Quality Management: From Effective Service to Innovative Facility

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Abstract

Quality is one crucial factor in determining human satisfaction, while managing quality sensibly denotes an effective and innovative running of an organization. Thus, the combinations of both depict almost a perfect administration of the organization. An institution that gives extra attention in managing and providing good quality services is believed to have gained its ‘customer’ loyalty, as this can contribute significantly to the overall effectiveness of the quality management system. This research seeks to identify the international undergraduates’ satisfaction levels on the services provided by a higher learning institution. A forty-five questionnaire items were developed based on the Analysis Model of SERVPERF which was completed by 130 international undergraduates using a five point Likert Scale. This paper will present, discuss and highlight the findings of this research project, as knowing these results is critical in deriving to the key components of the service quality, in order to creatively or innovatively redesign them to suit the needs of the learners.

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Keywords: Quality Management; service; facility; international;

1. Introduction

In higher education today, the application of quality management has become increasingly significant as service quality turns out to be essentially important in attracting applicants either locally or internationally. Competition among higher learning institutes develop into pressure in maintaining and improving facilities as service plays a crucial role in capturing ‘customer satisfaction’ [1]. This is due to the reason that understanding learners need and expectation toward service quality helps increase contentment and gradually boost performance. As Stinnet [2] suggests, the key in understanding the customer satisfaction is to always think like one, “if you want to catch a fish, you needed to think like a fish” (p. 3). In the context of Universiti Teknologi Malaysia (UTM), service quality involves not only the support staff handling admissions efficiently, provides prompt service, keep records accurately but

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also facilities such as library, cafeteria, bank and other that are provided to the international undergraduates. As Chai et al. [3] suggest quality of services will become the means of customer faithfulness in order to identify and fulfill new customer’s needs and desires.

Learner as a ‘customer’ is a key indicator in determining the success of the service management system in higher education. Learner perceptions and opinions towards service provided can affect his loyalty and sense of belonging. Abouchedd and Nasser [4] explain that the service quality concept in higher education is inextricably linked to the competitive service and success of an institution. Previous researches did try to identify some issues related directly to the institution that can help them determine the factors that influence a student’s decision in choosing a place to further his study. As suggested by Peterson and Augustine [5], some factors that influence student’s decision not only lie in the educational system of an institution, but also support facilities and its infrastructure.

In the early stage of service quality research, researcher measured perception of service quality from the customer satisfaction index. However, nowadays it is common to measure service quality as a predecessor to customer satisfaction [6; 7]. Generally, it is assumed that research focuses on the service quality can help the higher education to measure the successful use of its quality service management [21]. Hence, in order to become one of the higher education institute that practices a quality service management procedure, the international undergraduates expectation and perception toward the service quality provided in UTM needs to be measured as the information gained will help the service provider and the stakeholder to draw conclusion on the quality level for that particular university [8]. As stated by Parasuraman et al., [9] a perception of service quality is a result of a comparison between what consumers consider the service should be and their perceptions about the actual performance offered by the service provider.

2. Methodology

This research is carried out to identify the international undergraduates’ satisfaction level towards service quality provided by the support staff and facilities make available by Universiti Teknologi Malaysia (UTM) such as the library, counselling centre, cafe, bookstore, bank and other related facilities. A total of 130 respondents from various faculties and countries comprising of 82 males and 48 females, answered a forty-five questionnaire items adopted from Abdul Rahman et al., [10] based on the Analysis Model of SERVPERF. The Cronbach’s alpha value for the pilot study is 0.97. Data analysis involved quantitative method using the Software Package for Social Science (SPSS) version 16.0. Table 3.1 below shows the three major categories of the international undergraduates’ satisfaction level.

3. Findings

3.1. Level of Satisfaction among International Undergraduates

Table 1: Categories of Satisfaction Level among International Undergraduates

| Level of Satisfaction | Mean (N) | (%) |
|-----------------------|----------|-----|
| Low                   | 1.00-2.33| 2   | 1.54 |
| Moderate              | 2.34-3.67| 82  | 63.08|
| High                  | 3.68-5.00| 46  | 35.38|

3.2. Level of Satisfaction on Services and Facilities

Table 2: Satisfaction Level of International Undergraduates on Services and Facilities

| Element | Dimensions | Mean Undergraduate Students | Level |
|---------|------------|-----------------------------|-------|
| 1       | Support Staff (Faculty) | 3.49 | Moderate |
| Services and Facilities 2 Support Staff (SPS) | 3.37 | Moderate |
| 3       | Facilities-Library/SPS/Clinic/Counseling Centre | 3.64 | Moderate |
| 4       | Support Facilities/Cafe/Banks/Clinic/Bookstore/Others | 3.34 | Moderate |
| OVERALL |             | 3.46 | Moderate |
4. Discussion and Conclusion

The overall results from Table 1 show that the satisfaction level among international undergraduates towards the services provided by the support staff at UTM is at a moderate level. This result indicates that the international undergraduates are satisfied with the services provided by UTM. Based on this finding, it is not wrong to say that UTM should not underestimate the magnitude and function of their support staff because they play a major role in the running of almost everything in the university. Without them an office can be so chaotic and no one would be able to work nearly as efficiently as they in handling all the international undergraduates especially at the information counter. The chaos created mostly by the international undergraduates especially in the early morning hour could be overwhelming without their help. The function of a support staff is undeniably important and indirectly reflects the Malaysian work ethic and culture. How the support staff attitude affects the international undergraduates and the culture is something that should be looked into seriously by the UTM authority in maintaining its service management quality in attracting more international undergraduates applying for enrolment in the university in the near future. In reality, a number of cultural exchanges occur during the interaction period between the support staff and the international undergraduates. Therefore, understanding each culture during this exchange is extremely vital. It is important to recognize that this intense focus on learning a new culture is not limited to the international undergraduates, but also the support staff. Consequently, in the end it is the responsibility of the UTM management team to provide trainings for the support staff, in order for them to be aware of the different attitude and work culture of other countries. Another consideration is, an orientation program that shows some ‘do’s’ and ‘don’ts’ in the Malaysia context should be included in the international undergraduates orientation program or the introduction of a subject related to the Malaysian work ethic and culture should be recognized as a compulsory subject so that the international undergraduates would understand not only the university system but also its people and the culture that integrates with it. Even though the results of this study, show that the international undergraduates’ perception towards services in UTM is at a moderate level, another vital point that should be considered in order to upgrade the service quality in UTM is the implementation of a collaborative work among support staff. The idea of collaborative work occurs when an entire office including the support staff is organized into highly effective collaborative teams. This will work well when the focus is on continuous improvement to ensure that every goal is achieved especially towards satisfying ‘customer’s need’. No matter what the task of the support staff is, collaborative culture should be practice due to the reason that support staff always develop, plan and implements certain management policy. Therefore, they should be given proper training such as customer service training, time management and technology skills. Special attention should also be given to training in programs that help expedite the daily tasks of support staff especially when dealing with international undergraduates.

Results from Table 2 also show that the facilities provided by UTM are at a moderate level. Majority of the international undergraduates are satisfied with the facilities in UTM. These facilities include the library, clinic, bank, cafe or even the counselling centre. Ojo [11] stated that customers’ satisfaction has a positive relationship with service quality which affects customer satisfaction. Similarly, Brady and Robertson [12] say that the service quality is not only important but at the same time will help an organization to create the necessary competitive advantage compared to other organization. Relatively, innovative and world class facilities are some of the factors that can attract an international undergraduate when choosing an institution to further their study. Most people may think that when identifying an institution, only the subject/course offered or location of the institution becomes the main criteria of an individual. Many people forget that facility such as the opening hours of the library, the books, articles and online facilities are important to some applicants. Library can be a significant place for international undergraduates, because here assignments or discussion are mainly done and here is a place where students learn to move independently beyond lecture and textbook [13]. On the other hand, for those who want to be doing things during their free time, sports facilities are also important in their selections. Generally, when selecting a higher learning institution, students do consider not just the academic related facilities but also the social-related facilities. There are many different places for them to look for this information. The institution prospectus, handbooks and websites are the most common place to search. For that reason, UTM will have to make certain that the information related to its website is always current and up-to date because in this modern technology era, news that is posted via the website may affect the students intake especially among international
applicants. As stated by Schiffman and Kanuk [14], an individual would go through an assessment process before he finally accepts and makes his final decision.

Yahaya [15] suggests that effective group counselling can also give more advantages to students in terms of provided opportunity for constructive change and at the same time help them to improve their academic performance. The results of this study show that support facilities including counselling centre provided to the international undergraduates in UTM environment is at a moderate level (Table 2). This study is supported by Cubillo et al., [16] who believe that the measurement on the satisfaction level and quality services provided are totally based on the students’ perception. While students’ decision making processes are always based on the external factor of the institutions, personal reasons and also their previous experiences toward the service provided to them may affect their satisfaction level. Caceres and Paparoidamis [17] strongly think that the relationship between satisfaction, trust and customer commitment towards a product or service provided can help the institutions to achieve its competitive advantages in the marketplace. Sometimes ‘words of mouth’ do provide free advertising to the university in maintaining its competitiveness. Moreover, Koskela [18] believes that the customer-server relationship can help to strengthen relationship between customer, server and also services firm. Customer will become stronger and form the loyalty as long as the services standard exceeds industry norms [19]. Koskela [18] concludes that perceived service quality is viewed as a key determinant of satisfaction with potential consequences for repeat purchase. Subsequently, it is assumed that when international undergraduates become comfortable in one environment, the tendency for them to remain at the same place for a longer period may take place. This means when they have a positive perception of UTM, the probability of them pursuing their higher degree at the same institution is also higher.

In conclusion, the international undergraduates’ perception towards the service quality make available by UTM is at a moderate level. However, in achieving higher success, more attention should be focused on the improvement of the service quality. At the same time, UTM needs to take a conscious strategic decision to align its service quality as it is the best way to cope with customer desire, need and expectation. Baure et al., [20] state that “product developers, manufacturers, and vendors have their own priorities as stakeholders, but they all share the expectation that product cannot be competitive in the market unless it satisfies customer needs” (p.52).

**Acknowledgements**

The author would like to express appreciation to the Ministry of Higher Education and UTM. This study was supported by the following grant sponsors; Research University Grant (GUP) Funding, Vote No. Q.J130000.7141.00J92.

**References**

[1] Timm, P. R. Customer Service : Career Success Through Customer Satisfaction. New Jersey, Prentice-Hall, Inc. 1998.
[2] Stinnett, B. Think Like Your Customer : A Winning Strategy to Maximize Sales by Understanding How and Why Your Customer Buy. New York, McGraw-Hill, 2005.
[3] Chai Kah-Hin, Yi Ding, & Yufeng Xing. Quality and Customer Satisfaction Spillovers in the Mobile Phone Industry Service Science,1(2): 2009, 93-106.
[4] Abouchedid, K., & Nasser, R. Assuring Quality Service In Higher Education: Registration And Advising Attitudes In A Private University In Lebanon. Quality Assurance in Education, 10(4), 2002, 198–206.
[5] Peterson, M. W., & Augustine, C. H. External and Internal Influences on Institutional Approach to Student Assessment. Research in Higher Education, 41(4), 2000, 443–479.
[6] Cronin, J.J., Brady, M.K. & Hult, G.T.M. Assessing The Effects Of Quality, Value, And Customer Satisfaction On Consumer Behavioural Intentions In Service Environments. Journal of Retailing, 76(2): 2000, 193-218.
[7] Ranaweera, C. & Neely, A. Some Moderating effect on the Service Quality-Customer Retention Link. Internatinal Journal of Operations & Production Management., 23(2), 2003, 230-248.
[8] Hill, Y., Lomas, L. MacGregor, J. “Students’ Perceptions of Quality in Higher Education”, Quality Assurance in Education, 11(1): 2003, 15-20.
[9] Parasuraman, A., Zeithaml, V.A. & Berry, L.L. “A Conceptual Model Of Service Quality And Its Implications For Future Research”, Journal of Marketing, 49(4): 1985, 41-50.
[10] Abdul Rahman, H., Khalifah, Z., Arif, S., Sirin, R., Zainal Abidin, H., & Sulong, N. Kajian Mengenai Tahap Kualiti Pendidikan Tinggi dari Perspektif Pelajar di Universiti Teknologi MAIaysia. Vot 75017, 2004.
[11] Ojo, O., "The Relationship Between Service Quality and Customer Satisfaction in the Telecommunication Industry Evidence From Negeria." BRAND. Board Research in Accounting, Negotiation and Distribution 1(1): 2010, 88-100.

[12] Brady, M. K. & Robertson, C. J. Searching For A Consensus On The Antecedent Role Of Service Quality And Satisfaction: An Exploratory Cross-National Study. *Journal of Business Research*, 51(1), 2001, 53–60.

[13] Udoumoh, C. N. & Okoro, C. C., "The Effect of Library Policies on Overdue Materials in University Libraries in the South-South Zone, Nigeria." Library Philosophy and Practice, 2007.

[14] Schiffman, L. G., & Kanuk, L. L. *Consumer Behavior*. International. Inc.: Prentice-Hall, 2000.

[15] Yahaya, L. A. "Effects of Group Counselling and SQ3R on the Study Habits of Secondary School Students in Ilorin." *Journal of Educational Research and Development* 3(1): 2004, 125-136.

[16] Cubillo, J. M., Sanchez, J. & Cervino, J. International Students’ Decision-Making Process, *International Journal of Educational Management*, 20(2), 2006, 101-115.

[17] Caceres, C.R., & Paparoidamis, N.G., Service Quality, Relationship Satisfaction, Trust, Commitment and Business-to-Business Loyalty. *European Journal of Marketing*. 41(7/8):2005, 836-867

[18] Koskela, H., Customer Satisfaction and Loyalty in After Sales Service: Modes of Care in Telecommunications Systems Delivery. *HUT Industry Management and Work and Organizational Psychology*. Report No. 21, 2002.

[19] Page, A.R., Customer Loyalty and LAN Failure: A Positive Relationship. *Performance Dimensions International (PDi)*. 2002, 1-11.

[20] Bauer, S.M., Lane, J.P., Stone, V.I., & Unnikrishnan, N., The Voice of the Customer-Part 2: Benchmarking Battery Chargers against the Consumer’s Ideal Product. *Asset Technology* 1998(10):1998, 51-50.

[21] Tseng, M.L. (2010). An assessment of cause and effect decision making model for firm environmental knowledge management capacities in uncertainty. Environmental Monitoring and Assessment161, 549-564