



Application of the Importance Performance Analysis Method and Customer Satisfaction Index Methods to the Quality of Distance Learning Services for Students during the Covid 19 Pandemic

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ABSTRACT

This study discusses the analysis of satisfaction levels on distanced learning or PJJ of the student at Universitas Kristen Indonesia during the Covid-19 pandemic. The problem investigated are whether the expectation of UKI students meet service and its level of satisfaction. The research was carried out in the even semester of 2020/2021. The research method used is quantitative method with a survey approach through questionnaire distribution. Furthermore, the data were analyzed by the Importance Performance Analysis method (IPA) and Customer Satisfaction Index (CSI). IPA Matrix described the most meaningful attributes of students in the PJJ process, which is mapped in 4 quadrants of all variables that have impacts on quality PJJ services, and CSI are used to determine the overall student satisfaction level with the approach which considers the importance of the attributes measured during the Covid-19 pandemic. Based on the results of the analysis using IPA, it was known that the attributes which is the main priority in quadrant A are speed of access to the PJJ learning platform, fair assessment by the lecturer, the consistency in giving lectures well, reliability in managing class, use the PJJ platform, pay attention to the student, and understand the student's difficulties during PJJ. For quadrant B, attributes that need to be maintained are the use of interactive tools for PJJ, easy access and connection of the PJJ platform, lecturers teaching in accordance to their field, lecturers answer student's questions, lecturers master the material being taught, lecturers updating learning materials following the current conditions, encourages and motivates students to do the best learning in the PJJ process. Attribute on quadrant C, the low priority attribute are lecturers are able to adapt from conventional learning to PJJ, lecturers respond quickly and efficiently handle student needs and complaints, how lecturers answering student's questions and comments, lecturers use variative learning platforms, lecturers put the long-term interest in their students to stay focus in PJJ. For quadrant D, an overrated attribute is the proactivity of lecturers in providing the information about PJJ to students. For CSI the attributes, the amount of learning carried out by UKI lecturers is 72.61%. It is still in the CSI range (between 0.66 - 0.80) which means that UKI

students feel satisfied with the PJJ which was carried out during the Covid-19 pandemic.

Keywords: satisfaction, distanced learning (PJJ), Importance Performance Analysis (IPA), Customer Satisfaction Index (CSI).

INTRODUCTION

Since March 2020, Indonesia has been hit by the Covid-19 pandemic which is still ongoing today. This situation brought many changes in all aspects of life, including in the educational environment. Data from the covid19.go.id site as of 210 February 2021 shows that the number of people exposed to Covid-19 in Indonesia reached 1,183,555 people and DKI Jakarta as many as 303,715 people or 25.7% of the total. The increase in the number of those exposed to Covid-19 is of concern to all parties, including those authorized to handle the education sector in Indonesia. The Indonesian Ministry of Education and Culture issued circular letter number 4 of 2020 dated March 24, 2020 concerning Implementation of Education Policy during the emergency period of the spread of Covid-19, namely the process of teaching and learning from home through online or distance learning at all levels of education including tertiary institutions. Universities that have been conducting face-to-face learning, must change it to online or remote learning. This is of course not easy; it needs careful preparation. But there is no other choice, for the sake of controlling the spread of Covid-19 infection in the student environment, online learning must be carried out.

In essence, learning is a process of organizing, organizing the environment around students, so that it can grow and encourage students to carry out the learning process. Learning is also said to be a process of providing guidance or assistance to students in carrying out the learning process. Trianto (2011) explains that learning is an aspect of activity that is complex and cannot be fully explained. According to the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System, that learning is "a process of teacher interaction with students and learning resources that takes place in a learning environment. Learning can also be said as a system, because learning is an activity that has a goal, namely to provide knowledge to students.

PJJ teaches students to be able to learn independently by utilizing developments in technology, information and communication as learning resources. This is in accordance with the contents of Law number 20 of 2003 article 1 paragraph 15 which states "Distance education is education in which students are separated from educators and their learning uses various learning resources through communication technology, information and other media."

According to Keegan in Warsito (2011) states that "there are several characteristics of distance education, including: 1) There is a separation of learning that is close to a permanent element between teaching staff and students during the education program, 2) There is a separation between a student and other students. during the educational program, 3) There is an institution that manages the educational program. 4) Utilization of good mechanical communication facilities as learning materials, 5) Provision of two-way communication facilities so that students can take the initiative of dialogue and seek and process the benefits ".

In accordance with the Regulation of the Minister of Education and Culture (Permendikbud) Number 109 of 2013 the characteristics of PJJ are:

1. "Distance education is a teaching and learning process that is carried out remotely through the use of various communication media.
2. The learning process is carried out electronically (e-learning), which utilizes information packages based on information and communication technology for the benefit of learning that can be accessed by students anytime and anywhere.
3. Learning resources are teaching materials and various information developed and packaged in a form based on information and communication technology and used in the learning process.
4. Distance education has the characteristics of being open, independent learning, thorough learning, using information and communication technology, using other educational technologies, and taking the form of integrated higher learning.
5. Distance education is open, meaning that learning is organized flexibly in terms of delivery, selection and study program and program completion time, pathways and types of education without age limits, year of diploma, background in field of study, registration period, place and method of learning and evaluation period learning outcomes".

The Indonesian Christian University (UKI) based in Jakarta, which is the area with the highest number of exposed to Covid-19 in Indonesia (25.7% of the total Covid sufferers as of 10 February 2021), has been holding online learning since March 2020 based on the Circular of the Chancellor of UKI no 25/UKI.R/OTL.5/2020. The change in face-to-face learning to online learning, which can be said suddenly at that time, made learning not take place optimally, there were many obstacles in learning that previously had not been prepared thoroughly because it was never predicted that the Covid-19 pandemic would end in Indonesia.

Based on field observations, during the PJJ from March 2020 until now, some UKI students have complained about the learning system during this pandemic. They feel that the learning system is still not optimal, meaning that between student expectations and the reality/performance of PJJ has not given satisfaction. What they receive through PJJ is not all what they expect. As an educational institution engaged in the service sector, customer satisfaction (in this case students) is very important. Therefore, improving the quality of service for students, especially PJJ, is very necessary so that students are satisfied, not bored with attending PJJ and continue to be motivated to learn, for this reason it is necessary to measure student satisfaction in online learning in order to improve the quality of the PJJ process. Assessment of the level of student satisfaction, which is one aspect of the assessment of the quality of educational services, has significance for the continuity of the education system. The results of an assessment of the level of student satisfaction can be used to direct a better education system (Widarti et al, 2008).

Measuring customer satisfaction can be done in various ways, one of which is Service Quality (Servqual), which is the method used to describe the level of customer satisfaction through a list of questions filled out by the customer used to measure service quality, the advantage is that it already has standardized procedures in interpreting results.

According to Lewis and Booms, the quality/quality of service is how well the level of service provided can meet consumer expectations (Tjiptono, 2012: 157). Service quality shows a gap between student expectations and PJJ service performance, and the Importance Performance

Analysis (IPA) and Customer Satisfaction Index (CSI) methods are used to measure the level of satisfaction. The IPA matrix describes the attributes/characteristics that are most meaningful to students in the PJJ process, which are mapped into 4 quadrants of all variables that have an impact on the quality of PJJ services during the current Covid-19 pandemic. The CSI method is used to determine the level of student satisfaction with the use of services provided, namely PJJ services.

METHODS

This writing method was a quantitative descriptive method that aims to describe the overall level of satisfaction of UKI undergraduate program students with PJJ services during the Covid-19 pandemic, using a questionnaire (google form) to 3042 students from 8 faculties. The research population consisted of all UKI students from 8 faculties at UKI Cawang, with research samples from the 2017, 2018, 2019 and 2020 batches in the Odd Semester, 2020/2021 academic year, with a total of 3042 students. Arikunto (2010) argues that in research sampling, if the total population is less than 100 then the sample is the same as the population. If the population is more than 100 people, the sample used is 10-25% or 20-25%. Based on this opinion, the research sample was 10% of the student population of each faculty at UKI, so the number of research samples was 300 UKI students, but at the time of distributing the questionnaires, not all questionnaires were returned and could be processed, so the number of samples in the study was 263 students.

To describe the level of satisfaction of PJJ students at the Indonesian Christian University during the Covid-19 pandemic, the authors use the following diagram:



Figure 1. Cartesian diagram

Source: Supranto (2001:242)

RESULT AND DISCUSSION

This research was conducted to determine the level of satisfaction of PJJ UKI students during the Covid-19 pandemic. Prior to analysis, it is necessary to test the validity and reliability of the research instrument, and all data meets the requirements. To find out whether there is a match between expectations and PJJ services/performance of UKI students with the Cartesian and CSI diagrams which are explained as follows:

Cartesian diagram

This diagram is to see what attributes need to be repaired and which are maintained, as shown in Figure 1 below:

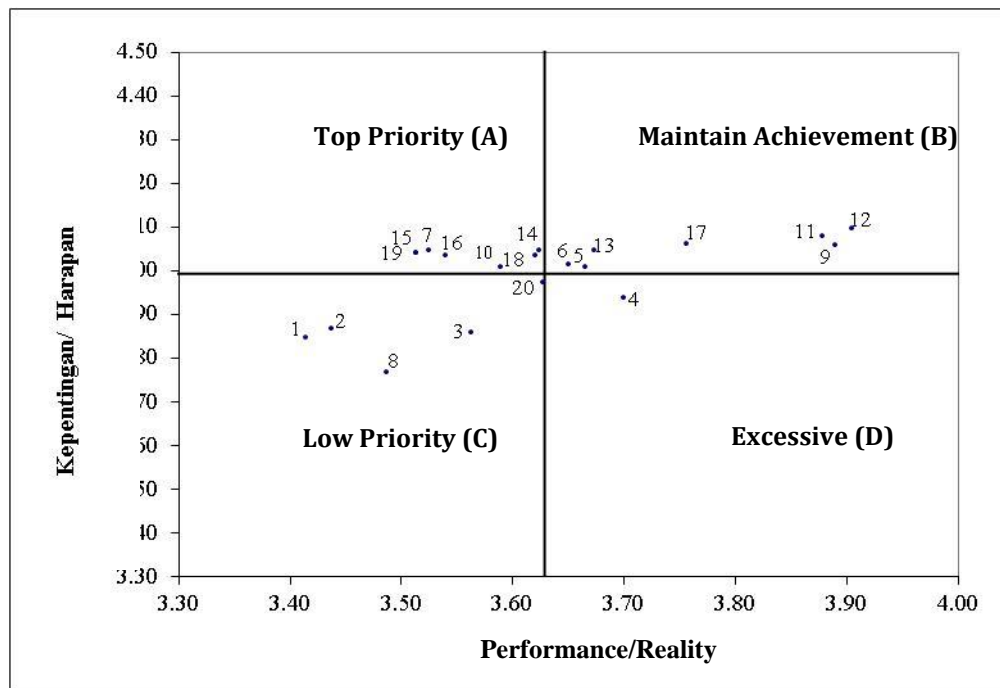


Figure 2. Cartesian diagram 1

From the Cartesian diagram it can be seen that the position of data placement on the interest level of students and the performance of each attribute that has been analyzed, the diagram is divided into four parts as follows:

Quadrant A

All attributes in this quadrant were attributes that have a performance level below the average (<3.63) and the respondents' assessment of the level of importance above the average (>3.99). In this quadrant, each attribute that is owned is considered to affect student satisfaction, so that the handling of it needs to be prioritized by lecturers and UKI, because the existence of these attributes includes elements that are considered important but the level of performance provided is still not satisfactory. This attribute is attribute no. 7, 10, 14, 15, 16, 18, and 19.

The findings above illustrate that there are 7 attributes that are a problem in performance services, namely: Speed of access to online learning platforms, Lecturers were fair and impartial in assessments, Consistency of lecturers giving lectures well, Lecturers were reliable in managing classes during online learning, Lecturer's attention to students during online learning, and lecturers understand student difficulties in the online learning process. Furthermore, these attributes were a priority for improving the performance of UKI PJJ services.

Quadrant B

All attributes in this quadrant have a performance level above the average (> 3.63) with a student interest level above the average (> 3.99) in this quadrant each attribute is considered to affect student satisfaction so that it needs to be maintained in handling it by lecturers, because the existence of this attribute includes elements of performance which are considered very important and the level of implementation is felt to be able to satisfy students. These attributes are attributes no. 5, 6, 9, 11, 12, 13, and 17.

The findings above illustrate that there are 7 attributes which were achievements that need to be maintained, namely: Use of interactive tools (PPT/video etc.) for online learning, Ease of access and connection to online learning platforms, Lecturers teach according to their fields, Lecturers answer student questions, Lecturers master the material being taught, Lecturers update learning materials according to current conditions and Lecturers encourage and motivate students to do the best learning in the online learning process. These attributes are strengths in UKI PJJ services.

Quadrant C

All attributes in this quadrant had a level of performance below the average (< 3.63) and the level of student interest is also below the average (< 3.99). This situation shows attributes that are less important for students and their implementation by lecturers is mediocre. Finally, the existence of these attributes seems futile or considered a waste. The attributes in this quadrant are attribute no. 1, 2, 3, 8, and 20, namely: Lecturers are able to adapt from conventional learning to online learning, Lecturers respond quickly and efficiently to handle student needs and complaints, Selection of various learning platforms and Lecturers instill a long-term interest in students to survive in the online learning process.

Quadrant D

All attributes that were in this quadrant are attributes that have a level of performance that is above the average (> 3.63), but the level of student interest is below the average (< 3.99). This shows that these attributes are considered less important in influencing students but the implementation is very satisfying, so it seems excessive. But basically, the attributes that are located in this quadrant are attributes that can be said to be complementary and even though they are considered not to significantly influence student behavior patterns, their presence does not need to be removed but they are still in this quadrant. The attributes in this quadrant are attribute no. 4, namely the lecturer's proactive attitude in providing information about learning to students.

Customer Satisfaction Index (CSI)

CSI is used to determine the overall level of student satisfaction with an approach that considers the level of importance of the attributes being measured. The CSI calculation results are shown in table 1 below.

| Attribute | Interest Level | Weighting Factors | Performance Level | Weighting Score |
|--------------------|----------------|-------------------|-------------------|-----------------|
| 1 | 3,85 | 4,82 | 3,41 | 0,16 |
| 2 | 3,87 | 4,84 | 3,44 | 0,17 |
| 3 | 3,86 | 4,83 | 3,56 | 0,17 |
| 4 | 3,94 | 4,93 | 3,70 | 0,18 |
| 5 | 4,01 | 5,02 | 3,67 | 0,18 |
| 6 | 4,02 | 5,03 | 3,65 | 0,18 |
| 7 | 4,03 | 5,05 | 3,54 | 0,18 |
| 8 | 3,77 | 4,72 | 3,49 | 0,16 |
| 9 | 4,08 | 5,11 | 3,88 | 0,20 |
| 10 | 4,01 | 5,02 | 3,59 | 0,18 |
| 11 | 4,06 | 5,08 | 3,89 | 0,20 |
| 12 | 4,10 | 5,13 | 3,90 | 0,20 |
| 13 | 4,05 | 5,07 | 3,67 | 0,19 |
| 14 | 4,05 | 5,07 | 3,62 | 0,18 |
| 15 | 4,04 | 5,06 | 3,51 | 0,18 |
| 16 | 4,05 | 5,07 | 3,52 | 0,18 |
| 17 | 4,06 | 5,08 | 3,76 | 0,19 |
| 18 | 4,03 | 5,05 | 3,62 | 0,18 |
| 19 | 4,04 | 5,06 | 3,51 | 0,18 |
| 20 | 3,97 | 4,98 | 3,63 | 0,18 |
| Total | 79,87 | 100,00 | 72,57 | |
| Weighted Total | | | | 3,63 |
| Satisfaction Index | | | | 72,61% |

Information:

Weighting Factors = (attribute importance level : total importance level) x 100%

Weighting Score = (Weighting Factors x attribute performance level) : 100

Satisfaction Index = (Weighted Total : 5) x 100%, where 5 is from the Likert Scale

Based on table 1, the CSI results for learning attributes carried out by UKI lecturers were 72.61%. This value is in the CSI value range, which is between 0.61 - 0.80, which means that students are satisfied with the PJJ carried out by the lecturer during the Covid-19 pandemic. CSI can be improved by making improvements to the performance attributes of the IPA results. With these student satisfactions, it is hoped that lecturers and the UKI can continue to improve the PJJ process so that student satisfaction is more than the previous semester and is expected to increase CSI scores.

Discussion

The Importance Performance Analysis (IPA) results show quadrant A or the attribute that must be prioritized, namely the speed of access to online learning platforms, meaning that the platform access speed is still not optimal because so far there is only one choice of learning platform at UKI, namely only through MS Teams. need to think about using other platforms like Zoom, for example. Then the Lecturer's attributes are fair and impartial in the assessment, meaning that there are still lecturers who were felt by students to be unfair and still take sides in giving assessments. Consistency of lecturers giving lectures well, meaning that lecturers are considered by students not to be consistent in terms of fulfilling class schedules. Lecturers were reliable in managing classes during online learning, meaning that there are lecturers who are not reliable in using digital technology for online learning. Lecturers are reliable in using the online learning platform, meaning that there are lecturers who are not yet reliable in operating the MS Teams platform which has been used so far at UKI. Lecturers pay attention to students during online learning, meaning that there are lecturers who only pay attention to certain students in the online learning process and pay little attention to others. Lecturers understand students' difficulties in the online learning process, meaning that there are lecturers who do not understand students' difficulties in online learning, for example in terms of accessing the platform there were students who have difficulties because the network is poor.

Quadrant B which showed the variables that were considered important to satisfy students and must be maintained, namely the use of interactive tools (PPT/video etc.) for online learning, meaning that the lecturer had used interactive tools well. Ease of access and connection to online learning platforms, meaning that access and connections to online learning are good and need to be maintained. Lecturers teach according to their fields, meaning that UKI lecturers are in accordance with their competencies and fields with the subjects they teach. The lecturer answers student questions, meaning that the lecturer responds and answers well the questions asked by students. The lecturer masters the material being taught, meaning that the lecturer who teaches is very competent and masters the field being taught to students. Lecturers update learning materials according to current conditions, meaning that lecturers always update the material taught and are in accordance with current conditions. Lecturers encourage and motivate students to do the best learning in the online learning process, meaning that lecturers always motivate and encourage students to study hard.

Quadrant C is a low priority attribute, which was considered less important and unsatisfactory for students, namely the lecturer is able to adapt from conventional learning to online learning, meaning that the lecturer should and should adapt to online learning. Lecturers respond quickly and efficiently in handling student needs and complaints, meaning that it should be and every lecturer should respond quickly to student needs and immediately handle student needs. The seriousness of the lecturer in serving student questions and comments means that as a lecturer it is his duty to answer student questions. The choice of learning platforms varies, meaning that students are not too concerned about what platform is used by lecturers in teaching. Lecturers instill a long-term interest in students to survive in the online learning process, which means that students have no other choice but to study online during this pandemic.

Quadrant D is an attribute that was considered excessive by UKI students. This attribute was the proactive attitude of the lecturer to provide information about learning to students,

meaning that the lecturer does not need to exaggerate in reminding people through repeated information. The CSI results for learning attributes carried out by UKI lecturers were 72.61%. This value is in the CSI value range, which is between 0.61 - 0.80, which means that students are satisfied with the PJJ carried out by the lecturer during the Covid-19 pandemic.

CONCLUSION

Based on the description and analysis that has been put forward, it can be concluded as follows:

1. The SERVQUAL attributes studied using the Importance Performance Analysis (IPA) technique can show the strengths and weaknesses of UKI PJJ service performance. Factors or attributes that are the top priority in quadrant A are as follows:
 - a. Access speed of online learning platforms (7)
 - b. The lecturer is fair and impartial in the assessment (10)
 - c. Consistency of lecturers giving lectures well (14)
 - d. Lecturers are reliable in managing classes during online learning (15)
 - e. Lecturers are reliable in using online learning platforms (16)
 - f. Lecturer pays attention to students during online learning (18)
 - g. Lecturers understand student difficulties in the online learning process (19)
2. The factors or attributes in quadrant B are attributes that need to be maintained as follows:
 - a. Use of interactive tools (PPT/video etc.) for online learning (5)
 - b. Ease of access and connection to online learning platforms (6)
 - c. Lecturers teach according to their fields (9)
 - d. Lecturer answers student questions (11)
 - e. Lecturers master the material being taught (12)
 - f. Lecturers update learning materials according to current conditions (13)
 - g. Lecturers encourage and motivate students to do the best learning in the online learning process (17)
3. Factors or attributes in quadrant C are low priority attributes. Attributes in this quadrant are considered less important for UKI students. These attributes are:
 - a. Lecturers are able to adapt from conventional learning to online learning (1)
 - b. Lecturers respond quickly and efficiently to address student needs and complaints (2)
 - c. The seriousness of the lecturer in serving student questions and comments (3)
 - d. Selection of various learning platforms (8)
 - e. Lecturers instill a long-term interest in students to survive in the online learning process (20)
4. Factors from attributes that are in quadrant D were attributes that are considered excessive by UKI students. These attributes are: The proactive attitude of the lecturer to provide information about learning to students (4).
5. A Customer Satisfaction Index (CSI) of 72.61% was obtained, meaning that students were satisfied with the PJJ carried out by the lecturers during the Covid-19 pandemic.

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