Malaysian Journal of Quality Vol.1

Does Quality Differentiation Strategies Enhance Competitive Advantage And Customer Satisfaction? A Strategic Management Perspective

Towards Building A Learning Organization In UiTM: An Option

Strategic Decision Processes Among Senior Executives Of SEDC Companies: A Cognitive Diversity Perspective

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A Critical Look At The Various Methods Of Teaching Law

A Roadmap For The Implementation Of ISO 9001:2000 In Academia: 9 Steps To Certification By FSPPP, UiTM

Malaysian Journal of Quality

Edited by Assoc. Prof. Dr Roziah Mohd Janor Assoc. Prof. Dr Mohd Ismail Ramli Assoc. Prof. Dr Wan Jaafar Wan Endut



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EDITORIAL

This inaugural issue of the Malaysian Journal of Quality focuses on the theme, "Quality Initiative: From Strategiy to Implementation". We are pleased to report that we received a number of excellent papers for this inaugural issue. Hence, we are publishing the papers in two parts: Part I in December 2005 (English) and Part II in February 2006 (Malay). The journal envisions to be an official platform for documenting any quality initiatives that has proven workable and of value to any organisational community or society at large. The journal will provide opportunities for academicians and professionals from various fields to interact via published work with members inside and outside their own particular disciplines.

This issue contains seven papers, all from academics from various local universities, but their papers represent findings from study done both inside and outside of universities. The first paper looks at whether quality differentiation strategies gives impact on companies competitive advantage and its' customer satisfaction. The second author proposed an alternative way of building a learning organisation by providing a case study done in a local university. While the third paper provides a finding from a case study that promotes the idea that diverse cognitive ability amongst its executive results in better financial performance.

In focusing on the theme of quality initiatives in the university environment, the following four papers revolves around issues on how to improve teaching, learning and management system in universities. The fourth paper touches on the idea of higher education as a service and it defines the concept of an excellent lecturer from students' perspectives by comparing findings from a university in the United Kingdom to that in Malaysia. It reveals that the most important attributes of an excellent lecturer are competence, communication, reliability, responsiveness, and understanding. The fifth paper shares a modest way of monitoring and improving student performance in a Medical program that includes student feedback, examination performance and question analysis. The sixth paper critically looks at various methods of teaching law and its contending issue between teaching law to non-law students and teaching full fledged law students, where the author concludes that there is no superior method of teaching law but suggests that the effective teaching method rests more on the self of the lecturer rather than the method and his/her ability to create balance between fulfilling the need to pass exams and to develop legal skills. Finally the seventh paper documents a roadmap that consists of nine steps that a faculty has undertaken in implementing the ISO 9001:2000 guidelines in improving its management system.

We hope that this issue of the Malaysian Journal of Quality will be useful in efforts to better understand how quality initiatives can promote impeccable improvement in any organisational setting.

Roziah Mohd Janor *Chief Editor* Mohd Ismail Ramli Wan Jaafar Wan Endut *Editors*

A ROADMAP FOR THE IMPLEMENTATION OF ISO 9001:2000 IN ACADEMIA: 9 STEPS TO CERTIFICATION BY FSPPP, UITM.

Maniam Kaliannan Jasmine Ahmad

ABSTRACT. The environment in which universities operate is rapidly becoming demanding, competitive and global. Today, academia faces much the same situation manufacturing and service companies 'in the real world' have been encountering for decades. It seems that only with explicit quality assurance and the ability to operate in a profitable manner will universities be able to survive in the academic market. One of the ways to meet the increasing need for a global quality assurance in academia is to design, implement and maintain quality systems based on the internationally accepted ISO 9000 standards. The Faculty of Administrative Science and Policy Studies (FSPPP), UiTM was awarded ISO 9001: 2000 certification on 11 July 2004. It accomplished this as quickly as possible, spending only six months and less. This paper reveals the timeline and 9 steps FSPPP followed to accomplish its objective. The steps include: 1. Management Commitment, 2. Appointment of Management Representative, 3. Establishment of the ISO 9001: 2000 Quality Committee, 4. Implementation Schedule, 5. Draft Quality Documents, 6. Conduct Internal Audit, 7. Respond To Findings, 8. LRQA Adequacy Audit (Stage One) and 9. LRQA Compliance Audit (Stage Two).

KEYWORDS ISO 9001: 2000, Quality Management System (QMS), Quality Assurance (QS).

INTRODUCTION

One of the ways to meet the increasing need for a global quality assurance is to design, implement and maintain quality systems based on the internationally accepted ISO 9000 standards. These generic standards present guidelines for developing quality systems as well as a set of requirements to which a university or any other manufacturing or service organization should comply in order to register its quality system. The standards provide a possibility for streamlining university operation; identifying, correcting and preventing quality problems, as well as a systematic quality improvement measurement the rough internal quality auditing and various statistical techniques. An established quality system in the university also improves confidence in students, their prospective employers, the government, and other interested parties. It can be integrated with other internal systems, such as the ones for environmental control and/or health and safety management.

ISO 9001 specifies requirement for a quality management system that can be used for internal application by organizations, or for certification, or for contractual purposes. It focuses on the effectiveness of the Quality Management System (QMS) in meeting customer requirements. Quality assurance (QA) involves a systematic process of linking planning, implementation, review and improvement. A key feature of a good QA framework is its integration with daily activities of individuals across the University. A weakness in some QA processes is that the loop is not closed – that is, review does not lead to improvements being systematically planned and implemented and subsequently reviewed. While collegial processes are very important for QA, there is also a need for more formal evidence-based reviews, based on quantitative data and involving external input.

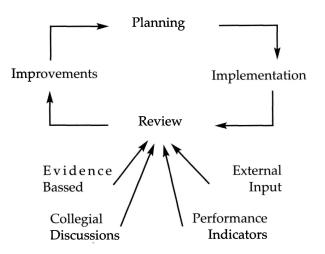


Figure 1: Elements of Certification Process

Key aspects of QA include:

- Internal Review
- Programme Approval Processes
- The Academic Infrastructure
- Enhancement of Learning and Teaching

Quality in higher education is a multidimensional concept, which should embrace all its functions and activities. It includes:

- Teaching and Academic Programmes
- Research and Scholarship
- Staffing
- Students
- Buildings
- Facilities
- Equipment
- Services to the Community
- Academic Environment

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QUALITY INITIATIVES IN UITM

Quality has always been an implicit concern of the management of UiTM. Responding to the unprecedented expansion in higher education, formalized and systematic quality assurance mechanism began to evolve in the early 1990s.

Shown below is UiTM's Road Map towards continuous improvement in ensuring quality in teaching and learning:

Year	Initiatives
1992>	Total Quality Management (TQM)
2000>	Change Management & Process Improvement
2001>	STRATEGI 2121 (Restructuring)
2002>	Academic Excellence
2003>	ISO 9001:2000
2004>	Accountability & Integrity
2006>	World Class University (WCU)

The aim of these initiatives can be regarded as an effort for continuous improvement of higher education. Furthermore, in recent years, the changing contexts present emergent needs to revisit the concept of quality. The changes that affect higher education – at professional-pedagogic level, at the institutional level and at systems level with new variables, include new providers, new media, provision that is cross-sectional, transnational and multinational. The changes are challenging conventional modes of operation and strategic development as well as having immense impacts on practices and identities for academic professionals, institutions and policy-making bodies. The field of higher education in the 21st century is challenging.

The University's approach to quality aims to ensure the academic programme continues to meet the highest possible standards. This approach rests on the philosophy where:

- Accountability for quality and responsibility for standards lie at the delivery point, wherever this may be.
- Reliance is placed not on inspection, but on self-evaluation by individuals, teams, faculties and departments as key to safeguarding standards and quality improvement.
- Regular monitoring is built-in and review processes are employed to assure the Vice Chancellor, the Academic Board and the Board of Governors of the integrity of the quality assurance and the maintenance of standards.

ISO 9001:2000 CERTIFICATION AT THE FACULTY OF ADMINISTRATIVE & POLICY STUDIES (FSPPP)

ISO 9001:2000 was introduced in the university in early 2003. The faculty started its ISO documentation process as early as February 2003, at that point of time the faculty was known as the Faculty of Administration and Law (FPUU). Went through the internal audit process in August 2003, getting prepared for the adequacy audit when, in November 2003, The Ministry of Education (then, now Ministry of Higher Education) gave the approval for the separation of the faculty to two separate faculties, namely the Faculty of Law and Faculty of Administrative Science and Policy Studies (FSPPP). FSPPP was officially declared on 14 January 2004 by the top management of Universiti Teknologi MARA (UiTM). The separation called for new direction. The ISO systems and documentation needed to be realigned. The management agreed to give the faculty a new dateline for certification. Effective 15 January 2004, FSPPP became a separate entity with a new Dean and required new planning.

9 STEPS FSPPP FOLLOWED TO ACCOMPLISH ITS OBJECTIVE

Step 1: Management Commitment

The Executive Management of a university department, faculty or institute must be totally committed to the implementation of a meaningful quality system. This includes the commitment of the Dean, Department Heads and Coordinators. The commitment is considered a necessary condition for successful implementation of ISO 9001:2000 (Walker 1997: Pfeiffer & Wunderlich, 1997, Landon, 2003). To obtain such commitment, the benefits of an ISO 9001:2000 quality system in a university for individual faculty and staff members, as well as for students and other stakeholders of the university, should be put forth. Naturally, one's commitment to any project or work is not easy to assess or assure. Such management commitment in the university environment may be expressed through project leadership, acquisition and deployment of the required resources (including financial support and people), actual time and effort put forth by the deans and the head of departments in order to drive the project and resolve problems, as well as a clear definition of priorities with respect to the ISO 9001:2000.

The Dean and the Faculty Board was responsible for defining the quality and environmental goals and ensuring they are incorporated into the faculty's strategic planning. Its charter is to instill a corporate culture of integrity, customer satisfaction, environmental awareness and continual improvement. This was accomplished by:

• Delivering presentations on awareness benefits of ISO 9001:2000 .The talk was delivered by Dr Zainab Mohd Noor, Fellow, Center for QA in Education, Institute of Knowledge Advancement, UiTM.

- Organizing a retreat on Strategic Planning (20 -22 February 2004), which was attended by members of the faculty from both the main campus and branch campuses. The main agenda of the retreat was to plan the future direction of the faculty, which includes defining and formulating the Vision, Mission and Quality objective.
- Providing members with a copy of ISO 9001:2000 manuals.

The objective of ISO 9001: 2000 implementation was not merely to achieve certification. That was considered more of a by-product than an end unto itself. The true goal was to establish a framework for meeting customer requirements, increasing customer satisfaction and continually improving products, processes and services. Important focus areas were:

- Improving faculty members' understanding of the quality system and its impact on customer satisfaction
- Better definied and documented processes for identifying customer requirements
- Defining measures to assess how well the faculty meets customer requirements and overall customer satisfaction
- Develop plans for improving products, processes and services

Step 2: Appointment of Management Representative

One of the requirements of the ISO 9001:2000 (Section 5.5.2) is to appoint a Management Representative. The management representative should possess:

- A genuine and passionate commitment to quality of education and research
- Knowledge of university processes and procedures
- Strong leadership and communication abilities
- Experience in administrative functions

In the case of FSPPP, Associate Professor Nabilah Leong Abduallah was appointed as the faculty Management Representative. She has served the faculty for 18 years, had held the position of Course Tutor, and currently teaching Quality Management and Management of Change.

Step 3: Establishment of the ISO 9001: 2000 Quality Committee

The next necessary step toward the ISO 9001:2000 registration is to organize a project committee (steering committee). The committee headed by the management representative, ensures that the quality policy and objective of the project are known throughout the faculty and also manages the ISO 9001:2000 effort. Meeting regularly,

the committee plans and organizes the interpretation of the selected standards, as well as documentation, implementation, registration and maintenance activities. Moreover the committee addresses problems arising during the project, and manages human and financial resources associated with it.

At FSPPP, the quality committee includes academic and administration staff. The work is divided by sub-committees handling the various components of the quality system, comprised of:

- Quality Manual
- Operational Procedure Manual
- Management Procedure Manual
- Measurement, analysis and improvement (PDCA)

Step 4: Implementation Schedule

 Table 1: Implementation Schedule for ISO 9001:2000

Date	Activity
15 January	Appointment of the Founding Dean of FSPPP
17 & 18 January	FPUU ISO committee meeting at Concorde Inn, KLIA Sepang – decision on ISO certification process due to separation of the two faculties
29 January	First ISO meeting of FSPPP
	 Introduction to the new Management Representative Appointment of sub committees
	Quality Manual Operational Procedure Manual
	Management Procedure Manual Measurement, analysis and improvement (PDCA) Dean's Presentation
20 –22 February	• Strategic Planning Retreat Embarking on the vision, mission, quality objectives and road map of FSPPP
Feb - Mac	Final Examination (ISO activities were put on hold until 15 March 2004)
Mac - April	 Full swing documentation preparation for ISO Check list and dead line Preparation of quality documents (quality manual, operation procedures, management procedures)
	• Meetings to review all processes
	• Preparation of course files, organizing and standardizing

	teaching portfolio, handbooks for lecturers and supporting
	documents.
12 & 13 May	Conduct Internal Audit
14 May	Management Review meeting
	Respond to findings
	 Internalizing the findings from the internal audit
	• Planning on work ahead
21 May	LRQA Adequacy Audit (Stage One)
25 May	Management Review Meeting
10 & 11 June	LRQA Compliance Audit (Stage Two)
11 June	Recommendation for Certification

Various steps were taken to ensure preparation can be done before the middle of May 2004. Among the activities identified were:

Step 5: Draft Quality Documents

The three main documents are the:

- Quality Manual includes the scope of the quality management system, the documented procedures established for the quality management system and a description of interaction between the processes of the quality management system.
- Management Procedure Manual consists of 12 procedures involving the adminis tration of the FSPPP.
- Operational Procedure Manual consists of 23 procedures pertaining to the issues of teaching and learning in FSPPP.

The documentations and record requirements were discussed in a series of meetings and discussions. Understand the standard, evaluate the effect on existing procedures and records and update the draft documents and associated procedures or records as appropriate. We publicize due date as well because we knew writing and updating the procedures would not be a popular assignment.

Step 6: Conduct Internal Audit

The manual had been updated and it was ready for the internal audit. No one in FSPPP had experience in ISO 9001:2000. We were not provided with proper training on ISO 9001: 2000. The faculty wanted to make a strong impression in the gap assessment and identify as many issues as possible prior to the certification assessment. A team of internal auditors comprising of 3 members from various faculties of UiTM were at FSPPP for 2 days to evaluate whether we are on the right track.

The result was not pleasant. The auditors produced more than 10 pages of issues, questions and comments. Findings from the visit are identified as "N" (Non-conformity), "I" (Improvement) and "O" (Observation). A total of 2 "I" s and 32 "O" s were recorded. As painful as the result may have been, the benefits of the auditors review were substantial.

Step 7: Respond To Findings

The Management Review Meeting was held to assess opportunities for improvement and the need for changes to the quality management system, including the quality policy and objective. FSPPP was able to update the documentations and have it re-evaluated. Corrective action plans were in-place. The ISO 9001:2000 committee members worked for one week and managed to have the internal audit findings closed. The internal were pleased with the corrective actions adopted by FSPPP and this enables us to be in a better position to do well in the LRQA Adequacy Audit.

Step 8: LRQA Adequacy Audit (Stage One)

On 21 May 2004, the LRQA Adequacy Audit was held. The external auditor found good progress has been made but identified several areas where improvement was needed. We were give one "I" and 5 "O" s. The "I" was given for incomplete management review meeting. However, the auditor has given the green light for the faculty to pursue the compliance audit. We were given until 26 August 2004. The management representative called for a second management review meeting to discuss on the matters arising and to confirm the date for the compliance audit. The committee has decided to conduct compliance audit from 10 to 11 June 2004.

Step 9: LRQA Compliance Audit (Stage Two)

Prior to the compliance audit, all the committee members were coached on potential questions and pre-audited to assure compliance. When the date of the certification audit arrived, FSPPP was confident of success. To the best of the faculty's abilities, corrective action had been implemented for all internal audit findings. For those findings requiring more time to correct, improvement plans were in place. The committee members of the ISO 9001: 2000 had spent every working day from the beginning of March 2004 till Jun 2004 upgrading the documents and procedures. Therefore, it was not surprising that on 11 Jun 2004, FSPPP was recommended for certification with 7 observations. It was a happy moment for the FSPP citizency. All the hard work finally paid off.

CONCLUSION

Friday the 11th of June 2004 is a memorable day. It is a day where the faculty realized its objective for certification of ISO 9001:2000. "Esprit-de-corps" among members were high. We knew that certification is just the beginning of a never-ending journey. In the words of the lead assessor,

".... The key processes of the QMS are adequately documented and implemented in accordance to the ISO 9001:2000 requirements. The Dean has demonstrated his commitment to quality and continually improves the effectiveness of the QMS to ensure customer satisfaction. Management Review inputs and outputs carried out were considerably effective together with review of quality policy, objectives, audit results, corrective and preventive actions were all being used jointly to improve the effectiveness of the QMS. Teaching and Learning key processes were found to be effectively implemented in a controlled manner. Monitoring and measurement of processes and resource needs are clearly identified and implemented. Positive progress towards achievement of objectives noted. Internal Audit conducted by trained auditors according to the planned arrangement is considered effective. The assessor recommends certification to ISO 9001:2000 QMS...."

Lead Assessor, Compliance Audit 11 Jun 2004, 4.30 pm

REFERENCES

ISO 9001 (2000), International Standard: Quality Management Systems Requirements.

ISO 9001:2000, Quality Management Systems – Guidelines for performance improvements.

Landon, T. (2003), **Quality Progress, Milwaukee, March 2003**. Vol. 36, Issue 3, pp 32. Lewis, R.G. and Smith D.H. (1994), **Total Quality In Higher Education**. St Lucie Press, Delray Beach, FL.

Pfeifer, T. and Wunderlich, M. (1997). "Establishing Quality Systems In Research Institutes, A Progress Report". TQM Magazine, Vol. (No 3, pp 221-227.

Karapetrovic, S. and Willborn, W. (1999), Holonic Model For A Quality System In Academia. The International Journal of Quality & Reliability Management, Bradford, Vol. 16, Issue 5, pp 457.

Walker, AJ (1997), "Impact Of An ISO 9001 Compliant Quality Management System On A University Research Enterprise". The TQM Magazine, Vol. 9 No. 6, pp 397-402. Willborn, W. and Cheng, T.C.E. (1994), Global Management Of Quality Systems. McGraw-Hill, New York.