

TQM and Higher Education Institutions: Issues regarding the implementation process at Integrated State University

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Abstract. There is a significant relationship between quality working climate and organisational performance. Total Quality Management (TQM) emphasizes continuous improvement which requires participation of everyone in the company in the development of shared mission, vision, plans and in the quest for continuous improvement. High educational institutions are complex organizations with a strong sense of tradition and distinct culture. Employees at all levels are organized and motivated with knowledge and responsibility for managing and improving organizational processes. Integrated Universities have specific organizational structure and the concept regarding TQM implementation at Integrated University is consisted of two parts: (a) TQM in education area (at Faculty level), (b) TQM in administrative areas (centralised administration). Our field of work is in implementing TQM in administrative areas (further to be extended in educational and especially research areas). TQM emphasizes teamwork and employee empowerment. Adoption of TQM will help institutions of higher education maintain their competitiveness, eliminate inefficiencies in the organization, help focus on the market needs. This paper is to discover a quality working climate that will explicate the conditions for an overall quality TQM concept. Main issue is the lack of employee awareness about the importance of the TQM implementation process and achieving deadlines set on purpose by the Quality manager. Basically, administration's excuse for not doing their work „on time“ is the additional work that requires additional working hours. A need for setting deadlines is identified, but it is not useful if it is not highlighted and supported by the top-management. Top-management's interaction in the whole process of setting new job description tasks in the job specifications of employees, creates a higher level of employee commitment about the task and their involvement in the process. TQM is for systems enhancement, sustaining continuous organisational improvement and also as one part of the recognition and reward process. TQM is a new management philosophy and methods that using organization can improve. Changes from quality control to quality management are bound with changes in the way of thinking, in the means of management and working methods, in conscience. Service-oriented organizations including higher education institutions, which have a greater degree of employee-customer interactions, should concentrate on the more qualitative and softer aspects of working culture, customer care and personal interactions.

Introduction

Initially developed in Japan, the Total Quality Management (TQM) was widely seen as a revolution in management. In fact, it is more plausible to argue that the popularity of TQM – as a pre-eminent business strategy – among a wide range of organisations including large and small, public and private, local and multinational resulted in radical and widespread shifts in the global economy[1].

Obtaining the competitiveness and eliminating the inefficiencies is the main focus of the TQM implementation process. TQM is the application of quantitative method and human resources to improve the materialising services supplied to an organisation, all the process in an organisation, and the degree to which the needs of the consumer are met, now and in the future[2]. Philip Kotler defines TQM as organization wide approach to continuously improving the quality of all organization's processes, products and services[3]. TQM is both a philosophy and set of guiding principles that represent the foundation of continuously improving organisation. Since the commencement of the Malcolm Baldrige National Quality Award (MBNQA) framework in 1995, numerous researchers have based their TQM literature on seven elements: "leadership", "strategy and planning", "customer focus", "information and analysis", "people management", "process management" and "business performance". These elements may be further categorized into four aspects: "employee relations", "leadership", "customer/supplier relations", and "product/process management"[4]. The British Quality Foundation developed a list of 16 core principles to represent the TQM initiatives[5]. The core principles are "customer focus", "participation and team work" and "continuous improvement and learning"[6]. Identifying and improving core processes is a solid ground for further implementation of the TQM philosophy at Educational level itself. TQM allows to evaluate the efficiency of tools of quality assurance. Certification of quality system confirms the high level of the system, but it does not guarantee economical efficiency of system's functioning and company's success. Implementation of TQM helps to solve this problem more efficiently. The adoption of the TQM can be very different in public organizations than the adoption in service oriented or manufacturing organizations. Our paper points out the obstacles met while monitoring a TQM implementation process (7 months), the actions taken in order to reduce this obstacles at a Integrated Higher Education Institution. It also gives a methodology for an implementation process in this kind of institutions (tested and implemented) followed by a framework consisted of 7 steps.

Critical success factors: important barriers to the effective implementation of TQM

In general terms, "critical success factors" can be defined as the crucial elements that require examination and categorization to ensure effective management and implementation of an individual system and/or the overall mission of an organization[7]. The strong sense of tradition State Universities have, is a basic issue while working with employees with 10-20 years long experience in these organizations. Their specific way of thinking and resistance to change is affecting the implementation process and is the reason why the process is running slowly than it should be. Literature reviews about TQM implementation, define many critical success factors. These factors, mentioned forward, can be considered while constructing a reliable concept for TQM implementation process: "lack of management and leadership", "lack of management support", "lack of training", "inadequate perception of quality on part of most employees", "resource constraints", "employee resistance to change", "short sighted motivation for seeking certification", "inadequate senior management commitment", "insufficient training with respect to quality issues" and "a failure to define responsibility and authority for personnel employee resistance to change"[8].

Issues regarding the TQM implementation process at High Education Institutions

As a separate management discipline, Integrated Higher Education Institutions have specific organizational structure. Implementation of a TQM takes time. The best way to prepare an organization for implementation and, on the other hand, to save money is to include people which already have experience working in the administrative area at the Higher Education Institution. These people are familiar with all the processes which take place at the University. Lord Tobin defines TQM as "the totally integrated effort for gaining competitive advantage by continuously improving every

facet of organizational culture”. The concept of TQM is based on principles concerning the quality assurance, improving and managing business processes etc. It emphasizes a process orientation and adopts a well established management approach plan – do – check – act model. We have to assure and continually improve system performance. A highlight has been put on [9]:

- a) assuring employee involvement into the quality improvement processes;
- b) development of the full human potential of all employees;
- c) assuring continuous teaching and education towards transformation of employee’s way of thinking about the process of implementation of the TQM philosophy.

Before implementing any standards at a University level, it is very important to have the full support of the top management of the University. Their support means:

- a) better management considering the support for working with the second level managers of the different departments and organization of the meetings;
- b) increasing the level of importance of the „in-charge“ employees that work on the quality implementation process;
- c) using the University’s resources for implementation needs.

The whole implementation process includes reviewing a wide range of departments and documents. It is very important that the top management point of view about the timeframe isn’t precisely defined at the beginning of the implementation of TQM. This creates positive working climate and reduces stress. The preparations for the “start-up” of the whole process last around 3 months, working 3 days a week, 8 hours a day. The documentation that needs to be considered before the beginning of implementation preparations are the same documents that are already “in use” by the administrative staff itself. A framework has been developed in order to make the implementation process run smoothly. It is consisted of 7 steps, and is prepared as a result of a 7 months monitored work in implementing TQM at Integrated Higher Education Institution. Integrated University includes wide range of departments and a customer perspective on students, as well as assuring quality support processes that need to impact the educational process (Fig. 1).

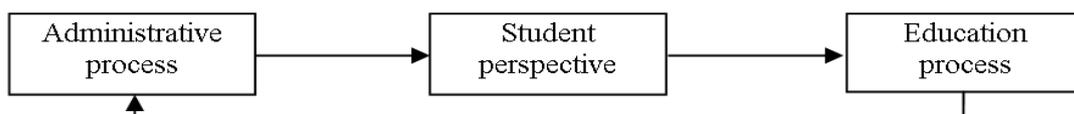


Fig. 1 Impact of quality support processes on students perspective over the education process helped by the administrative process

Before presenting the 7 step framework (Fig. 2), we need to point out that the Quality Center (QC) has a preliminary 1,5 year period set, for finishing the TQM implementation until the Intern Audit period. Considering that timeframe, we have managed to give a clear picture of the current working climate stressing out the major obstacles the QC meets as well as the loss of time and need for intervention.

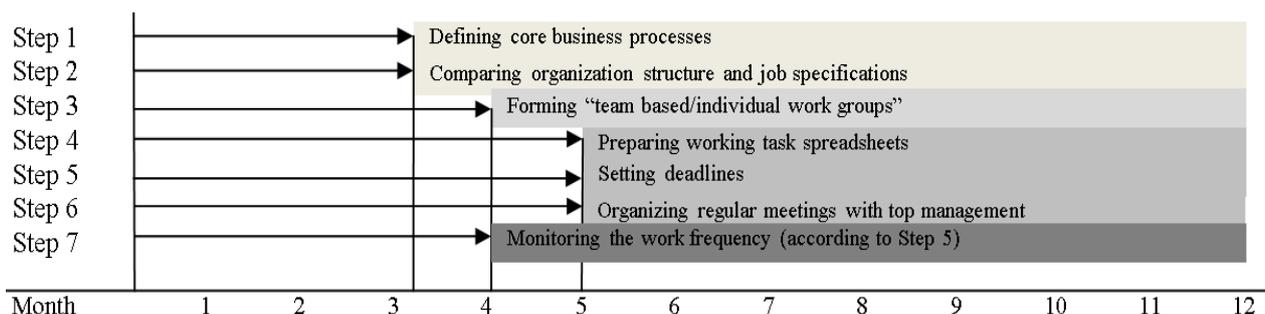


Fig. 2 The 7 step framework for implementing TQM at Integrated Higher Education Institution

Step 1: Comparing the organizational structure with the official job-specifications. This needs to be done before the definition of processes. (This is used in order to identify responsible employees who will prepare and approve specific processes).

Step 2: Defining core business processes at administrative level. Team based groups need to be set and will be consisted of the second level managers and their first line employees.

Step 3: Forming “team based/individual work groups” (usually including employees that work in the same department and have similar job specification, or employees that work in departments which have mutual interaction in specific processes).

Step 4: Preparing working tasks spreadsheets, with all defined core business processes and “to do” lists.

Step 5: Setting deadlines which require precisely defined responsible (employees) and due dates (due dates are set on monthly level and will further be included in the monthly reports that the Quality Center provides for the top management).

Step 6: Setting dates for regular meetings with the top management (every 2 weeks) in order to confirm completed procedures, and to point out the obstacles met while working on the implementation process.

Step 7: Monitoring the frequency of the working process according to *Step 5*, before and after defining the issues and obstacles, and managing them (which will be pointed out in the monthly reports for the top management).

High levels of quality consciousness during the development of TQM result in both basic preconditions for TQM’s ultimate success and its primary aim during the initial stages of most TQM interventions[10]. The obstacles which cause unsuccessful adopting and implementing TQM on administrative level in Higher Education Institutions are met in *Step 5* “setting deadlines” (Fig. 2). The 7 Step framework for implementing TQM at Integrated Higher Education Institution. This step has a great impact on the preparation process of the reports for the top management. These deadlines have been precisely defined on a monthly level, which gives employees enough time to work on the implementation process (considering the fact they have to work with the QC, 3 days a week). Deadlines have not been achieved in the first 3 months after their setting and as main obstacles for their delay, we point out the following five [11]:

- Nature of the employees, which makes the change process slow;
- Resistance to change, so to learn about the new (improved) method of doing things;
- Concentration of the staff on their narrow specialization;
- Absence of employees who are specialized in TQM;
- Encouragement gained from the relative success employees have while using the current methods.

Creating a positive working environment resulted with delay of work among the administrative staff. QC had a vision to create a stricter working environment encoding new due dates set on a weekly level. It was considered to be less stressful and to create a positive working climate. Since the working process was running slow, some punishing measures were taken in consideration in consultation with the top management. Before defining them, the QC used previously prepared job description tasks, written in an official document which was sent to employees by the top management itself. This gave additional importance to the work tasks. Their goal was to encourage employees to initiate a working process and achieve the deadlines set previously. This is considered to be the way in which the

standard is communicated to the workforce and how it is perceived by the workforce and followed by it [12]. QC focused on:

- Making the change (implementation) process run faster;
- Reducing the resistance to change, so to learn about the new (improved) method of doing things;
- Improving employee performance by introducing them to the new and modern methods of working.

Reaching due dates was improved and employees themselves initiated to start working regularly on the implementation process. The importance level of the TQM implementation process was raised and it created additional positive reports for the top management. It took some time until employees became aware of the importance of the punishing measures that could be considered if they didn't take part in the TQM implementation process. The second notice (official document) was sent to specific employees and had a positive effect of the whole timeframe of the implementation process.

Conclusion and further research recommendation

Since the human aspects like employee commitment, employee involvement and team working were achieved in the next 2 months period after sending a notice from the top management itself, one of the obstacles has been managed and there are more to come. Due dates are achieved and employees have created a positive working environment, after the benefits of the TQM were presented to them. Their awareness of the whole process is still on a low level, since they are seeking for a short term working process. Interaction between second level managers and first level employees, is the new obstacle that needs to be taken in consideration. Employees don't have routine in informing their colleagues about the change that has been enrolled in the administrative departments. It creates confusion among employees which are directly affected by the change itself and creates unhealthy working climate. There are some serious changes that need to be made, starting from regular meetings of the second level managers with their first line employees as well as regular meetings between all second level managers. Those meetings are planned to be informational, where employees are going to be trained how to implement the new regulations or processes, changes or tasks, that need to be applied in their work. The adoption level of the TQM implementation process is positively associated with employee performance. Further research can be made in the maintenance of the implemented TQM methodology. The obstacles which take place in the implementation process have great probability to be met in the maintenance process as well. There is a need for implementing a reward/punishment system especially for employees that will contribute the most in the implementation process. The TQM implementation can also be used in further research that will demonstrate the commitment in maintaining the TQM methodology which will be implemented at some point. Strategic control framework should be further considered combining TQM with a specific strategic control tool.

References

- [1] E. Soltani: Conflict between theory and practice: TQM and performance appraisal, *International Journal of Quality & Reliability Management* Vol. 22 No. 8, 2005 pp.796-818q Emerald Group Publishing Limited 0265-671XDOI 10.1108/02656710510617238
- [2] J. C. Strickland, TQM: Linking People and Processes for Mission Excellence, *Army Research Development & Acquisition Bulletin* , May-June 1989, p. 9
- [3] P. Kotler, *Marketing Management*, (Prentice-Hall Inc, The Millennium Edition USA-2000, p. 56)

- [4] J. Y. Jung Yong, J. Wang, S. Wu Competitive strategy, TQM practice, and continuous improvement of international project management A contingency study, *International Journal of Quality & Reliability Management* Vol. 26 No. 2, 2009 pp. 164-183 q Emerald Group Publishing Limited 0265-671X DOI 10.1108/02656710910928806
- [5] J. Choppin, TQM – what isn't it?, *Management Development Review*, Vol. 08, Issue 4, 1995, p.6-9
- [6] J. R. Evans, W. M. Lindsay, *The Management and Control of Quality*, (SouthWestern Collage Publishing, Fourth Edition, USA -1999. p. 119)
- [7] J. Oakland, *Total Quality Management – Text with Cases, 2nd ed.*, (Butterworth-Heinemann Professional Publishing, Oxford, 1995)
- [8] E. L. Psomas, C. V. Fotopoulos and D. P. Kafetzopoulos, Critical factors for effective implementation of ISO 9001 in SME service companies *Managing Service Quality* Vol. 20 No. 5, 2010 pp. 440-457 q Emerald Group Publishing Limited 0960-4529 DOI 10.1108/09604521011073731
- [9] J. Kleijnen, D. Dolmans, J. Willems, H. Van Hout, Does internal quality management contribute to more control or to improvement of higher education? A survey on faculty's perceptions, *Quality Assurance in Education* Vol. 19 No. 2, 2011 pp. 141-155 q Emerald Group Publishing Limited 0968-4883 DOI 10.1108/09684881111125041
- [10] O. K. Boon and V. Arumugam, T. S. Hwa, CASE STUDIES Does soft TQM predict employees' attitudes?, *The TQM Magazine* Vol. 17 No. 3, 2005 pp. 279-289 q Emerald Group Publishing Limited 0954-478X DOI 10.1108/09544780510594243
- [11] W.M. To, P. K.C. Lee, and B. T.W. Yu , ISO 9001:2000 implementation in the public sector A survey in Macao SAR, the People's Republic of China, *The TQM Journal* Vol. 23 No. 1, 2011 pp. 59-72 q Emerald Group Publishing Limited 1754-2731
- [12] F. Franceschini, M. Galetto, D. Maisano and L. Mastrogiacomo, A proposal of a new paradigm for national quality certification systems, *International Journal of Quality & Reliability Management* Vol. 28 No. 4, 2011 pp. 364-382 q Emerald Group Publishing Limited 0265-671X DOI 10.1108/02656711111121799