Student Satisfaction on Distance Education Academic Services

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Abstract. Universitas Terbuka is the 45th State University in Indonesia that implements open and distance education. Educational services are delivered through modules and internet-based media. Developments at technological cause internet-based electronic media to be more used. In the 2018.1 semesters, the number of UT students was 302,484 people at 38 UT Regional Offices throughout Indonesia and 2,099 students at 39 Countries. Generally, academic services provided by UT to students include services at 1) guidance from study programs with distance education models; 2) registration services; 3) student learning materials (modules and non-print teaching materials); 4) face-to-face and online tutorials; 5) learning assistance counselling services; and 6) evaluation of learning. The level of student satisfaction with UT’s academic services needs to be measured regularly to maintain service quality. This research was conducted on UT students with a sample of 370 students from 13 UT Regional Office. Sampling is representative of students from the regions of Western Indonesia, Central Indonesia, and Eastern Indonesia. Data is processed using Importance-Performance Analysis (IPA) and Customer Satisfaction Index (CSI). In general, the level of student satisfaction with distance education attributes is at the value of 90.20%. That is, students feel very good satisfaction with the services provided by UT include aspects of distance education study programs and models, registration, teaching materials (modules and non-print teaching materials), face-to-face tutorials and online tutorials, learning assistance counselling services, and evaluation learn. When examined in more detail, there are several aspects that are above or below the index value (90.20%), for example, the number of face-to-face Tutorial meetings 8 times in one semester and online Tutorials can be accessed easily. Analysis with CSI shows that 6.3% academic services are in quadrant A, 54.2% services are in quadrant B, 29.2% services are on quadrant C and 10.4% services on quadrant D.

1. Introduction

Universitas Terbuka (UT) is the 45th University in Indonesia which implements open and distance learning systems. The term distance means learning is not done face-to-face, but uses media, both print (module) and non-print (audio / video, computer / internet, radio broadcasts, and television)[1]. While open means there are no restrictions on age, year of diploma, period of study, time of registration, and frequency of taking the exam.
As a university that implements a distance learning system, UT students are expected to learn independently. This way of learning requires students to study on their own initiative or initiative. Self-study can be done alone or in groups, both in study groups and in tutorial groups. UT provides teaching materials that are designed to be studied independently. In addition to using teaching materials provided by UT, students can also take the initiative to take advantage of other reading material in the library following the tutorial, both face-to-face and through the internet, radio and television; and utilizing other learning resources such as computer-assisted teaching materials and audio / video programs[2]. When experiencing learning difficulties, students can request information about study assistance to the UT Regional Office in 39 provinces in Indonesia. Currently UT is a teaching university that has an academic service reach to the outermost, disadvantaged, and poorest areas. Besides that UT also has to be able to reach Indonesian citizens who work abroad but still want to take higher education [3].

The focus of attention in the UT Strategic Plan focuses on student services as the core business. Student services are provided in the form of academic services and non-academic services. UT's academic services include services: a) registration, b) face-to-face tutorials and remote tutorials via radio, television, and the internet, and c) academic consultations. While non-academic services are given in the form of: a) information services, b) learning assistance, c) academic guidance; d) academic administration; d) customer complaints; and e) libraries. This service is intended to help students overcome academic and academic administration problems faced while studying at UT.

The academic and non-academic services provided by UT are described in the UT Strategic Plan of UT's strategic programs, namely: (1) improving the quality and academic services, (2) increasing the reach of education services and increasing public recognition of UT. The consequence of the UT Strategic Plan requires UT to provide higher education services to all levels of society so that accessibility becomes the main mandate. As a teaching university, UT needs to improve its quality in learning expected final product is UT's ability to provide academic services through world-class distance learning with a high level of accessibility with high-quality output. In the end, improving the quality of inputs, processes, and outputs will increase UT's academic authority. Now UT is paying full attention to the availability of adequate and integrated ICT facilities to support academic and non-academic services [3].

2. Customer Satisfaction

Customer satisfaction is how customers view an organization's products or services in or the product, as well as comparison with what they have heard or seen about other companies or organizations. Customer satisfaction is one of the elements to be measured[4].Customer satisfaction is rooted in two ideas about quality. Quality can be measured by the gap between customer expectations and the service performance they receive. Product quality will be considered good if the services provided are in accordance with customer expectations. The ISO 9000 standard describing quality is about conformance to standards or specifications. After the design is set, the quality is good and ensures that the final results delivered to customers meet this design. Customer satisfaction is about monitoring the quality of product and service delivery[4].

In companies where customer satisfaction is a top priority, the customer survey process and the results are very high prominence throughout the organization. Customer satisfaction is based on meeting or exceeding customer requirements. To achieve this, the organization must do the best that is most important to the customer. The customer satisfaction measurement program will provide information that will enable organizations to: (1) accurately identify customer requirements and their relative importance; (2) understand how customers perceive the organization and whether the performance they receive has met their requirements; (3) identifying PFI (priority for improvement); (4) knowing the ability of service staff to meet customer needs; (5) setting goals for service improvement and monitoring progress towards customers satisfaction index; (3). Many methods used in measuring customer satisfaction. Bell (1995), used a survey method at Leicester University to measure student satisfaction with the services provided(5).
3. UT Academic Services

As a service that supports academic services, UT also provides student services in the form of administrative services, which are focused on providing assistance to students in registration, obtaining teaching materials, transfer of credit, and other things that can affect student learning. Facilities owned by universities aim to improve organizational performance. In the context of higher education, facilities have two objectives, the first can be essential facilities in attracting and retaining key research students and potential students.

UT activities in educational services both those directly related to academic services and Academic support services can be illustrated in the following chart[3].

Figure 1 shows the focus of academic activities carried out in quadrant IV. Academic activities are focused on the occurrence of independent learning processes, group learning interactions and tutorial activities. While quadrant I is a non-academic service. Activities in Quadrant II, are Non Academic Services in the form of support for the academic process. In quadrant III, activities are focused on supporting the teaching and learning process, in the form of providing tutorial services, both face-to-face tutorials and online tutorials. Whereas in quadrant V it is focused on the process of evaluating learning outcomes.

Some studies on student satisfaction with learning services show that there are several aspects of service that are the focus of student attention. While the least important are those associated with the physical facilities. 1) Teaching ability of staff; 2) Subject expertise of staff; 3) IT facilities; 4) lecturer; 5) Supplementary lecture materials. With regard to facilities, students have ranked the importance of IT facilities very highly. International (non-EU) students, mostly Asian from China, India and Pakistan, ranked “textbook availability within the LRC” as the most important aspect of the service. This is indicative of the learning style of many international students. Experience and anecdotal evidence of the Chinese education system, with the textbook teaching structured round and the examination also based on the textbook. Depth of knowledge on one text is expected, rather than breadth of knowledge from number of sources[6].

While research at Edge Hill University College showed that student satisfaction with university services that were considered most important was related to: (1) lecture system; (2) price and quality of food; (3) publicity related to students’ union; (4) opportunities for training for students; and; and (5) giving feedback in the learning process ([7]. Research in Finland on students and academic staff shows that the most important facilities and providing the highest satisfaction for students is a comfortable learning environment, in the form of public space and campus accessibility. While the staff satisfaction is characterized by a comprehensive campus and complete
laboratories and teaching facilities. In general, the results show that the factors related to the field of research and teaching have the greatest impact on student satisfaction and staff[8].

4. Research Methods

4.1 Research Samples
This study was conducted with a survey method using a questionnaire. The research sample was UT students from 13 UT Regional Offices in Indonesia, with the number of samples per UT Regional Office as in Figure 2. Samples were taken by purpose sampling method by considering the representation of the regions of Western Indonesia, Central Indonesia and Eastern Indonesia. The number of samples for each UT Regional Office is shown in Figure 2.

4.2 Processing and analysis of data

Analysis of student satisfaction with Universitas Terbuka academic services quantitatively using Importance-Performance Analysis (IPA)[9] and Customer Satisfaction Index (CSI)[10] analysis tools. IPA is used to determine the gap between performance and expectations of service products and the CSI which is used to analyze the overall level of customer satisfaction [11].

The results of the analysis with IPA and CSI are explained in Figure 3 and Table 1 below.

**Table 1. CSI PTJJ Attributes**

| NO | Indicators                                                                 | Performance | Interest | CSI E/5 | Quadrant |
|----|---------------------------------------------------------------------------|-------------|----------|---------|----------|
|    |                                                                          | A           | B        | C       | G        |
| 1  | Distance learning courses and education models                            | 3.29        | 3.60     | 90.47%  | D        |
| 2  | Accreditation of study programs you choose at UT                          | 3.12        | 3.38     | 85.72%  | C        |
| 3  | The amount of tuition fees that you pay each semester                     | 3.30        | 3.63     | 90.77%  | B        |
| 4  | Your timeliness in completing the study                                   | 3.34        | 3.66     | 91.14%  | B        |
| 5  | Certification acquisition ISO in guanteeng UT service quality             | 3.27        | 3.59     | 89.88%  | A        |
| NO | Indicators                                                                 | Performance | Interest | CSI E/5 | Quadrant |
|----|----------------------------------------------------------------------------|-------------|----------|---------|----------|
| 6  | Compliance with existing study programs at the Universitas Terbuka with needs at work | 3.34        | 3.65     | 91.81%  | B        |
| 7  | Flexible learning model in the Universitas Terbuka with the availability of your time | 3.34        | 3.55     | 91.74%  | D        |
| 8  | The benefits of the learning material you get at UT in your knowledge       | 3.48        | 3.69     | 95.68%  | B        |
| 9  | Benefits of the learning material that you process at UT in helping assignments at work | 3.35        | 3.63     | 92.03%  | B        |
| 10 | Learning Models at UT in forming independent attitudes                     | 3.40        | 3.58     | 93.45%  | D        |
| 11 | Application technology in defense the range in TU can be easily utilized    | 3.21        | 3.52     | 88.24%  | C        |
| 12 | Announcement of registration schedule for each semester                     | 3.37        | 3.67     | 92.63%  | B        |
| 13 | Ease in registering                                                        | 3.43        | 3.67     | 94.34%  | B        |
| 14 | Registration process at UPBJJ and Pokjar                                   | 3.40        | 3.66     | 93.45%  | B        |
| 15 | The length of time required in the registration process                    | 3.25        | 3.58     | 89.43%  | C        |
| 16 | Hospitality and assistance provided when carrying out the service process registration | 3.39        | 3.65     | 93.30%  | B        |
| 17 | Have you ever done an online registration system? If “yes” How is the quality of the implementation of the online registration system? | 3.01        | 3.58     | 82.74%  | C        |
| 18 | Course module teaching materials that you take each semester are always available | 3.44        | 3.68     | 94.49%  | B        |
| 19 | Modules are always received on time every semester                         | 3.30        | 3.60     | 90.85%  | B        |
| 20 | Module size (A5) and the type of letters used can be read well              | 3.41        | 3.63     | 93.74%  | B        |
| 21 | condition of the module you received (4 torn / disabled / there are 4 parts read) | 3.47        | 3.69     | 95.45%  | B        |
| 22 | The material presented in the Module is well understood                    | 3.39        | 3.66     | 93.22%  | B        |
| 23 | Illustration (in the form picture) can help you understand module material | 3.31        | 3.59     | 91.07%  | D        |
| 24 | Quality presentation of non-print teaching materials Audio                  | 3.14        | 3.57     | 86.46%  | C        |
| 25 | Quality of presentation of non-print teaching materials video              | 3.17        | 3.55     | 87.20%  | C        |
| 26 | Material presented in Audio and Video teaching materials help your understanding | 3.22        | 3.56     | 88.69%  | C        |
| 27 | Location of easy-to-reach face-to-face tutorial services                   | 3.35        | 3.68     | 92.03%  | B        |
| 28 | Face-to-face tutorial services help you understand module material         | 3.48        | 3.68     | 95.60%  | B        |
| 29 | Mastery of material by tutor tutor                                        | 3.38        | 3.65     | 92.83%  | B        |
| 30 | Number of face-to-face Tutor meetings 8 times in one semester              | 3.50        | 3.69     | 92.35%  | B        |
| 31 | face-to-face tutorial materials help you in understanding modules          | 3.45        | 3.69     | 94.86%  | B        |
| 32 | Timing for conducting face-to-face tutorial services on time               | 3.33        | 3.68     | 91.59%  | B        |
| 33 | Online tutorials are easily accessible                                     | 2.99        | 3.50     | 88.28%  | B        |
| 34 | Material in online tutorials helps you in understanding module material    | 3.01        | 3.51     | 82.74%  | B        |
| 35 | There are facilities to access online tutorial services                    | 3.01        | 3.51     | 82.67%  | B        |
| 36 | Convenience contacting staff UT Poat / UPBJJ-UT / Manager / Tutor          | 3.28        | 3.63     | 90.18%  | B        |
| 37 | Counseling / guidance services are available at UPBJJ                      | 3.15        | 3.57     | 86.61%  | C        |
| 38 | Independent exercises can be accessed easily online                       | 3.13        | 3.54     | 86.09%  | C        |
| 39 | Digital library services can be accessed through communication devices mobile/handphone | 3.16        | 3.54     | 86.91%  | C        |
| 40 | Academic services (such as online tutorials, online registration, online bookstores) can be accessed via a mobile phone | 3.15        | 3.55     | 86.53%  | B        |
| 41 | The quality of UT’s academic services and student complaint services makes it easy for you to study at UT | 3.27        | 3.64     | 89.95%  | A        |
| 42 | The quality of academic services UT can help you in solving problems that you encounter while studying at UT | 3.30        | 3.71     | 90.70%  | B        |
| 43 | You are always reminded about the schedule of the Semester Final Examination | 3.45        | 3.72     | 94.86%  | B        |
| 44 | The location of the easy semester final exam                              | 3.36        | 3.66     | 92.48%  | B        |
| 45 | Facilities available at the test location are very adequate                | 3.26        | 3.56     | 89.73%  | C        |
| 46 | You can access the Online Exam (SUO)                                       | 3.07        | 3.54     | 84.38%  | C        |
| 47 | The Online Examination System can be done easily                          | 3.02        | 3.49     | 83.19%  | C        |
| 48 | Schedule of achievements announcements every semester is always on time     | 3.21        | 3.61     | 88.32%  | A        |
5. Discussion and Conclusions

5.1 Discussion

In general, the level of student satisfaction with attributes PTJJ attribute is at the value of 90.20%. That is, students feel very good satisfaction with the services provided by UT include aspects of distance education study programs and models, registration, teaching materials (modules and non-print teaching materials), face-to-face tutorials and online tutorials, learning assistance counseling services, and evaluation learn.

When examined in more detail, there are several aspects that are above or below the index value (90.20%), for example the number of face-to-face Tutorial meetings 8 times in one semester and online Tutorials can be accessed easily.

Data analysis using Importance Performance Analysis shows that 54% (26 types of services) UT service performance has been in Quadrant B, which means that most of the academic services provided are in accordance with student expectations. Academic services that are already in Quadrant B are registration services and tutorial services. Meanwhile 3 services (6.3%) are in Quadrant A, which means this service is considered very important for students, but performance is still low. The services are (1) Certification ISO in guaranteeing UT service quality; (2) Student complaint services; dan (3) Schedule of achievements announcements every semester. 14 UT academic service items (29.2%) are in Quadrant C, which means that the service is not too important for students and has low performance. The service is related to registration; the quality of audio teaching materials and video teaching materials; counseling services and examinations. While services that are considered not important by students and have a high enough performance amounted to 5 services (10.4%). The service is related to module teaching materials; study program accreditation and learning flexibility at UT.

5.2 Conclusions

Based on the results of research and analysis of data on academic service performance in UT using the Customer Satisfaction Index, it was concluded that the quality of UT's academic services to students had very good performance. However, judging from the analysis of Importance Performance Analysis, further evaluation of academic services still needs to be improved and academic services that are considered less important for students.

This analysis can increase the effectiveness and efficiency of UT's services in the future.

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