfortable

Machine/Equipment:

- Lack of laboratory equipment as a means of supporting practicums
- AC is not cold enough
- Projectors are not up to standard
- Whiteboards
- Wifi network access is not adequate

Money:

- SPP fines are too high
- Lack of late payment policy for SPP

Importance Performance Analysis (IPA)

After measuring the level of satisfaction of higher education services at UIS, the next step is to analyze the satisfaction and level of importance of each service attribute, the aim is to find out which attributes are considered a priority in improving service quality that can meet the level of customer desires.

In order to find out which attributes are included in each quadrant grouping, it is necessary to carry out an analysis using a Cartesian diagram, the aim of which is to find out which attributes are included in the category that will be made a priority in improving services and which attributes are the ones that determine customer satisfaction with performance.

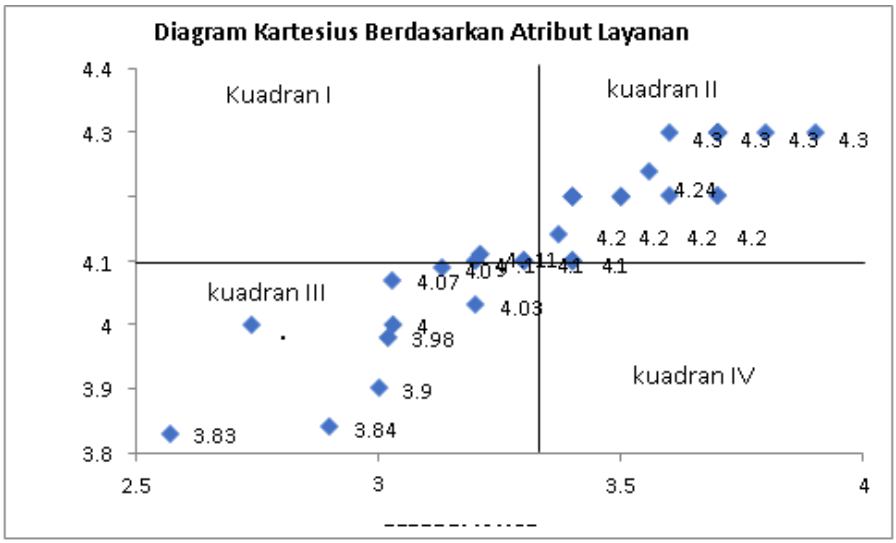

Figure 7: Cartesian diagram of satisfaction

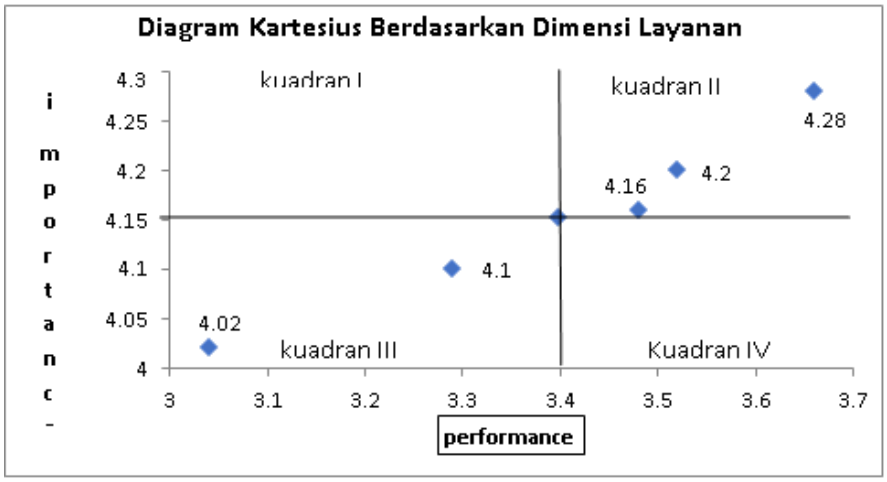

Figure 8: Cartesian diagram of services

From the results of the Cartesian diagram grouping above, it shows that there are 3 service quality dimension attributes that fall into quadrant 2 as service satisfaction that

needs to be maintained, namely the physical evidence service dimension and responsiveness service, and there are 3 dimensions that fall into quadrant 2 as low priority to be carried out as improvement materials, namely the reliability, assurance, and attention service dimensions.

CONCLUSION

Based on the findings of this study, it can be concluded that the quality of services provided to students at Ibnu Sina University is still below expectations. This is evident from the results of measurements using the Servqual method, where all dimensions of service quality show a negative gap, indicating student dissatisfaction with the services they received. The dimension with the highest gap is the tangible dimension, with a value of -0.98, followed by the responsiveness dimension with a gap value of -0.81. Additionally, the analysis using the Cartesian diagram reveals that quadrant 1 is the main priority for improving service quality. Several key attributes that require immediate improvement, according to student needs, include adequate parking areas (attribute 3), the ability of the Academic and Administrative Bureau (BAAK) to provide good administrative services (attribute 12), the speed of the Study Program in responding to student complaints (attribute 19), the responsiveness of management to student complaints, criticism, and issues (attribute 21), and the solutions provided by management regarding issues related to tuition fee payments (attribute 23).

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