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BETWEEN
FACULTY OF EDUCATION, UNIVERSITI TEKNOLOGI MALAYSIA (UTM)
& UNIVERSITAS NEGERI MAKASSAR, INDONESIA



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PROCEEDINGS OF THE



BETWEEN FACULTY OF EDUCATION, UNIVERSITI TEKNOLOGI MALAYSIA (UTM) & UNIVERSITAS NEGERI MAKASSAR, INDONESIA

Faculty of Education, Universiti Teknologi Malaysia

Assalamualaikum w.b.t and Good Day



Ladies and gentlemen,

It is my pleasure to welcome you to the Education Research Colloquium between Faculty of Education, Teknologi Universiti Malaysia (UTM) Universitas Negeri Makassar (UNM), Indonesia. This colloquium is a platform for both institutions to sustain a harmonious and stable global society and to promote international cooperation and exchange. As we know, UTM participated in a wide variety of collaborative relationships with universities, institutions and individuals in many countries. I am confident that through this colloquium, relationship and friendship between FP UTM and UNM will become stronger. I would like to take this

opportunity to congratulate all presenters in this colloquium. I am sure that the variety and depth of the research presented at this colloquium will be appreciated by the audiences. In summary, I believe that this colloquium is just a start for a more fruitful and continuous collaboration between FP UTM and UNM.

Thank you

Professor Dr. Muhammad Sukri Saud

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The Quality Analysis of Academic Services Based on Importance Performance Analysis (IPA)

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Abstract:

The purpose of this study is to analyze the description of the quality of academic services by using the importance of performance analysis (IPA). The sample of research is 40 respondents from the National Informatics Polytechnic Student of Makassar. Quantitative data analysis techniques using Importance Performance Analysis (IPA). The results showed that the quality of service has given positive response / good that was seen from the services provided by employee/staffs and lecturers in providing student academic services. The weaknesses in the provision of services such as: the classroom learning facilities and campus attention to the talents and interests of students is still low, the limitations of references in the library and the campus funding transparency have not been yet opened.

Keynote: service quality, Importance Performance Analysis.

1.0 Introduction

Service is a fixed price in improving the performance of an organization (Hu, Lee, Yen, & Tsai, 2009). Therefore, one way to find out the quality of the service of an organization must be to use an accurate method within provide an assessment. As with the Impotance Performance Analysis (IPA) model is a kind of model that is developed to measure service quality (Martilla & James, 1977); (Berry & Parasuraman, 1992); (Breiter & Milman, 2006); (Angell, Heffernan, & Megicks, 2008); (Hu et al., 2009); (Kim & Lee, 2015); (Shafaei & Razak, 2016). The fundamental concept of the analysis, conducting analysis in the field of service quality of a profit organization. However, it does not rule out that in measuring the performance of academic service organizations should not be. Rather it is able to provide analysis and classify the quality of service. (Akib, Rifdan, & Guntur, 2015). Similarly, at the campus of the Politeknik Informatika Nasional Makassar.

Some efforts in organizing the service, at the Politeknik Informatika Nasional Makassar still experiencing various obstacles to improve the quality of service. One of the problems faced is the lack of educational staff when compared with the number of students enrolled in the campus.

2.0 Research Method

This type of research includes quantitative descriptive research. Location of research at Politeknik Informatika Nasional Makassar of Alaudin Branch. Respondents in this study were 40 students using multi stage sample ramdom. Technique of collecting data by using: 1)

observation, 2) questionnaire, and 3) interview. Data analysis technique using SPSS with Method Importance Performance Analysis (Martilla & James, 1977).

3.0 Result

Quality academic service is a fixed price in an institution. Because with a quality service, it will provide a good image for the institution. Similarly, in educational institutions, which create quality alumni and ready to work. Of course has a standard service both national and international levels.

In order to know the description of Quality of academic service picture quality of academic service at the Politeknik Informatika Nasional Makassar. The researcher will present a picture of academic service seen from five service aspects, namely; (1) tangible, (2) responsiveness, (3) assurance, (4) empathy, (5) reliability. Which of the five aspects of service consists of 28 attribute questions. The result findings of the Academic Service at Politeknik Informatika Nasional Makassar of Alaudin Branch can be described at the Table 1.

Table 1: Academic Service to Average Values of Importance and Performance

		C	1	
No.	Items	Important Scores	Performance Scores	Quadrant
2	The learning facilities are available in the classroom	4.60	3.05	A
24	Campus seeks to understand interest and student talents	4.70	2.90	A
1	The campus room is clean, neat, cool and comfortable	4.50	3.45	В
5	Worship facilities that students used	4.70	3.35	В
7	The lecturer delivering Learning Program Plan at the beginning of the lesson	4.80	3.70	В
8	Clarity of course material presented by lecturer	4.50	3.75	В
9	The lecturer returns the exam result / task with an objective value	4.70	3.45	В
10	Lecturers arrived on time	4.70	3.55	В
12	Campus provides Academic Advisor for Students	4.90	3.90	В
17	Student's problems / complaints are handled by the campus through the head of study program or academic supervisor	4.50	3.35	В
18	Every job / task is always restored on students	4.60	3.25	В
21	Lecturers are willing to help students who have difficulty in academic / subjects	4.80	3.65	В
22	Lecturers are willing to help students who have difficulty in the academic field /subject	4.50	3.65	В

	mattan			
23	matter			
23	Lecturers openness,	4.70	4.05	В
2	cooperative with students			
3	The campus has a complete	4.10	2.15	С
	library			-
4	The availability of adequate	4.40	3.15	С
	and clean washroom facilities	1.10	3.13	C
6	The campus seeks to			
	transparently explain the use of	4.00	1.95	C
	student funds			
13	The campus helps students			
	when faced with academic	4.40	3.05	C
	problems			
14	The director and his staff			
	provide time for parents to	4.20	2.70	C
	consult			
25	The campus provides			
	information on the lecture			~
	system in the form of a	4.40	3.15	C
	guidebook lectures			
26	Campus provides academic			
20	information and non-academic			
	services in the form of website	4.20	2.45	C
	(online)			
27	Campus opened a complaint			
21	service for students who have	4.00	2.55	С
		4.00	2.33	C
11	problems			
11	The ability of academic staff to	4.20	2.20	Ъ
	serve the Student	4.30	3.30	D
1.5	administration			
15	The campus provides			
	insurance assistance for	4.00	3.25	D
	students who get unfortunate			
	accident			
16	Academic administration staffs	4.10	3.75	D
	are polite in providing services			_
19	Sanctions for students who			
	violate established campus	4.10	3.50	D
	rules and apply to all students	1.10	3.30	D
	without any exceptions			
20	Campuses monitor the			
	progress of students through	4.40	3.65	D
	academic supervisors / heads	4.40	3.03	D
	of study programs / faculty			
28	The campus is trying to give a			
	positive response to each	4.10	3.25	D
	student complaint			
(Source	ce: primary data analysis, 2018)			

(Source: primary data analysis, 2018)

Based on table 1 above showed that the quality of academic services can be seen from the attributes of academic services from the average level of importance with the average level of performance in the field. With these average results, it will be converted into Cartesian diagram. Cartesian diagram is a diagram showing the importance and prformance

of the academic services provided by the service provider. The Cartesian diagram can be seen in Figure 1.

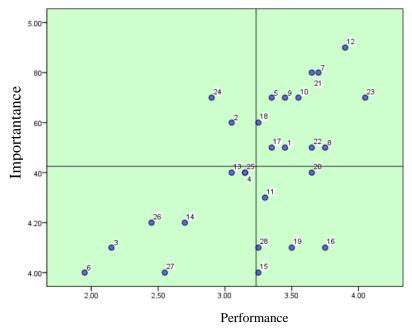


Figure 1: Cartesian Diagram Attribute Quality of Academic Services

Based on the Figure 1, It gives a description concerning to the quality of academic services viewed from the importance desired by the respondent or the services customers concerning to the performance that occurred in the field. The assessed aspects can be seen from the four quadrants, namely: Quadrants A, B, C and D.

a. Quadrant A

The Quadrant A is an attribute that provides an illustration in this aspect which is considered to be highly contributing in influencing the service customers into the satisfaction of services. Besides that, it also becomes the elements of service that are considered very important, but the campus management has not implemented according to the importance of students as the customers of the service, consequently that they felt have no satisfaction. Therefore in this quadrant considered necessary to prioritize and improving its performance. As for the attributes, such as: (1) Learning facilities available in the classroom, and (2) The campus seeks to understand the students' interests and talents, the availability of reference books in the library. From these two points, the students' expectation should be considered by the campus but as a real showed that it was still low or less enough.

Based on the results of the data analysis, in accordance with the results of interviews which conducted to the one of the students receiving the service stating that:

"Politeknik Informatika Nasional Makassar of Alaudin Branch of relatively new branch, however, has been able to provide the best service to its students. However, there are still many weaknesses that must be addressed by the campus, such as: (1) the availability of learning space that must be improved, and (2) the campus has not given the students the opportunity to develop their talents and interests".

b. Quadrant B

In this quadrant indicates that academic services have been implemented well and must be maintained as they are important in order to provide satisfaction to students or customers of campus services. The attribute that gives contribution consists of 12 (twelve) attributes. In this attributes in which gives the highest contribution to the campus provides an Academic Advisor for Students.

Based on the results of the data analysis, then in accordance with the results of interviews from one of the respondents who revealed that:

"In the provision of academic services, the students are given academic counselors to interact more if they have difficulty in the learning process. Lecturers who are given the confidence to teach the subject have delivered the material according to the Semester Academic Plan that has been designed. In addition, lecturers arrived on time in delivering learning subjects".

c. Quadrant C

Based on the result showed that in this quadrant, it revealed some aspects of service that are less important for student satisfaction, but the implementation by service providers such as employees/staff, lecturers are considered mediocre, and in fact the level of performance against these attributes are still low in which between the values importance and performance are almost not too far apart, it contrasted with the Quadrant A, where the importance are high and performance are low, so then it needed to be improved. In this quadrant, there are seven attributes, where the lowest score (1.95) where the campus need to try to be transparently explaining the use of student funding, and the also the score of value was 2.55 is that the Campus has complete library references.

d. Quadrant D

This quadrant attribute provides an idea that aspect levels of expectations are not so important, but can affect student satisfaction / service customers. The service recipient assumed that this attribute or service was less important, however, it gives a very meaningful satisfaction. Based on data analysis about the average reality experienced by the student shows that the lowest value of 6 (six) attributes is with the highest average value of 3.75 is the polite academic administration staff in providing services. In addition, which has a high value is the campus to monitor the progress of students through supervisor / head of study program / lecturers.

4.0 Conclusion

The quality of academic services is reflected in 4 quadrants as the main dimensions of Importance Performance Analysis (IPA) Analysis Model. The quality of academic services can be seen from 4 (four) quadrants. In Quadrant A has been revealed that the academic services at Politeknik Informatika Nasional Makassar such as; classroom learning facilities and the attention of the campus to their students' interest and talent was still low. For Quadrant B showed that the ability of educators and educators such as faculty and staffs have provided the best service to their students. Quadrant C indicates that there were still many deficiencies in the provision of services such as; facilities and infrastructure included the limited facilities of worship and restroom, and also the openness of the campus in responding

to the students' complaints. Quadrant D indicates that staffs and lecturer's activation in providing services to students has showed a positive response for students.

REFERENCES

- Akib, H., Rifdan, & Guntur, M. (2015). Quality improvement strategies of academic services and student affairs at the Graduate Program State University of Makassar, Indonesia. International Journal of Applied Business and Economic Research, 13(4), 2019–2027. Retrieved from http://www.serialsjournals.com/serialjournalmanager/pdf/1441694797.pdf
- Angell, R. J., Heffernan, T. W., & Megicks, P. (2008). Service quality in postgraduate education. Quality Assurance in Education, 16(3), 236–254. http://doi.org/http://dx.doi.org/10.1108/QAE-11-2012-0046
- Berry, L. L., & Parasuraman, A. (1992). Prescriptions for a service quality revolution in America. Organizational Dynamics, 20(4), 5–15. http://doi.org/10.1016/0090-2616 (92)90071-T
- Breiter, D., & Milman, A. (2006). Attendees' needs and service priorities in a large convention center: Application of the importance-performance theory. Tourism Management, 27(6), 1364–1370. http://doi.org/10.1016/j.tourman.2005.09.008
- Hu, H. Y., Lee, Y. C., Yen, T. M., & Tsai, C. H. (2009). Using BPNN and DEMATEL to modify importance-performance analysis model A study of the computer industry. Expert Systems with Applications, 36(6), 9969–9979. http://doi.org/10.1016/j.eswa. 2009.01.062
- Kim, N., & Lee, S. R. (2015). Determining the priority of self-regulated learning ability development for engineering college students using IPA. In Proceedings of 2015 International Conference on Interactive Collaborative Learning (ICL) (pp. 589–592). Florence, Italy.
- Martilla, J. a, & James, J. C. (1977). Importance-Performance Analysis. Journal of Marketing, 41(1), 77–79. http://doi.org/10.2307/1250495
- Shafaei, A., & Razak, N. A. (2016). What matters most: importance-performance matrix analysis of the factors influencing international postgraduate students' psychological and sociocultural adaptations. Quality & Quantity, 50(5), 1–20. http://doi.org/ 10.1007/s11135-016-0418-y