

Education Management: Perception of TQM and Its Effect on Attractiveness of Place of Study

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Abstract

This study evaluates the general perception of post-graduate students on TQM in Malaysian universities and its effect on attractiveness of place of study. The objective is to examine two components of TQM, i.e. student needs focus and quality of service, and their impact on performance, defined as the attractiveness of place of study. A survey was carried out among 115 students in three Malaysian universities. Findings indicate that quality of service and student needs focus positively affect attractiveness of place of study. The current study may serve as a reference for Malaysian universities to plan their marketing strategies in terms of meeting student needs and achieving continuous improvement.

Keywords: *total quality management, education, Malaysia*

Introduction

Total quality management (TQM) has been adopted as a management paradigm by many organizations worldwide. In recent decades, TQM was introduced in the service

industry and since then, many businesses have realized that TQM can be just as effective in services as in manufacturing.

The quality management models practiced by the business world have also been adapted and applied to the education sector. By applying the consumer behavior theory in education, this paper regards students as consumers purchasing the services provided by the industry. Thus, students have the right to obtain the best quality education. It is important for education providers to improve quality of service by understanding customer needs. In order to understand their needs, it is necessary to identify the quality attributes embraced by the customers, since people perceive quality differently.

The Ministry of Education has clearly stated a vision to make Malaysia a center of learning and educational excellence by the year 2020. Hence, the management of quality in education institutions has gained momentum very rapidly in the last few years. Higher educational institutions play an important role in the competitive marketplace. In this work, we explore the picture of TQM from students' perspective and study the reasons why they view a particular place of study attractive, and vice versa.

This study aims to analyze students' general perception of TQM and its effect on attractiveness of place of study. The two independent variables are student needs focus and the quality of services provided by different educational institutions. The current study is useful in that it enables higher educational institutions to evaluate their performance and formulate strategies for the future. Findings of the study can be used as a reference for these institutions to plan their marketing strategies and help their internal TQM machinery in terms of meeting student needs and achieving continuous

improvement.

Quality and TQM

Quality has a variety of ambiguous and contradictory meanings. Many quality gurus present different theories of quality and quality management. According to Juran (1988), quality is fitness for use. Juran (1988) also states that quality consists of those product features which meet the needs of the customers and thereby provide product satisfaction. Crosby (1994) is well noted for his four “absolutes to quality” which may be summarized as follows:

- (i) Quality has to be defined as conformance to requirements, not as goodness or excellence.
- (ii) The system for causing quality is prevention, not appraisal.
- (iii) The performance standard must be Zero Defects, not ‘that’s close enough’.
- (iv) The measurement of quality is the price of non-conformance, not indices.

Ishikawa (1985, p.45) has this to say about quality:

Narrowly interpreted, quality means quality of product. Broadly interpreted, quality means quality of work, quality of service, quality of information, quality of process, quality of division, quality of people, including workers, engineers, managers and executives, quality of system, quality of company, quality of objectives etc.

Townshend (1990, p. 4-6) talks about the “dual nature of quality” namely, there are two sub-concepts: “quality in fact” and “quality in perception”. He explains “quality in fact” as “the provider of goods and services who through dint of hard work and capital expenditures performs up to its own specifications achieves quality in fact.” “Quality in perception” is defined as the “subjective quality as the customer sees it. A product or

service achieves quality in perception when meets the customer's expectations".

Deming (1986, p.49) does not define quality directly but in one of his popular fourteen points for management says:

...Improve constantly and forever the system of production and service.... Quality must be built in at the design stage.... It may be too late, once plans are on their way.... There must be continual improvement in test methods and ever better understanding of the customer's needs and of the way he uses and misuses a product.... The quality desired starts with the intent, which is fixed by management. The intent must be translated into plans, specifications, tests, in an attempt to deliver to the customer the quality intended, all of which are management's responsibility.

The concepts of quality based on the above definitions reveal two important dimensions: customer satisfaction and continuous improvement.

Total quality management (TQM) is a well-known approach by organizations that strive to make quality assurance as their business culture. There are also various definitions by different writers. Oakland as quoted by Berry (1996) defines TQM as:

... an approach to improving the effectiveness and flexibility of business as a whole. It is essentially a way of organizing and involving the whole organization; every department, every activity, every single person at every level.

By the definition, it is obvious that TQM is applicable to all types of business, and it requires total involvement of all parties which have either direct or indirect contact within or outside the organization. In the context of education, Harris (in Kwan, 1996) defines three common approaches to TQM, namely, customer focus, staff focus, and service agreement stance.

The theory of TQM rests on two tenets (Weaver, 1992). The first and most important is that customers are vital to the operation of the organization. Without customers there is no

business definitely, and without business there is no organization. Consequently, it should be the primary aim of any group to keep customers satisfied by providing them with quality product (Deming, 1986). The second tenet is that management needs to listen to nontraditional sources of information in order to institute quality. This is based on the belief that employees want to do quality work, which will be possible if managers listen to them and create a workplace based on their ideas (Deming, 1986).

TQM in Education

The quality philosophy and principles have become central to international educational reform efforts in nations such as Canada, Australia, Japan, the United States and the United Kingdom (Weller, 1996). The attraction of TQM philosophy is mainly because of its successful record in the world of business in producing quality products and services. In fact, TQM provides a structured and comprehensive delivery system which may lead improvements in education (Weller and Hartley, 1994).

TQM recognizes students as both customers and employees of the education system (Weaver, 1992). Therefore the roles of students must be recognized by involving them in their own learning process. Furthermore, students' evaluation in TQM is very important and should be carried out throughout their studies so that corrective measures may be enforced continuously (Weaver, 1992).

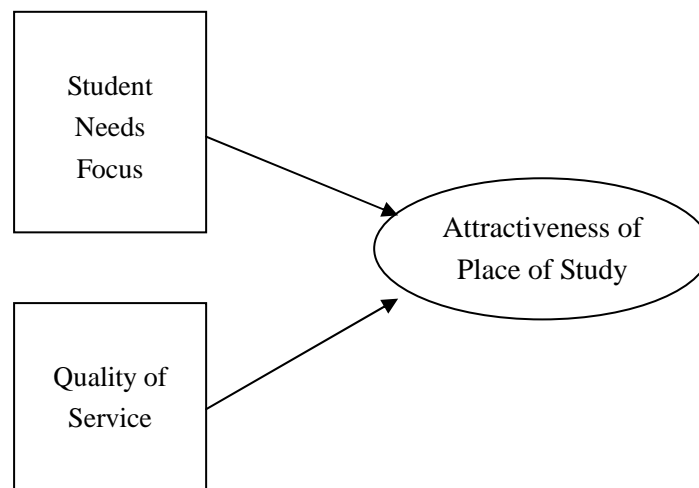
Research Methodology

Primary data were collected using self-administered questionnaires distributed to 150 post-graduate students studying in three local universities: UM (University of Malaya), UIA (Universiti Islam Antarabangsa) and UPM (Universiti Putra Malaysia). The

questionnaire comprised four sections, ie. demography of respondents, perception on the institution's quality of service, respondents' satisfaction according to their needs focus, and attractiveness of place of study. Sections 2 and 3 employed a 5-point Likert-type scale, while Section 4 required the respondents to rank five educational institutions in terms of their attractiveness as places of study. These five are UM, UPM, UIA, Universiti Sains Malaysia (USM) and Universiti Teknologi Malaysia (UTM).

Figure 1 shows the theoretical framework linking independent and dependent variables in the study. The two independent variables are discussed further as follows. Items measuring them are developed based on the works of Kwan (1996) and Lagrosen (1997), as well as separate interviews with a group of students and academicians. The items are listed in Tables 1 and 2.

Figure 1 Education TQM Model



Student needs focus

The student is the primary judge of quality. Perceptions of value and satisfaction are influenced by many factors throughout the student's overall purchase, ownership, and

service experiences. In order to complete this duty, a university's efforts need to extend well beyond merely meeting specifications, reducing defects and errors, or resolving complaints. It must also develop new ways of enhancing customer relationship, and recognize that internal customers are as important in assuring quality as external customers who enjoy the services provided.

Quality of service

Quality may be measured using constructs such as enhancing value to the customer through new and improved products and services; reducing errors, defects, waste, and their related costs; increasing productivity and effectiveness in the use of all resources; as well as improving responsiveness and cycle time performance.

Table 1 Statements Measuring Student Needs Focus

Statement \ Institution	UM	UPM	USM	UTM	UIA
1. Opens new career opportunities. 2. Improves personal development and educational experience. 3. Gives opportunity for future salary increase. 4. Potential to network with industry players. 5. Willing to recognize my previous qualifications. 6. Has a reputation for being responsive to student needs. 7. Offers flexible entry throughout the year. 8. Provides support and assistance to international students. 9. Offers scholarships for needy students. 10. Offers medical, accommodation and other student facilities.					

Table 2 Statements Measuring Quality of Service

Statement	Institution	UM	UPM	USM	UTM	UIA
1. Has a reputation for quality of knowledge culture. 2. Has a reputation for quality and expertise of its staff. 3. Offers qualifications that are recognized by industry players. 4. Offers a broad range of courses and programs. 5. Makes use of the latest information technology. 6. Is well-known for innovation in research and teaching. 7. Has a good library facility. 8. Is noted for effective communication with all stakeholders. 9. Offers adequate tutorial and consultation. 10. Offers courses which are relevant to industries.						

Research Findings

In the end, there were 115 usable responses, yielding a 76.7% response rate. There were 55 female students (47.8%) while the rest were male. Most of the respondents were above 20, with 56.5% aged between 20 -29. This was followed by the age group 30 -39 years (36.5%), 40-49 years (4.3%), less than 20 (1.7%), and the age above 50 (0.9%).

The majority of respondents were single ie. 69 students (60%), while 18 (15.7%) were married without children, 27 (23.5%) married and have children, and 1 (0.9%) was divorced. There were 66 (57.4%) local students, and 49 (42.6%) international students. Most of the respondents were full-time students ie. 74 (64.3%), followed by salaried employees 16 (13.9%), professional 9 (7.8%), manager 8 (7.0%), senior manager 3 (2.6%), and business owner 3 (2.6%). In terms of income, 44 (38.3%) received less than RM1000 per month. Comparatively, about 42 (35.7%) earned more than RM3000 per

month, and 29 (25.2%) with monthly income level RM1000-2999.

Before proceeding with further tests, reliability of the scales measuring continuous variables was ascertained. Cronbach alpha for the student needs focus scale is 0.9525 and for quality of services 0.9254, which indicate very satisfactory levels of reliability.

Effect of Demographic Factors

Mean scores of each statement were analysed to compare the perception of different groups of respondents towards quality of service, student needs focus, as well as attractiveness of place of study. A low mean score implies a more positive perception; on the other hand, a higher score means a less positive perception.

Results suggest that gender and nationality have a significant effect on quality of service. Female respondents (mean=108.78) appear to be more satisfied than males (118.65) with the quality of services provided by the institutions, at $p=0.04$. In terms of nationality, local students (110.90) are more satisfied than foreigners (118.0), also at $p=0.04$.

Quality of Service in Each University

In general students perceive UM to offer the best quality of services compared to the other four institutions. UM scores the lowest mean for all ten statements, which suggests that respondents are most satisfied with UM in all constructs of quality used in the study. The second best scorer is UPM, which also performs consistently across all ten statements.

Further analysis shows that UM's main strengths are having a reputation for quality of knowledge culture (Statement 1) and offering recognized qualifications (Statement 3)

while its major weakness is the effectiveness of communication with all stakeholders (Statement 8). Interestingly this also appears to be the greatest weakness of all five universities involved in the study.

Student Needs Focus

Respondents generally agree that UM is the best scorer in all ten statements measuring the said variable, followed by UPM. Students perceive UM's primary strengths to be improving personal development and educational experience (Statement 2) as well as opening new career opportunities (Statement 1), while the major weaknesses are lack of flexible entry throughout the year (Statement 7) and scholarships (Statement 9). Again these are both the greatest weaknesses observed in all five institutions.

Ranking the Attractiveness of Place of Study

The respondents were asked to rank five universities based on their general perception of its attractiveness as a place of study. The result shows UM (mean 1.5739) is perceived among respondents as the most attractive place of study followed by the other four universities ie. UPM (2.1304), USM (2.200), UTM (2.4087), UIA (2.5391). Frequency analysis shows that 51.3% of respondents consider UM as very attractive. In contrast, UPM is considered very attractive by 17.4%, UIA 13.9%, 12.2% UTM, and USM 11.3%.

Relationship between Quality of Service/Student Needs Focus and Ranking

Results of Pearson Correlation test indicate that there is a significant relationship between quality of service and attractiveness of place of study ($R=0.324$, $p=0.000$). The relationship between student needs focus and ranking is also found to be significant

($R=0.414$, $p=0.000$). The positive sign in both tests affirm that a university's rank tends to improve with better services and focus on its students' needs.

Conclusion

The study aimed to analyze students' general perception of TQM and its effect on attractiveness of place of study. The study sought to examine student needs focus, and quality of service provided by Malaysian universities, as well as the effect of the two variables on the ranking of the institutions.

Overall, the findings have given an encouraging feedback on the implementation of TQM in Malaysian educational institutions. The study provides empirical evidence that can help institutions to better understand the need of TQM and how TQM can improve institutional performance. The findings show that students place a high importance on an institution's quality performance. Thus more effort should be taken to enhance the practice of TQM in every component of the institution, and embed it as an organizational culture.

Institutions have an important role to play in determining the success of TQM in the education system, besides providing training and courses for staff. Constant monitoring should be carried out on its progress and problems encountered as these might hinder its implementation. Commitment from every level of the organization is essential for a successful TQM implementation. Last but not least, customer participation is also important as it provides measures of the actual performance, which completes the feedback loop in the strategic management process.

Further research is needed for better understanding of the subject matter. The instrument

may be further improved by covering all elements of the TQM and institutional performance. The sample should be increased, and extended to other universities to get more in-depth information. Also in this study, only students are surveyed when in fact academics, supporting staff and parents are also stakeholders in an education system. Therefore, to get a clearer and more accurate picture of TQM implementation, these groups should also be included in future studies.

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