

**COMPARISON OF STUDENT SATISFACTION BETWEEN ONLINE AND OFFLINE LEARNING USING SERVQUAL DATA ANALYSIS AND CARTESIAN DIAGRAMS IN FACULTY OF ISLAMIC ECONOMICS AND BUSINESS ISLAM IAIN PONTIANAK**

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**ABSTRACT**

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**ARTICLE INFO**

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This research was conducted to determine student satisfaction in online and offline learning for students of the Islamic Economics Study Program at the Pontianak Islamic Institute in 2022. The data used in this research is data on the number of students in semester 1 and semester 7 using Servqual data analysis and Cartesian diagrams. The Servqual test results from this research found that the performance of the Sharia Economics study program at FEBI IAIN Pontianak was above the expectations of students who carried out online teaching and learning. while the Cartesian Diagram shows that the distribution of 28 question attributes for students studying face-to-face shows that performance is in line with student expectations based on questions 2, 3, 4, 9, 15, 17, 23 and 26, while online learning is included in the category these are question items 4, 7, 8, 10, 21, 25 and 27. Lastly, the Customer Satisfaction Index (CSI) test results showed a result of 80.36%, meaning that students who studied face-to-face in semester 1 were satisfied with the service performance provided by the Sharia Economics Study Program FEBI IAIN Pontianak, while the online CSI result was 71, 94%, meaning that students who were online in semester 7 were quite satisfied with the service performance provided by the Sharia Economics Study Program FEBI IAIN Pontianak.

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Keywords:  
*Sevqual, Kartesius,  
Kepuasan Online dan  
Offline*

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## 1. Overview

The three basics of State development, namely Education, Health and Income, adequate education drives the development of a State, whether a State is advanced or not can also be seen from how advanced education is in a State or region. When Covid-19 hit Indonesia in 2020, the educational system changed drastically, initially education at all levels was carried out face to face (offline), during the pandemic the education system in Indonesia and all regions in Indonesia experienced drastic changes, namely restrictions on meetings, and education with online system (online).

Distance learning is one of the State's goals in tackling the spread of Covid-19 while at the same time meeting educational standards by using technology, either the Zoom Meeting application or using Google Meeting. This new learning model has resulted in several researchers finding that the online learning model is no longer effective. Online learning is less efficient due to students having difficulty understanding subjects, reduced concentration, inefficient question and answer sessions and reduced mastery of the material (Purwanto et al. 2020). Online education is indeed one way of learning during Covid-19 that can replace face-to-face learning, but this online system has not been able to achieve learning objectives, apart from student readiness, the obstacles are also inadequate internet networks and learning facilities, student readiness and lecturers in adapting to this new situation (Damayanthi 2020). Likewise in their research (Merdekawati and Kumalasari 2021), where their research found that a comparison of the two, namely offline learning, is more effective than online education, this is because students tend to experience difficulties in the online learning process. Likewise, research (Safitri, Ananda, and Prasetyia 2021) found that offline learning is more effective than online learning.

One of the causes of the ineffectiveness of online learning is students' economic problems, such as limited cellphones, internet packages, and unequal distribution of networks in some areas, as well as difficulties in understanding courses that are mathematical compared to just theory (Syarifuddin et al. 2021). This is different from the research results of Djusar, Sadar, and Asril (2021) which found that online learning was 50% effective during Covid-19, meaning that the majority of students felt satisfied with online learning carried out at Lancang Kuning University.

This is different from the research results of Kurniasari, Probowo, and Putra (2020) which found that learning from home was quite effective, where students could access courses directly through videos and made it interesting for students to study and easily understand the material presented. Research conducted by Prasetya and Harjanto (2020) found that the level of satisfaction and online learning has an influence on learning outcomes, meaning that online learning has a positive impact on learning outcomes. The results of the study by Rahma and Pujiastuti (2021) also stated that online learning in their panel showed that it was in the quite strong category. while research by Hikmat et al. (2020) said that online with Zoom and WahtsApp is effective in theory and practical courses, but not effective in lectures that involve a lot of practice. Because of the background above, the researcher formulated a problem regarding the comparison of student satisfaction with the Sharia Economics Study Program FEBI IAIN Pontianak towards online and offline learning.

## 2. Methodology (Time New Roman, 12 Bold)

This research was conducted on students of the Sharia Economics Study Program, FEBI IAIN Pontianak. Data was obtained from the results of questionnaires distributed to students (sample). The questionnaire was used with a Likert scale with values between 1-5. The score

is 5 for strongly agree, 4 for agree, 3 for doubt, 2 for disagree and 1 for strongly disagree. After the results are obtained, the answers are tabulated and analyzed quantitatively.

The population in this study were all students of the Sharia Economics Study Program FEBI IAIN Pontianak semester 1 (67 students) consisting of two classes, namely class 1A and class 1B, while semester 7 (64 students) also had two classes, namely, class 7A with 34 students and 7B with 30 students. To determine the sample in this study, the Purposive Sampling method was used, namely a method of taking samples with certain considerations, namely students returning or filling out questionnaires (Google Form), taking online lessons, namely 1st semester students, while 7th semester students are students who study online, at the same time. Researchers have been in their class, so that these two sample criteria can be compared.

## Data Analysis

### Validity Test and Reliability Test

The validity test is used to measure each instrument and the validity of the questions filled in by the sample. Pearson correlation is used to determine the relationship and contribution of the independent and dependent variables and the Pearson product moment correlation ( $r$ ) formula is used:

$$r = \frac{N \sum XY - \sum X * \sum Y}{\sqrt{(N \sum X^2 - (\sum X)^2) * (N \sum Y^2 - (\sum Y)^2)}}$$

Here,

$r$  = Product moment correlation

$Y$  = Total score of variable  $Y$  items

$N$  = Number of Respondents

$X$  = Total score of variable  $X$  items

With the criteria, if the correlation value of each question item is greater than 0.265 or has a \* or \*\* sign, then it can be concluded that the item is said to be valid.

Reliability Test is used in this research whether all the question items in this research are reliable or not. If the Cronbach's Alpha value is  $> 0.80$  then it is said to be reliable and if the Cronbach's Alpha value is  $< 0.80$  then it is not reliable (Pangaribuan and Ginting 2021).

### Metode Servqual

This technique is carried out to assess the quality of service from the online and offline learning process through dimensions, namely direct evidence (tangible), Reliability, Responsiveness, Assurance, Empathy. There are two factors in the servqual method, namely the real service that consumers receive (Perceived Service) and the actual service that is expected/desired (Expected Service). Perceived Service and Expected Service are used in the ServQual concept to calculate existing gaps (Ranas and Mansur 2016). The similarities of the Servqual method are:

$$G = P - E$$

Here,

$G$  = Gap

$P$  = *Perceived Service*

$E$  = *Expected Service*

### Cartesian Diagram Method

The Cartesian diagram method is used to find out which quadrant the question attributes are in, so that from these quadrants it is known which attributes are good and should be maintained, improved and which question attributes have a strong influence on satisfaction. Apart from that, the Cartesian diagram method also measures the relationship between the expectations or interests of the services desired by students and the performance received by the students, where the horizontal axis (X) is the performance level score and the vertical axis (Y) is the score for the level of expectations or importance. The following is the formula for performance and expectations:

$$\bar{X} = \frac{\sum X_i}{n} \quad \bar{Y} = \frac{\sum Y_i}{n}$$

Here,

X = Average performance value

Xi = Company performance score

Y = Average value of hope/importance

Yi = Expectation/importance score

Meanwhile, to draw a Cartesian diagram, quadrant division is used which determines the starting point for both X and Y, with the formula:

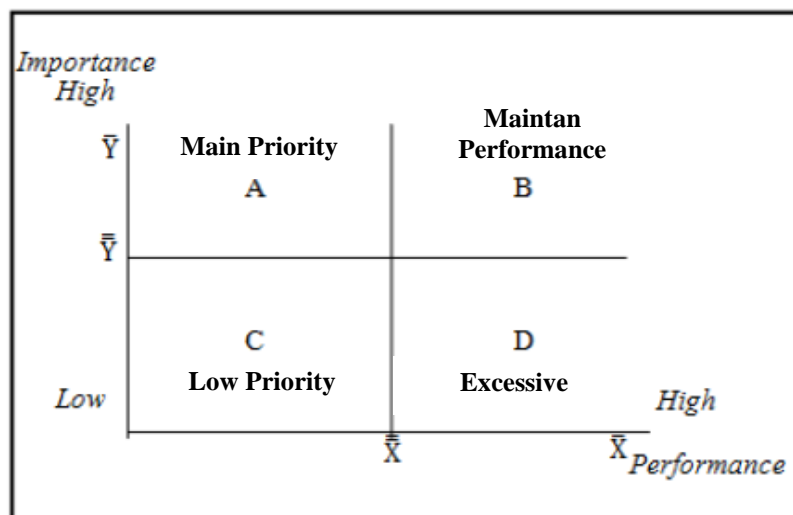
$$\bar{X} = \sum_{i=1}^n \frac{\bar{X}_i}{K} \quad \bar{Y} = \sum_{i=1}^n \frac{\bar{Y}_i}{K}$$

Here,

X = Average performance value

Y = Average value of hope/importance

The scale used in this research is a Likert scale, namely a scale of 1 to 5, so that the results of data processing are depicted in a Cartesian diagram which is divided into four quadrants, namely Quadrant I (A), Quadrant II (B), Quadrant III (C) and Quadrant IV. (D).



Picture 1. Cartesian Diagram

Explanation:

- Quadrant A Student expectations / interests are high, but performance is still low. This means that it is necessary to improve both performance and other factors.
- Quadrant B Student expectations/interests and performance are high, meaning that performance is in line with student expectations, so management needs to maintain the good quality of the attributes in Quadrant B.
- Quadrant C Student Expectations / Interests and low performance. This means that the attributes in quadrant C are not important to students and it is not important to pay attention to these attributes.
- Quadrant D Students' expectations / interests are low, but performance is high, meaning that this attribute is not very important, so other attributes need to be paid attention to and improved as in quadrant A.

### Customer Satisfaction Index (CSI)

This test was carried out to determine the overall level of student satisfaction, by paying attention to the level of student interest in the question items (Nababan 2021). The CSI formula is:

$$CSI = \frac{T}{5Y} \times 100\%$$

Explanation :

- CSI = > 100%, then students are very satisfied with service performance
- CSI = 80% - 100%, then students feel satisfied with service performance
- CSI = 50% - 80%, then students feel quite satisfied with service performance
- CSI = < 50%, meaning service performance is not good

### 3. Result and Discussion (Time New Roman, 12 Bold)

#### Validation Test Result

To find out whether the test carried out is valid or not, refer to the r table, so if the Pearson Correlation value of each question item is greater than 0.265 or has a \* or \*\* sign, then it can be concluded that the item is said to be valid. The validity test results for students studying offline or face-to-face are:

**Table 1. Validity Test Results (X)**

Question Item	r-Count	r-Table	Result
X1	490**	0,265	Valid
X2	654**	0,265	Valid
X3	497**	0,265	Valid
X4	423**	0,265	Valid
X5	443**	0,265	Valid
X6	617**	0,265	Valid
X7	655**	0,265	Valid
X8	691**	0,265	Valid
X9	568**	0,265	Valid
X10	604**	0,265	Valid

X11	660**	0,265	Valid
X12	608**	0,265	Valid
X13	640**	0,265	Valid
X14	640**	0,265	Valid
X15	699**	0,265	Valid
X16	683**	0,265	Valid
X17	742**	0,265	Valid
X18	796**	0,265	Valid
X19	819**	0,265	Valid
X20	710**	0,265	Valid
X21	804**	0,265	Valid
X22	721**	0,265	Valid
X23	794**	0,265	Valid
X24	764**	0,265	Valid
X25	724**	0,265	Valid
X26	732**	0,265	Valid
X27	817**	0,265	Valid
X28	810**	0,265	Valid

From the table above, it shows that all the variable expectations questions (X) for students studying offline consist of 1A and 1 B Class are all valid, with the question item that has the highest correlation value being question item X19, which is 0.819. Meanwhile, the results of the validity test for variable Y are as follows:

**Table 2. Validity Test Results (Y)**

Question Item	r-Count	r-Table	Result
Y1	616**	0,265	Valid
Y2	613**	0,265	Valid
Y3	620**	0,265	Valid
Y4	626**	0,265	Valid
Y5	508**	0,265	Valid
Y6	683**	0,265	Valid
Y7	731**	0,265	Valid
Y8	613**	0,265	Valid
Y9	872**	0,265	Valid
Y10	800**	0,265	Valid
Y11	735**	0,265	Valid
Y12	805**	0,265	Valid
Y13	772**	0,265	Valid
Y14	691**	0,265	Valid
Y15	838**	0,265	Valid
Y16	766**	0,265	Valid
Y17	688**	0,265	Valid
Y18	833**	0,265	Valid
Y19	751**	0,265	Valid
Y20	729**	0,265	Valid
Y21	837**	0,265	Valid
Y22	664**	0,265	Valid
Y23	810**	0,265	Valid

Y24	622**	0,265	Valid
Y25	770**	0,265	Valid
Y26	673**	0,265	Valid
Y27	707**	0,265	Valid
Y28	752**	0,265	Valid

The table above shows that all performance question variables (Y) for students studying face-to-face are all valid, with the question item that has the highest correlation value being question item Y9, which is 0.872. For the validity test results, the tabulated results of student questionnaires studying online are as follows:

**Table 3. Validity Test Result (X)**

Question Item	r-Count	r-Table	Result
X1	386*	0,265	Valid
X2	668**	0,265	Valid
X3	603**	0,265	Valid
X4	637**	0,265	Valid
X5	402**	0,265	Valid
X6	794**	0,265	Valid
X7	704**	0,265	Valid
X8	429**	0,265	Valid
X9	675**	0,265	Valid
X10	574**	0,265	Valid
X11	638**	0,265	Valid
X12	781**	0,265	Valid
X13	846**	0,265	Valid
X14	629**	0,265	Valid
X15	677**	0,265	Valid
X16	785**	0,265	Valid
X17	719**	0,265	Valid
X18	719**	0,265	Valid
X19	796**	0,265	Valid
X20	853**	0,265	Valid
X21	753**	0,265	Valid
X22	769**	0,265	Valid
X23	776**	0,265	Valid
X24	829**	0,265	Valid
X25	827**	0,265	Valid
X26	866**	0,265	Valid
X27	757**	0,265	Valid
X28	825**	0,265	Valid
X29	790**	0,265	Valid
X30	701**	0,265	Valid

The table above shows that all the variable expectations (X) questions for students who study online that consist of 7A and & 7B Class are all valid, with the question item that has the highest correlation value being question item X26, which is 0.866. Meanwhile, the results of the validity test for variable Y are as follows:

**Table 4. Validity Test Result (Y)**

Question Item	r-Count	r-Table	Result
Y1	614**	0,265	Valid
Y2	269	0,265	Valid
Y3	515**	0,265	Valid
Y4	639**	0,265	Valid
Y5	489**	0,265	Valid
Y6	341**	0,265	Valid
Y7	633**	0,265	Valid
Y8	912**	0,265	Valid
Y9	811**	0,265	Valid
Y10	788**	0,265	Valid
Y11	855**	0,265	Valid
Y12	829**	0,265	Valid
Y13	807**	0,265	Valid
Y14	873**	0,265	Valid
Y15	797**	0,265	Valid
Y16	868**	0,265	Valid
Y17	796**	0,265	Valid
Y18	791**	0,265	Valid
Y19	892**	0,265	Valid
Y20	766**	0,265	Valid
Y21	836**	0,265	Valid
Y22	809**	0,265	Valid
Y23	800**	0,265	Valid
Y24	825**	0,265	Valid
Y25	898**	0,265	Valid
Y26	869**	0,265	Valid
Y27	860**	0,265	Valid
Y28	757**	0,265	Valid
Y29	751**	0,265	Valid
Y30	779**	0,265	Valid

The table above shows that all performance question variables (Y) for students who study online are all valid, with the question item that has the highest correlation value being question item Y8, which is 0.912.

### Reliability Test Result

Reliability Test is used in this research whether all the question items in this research are reliable or not. If the Cronbach's Alpha value is  $> 0.80$  then it is said to be reliable and if the Cronbach's Alpha value is  $< 0.80$  then it is not reliable (Pangaribuan and Ginting 2021). The results of the reliability test of question items for students studying face-to-face are as follows:

**Table 5. Reliability Test Result (X) Offline Learning**

Reliability Statistics	
Cronbach's Alpha	N of Items
.967	28



From the results of the reliability test above, it shows that the Cronbach's Alpha value obtained is an alpha value of  $0.967 > 0.80$ , so it can be concluded that all question items have high reliability.

**Table 6. Reliability Test Result (Y) Offline Learning**

Reliability Statistics	
Cronbach's Alpha	N of Items
.965	28

From the results of the reliability test above, it shows that the Cronbach's Alpha value obtained is an alpha value of  $0.965 > 0.80$ , so it can be concluded that all question items have high reliability.

**Table 7. Reliability Test Result (X) Online Learning**

Reliability Statistics	
Cronbach's Alpha	N of Items
.966	30

From the results of the reliability test above, it shows that the Cronbach's Alpha value obtained is an alpha value of  $0.966 > 0.80$ , so it can be concluded that all question items have high reliability.

**Table 8. Reliability Test Result (Y) Online Learning**

Reliability Statistics	
Cronbach's Alpha	N of Items
.971	30

From the results of the reliability test above, it shows that the Cronbach's Alpha value obtained is an alpha value of  $0.971 > 0.80$ , so it can be concluded that all question items have high reliability.

**Servqual Method Result**

This technique is carried out to assess the quality of service from the online and offline learning process through dimensions, namely direct evidence (tangible), Reliability, Responsiveness, Assurance, Empathy. There are two factors in the servqual method, namely the real service that consumers receive (Perceived Service) and the actual service that is expected/desired (Expected Service). The Servqual test results are as follows:

**Table 9. Servqual Online Learning Test Result**

NO	ATTRIBUTE	Expectation	Performance	GAP
<i>Tangible</i>				
1	The online KRS (Study Plan Card) and KHS (Study Results Card) registration implementation system (via SIAKAD) is	3.82	4.43	0.61

	relatively easy and flexible.			
2	Access to face-to-face offline is relatively easy.	4.37	4.47	0.10
3	The lecturer's appearance meets standards (neat, polite clothing).	4.53	4.37	-0.16
4	Determination of a schedule for face-to-face implementation.	4.29	4.43	0.14
5	The ES (Sharia Economics) Study Program provides workshops/seminars/webinars/guest lectures which periodically invite resource persons.	4.04	4.06	0.02
6	Lecturers are easy to contact directly or via WhatsApp, email or other means	3.78	4.43	0.65
<b><i>Responsiveness</i></b>				
7	The study program provides lecturers with academic guidance for students.	4.20	4.39	0.20
8	Implementation of Mid Test and Final Test on time according to schedule.	4.24	4.39	0.16
9	Implementation of offline lectures according to a predetermined schedule.	4.27	4.43	0.16
10	The Study Program helps students if there are problems in online learning.	3.84	4.39	0.55
11	Lecturers provide time if students need it.	3.84	4.45	0.61
12	The Study Program provides services to students efficiently (fast and on time).	3.80	4.45	0.65
<b><i>Reliability</i></b>				
13	Lecturers always come to lectures on time.	3.88	4.33	0.45
14	Lecturers always end lectures on time.	3.96	4.29	0.33
15	The lecturer delivers the material easily and clearly to understand.	4.10	4.53	0.43
16	Availability of time for discussion and QnA session	4.04	4.33	0.29
17	Lecturers provide teaching materials (supplements) to complement the material provided.	4.20	4.51	0.31
18	The Study Program is always available to serve students' interests.	3.78	4.47	0.69
<b><i>Assurance</i></b>				
19	The Study Program has a good services.	4.00	4.45	0.45
20	Student problems/complaints are always handled by the Academic Advisory Lecturer provided by the Study Program.	3.78	4.39	0.61
21	Lecturers provide feedback on each work/assignment to students.	3.98	4.22	0.24
22	Lecturer's ability to use methods that are suitable for online learning.	4.06	4.22	0.16
23	Lecturers are willing to help students who have difficulty understanding the subjects	4.10	4.61	0.51

	taught.			
<b>Emphaty</b>				
24	The Study Program through its Academic Advisor lecturers always monitors student progress.	3.75	4.37	0.63
25	Lecturers are willing to help students who experience difficulties in academic areas/subjects.	3.94	4.63	0.69
26	Lecturers are friendly, open, cooperative with students.	4.20	4.35	0.16
27	The Study Program seeks to understand students' interests and talents and strives to develop them.	3.92	4.39	0.47
28	The ES Study Program tries to facilitate students if there are problems with lecturers	3.78	4.49	0.71

The table above shows that the performance of the Sharia Economics study program at FEBI IAIN Pontianak is above the expectations of students who carry out online teaching and learning. This can be seen from the entire gap between the performance and expectations of students who study dare or online with a positive value, only one physical evidence question variable, namely the lecturer's appearance meets standards (neat, polite clothing) which has a negative Gap value of -0.16, while the value has The highest performance is in the question attribute of the ES Study Program, which is always available to serve students' interests and the lecturer's questions are ready to help students who experience difficulties in the academic field/subjects, which both have a score of 0.69. The ES Study Program is expected to be able to improve the quality of the attributes of the questions above so that student satisfaction continues to increase, and the ES Study Program can improve the quality of lecturers' appearance to meet standards (neat, polite clothing), because only this question has a negative Gap value.

**Table 10. Servqual Online Learning Test Result**

NO	ATTRIBUTE	Expectation	Performance	GAP
<b>Tangible</b>				
1	The online KRS (Study Plan Card) and KHS (Study Results Card) registration implementation system (via SIAKAD) is relatively easy and flexible.	3.94	4.17	0.23
2	Access to face-to-face offline is relatively easy.	3.31	3.83	0.51
3	The lecturer's appearance meets standards (neat, polite clothing).	4.00	4.09	0.09
4	Determination of a schedule for face-to-face implementation.	3.66	4.37	0.71
5	The ES (Sharia Economics) Study Program provides workshops/seminars/webinars/guest lectures	3.60	4.20	0.60

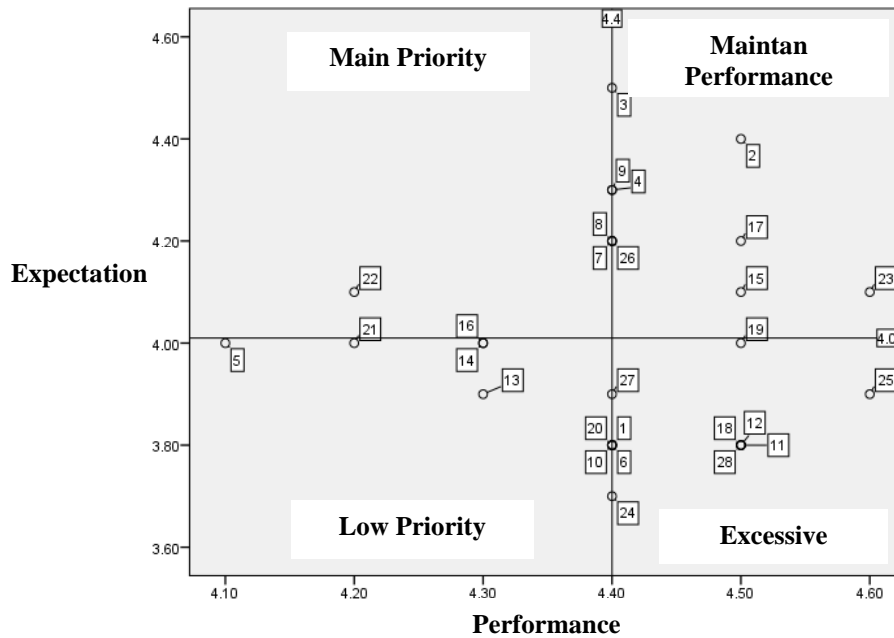
	which periodically invite resource persons.			
6	Lecturers are easy to contact directly or via WhatsApp, email or other means	3.66	4.17	0.51
7	The online KRS (Study Plan Card) and KHS (Study Results Card) registration implementation system (via SIAKAD) is relatively easy and flexible.	3.80	4.37	0.57
<b>Responsiveness</b>				
8	The study program provides lecturers with academic guidance for students.	3.91	4.43	0.51
9	Implementation of Mid Test and Final Test on time according to schedule.	3.57	4.29	0.71
10	Implementation of offline lectures according to a predetermined schedule.	3.77	4.34	0.57
11	The Study Program helps students if there are problems in online learning.	3.46	4.40	0.94
12	Lecturers provide time if students need it.	3.49	4.34	0.86
13	The Study Program provides services to students efficiently (fast and on time).	3.29	4.43	1.14
<b>Reliability</b>				
14	Lecturers always come to lectures on time.	3.34	4.26	0.91
15	Lecturers always end lectures on time.	3.69	4.23	0.54
16	The lecturer delivers the material easily and clearly to understand.	3.54	4.46	0.91
17	Availability of time for discussion and QnA session	3.66	4.17	0.51
18	Lecturers provide teaching materials (supplements) to complement the material provided.	3.80	4.23	0.43
19	The Study Program is always available to serve students' interests.	3.37	4.40	1.03
<b>Assurance</b>				
20	The Study Program has a good services.	3.57	4.29	0.71
21	Student problems/complaints are always handled by the Academic Advisory Lecturer provided by the Study Program.	3.66	4.29	0.63
22	Lecturers provide feedback on each work/assignment to students.	3.63	4.26	0.63
23	Lecturer's ability to use methods that are suitable for online learning.	3.26	4.11	0.86
24	Lecturers are willing to help students who have difficulty understanding the subjects taught.	3.57	4.26	0.69
25	The Study Program has a good services.	3.74	4.34	0.60
<b>Emphaty</b>				
26	The Study Program through its Academic Advisor lecturers always monitors student progress.	3.54	4.31	0.77

27	Lecturers are willing to help students who experience difficulties in academic areas/subjects.	3.60	4.40	0.80
28	Lecturers are friendly, open, cooperative with students.	3.54	4.31	0.77
29	The Study Program seeks to understand students' interests and talents and strives to develop them.	3.40	4.23	0.83
30	The ES Study Program tries to facilitate students if there are problems with lecturers.	3.54	4.31	0.77

The table above shows that the performance of the Sharia Economics study program at FEBI IAIN Pontianak is above the expectations of students who undertake offline or face-to-face teaching and learning. This can be seen from the entire gap between the performance and expectations of offline or face-to-face students who have positive values. The question item with the highest score is that the ES Study Program provides services to students efficiently (quickly and on time), namely 1.14 and the ES Study Program is always available to serve students' interests, namely 1.03. This means that it can be concluded that the majority of students who study offline or face to face feel satisfaction with the services at the Sharia Economics Study Program FEBI IAIN Pontianak. Therefore, improving service quality will have a positive impact on student satisfaction, especially question attributes that have low scores.

### Cartesian Diagram Results

The Cartesian diagram method is used to find out which quadrant the question attributes are in, so that from these quadrants it is known which attributes are good and should be maintained, improved and which question attributes have a strong influence on satisfaction. Apart from that, the Cartesian Diagram method also measures the relationship between the expectations or interests of the services desired by students and the performance received by the students, where the horizontal axis (X) is the performance level score and the vertical axis (Y) is the score for the level of expectations or importance. To see the results of the Cartesian test, see the following image:



Picture 2 Cartesian Diagram Results for Students who joining offline learning

The Cartesian diagram above shows the distribution of 28 question attributes from students studying face-to-face or offline. For more details, it is explained as follows:

Quadrant A: These are areas where student expectations and interests are high, but performance is still low. This means that there is a need to improve both performance and other factors. The attributes included in this category are question items 7, 8 and 22 or questions: The study program provides lecturers with academic guidance for students, Implementation of UTS and UAS on time according to schedule and the ability of lecturers to use methods that are suitable for online learning.

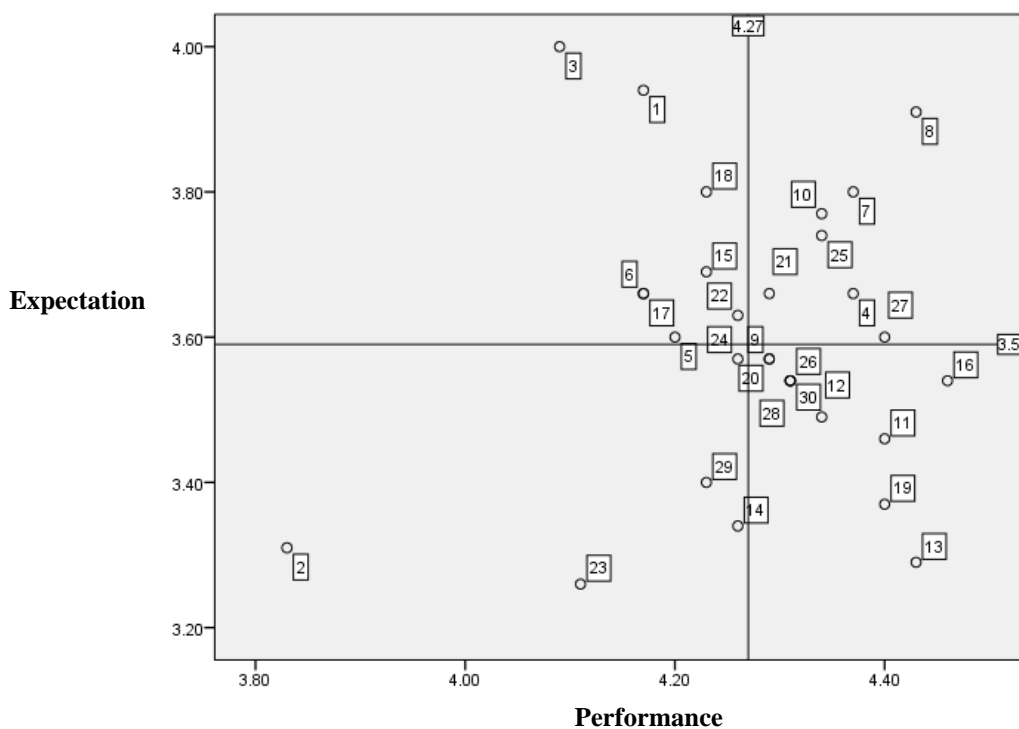
Quadrant B: Student expectations/interests and performance are high, meaning that performance is in line with student expectations, so management needs to maintain the good quality of the attributes in Quadrant B. Attributes included in this category are question items 2, 3, 4, 9, 15, 17, 23 and 26 or questions: Access to face-to-face lectures is relatively easy, Lecturer's appearance meets standards (neat, polite clothing), Determination of schedule for face-to-face lectures, Implementation of face-to-face lectures according to a predetermined schedule, Delivery of material by the lecturer easily and clearly understood, the lecturer provides teaching materials (supplements) to complement the material provided, the lecturer is willing to help students who have difficulty understanding the subjects being taught and questions. The lecturer is friendly, open, and cooperative with students.

Quadrant C: Student Expectations/Interests and low performance. This means that the attributes in quadrant C are not important to students and it is not important to pay attention to these attributes. Attributes included in this category are question items 5, 10, 13, 14, 16, 20 and 21 or questions: The ES (Sharia Economics) Study Program provides workshops/seminars/webinar/guest lectures which bring in resource persons periodically, the ES Study Program helps students if there are problems in online lectures, Lecturers always enter lectures on time, Lecturers always end lectures on time, Availability of time for discussions and questions and answers, Student problems/complaints are always handled through Academic Advisory Lecturers provided by the Study Program and questions Lecturers provide feedback feedback on every work/assignment to students.

Quadrant D: Student expectations/interest are low, but performance is high, meaning that this attribute is not very important, so other attributes need to be paid attention to and

improved as in quadrant A. Attributes that fall into this category are question items 1, 6, 11, 12, 18, 19, 24, 25, 27 and 28 or questions: The online registration system for KRS (Study Plan Card) and KHS (Study Result Card) (via SIAKAD) is relatively easy and flexible, lecturers are easy to contact directly or via WhatsApp, email, or via other means, Lecturers provide time if students need it, ES Study Program provides services to students efficiently (quickly and on time), ES Study Program is always available to serve students' interests, ES Study Program is polite in providing services, ES Study Program through Academic Advisor lecturers always monitor student progress, lecturers are willing to help students who experience difficulties in academic areas/subjects, the Study Program tries to understand students' interests and talents and tries to develop them and questions ES Study Program tries to facilitate students if there are problems with lecturers.

Meanwhile, the results of the Cartesian diagram test for students studying online are as follows:



Picture 3 Cartesian Diagram Results for Students who joining offline learning

**Quadrant A:** Student expectations/interest are high, but performance is still low. This means that both performance and other factors need to be improved. Attributes included in this category are question items 1, 3, 5, 6, 15, 17, 18, and 22 or question: System for implementing online KRS (Study Plan Card) and KHS (Study Result Card) registration (via SIAKAD) relatively easy and flexible, Lecturers' appearance meets standards (neat, polite clothing), ES (Sharia Economics) Study Program provides workshop/seminars/webinars/guest lectures which bring in resource persons periodically, provide teaching materials (supplements) to complement the material provided and questions. Lecturers provide feedback on each work/assignment to students.

**Quadrant B:** Student expectations/interests and performance are high, meaning that performance is in line with student expectations, so management needs to maintain the good quality of the attributes in Quadrant B. Attributes included in this category are question items 4, 7, 8, 10, 21, 25 and 27 or questions: Determination of the schedule for online lectures (on



the network), the Faculty and ES (Sharia Economics) Study Program have a website that makes it easier for students to access information related to academic services, the study program provides lecturers with academic guidance for students, Implementation online lectures according to a predetermined schedule, Student problems/complaints are always handled by the Academic Advisory Lecturer provided by the Study Program, Lecturers are willing to help students who have difficulty understanding the subjects being taught and questions Lecturers are willing to help students who experience difficulties in the academic field /subject.

**Quadrant C:** Student Expectations/Interests and low performance. This means that the attributes in quadrant C are not important to students and it is not important to pay attention to these attributes. Attributes that fall into this category are question items 2, 14, 23, 24, and 29 or questions: Access to online lectures is relatively easy, Lecturers always start lectures on time, Lecturers discuss assignments/work given during face-to-face meetings via zoom/google meet or other applications, the ability of lecturers to use methods that are appropriate to online learning and questions. The Study Program tries to understand students' interests and talents and tries to develop them.

**Quadrant D:** Student expectations/interest are low, but performance is high, meaning that this attribute is not very important, so other attributes need to be paid attention to and improved as in quadrant A. Attributes that fall into this category are question items 9, 11, 12, 13, 16, 19, 20, 26, 28, and 30 or questions: Implementation of UTS and UAS on time according to schedule, ES Study Program helps students if there are problems in online lectures, Lecturers provide time if students need it, ES Study Program provides services to students efficiently (fast and on time), Delivery of material by lecturers easily and clearly understood, ES Study Program is always available to serve students' interests, ES Study Program is polite in providing services, ES Study Program through Academic Advisor lecturers always monitors student progress, Lecturers are friendly, open , cooperative with students and questions ES Study Program tries to facilitate students if there are problems with lecturers.

### ***Customer Satisfaction Index (CSI)***

The average scoring results can be seen in the following table, so that from the scoring data you can get the Customer Satisfaction Index (CSI) results.

**Table 11. *Customer Satisfaction Index (CSI) Offline Learning***

<b>Item</b>	<b>Expectation</b>	<b>Performance</b>	<b>Score</b>
<b>1</b>	3.82353	4.431373	16.94348
<b>2</b>	4.37255	4.470588	19.54787
<b>3</b>	4.52941	4.372549	19.80507
<b>4</b>	4.29412	4.431373	19.02884
<b>5</b>	4.03922	4.058824	16.39446
<b>6</b>	3.78431	4.431373	16.76970
<b>7</b>	4.19608	4.392157	18.42983
<b>8</b>	4.23529	4.392157	18.60208
<b>9</b>	4.27451	4.431373	18.94195
<b>10</b>	3.84314	4.392157	16.87966



11	3.84314	4.45098	17.10573
12	3.80392	4.45098	16.93118
13	3.88235	4.333333	16.82353
14	3.96078	4.294118	17.00807
15	4.09804	4.529412	18.56171
16	4.03922	4.333333	17.50327
17	4.19608	4.509804	18.92349
18	3.78431	4.470588	16.91811
19	4.00000	4.45098	17.80392
20	3.78431	4.392157	16.62130
21	3.98039	4.215686	16.78008
22	4.05882	4.215686	17.11073
23	4.09804	4.607843	18.88312
24	3.74510	4.372549	16.37562
25	3.94118	4.627451	18.23760
26	4.19608	4.352941	18.26528
27	3.92157	4.392157	17.22414
28	3.78431	4.490196	16.99231
<b>Total</b>		<b>123.2941</b>	<b>495.41215</b>

$$CSI = \frac{T}{5Y} \times 100\%$$

$$CSI = \frac{495.41215}{5 (123.2941)} \times 100\%$$

$$CSI = 80.36\%$$

From the CSI results above, it was 80.36%, meaning that students who studied offline class in semester 1 were satisfied with the service performance provided by the Sharia Economics Study Program, FEBI IAIN Pontianak.

**Table 12. Customer Satisfaction Index (CSI) for Online Learning**

Item	Expectation	Performance	Score
1	3.9429	4.1714	16.4473
2	3.3143	3.8286	12.6890
3	4.0000	4.0857	16.3429
4	3.6571	4.3714	15.9869
5	3.6000	4.2000	15.1200
6	3.6571	4.1714	15.2555
7	3.8000	4.3714	16.6114
8	3.9143	4.4286	17.3347
9	3.5714	4.2857	15.3061
10	3.7714	4.3429	16.3788
11	3.4571	4.4000	15.2114
12	3.4857	4.3429	15.1380
13	3.2857	4.4286	14.5510
14	3.3429	4.2571	14.2310

<b>15</b>	3.6857	4.2286	15.5853
<b>16</b>	3.5429	4.4571	15.7910
<b>17</b>	3.6571	4.1714	15.2555
<b>18</b>	3.8000	4.2286	16.0686
<b>19</b>	3.3714	4.4000	14.8343
<b>20</b>	3.5714	4.2857	15.3061
<b>21</b>	3.6571	4.2857	15.6735
<b>22</b>	3.6286	4.2571	15.4473
<b>23</b>	3.2571	4.1143	13.4008
<b>24</b>	3.5714	4.2571	15.2041
<b>25</b>	3.7429	4.3429	16.2547
<b>26</b>	3.5429	4.3143	15.2849
<b>27</b>	3.6000	4.4000	15.8400
<b>28</b>	3.5429	4.3143	15.2849
<b>29</b>	3.4000	4.2286	14.3771
<b>30</b>	3.5429	4.3143	15.2849
<b>total</b>		128.2857	461.4971

$$CSI = \frac{T}{5Y} \times 100\%$$

$$CSI = \frac{461.4971429}{5 (128.2857143)} \times 100\%$$

$$CSI = 71.94\%$$

From the CSI results above, it was 71.94%, meaning that students who were online in semester 7 were quite satisfied with the service performance provided by the Sharia Economics Study Program, FEBI IAIN Pontianak.

The results and discussion are expressed concisely and clearly within the scientific framework obtained, not as a series of data tables or figures.

#### 4. Conclusion

From the research results, it can be concluded that the performance of the Sharia Economics study program at FEBI IAIN Pontianak is above the expectations of students who carry out online teaching and learning. This can be seen from the entire gap between the performance and expectations of students who study online or online which is positive, only one physical evidence question variable, namely the lecturer's appearance meets standards (neat, polite clothing) which has a negative Gap value of -0.16, while for offline learning or face to face, the FEBI IAIN Pontianak Sharia Economics study program is above the expectations of students who carry out online teaching and learning. This can be seen from the entire gap between the performance and expectations of students who study online or online to have positive values. The question item with the highest score is that the ES Study Program provides services to students efficiently (quickly and on time), namely 1.14.

The results of the Cartesian diagram show that from the distribution of 28 question attributes to students studying face-to-face or offline. Quadrant B: Student expectations/interests and performance are high, meaning that performance is in line with student expectations, so management needs to maintain the good quality of the attributes in Quadrant B. Attributes included in this category are question items 2, 3, 4, 9, 15, 17, 23 and 26, while for online learning with student expectations and performance is high, meaning that

performance is in line with student expectations, so management needs to maintain the good quality of the attributes in Quadrant B. Attributes that are included in the category these are question items 4, 7, 8, 10, 21, 25 and 27.

Lastly, the CSI results above it was 80.36%, meaning that students who studied face to face in semester 1 were satisfied with the service performance provided by the Sharia Economics Study Program FEBI IAIN Pontianak, while the online CSI results were 71, 94%, meaning that students who were online in semester 7 were quite satisfied with the service performance provided by the Sharia Economics Study Program FEBI IAIN Pontianak.

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