

Challenges in Maintaining Total Quality Management (TQM) from Internal QMS Audit Perspective: A University Case Study

Nor Juliana Mohd Yusof¹, Azlan Zakaria² and Khairul Anuar Mohd Ali³

ABSTRACT

Quality management system (QMS) certification has been prime agenda for many public institutions of higher education (PIHE) in Malaysia to gain competitive advantage in winning their target customers and stakeholders. As such, the concept of total quality management (TQM) has become an organizational focus to continuously improving their products and services. However, the implementation of TQM is not an indicator that every single thing is in place. The aim of this paper is to discuss thoroughly and investigate some findings experienced by internal QMS auditors during the internal quality audit process and obtain their perception toward the audit process at Universiti Teknologi MARA, Malaysia. The questionnaire, personal (face-to-face), telephone interview and observation were methods chosen to obtain required information from selected respondents. The findings revealed that the most common problem experienced by internal QMS auditors during an internal audit is the failure to follow documented procedures. The study also indicates that low awareness of quality among auditees, unavailability of evidences whenever required, procedures not documented and unco-operative staff are problems highlighted by internal auditors. The findings of this study provide an insight into the implementation of TQM in PIHE and further action for continuous improvement could be taken for the purpose of maintaining the effectiveness of QMS in organization.

Keywords: Total quality management, quality management system, internal quality audit, internal QMS auditor, public institution of higher education.

1. INTRODUCTION

The concept and principles of total quality management (TQM) has gained a wide acceptance in many industries for a better control of products and services. The higher education sector is no exception. The transition from traditional quality assurance to the implementation of TQM in higher education shows that the momentum of TQM has been so contagious since the concept was initially

¹ NOR JULIANA MOHD YUSOF, Faculty of Applied Sciences, Universiti Teknologi MARA (UiTM), Malaysia, juliana@salam.uitm.edu.my.

² AZLAN ZAKARIA, Faculty of Applied Sciences, Universiti Teknologi MARA (UiTM), Malaysia, azlan515@salam.uitm.edu.my.

³ KHAIRUL ANUAR MOHD ALI, Graduate School of Business, Universiti Kebangsaan Malaysia (UKM), Bangi, Malaysia, kabma@ukm.my.

embraced manufacturing sector. Later on, this quality initiative has expanded to the service sector specifically in healthcare, government and also education (Venkatraman, 2007). In Malaysia, the awareness and adoption to quality management system (QMS) in public institution of higher education (PIHE) started with the introduction of the Development and Administration Circular by the Malaysian Government in 1996 that requires all government agencies, including public universities, to implement the MS ISO 9001:1994 quality system to ensure the delivery of quality services to customers. Therefore, many public universities are committed to upgrading their QMS to the new ISO 9001:2000 certification in order to assure and maintain the quality of academic systems (Ismail & Gadar, 2008) so as to achieve internal and external customers satisfaction. Furthermore, the current initiative to continuously practicing quality management system as part of organizational agenda is portrayed through the focus towards the latest version of ISO certification (version 2008) as the purpose of its application to improve and maintain quality standards in the management of various departments and faculties in PIHE.

Certification and implementation of ISO-QMS in PIHE has indicated that the concept of total quality or TQM has been incorporated to the management system. The core principles of TQM such as customers and stakeholder focus, employee engagement and teamwork also with process focus supported with continuous improvement are those strategies and approaches that may guarantees the effectiveness of TQM. However, without a proper mechanism in monitoring the implementation of TQM in PIHE, it is difficult to measure and determine the consistency and effectiveness of current practice of QMS from time to time. Therefore, internal quality audit or QMS audit should be conducted internally and scheduled appropriately as the target to help the department and faculties to improve and identify any areas that lack of attention for further improvement as the concept of TQM take place in PIHE. Internal audit is a mandatory requirement of ISO 9001 management system as referred to paragraph 8.2.2 which requires organization to produce a documented (written) procedure for the process (Andreescu, 2011). This paper will investigate and explores some findings experienced by internal quality auditors from different faculties during the internal QMS audit process and obtained their perception toward the QMS audit process in Universiti Teknologi MARA (UiTM), Malaysia. The findings of this study will provide an insight into the implementation of TQM particularly in aligning to the requirement of ISO-QMS in UiTM so that the further action for continuous improvement could be taken in the future.

2. RESEARCH METHODOLOGY

This study adopts an exploratory approach as it provides insights and understanding of issues raised in the scope of research. Non-probability sampling is selected which indicates samples were gathered in a process that does not give all the individuals in the population equal chances of being selected. Thus, purposive sampling is chosen, which means the sample for this case study is selected to satisfy a specific objective (Mahmud, 2008). As to fulfill the type of sampling chosen, internal QMS auditors who have been appointed in the faculty (UiTM Shah Alam & Branch Campus) and actively participate in internal QMS audit process were selected in this study and they were academic staff as well. A survey instrument was developed which consisted of five (5) sections of questions that comprised approximately fifty (50) questions. A five-point Likert scale has been used to identify the level of importance and agreement of those items listed in the questionnaire. Personal (face-to-face) and telephone interview were carried out by using a semi-structured type of interview that contained a combination of formal and informal questions based on researchers experiences towards internal QMS auditing process. A total of 300 questionnaires were distributed to respondents chosen via UiTM's electronic mailing and it was pilot test and validated. 27% of response rate was identified which means only 82 respondents returned the questionnaire via e-mail. In this paper, only data related to stated objectives were further investigated by using frequency and descriptive analysis, together with findings from selected quality practitioners through interview session, observations during audit exercise and information given during meetings.

3. RESULTS AND DISCUSSION

3.1 General Profiles of Respondent

Frequency analysis has been used to analyze all information obtained from the questionnaire related to the age, gender, race, highest academic qualification and achievement, years of service at UiTM, current post, years of appointment as internal QMS auditor in the respective faculties and participation in QMS internal audit training. The results show that most of respondents were Malay (95 percent) and female academic staff members (73.2 percent). Half of respondents (50 percent) were in the range of 26 – 35 years of age and most of them (89 percent) acquired Master level of tertiary education. 47.4 percent of the respondents had worked less than five years and 37.8 percent of respondents had more than 10 years working experiences at UiTM. Respondents also had different years of appointment as internal QMS auditor and all respondents had attended QMS internal audit training as per requirement.

As the main purpose of this study is to investigate and explore some findings experienced by internal quality auditors during the internal quality audit process and obtain their perception toward the audit process in UiTM, the results and findings below are thoroughly investigated and studied with extra input gained (real experiences) by some quality practitioners through interview session, observations during audit exercise and information given during meetings as written earlier in the research methodology.

3.2 Problems/Issues Experienced by Internal QMS Auditors

Certification to QMS-ISO and TQM implementation does not assures every single thing is in place and complies with requirements. It was revealed through the real audit exercise that has been scheduled basically once a year in the faculty. Internal QMS auditors were facing with few problems that may affected their perception towards the audit process. Based on result from questionnaires, those problems are summarized as per Figure 1.

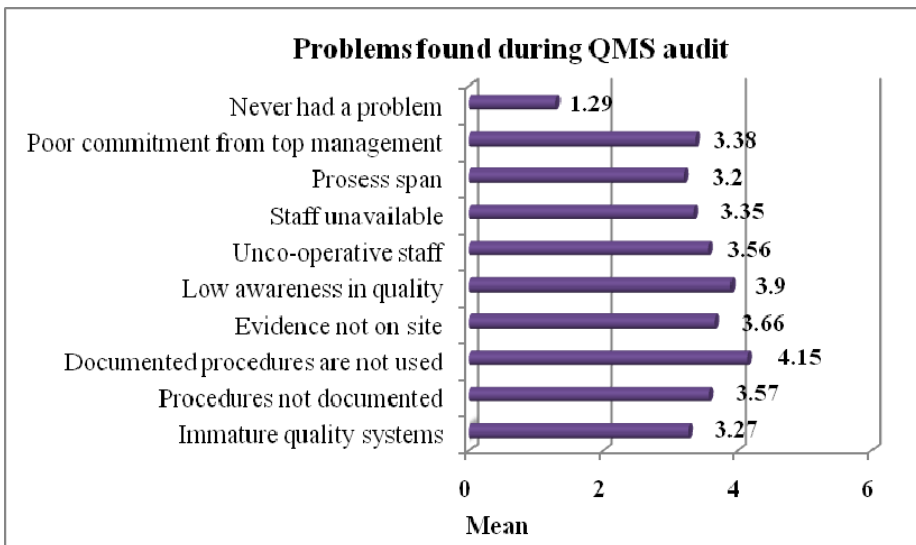


Figure 1: Mean of Agreement Level of Each Problem Identified by QMS Auditors during Internal QMS Audit

The result above shows that all respondents in different faculties experienced few problems during audit exercise. The main problems identified by internal QMS auditors are documented procedures are not used, low awareness in quality among staff in the faculty, evidences requested were not on site, procedures not documented and uncooperative staff during the audit session. Those problems are discussed in detail in the following sections.

3.2.1 Documented Procedures are Not Used

The management of academics basically involves various academic programs offered in the faculty. Thus, it was difficult to monitor the use of each documents and quality records developed specifically in the process available in the faculty. Basically, PIHE documentations include quality manual, procedures, instructions and other documents such as drafts, forms and records (Michalska, 2009). Based on researcher experiences in auditing, most of auditees were not aware the exact and latest quality records to be used, thus it shows a lacking of attention in the use of quality records in the faculty especially amongst academic staff. The reason is mainly because some programs tend to create and use their own forms according to the program needs without referring to the actual form to be used as a master copy of quality records. The same problem also was experienced by Ramli et al. (2007) at University of Malaya when they reported that in the majority of the non-conformances and observations that have been issued were related to document control, product realization and work environment.

As reported by Ali & Yusof (2009), the problem occurs mainly because there is no systematic mechanism developed in the faculty to disseminate information relating to any amendment of documents and quality records as required or new quality records developed in specific processes. They were also pointed out that one of the reason led to lacking of management of documents and quality records are due to there is no individual has been assigned in the faculty as a 'document controller' who basically responsible to control and monitor the use of controlled and uncontrolled documents as stated in clause 4.2.3 and 4.2.4 in ISO 9001:2008 QMS - requirements.

3.2.2 Low Awareness in Quality among Faculty Members

Audit findings also revealed that the awareness in quality was still low amongst academic staff in the faculty. The reason was mainly because the quality culture is not totally adopted at the level of individual in the management system. Although the concept of TQM requires everybody's to take responsibility to ensure compliance to requirements, not all of faculty members are keen and concern about the implementation of TQM. Lack of knowledge's in the area of quality probably is the major reason of the problem as stated by Venkatraman (2007) in his research whereas poor awareness of quality could be due to lack of understanding and necessary knowledge about TQM. One interesting issue highlighted earlier by Koch (2003) in his paper published in *The TQM Magazine* when he wrote that academic culture is not receptive to TQM, revealed that the situation occurs in the faculty and university was not the same as in industry. He also reported that the focus of TQM in university always has been non-academic activities and TQM has little or nothing to contribute to discussion of faculty tenure, undergraduate curricular, and so forth. Thus, it makes quality not a popular issues in academic world except in the area of research (local and

international) and publication. Through observation, junior staffs in the faculty are not really aware of the QMS requirement and criteria especially related with ISO 9001 requirement. Probably the main focus to the requirement of code of practice for programme accreditation (COPPA) developed by Malaysian qualification agency (MQA) in those nine (9) areas as listed below has been one of reasons the attention to the QMS-ISO is very minimum.

- Vision, mission and learning outcomes
- Curriculum design and delivery
- Student selection and support services
- Assessment of students
- Academic staff
- Educational resources
- Programme monitoring and review
- Leadership, governance and administration
- Continual quality improvement

The mixed focus towards compliance to QMS-ISO 9001:2008 requirement and COPPA requirement by MQA for enhancing the quality of academics has created dilemma and confusion among faculty members in such a way that which aspects of quality need to be given priority. Lately, self-review has been paramount agenda in each faculty at UiTM for the purpose of assuring quality of academics are align as per nine areas of COPPA; thus make the aspect of focus and understanding from academic staff become complicated. This scenario gives a negative impact indirectly to the academic staff which make them neglected the importance of QMS requirement in their daily routine job.

3.2.3 Evidence Not on Site

One of important criteria in auditing QMS implementation is availability of evidence which includes verifiable records, statements of fact or other information (Ismail & Gadar, 2008). Most of respondents experienced the same problem when at certain condition, auditees were failed to show evidence as required by auditors after explanation has been given clearly on specific questions asked. Sometimes, auditor was satisfied with the processes implemented by auditees; unfortunately there is no written evidence or necessary data with proper measurement and analysis to show the actual processes has been successfully carried out. Poor management in filing and keep track of documents and quality records and also lack of follow-up again has been the main root causes of this problem. In the eyes of auditees, the filing job is so tedious which sometimes may lead to missing documents and excessive paper used. When there is no necessary evidence as required, certainly auditors prone to be sceptical on the real practice of specific processes that has been audited.

3.2.4 Procedures Not Documented

Apart from documented procedures are not being used by auditees, there are also problems identified related to procedures not being documented. Since the focus on process-approach has been emphasized in the principle of QMS-ISO (version 2000 & 2008), auditees should take action accordingly to ensure the actual practice of the process will be documented and at the same time the current procedures should be reviewed whether it is still relevant and yet effective. The procedure which is no more usable and relevance to fulfill the current needs should be taken out and should be further improved by the process owner with recommendation and suggestion by appointed committees. Thus, the updated documented procedures then will be a guideline and reference for others who will be involved in the process.

3.2.5 Uncooperative Staff

Perhaps the statement by Koch (2003) that reported on the influence of academic culture and freedom in the system of higher education is still applicable. Faculty members especially academic tend to work alone more often and professorial research in many disciplines tend to be solitary activity. Venkatraman (2007) also pointed out that one aspect considered as barriers to TQM in higher education could be employee's resistance to change, which means as professionals who by tradition expect autonomy and freedom; they may not like being asked. In the current situation in most faculties, some academic staff does not take the QMS-ISO as important compared to high impacts activities such as research, publication and innovation. Real experiences of selected respondents revealed that non co-operative faculty members really make the audit exercise disturbed and some of them seemed comfortable not to get involved in the audit process even though an appointment as auditee or representative for selected program/processes has been notified earlier. The same case also occurred in University of Malaya when Ramli et al. (2007) stated that lack of co-operation from auditees or their representatives has been challenges experienced by QMS auditors in the audit process. One of solution to this issue is through a strong commitment from top management in TQM. In fact, lack of proper leadership may lead to difficulties in implementing TQM in PIHE (Venkatraman, 2007). He reported that senior management may want the results brought by TQM but may not support it wholeheartedly. He then suggested the top management should get visibly and explicitly committed to get TQM works in the faculty. Back to this case, the above mentioned suggestion will affect to the working environment and build a positive quality culture among faculty members to be more responsible and optimist in any quality-related processes.

3.3 Perception and Some Issues Of Internal QMS Auditors towards Audit Exercise

Inputs gained from interview sessions revealed that the task as internal QMS auditors have been felt as burdensome to some of academicians, the same thing as reported by Shuib *et al.* (2007) in University of Malaya. Some of them admitted that they are not keen to be involved in the auditing task in the faculty. As an academician, the routine job in the faculty has been increased with multi tasking job need that to be accomplished simultaneously. Since the university urges and encourages academic staff to be actively submitting research proposal for local and international grant applications as to increase the number of principle investigator (PI), involved in publications with high impact journals, innovation and consultation in order to increase faculty's MyRA scores, more and more academic staff felt that the task of internal QMS auditing and self-reviewer was extremely not important for their own merit as to align with vision and mission university's to become a research university.

Other important issue identified from observations and input from meetings was the quality of internal QMS auditors appointed in the faculty. As to ensure the audit process is effective and achieve a desired targets, internal auditor should utilized effective auditing techniques, auditing process and auditor knowledge level for the process audited (Ramly *et al.*, 2007). However, in the real practices, faculty's is getting tougher in maintaining the skillful auditors since some of academic staff tend to change to other committees after three or five years involved in the committee. There were also some lecturers quit from the committee due to study leave, resignation, retirement and promotion to high administrative level post. Thus, the faculty has to ensure internal auditors appointed are sent for internal audit course for their own competencies in performing audit. In fact, such training would help to create involved internal auditors more knowledgeable about requirements (Beecroft, 1996) and gained respect from other faculty members during audit session without any post gap amongst auditor and auditee.

4. CONCLUSION AND LIMITATION

The process of internal quality audit is an extremely effective tool to ensure the current implementation and practice of quality management system is aligned and complies with all ISO standard requirements and continuous improvement agenda. It can also stimulate tremendous improvement within an organization and help create 'proactive environment' (Beecroft, 1996) as to nurture TQM concept in PIHE. The involvement of internal QMS auditors in the process of decision making shown that the concept of employee empowerment has been incorporated and worked well in the system. Thus, it surely will help the organization to gradually improved before an external body validates the quality

management system. However, the organization should find out alternatives to ensure all problems found during internal QMS audit and any issues highlighted will be resolved effectively. As reported by Dilshad et al. (2012), quality enhancement initiative can not be implemented successfully until culture of quality is developed, strengthened and sustained. The result from this study could not portray the same scenario in the whole PIHE in Malaysia. The input gained from the study indicates which area need to be improved and may lead for a better planning and implementation of corrective and preventive action in the management and control of quality at PIHE.

REFERENCES

- Ali, K. A. M, & Yusof, N. J. M. (2009). Juruaudit dalaman system kualiti: kajian kes di Universiti Teknologi MARA, Malaysia. *Journal of Quality Measurement and Analysis*, 5(2), 81-97.
- Andreescu, N. A. (2011). *Internal Audit of the Quality*. Retrieved September 19, 2012, from <http://textile.webhost.uoradea.ro/Annals/Volume%20XIII%20No%202.pdf>.
- Beecroft, G. D. (1996). Internal quality audits – obstacles or opportunities? *Training for Quality*, 4(3), 32-34.
- Dilshad, R. M., Hameed, Y. M. Y., & Malik, M. A. (2012). Higher education in Pakistan: Towards developing a quality culture in universities. *International Journal of Academic Research*, 4(1), 102-106.
- Ismail, K., & Gadar, K. (2008). A beneficiary-driven and recipient-focused program using ISO 9001:2000 in teaching and learning in Malaysian university. *The Journal of International Management Studies*, 3(2), 133-140.
- Koch, J. V. (2003). TQM - Why is its impact in higher education so small? *The TQM Magazine*, 15(5), 325-333.
- Mahmud, Z. (2008). *Handbook of Research Methodology*. UPENA: Shah Alam.
- Michalska, J. (2009). The quality management system in education – Implementation and certification. *Journal of Achievements in Materials and Manufacturing Engineering*, 37(2), 743-750.
- Ramli, R., Halim, S. A., Nor, S. N. M., & Ressang, A. M. (2007). *Assuring quality of higher education through internal audit: A case study on University of Malaya*. Retrieved September 15, 2012, from <http://eprints.um.edu.my/2225>.

Ramly, E. F., Ramly, E. S., & Yusof, S. M. (2008). *Effectiveness of quality management system audit to improve quality improvement – A conceptual framework*. Retrieved September 28, 2012, from <http://ication.com/Attachment/ICQR65.pdf>.

Venkatraman, S. (2007). A framework for implementing TQM in higher education programs. *Quality Assurance in Education*, 15(1), 92-112.

Shuib, M. K., Zamri, S. N. A. S., Abdullah, R., Said, F., & Yusof, R. (2007). *Implementation of quality assurance in public higher education institutions: University of Malaya experience*. Retrieved September 15, 2012, from <http://eprints.um.edu.my/2233>.