Applying TQM Practices and Service Quality in Higher Education

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ABSTRACT

Higher education sector has faced new paradigm of perspective in total quality management and service quality. Students are a main focus in higher education whereas they were assumed as customer focus because their satisfaction will be measured in order to ensure the quality is constantly improved. Thus, the implementation of TQM in higher education will be enhance to increasing of student satisfaction due to its successfulness in manufacturing. Hence, by applying TQM in higher education will lead to new environment in which students will feel satisfied and higher education able to serve the service as expected by student. Hence, this study is to explore total quality management practices in higher education towards service quality in context public university.

INTRODUCTION

The implementation of total quality management (TQM) in manufacturing considered as one of major development mainly in western countries. Thus, many organization have embrace the concept of TQM in order to make their business runs smoothly. Generally, TQM known as management philosophy because it pursue for attaining quality, with the quality being a continuous improvement that associated with customers’ satisfaction with the service they received [1][2][3][4][5][6].

To improve performance, a number of universities have aware the benefit of TQM. Thus, TQM is practical process-based approach is attractive to many higher education administrators who find themselves increasingly challenged to offer a higher quality ‘product’ at more affordable price [7]. Meanwhile, TQM is widely practiced in higher education, and the Malcom Baldrige National Quality Award, an internationally-recognized guide of modern quality management, now has criteria for educational sector [8]. As mentioned by Ramona, Sower and Jaideep [9] TQM can be applied in higher education but it must be modified to fully recognize some unique prospect of education because of education service industry is no visible, tangible “product”, per se (as in manufacturing) and it serves multiple customers as main stakeholder.

Service quality as proposed by Zeithaml et al. [10], is to provide different perception of customer expectation on service delivery. Meanwhile, Nitecki et al. [11] defined that service quality as “meeting or exceeding customer expectation or the difference between customer perception and expectations of service. Parasuraman et al. [12], defined service quality as comparative function between customer expectations between actual service performance. It can be synthesis that serving quality is to fulfil customer expectation and needs in order to keep customer feel satisfied either during or after receive the service. From past studies, the result showed that service quality has positive correlation with customer satisfaction [13][14][15][16][17][18]. Besides that, service quality also was proven giving an effect the trust and loyalty of customer [19][20].

Hence, in context of higher education, service quality becomes as crucial due to the existence of competition among universities, internationalization spirit, higher expectation towards higher education institution and an increase in full fee payment and the classification of education as a marketable service [21].

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university, student are main customer of universities [22][23][24][25]. Service quality in higher education as student’s overall evaluation of services received as part of their educational experience [26]. However Hill [22] in his study reported that teaching, course content, teaching quality, teaching methods, personal contract with academic staff, feedback, student involvement, joint consultation, library service, financial service ant etc. are key component of service quality in higher education. On the other hand, Owlia and Aspinwall [27], proposed a framework for quality measurement in higher education, emphasizing on the teaching aspects of engineering education which involved four dimensions: academic resources, competence, attitude and content.

Problem Statement:
The applied of total quality management in education industry will be enhanced good performance in committee work, which is need to invest more time and no direct professional benefit for the faculty members individually [2]. Another stance, TQM also could be inability to define the outcomes and standards in an educational setting, then making the total quality unmeasurable and groundless [28][29]. As mentioned by Babson College [30], the implementation of total quality management (TQM) will taking time to plan, organize and implement in order to achieve targeted performance.

Generally the practices of TQM just focused on industries based whereas involved “market-oriented” but lack attention in an educational based. Hence, the application of total quality management in an education needs to focus because of the quality of education is becoming crucial whereas the output and outcomes of the system can be resulted direct impact on the quality of their employer organizations. Thus, quality management it is originally developed for business and needs to be adapted to suit in educational institution. According to Sayed [31] has mentioned that because of the intangible results of education, an objective measurement of quality is difficult or impossible, and another view it is an essential of quality improvement to be monitored [28].

Discussing about serving quality in education, institute of higher education monitor the quality of their services and commit to continuous improvement in an effort to responds towards their customers’ needs. Hence, the identification of the dimensions, which signal quality and the achievement of excellence in the higher education have emerged then still be as key issues facing the academia. Besides that, in higher education, the research literature on service quality has indeed swelled enormously over past two decades [32][27][33][34].

In developed countries such as United States, many research has been conducted related to service quality in higher education [35][36][37], while United Kingdom [22][38][39][40], Australia [41][16], Canada [42] and New Zealand [43] but it still lack of research or discussion about service quality of higher education in the context of developing countries.

From above statements showed that the implementation of total quality management practices has affected towards on service quality in higher education whereas students became an indicator to predict their satisfactions and expectation.

Research Objectives:
This study was conducted with the followed objectives:
1) To examine the relationship of total quality management practices with service quality in higher education.
2) To explore the students’ satisfaction and expectation towards service quality in public university.

Literature Review:
Total Quality Management (TQM):
Dixit and Garg [44] in their study has shown that customer focus or satisfaction supposed to be as prime objective for various industries in order to achieve total quality management. Hence, all factors must be used systematically to achieve total quality management and it can be efficiently by using a model that set up by these authors which having four phases to implement TQM.

Furthermore, previous study has been conducted at California State University, the survey’s result shown that TQM is frequently practiced among California’s public universities than it was previously reported. The evidence appears more than half (55%) of the universities surveyed have indicated using TQM concepts in one form or another. Besides that, the idea of starting TQM is more on the business side of universities because of its relatively easier. Thus, survey result tend to enforce this idea and suggest that most universities to implement TQM should start with their administrative level where processes are more similar to business processes in industry. 94% of the universities using TQM have reported showed some improvement in various area such as customer service, whereas the customer focus approach have increased the awareness about students’ needs. In addition, TQM also contribute to continuous improvement and streamlining financial, purchasing, admissions and administrative processes [45].

Bernhardt et al. [46] in their study showed that customer satisfaction of 472 restaurants are related to restaurant profits nine month later. Whilst, Anderson et al. [47] focused on customer perceptions of quality that are positively gain the return of investment. Hence, customer satisfaction is effective in quality management and also important during implementation of total quality management as proposed by Eklof and Westlund [48].
As mentioned by Kanji and Malek [49], total quality management has proven its successfulness in manufacturing then encourage US higher education to adopt these practices to develop their education sector. Hence, the introduction or applying total quality management practice in higher education has offered as solution to enhance tertiary education institution be more relevant to the needs of society [50][51].

Study has been conducted by Lee and Yeap [52], they are proposing TQM model for teaching and learning due to awareness towards the importance of TQM concept in improving quality in manufacturing. Thus, the authors have developed a TQM model in order to improving the quality in education mainly in teaching and learning process whereas the model was adapted from industrial TQM application. Through the proposed theoretical model, student were represented as immediate and internal customer are being transformed into a valuable man workforce for the future external customer (referred as employers of university graduates). As internal customer (students) they still have unprocessed skills initially, students may not able to specifically outline how teaching and learning practices should be performed. Hence, students were treated as co-workers guided by lecturers in improving teaching and learning process and were asked for student feedback in order to enhance for any continuous improvement efforts. It may resulted the quality of teaching and learning will improve steadily. Furthermore, in this study stated that the output of the product is not a student but the education of the students whereas it required student to take an active role in the development of the education and develop it for lifelong learning. The proposed model also showed the feedback from students and employers that will enhance to continuous improvement effort in refining, designing and redesigning the processes. Therefore, the proposed theoretical model were shown as follow:

![Diagram 1: TQM model applied in teaching and learning process. Source: Adopted from Lee and Yang (2003).](image)

Applying total quality management practices in education institution, the aims is to meet the needs and wants of its customers (referred to students). Thus, excellent organization is required to keep close to the customer [53] and have an obsession with quality. Fulfilling customer needs would enhance to growth and long-term survival for an organization. Besides that, TQM organization must crafting the strategies for meeting customer’s requirements.

**Service Quality:**

Past scholars has proposed that marketing concept will enhance to satisfaction towards on customer and organizational purposes then has been applied in university [54][55][56]. The university had adopted a marketing approach they are able to attract and retained top quality students. Hence, higher education sector has applied concept of service quality and customer satisfaction has moving the universities closer to their market needs [57][58][59].

Past study has been conducted by Qin and Prybutok [60], showed that service quality in fast food restaurant has indicated dimension that proposed by Parasuraman et al. [61]: tangibles, reliability, responsiveness, empathy and assurance were significant. Thus, service quality and food quality are determinants towards customers’ satisfaction. In this study, the researchers has employed structural equation modelling (SEM) in order to estimate the relationship among service quality, customer satisfaction and behavioural intentions.

Whilst, Angell, Hefferman and Megicks [62], conducted the service quality study on postgraduate students by using an online survey. Findings on this study, showed about 20 service attribute were derived from qualitative stage. Hence, four service factors emerged such as academic, leisure, industry link and cost. By using the setting of importance-performance analysis (IPA) in a UK university, it found that the academic and industry link factors of service quality are most critical to postgraduates. Hence, this study conclude that IPA is an appropriate tool for measuring service quality in postgraduate education.

Past literature in service quality, as proposed by Henning-Thurau et al., [63][64][65], referred higher education are service organizations. By maintaining the relationship with student who are customer focus can provide long-term benefit to the higher education. Furthermore, several research has been conducted to develop
and analyse integrated models in setting of tertiary education level. The finding of the study found that students’ satisfaction and students’ loyalty must be centred and the final outcome mostly of these incorporated to service quality model in higher education. Thus, service quality is a form of attitude and long-run overall evaluation, satisfaction is a transaction specific measure [66][67][68]. Moreover, perceived service quality is the key determinant of satisfaction [69][70].

Study about service quality in public sector rarely discussed rather than private sector due to its effectiveness in that sector. Thus, the study of service quality in the Malaysian public service sector has been conducted in public sector because of the increasingly awareness of the benefits from service quality programs [71]. The study has showed the result of the relationships among service quality, service performance and customer satisfaction are correlated to each other. This study has employed administered questionnaires and were analyse through Pearson correlation in order to examine the relationship among the service quality dimensions as selected by researchers. Besides that, structural equation model (SEM) also employed by researcher in this study to test the relationship between observed and potential variables. Hence, this study stressed the needs for customer-oriented approaches that focusing on improvement of public service quality. Furthermore, employees also responsible in improving customer satisfaction and service performance. Thus, employee courtesy would enhance more favourable perceptions of service quality and satisfaction among customers [72][73][74].

Previous study on service quality in higher education in Malaysia according to Abdullah [75], to measure student satisfaction the result of his study showed that assurance, empathy and tangible have positively impact on overall students’ satisfactions, whereas reliability and responsiveness have significant influence. Another study of measuring students’ satisfaction showed similar result whereas based on the study, Malaysian students were satisfied on seven factors of educational service quality such as teaching, management support, library, computer labs, accommodation, sports and medical facilities. But they are felt dissatisfied in transportation, class room and prayer facilities [76]. But, another study that conducted on Turkish Cypriot and Turkish student from Turkey concerning the travel agencies in Northern Cyprus has showed different result whereas students felt dissatisfied on tangibles, assurance, reliability and empathy. They satisfied towards responsiveness of the travel agencies quality service [77].

Methodology:
This study has employed quantitative approached as mentioned by Sugiyono [78], quantitative approach is to test theories through the independent variable and dependent variable and analysed the data with the statistical tool. Questionnaires will be distribute by using random sampling to undergraduate students in public universities. After all data collected, the questionnaires will be analysed by using Statistical Package for Social Sciences (SPSS).

Conclusion:
As a conclusion the study of total quality management in higher education need to give an attention mainly in context of Malaysian public university in order to enhance student satisfaction during they are pursuing their study. Although total quality management frequently practiced in manufacturing, but the implementation of TQM in higher learning institution may result new paradigm in education. Hence, the quality of teaching and management as well will be improve. Furthermore, it also encourage the positive interaction between students through their participation with their lecturer instead. In addition, the adoption of TQM practices also enhanced to continuous improvement to be more effective and efficient. Indeed, service quality is an indicator to measure student satisfaction through several dimension as proposed by Parasuraman et al., [61] is SERVQUAL dimensions: tangibility, reliability, responsiveness, assurance and empathy.

REFERENCES


